**Post Hearing Information Pack of**

# China Graphite Group Limited
# 中国石墨集团有限公司

(the "**Company**")

*(Incorporated in the Cayman Islands with limited liability)*

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# China Graphite Group Limited
# 中国石墨集团有限公司

*(incorporated in the Cayman Islands with limited liability)*

## [REDACTED]

| | | |
|---|---|---|
| **Number of [REDACTED] under the [REDACTED]** | : | **[REDACTED] Shares (subject to the [REDACTED])** |
| **Number of [REDACTED]** | : | **[REDACTED] Shares (subject to reallocation)** |
| **Number of [REDACTED]** | : | **[REDACTED] Shares (subject to reallocation and the [REDACTED])** |
| **Maximum [REDACTED]** | : | **HK$[REDACTED] per [REDACTED] plus brokerage of 1.0%, SFC transaction levy of 0.0027%, FRC transaction levy of 0.00015% and Stock Exchange trading fee of 0.005% (payable in full on application in Hong Kong dollars, subject to refund)** |
| **Nominal value** | : | **HK$0.001 per Share** |
| **Stock code** | : | **[●]** |

**Sole Sponsor**

Lego Corporate Finance Limited
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**[REDACTED] and [REDACTED]**

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# SUMMARY

*This summary aims to give you an overview of the information contained in this document. As this is a summary, it does not contain all of the information which may be important to you and is qualified in its entirety, and should be read in conjunction with the full text of this document. You should read the whole document including the appendices hereto, which constitutes an integral part of this document, before you decide to [REDACTED] in the [REDACTED]. There are risks associated with any [REDACTED]. Some of the particular risks of [REDACTED] in the [REDACTED] are summarized in "Risk Factors". You should read that section carefully before you decide to [REDACTED] in the [REDACTED]. Various expressions used in this summary are defined in "Definitions" and "Glossary".*

## BUSINESS OVERVIEW

We are engaged in the production and sales of flake graphite concentrate and spherical graphite in the PRC. Our origins trace back to 2006 when we began our operations with Yixiang Graphite in the beneficiation and sale of flake graphite concentrate (primarily with a carbon content between 94% and 96.8%) and we expanded with Yixiang New Energy in the processing and sale of spherical graphite (primarily with a carbon content above 99%) in 2012.

Due to the high carbon content of our flake graphite concentrate, which we believe is attributable to our beneficiation capabilities, it is used as heat resistant material as well as to be manufactured into spherical graphite and used as anode materials in lithium-ion batteries for electronic devices and NEVs. As by-products of processing our spherical graphite, we also sell micro graphite powder and high purity graphite powder. For the three years ended December 31, 2019, 2020 and 2021, we sold (i) approximately 18,400 tonnes, 34,100 tonnes and 37,300 tonnes of flake graphite concentrate; and (ii) approximately 8,300 tonnes, 10,400 tonnes and 13,800 tonnes of spherical graphite and its by-products, respectively. During such periods, our revenue generated from the sale of spherical graphite and its by-products amounted to approximately RMB66.4 million, RMB76.2 million and RMB98.5 million, whilst the revenue generated from the sales of flake graphite concentrate was approximately RMB57.4 million, RMB85.7 million and RMB97.7 million, respectively.

In 2019, we obtained the mining rights to our Beishan Mine as an ancillary to our Group's core operations. Since then, the unprocessed graphite in our Beishan Mine has been extracted only for our Group's own use, in order to supplement our procurement of unprocessed graphite from third-party suppliers. According to the Independent Technical Report, our Beishan Mine comprised approximately 14,000 kilo tonnes of Indicated Resource and approximately 1,000 kilo tonnes of Inferred Resource in relation to our graphite resources, and had an estimated life of mine of approximately 20 years as at December 31, 2021. Obtaining such mining rights allows us to access to a secure and stable source of unprocessed graphite and to benefit from the synergies of a vertical integration such as better control of our raw materials, stable supply and more effective cost structure. According to the F&S Report, we are one of the companies in Luobei County, and one of the companies in the PRC, with a vertically integrated supply chain linking a graphite processing operation to a graphite mine.

For the three years ended December 31, 2019, 2020 and 2021, we extracted approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes of unprocessed graphite, from our Beishan Mine, at an extraction cost of approximately RMB3.8 million, RMB5.6 million and RMB5.2 million, thus approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne, accounting for approximately 5.9%, 6.5% and 4.9% of our total cost of sales, respectively. For details, please see "Financial Information — Cost of Sales — Extraction Costs". Whilst we continue to source unprocessed graphite from third parties, for the three years ended December 31, 2019, 2020 and 2021, unprocessed graphite extracted from our Beishan Mine represented approximately 60.0%, 52.7% and 50.4% of our total unprocessed graphite supply.

We also begun the sale of unprocessed marble as a by-product of our extraction operations in our Beishan Mine in 2020. For the two years ended December 31, 2020 and 2021, we sold approximately 675,200 tonnes and 341,700 tonnes of unprocessed marble at extraction costs of approximately RMB4.1 million and RMB2.3 million, accounting for approximately 4.8% and 2.2% of our total cost of sales of the year, respectively. Our revenue generated from the sales of unprocessed marble amounted to approximately RMB6.9 million and RMB2.2 million for the years ended December 31, 2020 and 2021, respectively.

As disclosed in "Our Beneficiation and Procession Operations" in this section, our revenue is generated primarily from the sales of flake graphite concentrate and the sales of spherical graphite and its by-products throughout the Track Record Period. Our Group's gross profit is enhanced during each year of the Track Report Period, benefitting from an effective cost structure through a vertically integrated supply chain via the acquisition of our Beishan Mine. Our gross profit increased from approximately RMB59.4 million for the year ended December 31, 2019 (corresponding gross profit margin: approximately 48.0%), to approximately RMB83.2 million for the year ended December 31, 2020 (corresponding gross profit margin: approximately 49.3%) and further to RMB93.0 million for the year ended December 31, 2021 (corresponding gross profit margin: approximately 46.9%). Moreover, our Directors are of the view that obtaining the mining rights to our Beishan Mine is ancillary to our Group's core operations, supplementing our supply chain of unprocessed graphite and reducing the need for our procurement of unprocessed graphite from third-party suppliers. Other than sales of unprocessed marble, our Directors confirm that we do not sell other unprocessed graphite from extraction in our Beishan Mine.

Leveraging on our beneficiation and processing capabilities; our effective cost structure as a result of the synergies benefitted from vertical integration; and our proven track record performance, we believe that we are well-positioned to capture the up-and-coming growth opportunities in the PRC graphite products industry. In particular, according to the F&S Report, the sales revenue of flake graphite concentrate is expected to increase from approximately RMB2,524.7 million in 2022 to approximately RMB3,465.1 million in 2026, illustrating a CAGR of approximately 8.2% from 2022. The sales revenue of spherical graphite in the PRC increased from approximately RMB1,287.1 million in 2017 to approximately RMB2,223.0 million in 2021 at a CAGR of approximately 14.6%, and is expected to grow from approximately RMB2,610.0 million in 2022 to approximately RMB4,100.1 million in 2026 with a CAGR of 12.0%. We also benefitted from a series of favorable measures implemented by the local government authorities in Luobei County, Heilongjiang Province to support our operations and industry competitiveness, including (i) improvement of transportation and communication infrastructure; (ii) financial subsidies; and (iii) comparable electricity prices against other regions.

For the reasons above, our Group experienced moderate business growth during the Track Record Period, generating a total revenue of approximately RMB123.7 million, RMB168.7 million and RMB198.4 million, and a net profit of approximately RMB24.5 million, RMB37.9 million and RMB53.3 million, for the three years ended December 31, 2019, 2020 and 2021, respectively. The increase in our net profit for the year ended December 31, 2021 was partly contributed by the receipt of government grants of approximately RMB7.9 million, as compared to approximately RMB0.5 million and RMB0.6 million for the two years ended December 31, 2019 and 2020, respectively, as a result of our Group's effort in achieving a target level of taxation contribution for the past years and in research and development. For details, please see "Financial Information — Principal Income Statement Components — Other income and other gains, net". There is no assurance that we will receive equivalent or larger sum of such government grant in the future, and if any of the government grants we currently enjoy is discontinued, our financial conditions would be adversely affected. Please see "Risk Factors — Risks relating to our business and operations — Government grants and preferential tax treatment currently available to us may not be recurring". Although our Group generated net profit during the Track Record Period, there is no assurance that the unprocessed graphite and unprocessed marble extracted from our Beishan Mine would ultimately be extracted at a profit in the future.

## OUR COMPETITIVE STRENGTHS

We believe that the following competitive strengths distinguish us from our competitors:

- We are a company in the sales of flake graphite concentrate and spherical graphite in the PRC, with a proven operating track record, being well-positioned to benefit from the up-and-coming market growth opportunities;
- Our senior management team consists of experienced personnel with the requisite vision, industry expertise, management experience, and research and development capabilities;
- Our Beishan Mine has abundant resources and reserves for future development;
- Our open-pit mining method is more cost-effective, environmental-friendly and safer as compared to underground mining methods; and
- Our acquisition of mining rights of our Beishan Mine allows us to access to benefit from the synergies of a vertical integration.

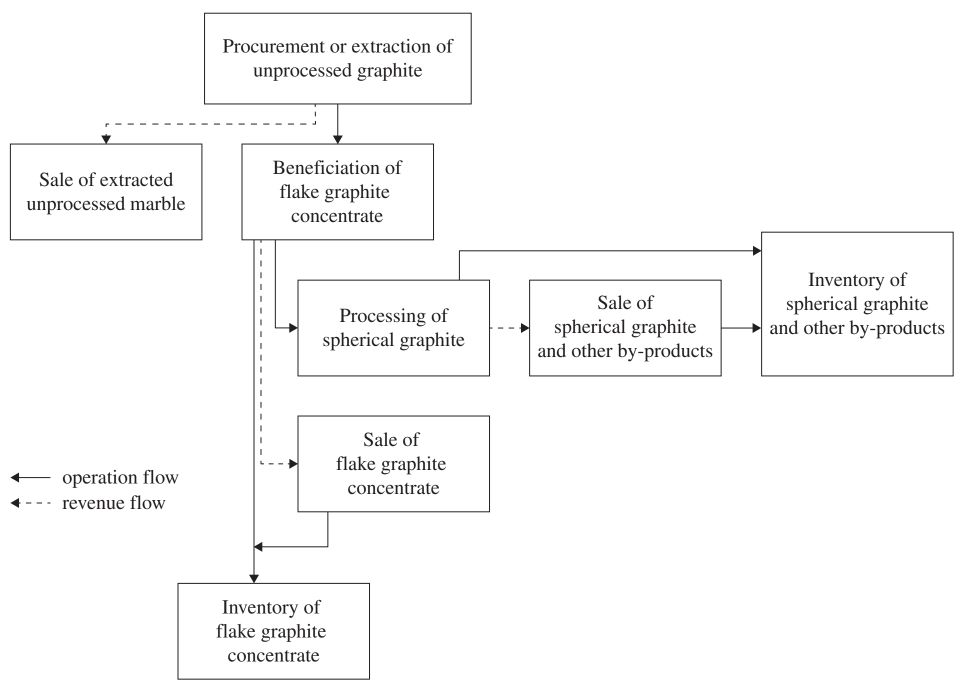
## OUR BUSINESS STRATEGIES

Our aim is to strengthen our market position in the PRC. In order to achieve this objective, we intend to pursue the following strategies:

- We will increase our ramp-up speed to reach the maximum graphite extraction volume permitted at our Beishan Mine;
- We will increase our capacity in the beneficiation of flake graphite concentrate;
- We will increase our spherical graphite processing capacity; and
- We will expand our customer base and reach out to more markets.

## OUR BUSINESS MODEL

We are engaged in the production and sales of flake graphite concentrate and spherical graphite in the PRC. The production of our principal products, i.e. flake graphite concentrate and spherical graphite, in our beneficiation and processing plants currently relies on the supply of unprocessed graphite extracted from our Beishan Mine and those purchased from third-party suppliers. As a by-product of our extraction operations, we also sell unprocessed marble. The following sets forth a flowchart illustrating the movement of graphite material from procurement and extraction, to beneficiation and processing, and to inventories and sales:




## EXTRACTION OF UNPROCESSED GRAPHITE FROM OUR BEISHAN MINE

Our Beishan Mine is an open-pit graphite ore mine with a permitted mining area of approximately 0.3 $km^2$. It is located approximately 28 km northwest of Luobei County in Heilongjiang Province, and approximately 10 km west of our beneficiation and processing plants. The connecting road between such plants and our Beishan Mine consists of approximately 10 km of paved road, which is considered adequate to support the operation. Our Directors confirm that we did not experience any material interruption in transportation and logistics for our graphite products as at the Latest Practicable Date. The estimated life of our Beishan Mine is approximately 20 years as at December 31, 2021. The current mining license of our Beishan Mine will expire in April 2024. For further details of the material terms of the mining license, please see "Business — Our Business Model — Extraction of unprocessed graphite from our Beishan Mine".

The following map and image illustrate the geographical location of our mine, our beneficiation plants and our processing plants:



Exploration of our Beishan Mine was first carried out in 2015, which included geological mapping and a very low frequency electromagnetic geophysical survey. The identified targets were tested by trenching and diamond drilling at a nominal 100 m by 50 m spacing. The 2-year exploration program totalled approximately 6,000 m (36 holes) of diamond drilling and 10,000 $m^3$ of trench excavation. In mid-2017, we engaged an environmental technology company to conduct an environmental impact assessment and submitted its report to Heilongjiang Forestry and Grassland Administration for review and certification in 2018; and a safety plan was prepared and submitted to Heilongjiang Emergency Management Office and we revised our safety plan in compliance with updated notices issued by the relevant authority, details of which are set out in "Business — Our Business Model — Extraction of unprocessed graphite from our Beishan Mine". In 2018, we applied to Yunshan Forestry of Luobei Country and the Heilongjiang Province to change the land use of the mine from "forest" to "commercial" use which was approved in January 2019. In 2020, the Independent Technical Consultant conducted a review of the previous exploration work and recommended a verification program. The verification program comprised a topographical survey, geological mapping, trenching and 1,647 m (11 holes) of diamond drilling. For further details of the exploration of our Beishan Mine, please see "Appendix III — Independent Technical Report".

According to the Independent Technical Report, the graphite and marble Mineral Resources in our Beishan Mine within the elevation limits of our mining license as at December 31, 2021, being reported in accordance with the JORC Code (2012) via classification as Indicated and Inferred, are approximately as follows:

**Graphite Mineral Resource Statement within the approved mining license elevation limits as at December 31, 2021**

| Domain | Mineral Resource Category | Tonnage *(kt)* | TGC *(%)* |
|---|---|---|---|
| V1 | Indicated | 1,740 | 7.86 |
| | Inferred | 138 | 12.62 |
| V2 | Indicated | 229 | 7.71 |
| | Inferred | 48 | 7.97 |
| V3 | Indicated | 3,333 | 10.99 |
| | Inferred | 656 | 11.81 |
| V5 | Indicated | 2,440 | 11.86 |
| V6 | Indicated | 1,348 | 8.37 |
| | Inferred | 107 | 8.87 |
| V7 | Indicated | 2,123 | 8.14 |
| | Inferred | 29 | 4.98 |
| V8 | Indicated | 2,539 | 8.83 |
| | Inferred | 20 | 12.59 |
| | **Indicated** | **13,753** | **9.59** |
| | **Inferred** | **997** | **11.24** |
| | **Total** | **14,750** | **9.70** |

**Marble Mineral Resource Statement within mining license elevation limits as at December 31, 2021**

| Mineral Resource Category | Tonnage *(kt)* |
|---|---|
| **Indicated** | 1,541 |
| **Inferred** | 582 |
| **Total** | 2,123 |

According to the Independent Technical Report, the graphite and marble ore Reserves in our Beishan Mine within the elevation limits of our mining license as at December 31, 2021, being reported in accordance with the JORC Code (2012), are approximately as follows:

**Graphite Ore Reserve Statement within mining license elevation limits as at December 31, 2021**

| Type | Ore Reserve Category | Tonnage *(kt)* | TGC *(%)* |
|---|---|---|---|
| **Graphite** | Probable | 9,549 | 10.15 |

**Marble Ore Reserve Statement within the mining license elevation limits as at December 31, 2021**

| Type | Ore Reserve Category | Tonnage *(kt)* |
|---|---|---|
| **Marble** | Probable | 1,152 |

For further details on the estimation, grades and qualities of the Resources and Reserves in our Beishan Mine, please see "Appendix III — Independent Technical Report".

The unprocessed graphite extracted from our Beishan Mine is only for our Group's own use and for supplementing our procurement of unprocessed graphite from third-party suppliers. The unprocessed graphite extracted from our Beishan Mine is beneficiated into flake graphite concentrate, which is then processed into spherical graphite. The main steps involved in open-pit mining include drilling, blasting, loading, and hauling. For details of the mining method of our Beishan Mine, please see "Business — Our Business Model — Extraction of unprocessed graphite from our Beishan Mine — Our mining operations". Our Directors confirm that our Beishan Mine is expected to continue to be our only self-owned graphite mine in the near future, upon which we partially depend for the supply of unprocessed graphite required for the production of our principal products, namely flake graphite concentrate and spherical graphite. The current mining elevation allowed is 274–150m ASL. If we submit an application for the permission to extract below the licensed limit of 150m ASL and if such application is approved by relevant authority, there would be an additional Indicated and Inferred Resources of approximately 20,900 kilo tonnes and 8,400 kilo tonnes, respectively. If we believe there is a need in future, we may consider to apply for permission to extract below the licensed limit of 150m ASL and we plan to conduct additional technical studies and prepare relevant documents to support an application to increase the graphite ore mining capacity to 1,000,000 tonnes per year. For details of the cash operating and production costs of the unprocessed graphite extracted from our Beishan Mine, please see "Financial Information — Estimated Capital Costs and Operating Costs — Operating costs". In addition, if the Company's capital expenditure for future land acquisition and construction is ultimately significantly more than our internally generated funds and borrowings from financial institutions, our business, financial position and results of operations may be adversely affected in the future. Please see "Risk Factors — Risks relating to our business and operations — We may not have adequate financing to fund our future expansion plans, and such capital resources may not be available on commercially reasonable terms or at all". Our Directors confirm that as at the Latest Practicable Date, our mining rights in our Beishan Mine are not pledged to secure any of our banking facility. According to the Notice of the Ministry of Land and Resources on Adjusting Production and Construction Scale Standards of Some Mineral Mines (國土資源部關於調整部分礦種礦山生產建設規模標準的通知) issued by the Ministry of Land and Resources on September 30, 2004, the scale of a graphite mine would be determined as "large" if the volume of unprocessed graphite to be extracted is over 10,000 tpa, "medium" if the volume of unprocessed graphite to be extracted is between 10,000 to 3,000 tpa, and "small" if the volume of unprocessed graphite to be extracted is below 3,000 tpa. Accordingly, based on our volume of extracted unprocessed graphite at 258,300 tonnes for the year ended December 31, 2021 and as advised by our PRC Legal Advisers, our Beishan Mine shall be classified as large scale.

## OUR BENEFICIATION AND PROCESSING OPERATIONS

Our beneficiation and processing plants are located 10 km from our Beishan Mine. For the three years ended December 31, 2019, 2020 and 2021, we were engaged in the beneficiation of flake graphite concentrate (with a production volume of approximately 31,100 tonnes, 38,500 tonnes and 48,200 tonnes of flake graphite concentrate, respectively) and the processing of spherical graphite (with a production volume of approximately 3,300 tonnes, 2,700 tonnes and 4,000 tonnes, respectively). For the three years ended December 31, 2019, 2020 and 2021, our beneficiation plant operated at a utilization rate of approximately 78%, 96% and 93%, and our processing plant operated at a utilization rate of approximately 78%, 51% and 77%, respectively. Please see "Business — Our business model — Our beneficiation and processing operations".

### Sale of flake graphite concentrate

Accredited to its molecular structure, flake graphite is a solid-state lubricant, a non-metal conductor and can sustain high temperature. Such characteristics, when used as a concentrate, led to wide applications mostly in industrial use. We have been selling flake graphite concentrate since the commencement of our business in 2006, with a focus on those with a carbon content between 94% and 96.8%. The following table summarizes the revenue generated, sales volume and average selling price of our flake graphite concentrate, highlighting the key types (i.e. "194", indicating a carbon content of 94% or from 94% to less than 95%; "195", indicating a carbon content of 95% or from 95% to less than 96%; and "196", indicating a carbon content of 96% or from 96% to 96.8%) during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| **Type** | **Revenue** | **Sales volume** | **Average selling price** | **Revenue** | **Sales volume** | **Average selling price** | **Revenue** | **Sales volume** | **Average selling price** |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/ tonne)* |
| 194 | 26,479 | 8,396 | 3,154 | 28,288 | 11,132 | 2,541 | 47,254 | 18,094 | 2,612 |
| 195 | 14,139 | 4,007 | 3,529 | 35,525 | 13,837 | 2,567 | 41,806 | 15,803 | 2,645 |
| 196 | 7,968 | 2,002 | 3,980 | 10,218 | 3,671 | 2,783 | 3,889 | 1,339 | 2,904 |
| Others[(1)] | 8,788 | 3,996 | 2,199 | 11,678 | 5,494 | 2,126 | 4,723 | 2,022 | 2,336 |
| **Total** | **57,374** | **18,401** | | **85,709** | **34,134** | | **97,672** | **37,258** | |

*Note:*

(1) Others primarily include flake graphite concentrates of other carbon content specifications.

Our revenue generated from the sales of flake graphite concentrate is determined by our sales volume and average selling price, which are generally affected by factors such as production costs and product specifications required by our customers, for instance, there is a general increase in the average selling price of each of our flake graphite concentrate type by its carbon content. Leveraging on the cost-saving benefits from vertical integration by obtaining the mining rights of our Beishan Mine, we adopt a competitive pricing strategy to sell our flake graphite concentrate at a lower average selling price with a view to attracting more customers. We believe that our competitive advantage in the market with flake graphite concentrate primarily lies with an effective cost structure through a vertically integrated supply chain since 2019. It allows us to effectively pursue a competitive pricing strategy, even during the COVID-19 outbreak in the year ended December 31, 2020.

**Sale of spherical graphite**

Owing to the technical specificity of each spherical graphite type (for instance, an SG-10 spherical graphite may have up to ten variances based on shape, density and purity), spherical graphite has wide applications in the field of NEVs or electronic appliances. During the Track Record Period, we sold spherical graphite with a carbon content primarily above 99% and by-products including micro graphite powder and high-purity graphite powder. The following table summarizes the revenue generated, the sales volume and the average selling prices of our spherical graphite and its by-products during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/ tonne)* |
| **Spherical graphite** | | | | | | | | | |
| *SG-10* | 47,122 | 2,343 | 20,112 | 63,926 | 3,479 | 18,375 | 47,842 | 3,059 | 15,638 |
| *Other models* | 9,998 | 645 | 15,501 | 5,237 | 444 | 11,795 | 42,443 | 3,002 | 14,138 |
| **Subtotal** | **57,120** | **2,988** | | **69,163** | **3,923** | | **90,285** | **6,061** | |
| **Micro graphite powder** | 7,103 | 5,049 | 1,407 | 6,284 | 6,296 | 998 | 8,043 | 7,733 | 1,040 |
| **High-purity graphite powder** | 2,139 | 282 | 7,585 | 712 | 134 | 5,313 | 181 | 48 | 3,771 |
| **Total** | **66,362** | **8,319** | | **76,159** | **10,353** | | **98,509** | **13,842** | |

The selling price of our spherical graphite is generally influenced by factors, such as, production costs and product specifications, as our spherical graphite is often processed upon request by customers with designated specifications and tailored instructions, which leads to additional processing costs. During the Track Record Period, there was a decline in the average selling price of our spherical graphite products, which was attributable to the overall decrease in unit cost of unprocessed graphite extracted from our Beishan Mine as compared to the unit cost of unprocessed graphite procured from our third party suppliers since the commencement of our vertical integration. The selling price of our SG-10 model spherical graphite products experienced a decrease in general for the year ended December 31, 2021 as compared to the corresponding period in the year ended December 31, 2020, which was primarily attributable to decreased sales of a high-density version of the model from approximately 14% of SG-10 high density model in the year ended December 31, 2020 to 11% of SG-10 high density model in 2021, as SG-10 low density model had lower average selling price at approximately RMB15,200 per tonne, and our adoption of market competitive pricing strategy. The selling price of our other model experienced an increase for the year ended December 31, 2021 attributable to strong market demand and sales in our SG-9 model spherical graphite products from one of our top five customers in the years ended December 31, 2019 and 2021.

**Sale of unprocessed marble**

We began selling unprocessed marble as a by-product of our extraction operations in the year ended December 31, 2020. For the two years ended December 31, 2020 and 2021, we sold approximately 675,200 tonnes and 341,700 tonnes of unprocessed marble, generating a revenue of approximately RMB6.9 million and RMB2.2 million, accounting for approximately 4.1% and 1.1% of our revenue. The decrease of revenue was primarily due to our lowering of sales price to accelerate the marble sales in order to make available more working space for placing other extracted materials on our site, and our customers' demand on unprocessed marble decreased due to slowdown in the property building and construction industry in the PRC in the second half of the year ended December 31, 2021.

Our Directors are of the view that our sales of unprocessed marble is influenced by factors, such as, supply and demand, and our extraction costs were approximately RMB4.1 million and RMB2.3 million, accounting for approximately 4.8% and 2.1% of our total cost of sales for the years ended December 31, 2020 and 2021.

**Our gross profit and gross profit margin**

For each year during the Track Record Period, our gross profit amounted to approximately RMB59.4 million, RMB83.2 million and RMB93.0 million, representing a gross profit margin of approximately 48.0%, 49.3% and 46.9%, respectively. The following table summarizes our gross profit and gross profit margin breakdown by business segment during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Gross profit | Gross profit attributable | Gross profit margin | Gross profit | Gross profit attributable | Gross profit margin | Gross profit | Gross profit attributable | Gross profit margin |
| | *(RMB'000)* | *(%)* | *(%)* | *(RMB'000)* | *(%)* | *(%)* | *(RMB'000)* | *(%)* | *(%)* |
| Sale of flake graphite concentrate | 28,372 | 47.7 | 49.5 | 45,505 | 54.7 | 53.1 | 51,960 | 55.8 | 53.2 |
| Sale of spherical graphite and its by-products | 31,055 | 52.3 | 46.8 | 34,986 | 42.0 | 45.9 | 41,180 | 44.3 | 41.8 |
| Sale of unprocessed marble | — | — | — | 2,756 | 3.3 | 40.1 | (97) | (0.1) | (4.4) |
| | **59,427** | **100.0** | **48.0** | **83,247** | **100.0** | **49.3** | **93,043** | **100.0** | **46.9** |

Our gross profit margin from the sales of flake graphite concentrate increased from approximately 49.5% for the year ended December 31, 2019, to approximately 53.1% for the year ended December 31, 2020, primarily due to (i) the growth in sales; (ii) the benefits of economies of scale as our utilization rate of our beneficiation plant increased from the year ended December 31, 2019 to the year ended December 31, 2020. Despite the drop in average selling price and rise in unit extraction and procurement costs, our gross profit margin from the sales of flake graphite concentrate further increased from 49.5% for the year ended December 31, 2019 to approximately 53.1% for the year ended December 31, 2020, as the percentage increase in cost of sales was lower than the percentage increase in revenue in the corresponding year, which was attributable to the rapid increase in the sales volume of flake graphite concentrate. Our gross profit margin from the sale of flake graphite concentrate remained stable at approximately 53.2% for the year ended December 31, 2021.

Our gross profit margin from the sales of spherical graphite and its by-products dropped slightly from approximately 46.8% for the year ended December 31, 2019, to approximately 45.9% for the year ended December 31, 2020, as we lowered the average selling price of our products to increase our market share and maintain our relationship with customers. Our gross profit margin from the sales of spherical graphite and its by-products further decreased to approximately 41.8% for the year ended December 31, 2021, which was mainly due to the incurrence of subcontractor fees of approximately RMB6.5 million payable to third-party service providers for purification processing service in the year ended December 31, 2021.

The gross profit margin from our sales of spherical graphite and its by-products was in the range of approximately 41.8% to approximately 46.8% during the Track Record Period, which is slightly lower than that of our sale of flake graphite concentrate in the range of approximately 49.5% to approximately 53.2% in the corresponding period. The increase of revenue generated from flake graphite concentrate is higher than that of spherical graphite, attributable to the rapid increase in the sales volume of flake graphite concentrate, and also due to additional costs incurred for the spherical graphite product segment resulting from the engagement of third-party service providers during the temporary suspension of our purification station from November 2020 to May 2021.

Our gross profit margin decreased from 49.3% in the year ended December 31, 2020 to 46.9% in the year ended December 31, 2021, which was primarily attributable to the engagement of third-party service providers for purification processing during the temporary suspension of our purification station from November 2020 to May 2021.

## OUR CUSTOMERS

For the three years ended December 31, 2019, 2020 and 2021, our major customers were primarily industrial manufacturers and retailers of heat-resistant materials. Our five largest customers accounted for approximately 62.9%, 59.0% and 55.7% of our Group's total revenue, respectively. Sales to the largest customer group, BTR New Material Group Ltd. (貝特瑞新材料集團股份有限公司) and its certain subsidiaries, accounted for approximately 37.9%, 37.9% and 20.1% of our Group's total revenue for the three years ended December 31, 2019, 2020 and 2021, respectively. Headquartered in Shenzhen, China, this customer group was listed on the National Equities Exchange and Quotations in 2015, and operates as a major supplier of anode material for lithium-ion batteries in the industry. Whilst it is considered as an advantage to have a stable customer base comprising major industry players, our Group aims to continue to broaden our customer base and product range which may eventually reduce any concentration and counter-party risk arising from both customers in future. Please see "Risk factors — Risks relating to our business and operations — We rely on a limited number of customers for a substantial portion of our revenue" for details.

### Sales and marketing

The graphite product market in the PRC is considered by our Directors to be niche and only with a finite number of industry players. During the Track Record Period, our sales and marketing team was responsible for harvesting new relationships with industry players by physical site visits and regular communications to understand the needs of such potential customers. We also engaged customer relationship service providers to provide assistance in maintaining relationships with our existing customers. Our sales and marketing approach also includes sponsoring industry or academic events such as forums, site studies or symposiums. Considering the niche nature and the limited number of industry players, we believe that such approach may be effective in increasing our exposure among industry players and potential customers and in building up a stable clique clientele.

## OUR SUPPLIERS

During the Track Record Period, our major suppliers mainly included raw material suppliers, suppliers of utilities such as electricity. For the three years ended December 31, 2019, 2020 and 2021, purchases from our five largest suppliers accounted for approximately 69.2%, 63.8% and 57.0% of our total purchases for the same periods, respectively, and purchases from our top supplier accounted for approximately 36.1%, 34.7% and 27.5% of our total purchases for the same periods, respectively.

In terms of the supply of unprocessed graphite to support our core operations, for the three years ended December 31, 2019, 2020 and 2021, we purchased approximately 171,000 tonnes, 189,500 tonnes and 254,200 tonnes of unprocessed graphite from our suppliers, incurring a procurement cost of approximately RMB10.8 million, RMB14.2 million and RMB19.1 million, thus at a unit cost of approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively. The increase in our unit procurement costs for the year ended December 31, 2020 was due to the increase in the average purchase price of unprocessed graphite purchased from our supplier, Luobei County Yunshan Graphite Mining Co., Ltd* (蘿北縣雲山石墨採礦有限責任公司).

For the three years ended December 31, 2019, 2020 and 2021, we extracted approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes of unprocessed graphite from our Beishan Mine at an extraction cost of approximately RMB3.8 million, RMB5.6 million and RMB5.2 million thus approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne, respectively. There was an increase in our unit extraction costs for the year ended December 31, 2020 as the total volume of material moved, including graphite ore, marble ore and waste extracted from Beishan Mine, increased in 2020. Our total extraction costs for the year ended December 31, 2021 decreased to approximately RMB7.5 million as compared to approximately RMB9.7 million in the year ended December 31, 2020, primarily attributable to the increase in portion capitalized in 2021 as a result of proportional increase of waste materials extracted in 2021. For details on reconciliation of the volume of unprocessed graphite procured from third party suppliers and extracted from our Beishan Mine to our sales volume of flake graphite concentrate and spherical graphite, please see "Business — Inventory Management". During the Track Record Period, depending on the yield of unprocessed graphite extracted from our Beishan Mine, all of the unprocessed graphite extracted from our Beishan Mine would be prioritized to be consumed for the reasons that (i) consumption of unprocessed graphite extracted from our Beishan Mine is more cost effective; and (ii) we do not need to make available additional area and facility for storage of unprocessed graphite not consumed in our production. The remaining unprocessed graphite needed would be purchased from our suppliers depending on our beneficiation production capacity. For details, please see "Business — Our Suppliers".

**Third-party providers**

During the Track Record Period, we engaged third-party providers for services that are auxiliary to our mining operations in our Beishan Mine, including the following:

- ***Blasting services:*** At our Beishan Mine, we engaged third-party service providers for certain tasks such as surveying, explosive transportation, charging, and blasting works. For the three years ended December 31, 2019, 2020 and 2021, we incurred approximately RMB1.6 million, RMB2.3 million and RMB2.5 million, respectively for such services.
- ***Graphite product processing services:*** We engaged processing service provider to assist with (i) handling orders made during the off-season months of January to March when our operations were put on hold due to severe cold weather; and (ii) purification of our unfinished products between November 2020 and May 2021 as the purification station of our spherical graphite processing plant was undergoing enhancement and repair. For the two years ended December 31, 2020 and 2021, we incurred outsourced processing costs of approximately RMB0.2 million and RMB6.5 million, respectively.
- ***Logistics and transportation:*** We engaged logistics service platform providers to transport unprocessed graphite from our suppliers to our production site and finished graphite goods to our customers. During the Track Record Period, we incurred a total of approximately RMB7.3 million, RMB9.1 million and RMB12.5 million for transportation costs (which fall under our cost of sales and transportation fees).
- ***Leasing of equipment and machinery:*** We leased certain equipment and machineries from third-party service providers to assist with the mining operation. For the three years ended December 31, 2019, 2020 and 2021, we incurred a total cost of approximately nil, RMB0.6 million and RMB1.9 million for leasing of equipment and machineries.

We incurred third-party service provider fees of approximately RMB8.8 million, RMB12.1 million and RMB23.4 million for the three years ended December 31, 2019, 2020 and 2021.

**MARKET AND COMPETITION**

Most of the graphite supply in the PRC is sourced from Shandong and Heilongjiang provinces. Shandong Province is home to most of China's graphite processing plants. However, many of the mines in Shandong Province are typically deep and, consequently, water inflows are a problem. Furthermore, the average carbon content is low at between two per cent and three per cent. The graphite is associated with clays and processing is costly and environmentally damaging because mines use acids in the process. So far as Heilongjiang Province is concerned, many mine owners transport their ore about 2,000 km to the processing plants in Shandong Province. There were over 120 market participants in flake graphite concentrate industry in 2021. The flake graphite concentrate sales revenue of our Group ranked fifth in 2021 with approximately RMB97.7 million, accounting for a market share of approximately 4.4% of total flake graphite concentrate industry by sales revenue. Moreover, spherical graphite industry in the PRC was concentrated with top 10 companies accounting for a total market share of approximately 70.0% by sales revenue in 2021. There were over 60 market participants in spherical graphite industry in 2021. Our Group ranked sixth in 2021 with a market share of approximately 4.1% by sales revenue. In addition to rising costs of production, the Chinese graphite industry faces an additional economic impost due to the winter closures: having to buy before the ice takes control ramps up warehousing and insurance costs. The average selling prices of flake graphite concentrate and spherical graphite may vary by different specification and generally influenced by factors such as production costs, market demands and macro economy. From 2018, many Chinese spherical graphite companies began to expand the spherical production capacity, which resulted in the decrease in the average selling price of spherical graphite in 2019 and 2020. Going forward, with the recovery of economy and continuously increasing demand from lithium-ion batteries industry, the demand of graphite would increase, which in turn would drive the average selling price of flake graphite concentrate and spherical graphite. Considering the rise in global demand for lithium-ion batteries, and the market move that most of Heilongjiang's graphite is actually processed in Shandong Province, we believe that our business model in operating an integrated graphite production company in Heilongjiang

Province remains a strong advantage. For details on the market and competitive landscape of the graphite industry, please see "Industry Overview — Overview of graphite industry in Heilongjiang Province — Competitive landscape".

## SUMMARY FINANCIAL INFORMATION AND OPERATING DATA

### Summary of our results of operations

The following table sets forth the consolidated statements of comprehensive income for the years indicated of our Group, prepared on the basis set up in the Accountant's Report in Appendix I to this Document:

| | Year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Revenue | 123,736 | 168,749 | 198,365 |
| Cost of sales | (64,309) | (85,502) | (105,322) |
| Gross profit | 59,427 | 83,247 | 93,043 |
| Other income and other gains, net | 663 | 300 | 8,033 |
| Selling and distribution expenses | (14,299) | (9,393) | (10,138) |
| General and administrative expenses | (9,019) | (18,770) | (19,738) |
| Research and development expenses | (4,820) | (5,830) | (8,118) |
| Reversal of/(provision for) impairment of financial assets | 194 | (349) | (1,463) |
| **Operating profit** | 32,146 | 49,205 | 61,619 |
| Finance income | 12 | 18 | 54 |
| Finance costs | (435) | (778) | (834) |
| Finance costs, net | (423) | (760) | (780) |
| **Profit before income tax** | 31,723 | 48,445 | 60,839 |
| Income tax expense | (7,174) | (10,586) | (7,514) |
| **Profit for the year** | **24,549** | **37,859** | **53,325** |
| **Profit attributable to:** | | | |
| Owner of the Company | 24,549 | 36,884 | 53,325 |
| Non-controlling interests | — | 975 | — |
| **Profit for the year** | 24,549 | 37,859 | 53,325 |

### Non-HKFRSs information

Our adjusted profit for the year is derived by excluding the [REDACTED]. The term of adjusted profit is not defined under HKFRSs. The adjusted profit for the year is presented because our Directors believe that it is a useful supplement to the consolidated statements of comprehensive income as it reflects our profitability from our operations without taking into consideration of the [REDACTED]. However, the adjusted profit for the year should not be considered in isolation or construed as an alternative to gross profit or profit for the year prepared in accordance with HKFRSs, and shall be used for illustrative purpose only. Potential [REDACTED] should be aware that the adjusted profit for the year presented in this document may not be comparable to similarly titled measures reported by other companies due to differences in the components of the calculation.

| | Year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Net profit for the financial year | 24,549 | 37,859 | 53,325 |
| Add: [REDACTED] | — | [REDACTED] | [REDACTED] |
| **Adjusted profit for the financial year** | **24,549** | **[REDACTED]** | **[REDACTED]** |

### Extraction costs

The following table illustrates the extraction costs (including the capitalized amount) incurred for the three years ended December 31, 2019, 2020, and 2021:

| | For the year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Depreciation | 1,778 | 3,552 | 1,607 |
| Blasting services | 1,590 | 2,287 | 2,460 |
| Fuel costs | 1,911 | 1,668 | 1,805 |
| Employees salaries and benefits | 1,130 | 830 | 1,145 |
| Machinery expenses | 1,173 | 661 | 1,198 |
| Amortization of mining rights | 813 | 1,837 | 1,108 |
| Raw materials | 250 | 242 | 1,043 |
| Repairs and maintenance | 338 | 19 | 85 |
| Mining project management and administrative expenses | 1,102 | — | — |
| Others(1) | 718 | 291 | 529 |
| **Total** | **10,803** | **11,387** | **10,980** |
| Portion capitalized(2) | 7,040 | 1,656 | 3,504 |
| Portion accounted for as cost of sales for the extraction of graphite(3) | 3,763 | 5,606 | 5,195 |
| Portion accounted for as cost of sales for the extraction of marble(3) | — | 4,125 | 2,281 |
| **Total** | **10,803** | **11,387** | **10,980** |

*Notes:*

1. Others include expenses in relation to workplace safety expenses, insurance on mining equipment, consumables and delivery of the dump truck.

2. The portion capitalized accounted for the amount to be capitalized as mining structures under our property, plant and equipment, which would be depreciated using the units of production method based on the total proved and probable reserves of the mine as the depletion base and recognized as depreciation under extraction costs in future. Mining structures primarily include the cost incurred to carry out waterproof engineering, construct on-site utilities systems and other miscellaneous infrastructure on the mining site, and the capitalization of the portion of costs incurred for mine extraction that is allocated to the stripping activities. Stripping activities exposed our Group to usable ore that can be used to produce inventory and improved access to further quantities of material that will be mined in future periods. To the extent the benefit is improved access to ore, our Group recognized these costs as mining structures under property, plant and equipment. The capitalization of extraction costs is made by using an allocation basis that is based on volume of waste extracted compared with expected volume of total extraction from the ore, for a given volume of ore production.

3. The cost of sales for the extraction of graphite and marble were allocated on the basis of the respective portions of graphite and marble extracted as measured in volume and were apportioned accordingly.

For details on the fluctuation of major items in the above extraction costs, please see "Financial Information — Cost of Sales — Extraction Costs".

**Selected consolidated statements of financial position**

| | As at December 31, 2019 | As at December 31, 2020 | As at December 31, 2021 | As at April 30, 2022 |
|---|---|---|---|---|
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* *(Unaudited)* |
| **Assets** | | | | |
| **Non-current assets** | | | | |
| Property, plant and equipment | 60,546 | 71,864 | 87,908 | 95,500 |
| Right-of-use assets | 5,799 | 7,608 | 9,933 | 9,661 |
| Mining rights | 20,562 | 27,013 | 25,905 | 25,895 |
| Other intangible assets | 63 | 55 | 35 | 29 |
| Deferred income tax assets | 2,506 | 779 | 271 | 268 |
| Prepayments | 3,039 | 244 | 1,038 | 1,534 |
| | 92,515 | 107,563 | 125,090 | 132,887 |
| **Current assets** | | | | |
| Inventories | 35,423 | 25,992 | 18,874 | 26,287 |
| Trade and bills receivables | 113,632 | 160,863 | 148,645 | 99,713 |
| Deposits, prepayments and other receivables | 180 | 4,566 | 7,533 | 12,094 |
| Cash and cash equivalents | 1,861 | 10,007 | 33,934 | 72,122 |
| | 151,096 | 201,428 | 208,986 | 210,216 |
| **Total assets** | 243,611 | 308,991 | 334,076 | 343,103 |
| **Liabilities** | | | | |
| **Non-current liabilities** | | | | |
| Lease liabilities | 164 | 976 | 383 | 144 |
| Provision for reclamation and mine closure | 2,206 | 2,314 | 2,427 | 2,467 |
| Deferred income tax liabilities | 2,516 | 1,462 | 1,838 | 1,888 |
| | 4,886 | 4,752 | 4,648 | 4,499 |
| **Current liabilities** | | | | |
| Trade payables | 16,160 | 20,965 | 18,608 | 23,958 |
| Accruals and other payables | 12,595 | 19,754 | 18,498 | 14,800 |
| Amounts due to related parties and non-controlling interests | 77,696 | 82,749 | 73,127 | 73,127 |
| Borrowings | 16,156 | 18,500 | 10,000 | 10,000 |
| Contract liabilities | 443 | 9,758 | 5,310 | 5,282 |
| Lease liabilities | 680 | 1,169 | 1,143 | 1,111 |
| Current tax liabilities | 4,204 | 2,671 | 744 | 1,075 |
| | 127,934 | 155,566 | 127,430 | 129,353 |
| **Total liabilities** | 132,820 | 160,318 | 132,078 | 133,852 |
| **Net current assets** | 23,162 | 45,862 | 81,556 | 80,863 |
| **Net assets** | 110,791 | 148,673 | 201,998 | 209,251 |

As at December 31, 2019, 2020 and 2021, we recorded non-current assets at approximately RMB92.5 million, RMB107.6 million and RMB125.1 million, respectively, the increase of which was mainly attributable to our acquisition of property, plant and equipment as a result of our production plant upgrade. Our current assets increased from approximately RMB151.1 million in the year ended December 31, 2019 to RMB201.4 million in the year ended December 31, 2020, and further to RMB209.0 million in the year ended December 31, 2021, mainly attributable to our overall increase in cash and cash equivalents and trade and bills receivables during the corresponding periods which were consistent with our business growth. Our current liabilities increased from approximately RMB127.9 million in the year ended December 31, 2019 to RMB155.6 million in the year ended December 31, 2020 due to the increase in trade payables, accruals and other payables and contract liabilities which were in line with our business growth, and our current liabilities decreased to approximately RMB127.4 million in the year ended December 31, 2021 mainly attributable to the decrease in borrowings as we repaid certain bank loans considering our positive financial conditions. As at December 31, 2019, 2020 and 2021 and April 30, 2022, we recorded net current assets at approximately RMB23.2 million, RMB45.9 million, RMB81.6 million and RMB80.9 million. For details on the movement of our net current assets, please see "Financial Information — Liquidity and capital resources — Current assets and liabilities".

**Selected consolidated statements of cash flows**

| | Year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| **Net cash generated from operating activities** | 11,244 | 24,544 | 75,698 |
| **Net cash used in investing activities** | (27,646) | (20,717) | (29,122) |
| **Net cash generated from/(used in) financing activities** | 13,129 | 4,319 | (22,649) |
| Net (decrease)/increase in cash and cash equivalents | (3,273) | 8,146 | 23,927 |
| Cash and cash equivalents at the beginning of the year | 5,134 | 1,861 | 10,007 |
| **Cash and cash equivalents at end of the year** | **1,861** | **10,007** | **33,934** |

For details on the movement of our cash flow, please see "Financial Information — Liquidity and Capital Resources — Cash flow".

**Key financial ratios**

| | Year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Net profit margin | 19.8% | 22.4% | 26.9% |
| Return on equity | 22.2% | 24.8% | 26.4% |
| Return on assets | 10.1% | 11.9% | 16.0% |
| Interest coverage *(times)* | 73.9 | 63.3 | 73.9 |

| | As at December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Current ratio *(times)* | 1.2 | 1.3 | 1.6 |
| Quick ratio *(times)* | 0.9 | 1.1 | 1.5 |
| Debt-to-equity ratio | 83.0% | 61.4% | 24.4% |
| Gearing ratio | 84.7% | 68.1% | 41.2% |

Please see "Financial Information" for details of our financial performance during the Track Record Period.

## RELATIONSHIP WITH CONTROLLING SHAREHOLDERS

As at the Latest Practicable Date, Mr. Zhao, one of our founders, chairperson of the Board, executive Director and chief executive officer, through his wholly-owned offshore holding company, Sandy Mining Limited, directly held 1 Share, representing the entire issued share capital of our Company. Immediately upon completion of the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming that the [REDACTED] is not exercised), Sandy Mining Limited will directly hold [REDACTED] Shares, representing [REDACTED]% of the total issued share capital of our Company. Thus, Sandy Mining Limited will continue to control more than 30% of the voting power at general meetings of our Company immediately following completion of the [REDACTED], the Loan Consideration Capitalization and [REDACTED] (assuming that the [REDACTED] is not exercised). Therefore, each of Sandy Mining Limited and Mr. Zhao will be our Controlling Shareholders for the purpose of the Listing Rules.

## SHARE OPTION SCHEME

We have conditionally adopted the Share Option Scheme. For details of the Share Option Scheme, please see "Statutory and General Information — D. Other information — 1. Share Option Scheme" in Appendix VI to this document.

## WAIVER APPLICATION

In preparation for the [REDACTED], our Company has sought the waiver from strict compliance with the requirements under Rule 8.12 of the Listing Rules. For details, please see "Waiver from Strict Compliance with the Listing Rules".

## LEGAL PROCEEDINGS AND REGULATORY COMPLIANCE

As advised by our PRC Legal Advisers and as confirmed by our Directors, during the Track Record Period and as at the Latest Practicable Date, save as disclosed in "Business — Legal Proceedings and Regulatory Compliance", we (i) obtained all the material approvals, consents, certificates, licenses and permits to conduct our operations in the PRC; and (ii) complied with all applicable laws and regulations in the PRC in all material aspects. To the best knowledge of our Directors, as at the Latest Practicable Date, save as disclosed below, no member of our Group was a party to any litigation, arbitration or administrative proceedings, and our Directors were not aware of any pending or threatened litigation, arbitration or administrative proceedings against our Group that would have a material adverse effect on our business, results of operations and financial conditions.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE

The Board acknowledges its collective and overall responsibilities in relation to ESG. The Board is committed to maintaining good communications with our senior management and making decisions on important ESG issues, supported by regular reporting of annual ESG updates by senior management, in order to gain a timely understanding of the ESG performance of the Group's business. The Group will continue to identify and manage ESG and climate related issues and risks in order to achieve its business objectives and ensure its stable development. Please see "Business — Environmental, Social and Governance" for details.

## [REDACTED]

Our Directors are of the view that the financial results of our Group for the year ending December 31, 2022 are expected to be adversely affected by, among others, our [REDACTED], the nature of which is non-recurring. Our total [REDACTED], primarily consisting of fees paid or payable to professional parties and [REDACTED], are estimated to be approximately RMB[REDACTED] (or approximately HK$[REDACTED] million, based on the mid-point of the indicative [REDACTED] range of HK$[REDACTED] per [REDACTED] and [REDACTED] and assuming the [REDACTED] is not exercised). The [REDACTED] we incurred in the Track Record Period and expect to incur would consist of (i) [REDACTED] of approximately RMB[REDACTED] million (including but not limited to [REDACTED]); and (ii) [REDACTED] related expenses of approximately RMB[REDACTED] million (including fees and expenses of legal advisers and reporting accountants of approximately RMB[REDACTED] and other fees and expenses of approximately RMB[REDACTED]). Among the estimated aggregate amount of our [REDACTED], (i) approximately RMB[REDACTED] is directly attributable to the issue of the [REDACTED] and will be accounted for as a deduction from equity upon the [REDACTED]; and (ii) approximately RMB[REDACTED] million has been and is expected to be recognized as expenses in our consolidated statements of comprehensive income, of which approximately RMB[REDACTED] million and RMB[REDACTED] million has been recognized for the two years ended December 31, 2020 and 2021, respectively, and the remaining of approximately RMB[REDACTED] million is expected to be recognized by our Group for the year ending December 31, 2022. The total estimated amount of [REDACTED] (including [REDACTED]) accounted for approximately [REDACTED] of our gross [REDACTED] from the [REDACTED] assuming the [REDACTED] is fixed at HK$[REDACTED] per Share (being the mid-point of the indicative [REDACTED] range stated in this document and assuming that the [REDACTED] is not exercised).

## [REDACTED]

We estimate that the [REDACTED] of the [REDACTED] which we will receive, assuming an [REDACTED] of HK$[REDACTED] per [REDACTED] (being the mid-point of the [REDACTED] range stated in this document), will be approximately HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million), after deduction of [REDACTED] and estimated expenses payable by us in connection with the [REDACTED] and assuming that the [REDACTED] is not exercised. We intend to use the entire [REDACTED] of the [REDACTED] for the construction of a new beneficiation plant. We intend to allocate:

- approximately [REDACTED] of the [REDACTED] from the [REDACTED], or HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) for land acquisition;
- approximately [REDACTED] of the [REDACTED] from the [REDACTED], or HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) for construction; and
- approximately [REDACTED] of the [REDACTED] from the [REDACTED], or HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) for purchasing and installing machinery and equipment.

## DIVIDENDS

We did not declare any dividends during the Track Record Period. After completion of the [REDACTED], the declaration of dividends shall be subject to the discretion of our Directors. Any declaration of final dividend by our Company shall also be subject to the approval of our Shareholders in a Shareholders' meeting. Any declaration and payment as well as the amount of dividend will be subject to our constitutional documents, PRC laws and the Cayman Companies Act. Under applicable PRC laws, our subsidiary in the PRC may only distribute after-tax profits after it has made allocations or allowances for recovery of accumulated losses and allocations of the statutory reserves. Any distributable profits that are not distributed in any given year will be retained and available for distribution in subsequent years. To the extent profits are distributed as dividends, such portion of profits will not be available to be reinvested in our operations.

## RECENT DEVELOPMENT AND MATERIAL ADVERSE CHANGE

Our Directors expect that our net profit may experience a decrease for the year ending December 31, 2022, as compared to the year ended December 31, 2021, mainly for the reasons that: (i) we may incur more professional fees for [REDACTED] compliance works after the [REDACTED]; and (ii) we may no longer be entitled to the government grant for the year ending December 31, 2022 (as compared to our receipt of government grant of approximately RMB7.9 million in 2021). For the four months ended April 30, 2022, our revenue experienced a slight decrease of approximately 2.3% (unaudited) as compared to that for the four months ended April 30, 2021, primarily attributable to the period-to-period decrease in the volume of unprocessed marble extracted and sold. Our Directors confirm that since December 31, 2021, being the date of the latest audited financial statements of our Company, and up to the date of this document, there has been no material adverse change in our financial or trading position or prospects. Our Directors also confirm that there has been no events since December 31, 2021 which would materially affect the information shown in the Accountant's Report as set out in Appendix I to this document.

## RESPONDING TO THE COVID-19 OUTBREAK

Since December 2019, there has been an outbreak of COVID-19 in the PRC, Hong Kong and other countries. As a result, there had been lockdowns at workplaces and places of commerce in Heilongjiang Province, including our Beishan Mine. However, the temporary closure of our Beishan Mine and plants due to restrictions under the COVID-19 outbreak coincided with our seasonal shutdown period (i.e. the months of January to March, due to severe cold weather). Our Directors confirm that our Beishan Mine and plants have resumed normal operation, since April 2020, thus the disruption caused by the COVID-19 outbreak to our operations is not considered by our Directors to be severe. Our Directors further confirm that as at the Latest Practicable Date, no employee of our Group was infected with COVID-19. Our Directors also confirm that there was no cancelation of confirmed purchase orders nor was there any actual and/or expected loss of confirmed purchase orders during the Track Record Period and up to the

Latest Practicable Date as a result of the COVID-19 outbreak and there was no other actual and/or expected loss. To the best knowledge, information and belief of our Directors, most of our suppliers and third-party service providers resumed their operations since April 2020. Our Directors also confirm that there was no actual or foreseeable disruption to the supply of raw materials or utility supplies from our suppliers and services by our third-party service providers up to the Latest Practicable Date, therefore there had not been a material adverse financial or operational impact that was directly caused by the COVID-19 outbreak. Nevertheless, we have implemented measures aiming at preventing the spread of COVID-19 in our Beishan Mine and our facilities. In case any of our employees and/or employees of our third-party service providers contracted or is suspected to have contracted with COVID-19, we are required to report to the relevant PRC government authorities and such employee would be taken to hospital for treatment.

## STATISTICS OF THE [REDACTED]

All statistics in this table are based on the assumption that the [REDACTED] is not exercised.

| | **Based on the [REDACTED] of HK$[REDACTED]** | **Based on the [REDACTED] of HK$[REDACTED]** |
|---|---|---|
| [REDACTED] | HK$[REDACTED] | HK$[REDACTED] |
| Unaudited [REDACTED] adjusted combined net tangible assets of our Group attributable to the owners of our Company per Share(1) | | |
| — HK$ | [REDACTED] | [REDACTED] |
| — RMB | [REDACTED] | [REDACTED] |

*Note:*

1. Please see "Unaudited [REDACTED] financial information" in Appendix II to this document for details regarding the assumptions and calculation basis used.

## RISK FACTORS

The business operations of our Group are subject to certain risks and uncertainties. We believe that the following are some of the major risks that may have a material adverse effect on us:

- Our current business operation depends on the stable supply of unprocessed graphite from our suppliers and also our Beishan Mine;
- Fluctuations in the market prices of, and the supply and demand for, graphite related products and our products could materially and adversely affect our business, financial condition and results of operations;
- Our business operations are exposed to mining risk, environmental and social risks and workplace safety and occupational health risks and hazards associated with our operations;
- We are subject to credit risk in collecting the trade and bills receivable due from the customers;
- We rely on a limited number of customers for a substantial portion of our revenue;
- Our operations are subject to various risks as identified by our Independent Technical Consultant, which may disrupt our business operations; and
- Failure to obtain, retain and renew governmental approvals, permits and licenses required for our operations could materially and adversely affect our business, financial condition and results of operations.

*In this document, unless the context otherwise requires, the following terms shall have the meanings set out below.*

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| "Accountant's Report" | the report of the Reporting Accountant, the text of which is set out in Appendix I to this document |
| "affiliate(s)" | with respect to any specified person, any other person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified person |
| "Articles" or "Articles of Association" | the amended and restated articles of association of our Company, conditionally adopted on [●], 2022 and with effect from the [REDACTED], a summary of which is set out in Appendix V to this document, and as amended, supplemented or otherwise modified from time to time |
| "associate(s)" | has the meaning ascribed to it under the Listing Rules |
| "Beishan Mine" | a graphite mine located approximately 28 km northwest of Luobei County in Heilongjiang Province, the mining rights of which were obtained by us in 2019 |
| "BGRIMM Group" | Mineral Processing Research and Design Institute of BGRIMM Technology Group Co., Ltd. (北京礦冶科技集團有限公司選礦研究設計所) |
| "Board" or "Board of Directors" | the board of Directors |
| "business day" | any day (other than a Saturday, Sunday or public holiday in Hong Kong) on which licensed banks in Hong Kong are generally open for business |
| "BVI" | the British Virgin Islands |
| "CAGR" | compound annual growth rate |
| "[REDACTED]" | [REDACTED] |
| "Cayman Companies Act" or "Companies Act" | the Companies Act (as revised) of the Cayman Islands, as amended, supplemented or otherwise modified from time to time |

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| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "China" or "PRC" | the People's Republic of China excluding, for the purpose of this document only, Hong Kong, the Macau Special Administrative Region of the People's Republic of China and Taiwan |
| "Circular 7" | the Public Announcement on Several Issues Concerning Enterprise Income Tax for Indirect Transfer of Assets by Non-Resident Enterprises (國稅務總局關於非居民企業間接轉讓財產企業所得稅若干問題的公告) issued by the State Administration of Taxation in February 2015 |

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| "Circular 9" | the Announcement on Certain Issues Concerning the Beneficial Owners in a Tax Agreement (《關於稅收協定中"受益所有人"有關問題的公告》) issued by SAT on February 3, 2018 |
| "Circular 13" | Circular of the SAFE on Further Simplifying and Improving the Direct Investment-related Foreign Exchange Administration Policies* (關於進一步簡化和改進直接投資外匯管理政策的通知) |
| "Circular 36" | the Circular of Full Implementation of Business Tax to VAT Reform (《關於全面推開營業稅改徵增值稅試點的通知》) jointly issued by MOF and SAT on March 23, 2016 |
| "Circular 37" | Circular on Relevant Issues concerning Foreign Exchange Administration of the Overseas Investment and Financing and Return Investment Conducted by Domestic Residents through Overseas Special Purpose Vehicle* (關於境內居民通過特殊目的公司境外投融資及返程投資外匯管理有關問題的通知) |
| "Civil Code" | the Civil Code of the PRC (《中華人民共和國民法典》), which was promulgated by the NPC and became effective on January 1, 2021 |
| "close associate(s)" | has the meaning ascribed to it under the Listing Rules |
| "Companies Ordinance" | the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time |
| "Companies (Winding Up and Miscellaneous Provisions) Ordinance" | the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time |
| "Company" or "our Company" | China Graphite Group Limited 中国石墨集团有限公司, an exempted company incorporated under the laws of the Cayman Islands with limited liability on August 3, 2020 |
| "connected person(s)" | has the meaning ascribed to it under the Listing Rules |
| "connected transaction(s)" | has the meaning ascribed to it under the Listing Rules |
| "Controlling Shareholder(s)" | has the same meaning ascribed to it under the Listing Rules and, in the context of this document, refers to the controlling shareholders of our Company, being Mr. Zhao and Sandy Mining Limited |
| "CG Code" | the Corporate Governance Code as set out in Appendix 14 to the Listing Rules |

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| "core connected person(s)" | has the meaning ascribed to it under the Listing Rules |
| "COVID-19" | a novel coronavirus (2019-nCov) |
| "CSRC" | China Securities Regulatory Commission (中國證券監督管理委員會), a regulatory body responsible for the supervision and regulation of the PRC national securities market |
| "Decisions on Revision of Four Laws" | the Decisions of the SCNPC on Revising Four Laws Including the Law of the PRC on Wholly Foreign-owned Enterprises (全國人民代表大會常務委員會關於修改《中華人民共和國外資企業法》等四部法律的決定) |
| "Deed of Indemnity" | the deed of indemnity dated [●] given by each of our Controlling Shareholders in favor of our Company (for itself and as trustee for and on behalf of its subsidiaries), further information of which is set out in "Statutory and General Information — D. Other Information — 2. Estate duty and other indemnities" in Appendix VI to this document |
| "Director(s)" | the director(s) of our Company |
| "Double Tax Avoidance Arrangement" | an Arrangement between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Incomes (《內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排》) |
| "EIT" | enterprise income tax |
| "EIT Law" | the Law of the PRC on Enterprise Income Tax (中華人民共和國企業所得稅法) |
| "EIT Regulation" | the Implementation Rules to the EIT Law (《中華人民共和國企業所得稅法實施條例》), which was issued by the State Council on December 6, 2007, became effective on January 1, 2008, and was revised on April 23, 2019 |

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| "Environmental Laws" | the collection of major governing environmental laws and regulations in the PRC, which consists of the Environmental Protection Law of the PRC (《中華人民共和國環境保護法》), which was most recently amended on April 24, 2014 and became effective on January 1, 2015, the Law on the Prevention and Control of Water Pollution of the PRC (《中華人民共和國水污染防治法》), which was most recently amended on June 27, 2017 and became effective on January 1, 2018, the Law on the Prevention and Control of Air Pollution of the PRC (《中華人民共和國大氣污染防治法》), which was most recently amended and became effective on October 26, 2018, the Law on the Prevention and Control of Solid Waste Pollution of the PRC (《中華人民共和國固體廢物污染環境防治法》), which was partially amended on April 29, 2020 and became effective on 1 September, 2020, and the Law on the Prevention and Control of Noise Pollution of the PRC (《中華人民共和國環境噪聲污染防治法》), which was promulgated on October 29, 1996 and amended on December 29, 2018 |
| "Extreme Conditions" | extreme conditions caused by a super typhoon as announced by the government of Hong Kong |
| "F&S Report" | the market research report prepared by Frost & Sullivan and commissioned by us |
| "Fire Protection Law" | the Fire Protection Law of the PRC (《中華人民共和國消防法》), which was promulgated by the SCNPC on April 29, 1998, last revised and became effective on April 29, 2021 |
| "Foreign Exchange Regulation" | the Regulation of the PRC on Foreign Exchange Control (《中華人民共和國外匯管理條例》), which most recently amended by the State Council on August 1, 2008 and effective on August 5, 2008 |
| "Foreign Investment Law" | the Foreign Investment Law of the PRC (《中華人民共和國外商投資法》), which was adopted by the NPC on March 15, 2019 and came into force as on January 1, 2020, replacing the Law of Sino-Foreign Equity Joint Ventures of the PRC, the Law of the PRC on Sino-Foreign Contractual Joint Ventures, and the Law of the PRC on Wholly Foreign-owned Enterprise |
| "FRC" | the Financial Reporting Council of Hong Kong |
| "Frost & Sullivan" | Frost & Sullivan (Beijing) Inc. Shanghai Branch Co., an Independent Third Party, being a consulting firm that provides market research and analysis |
| "[REDACTED]" | [REDACTED] |

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| "[REDACTED]" | [REDACTED] |
| "Group", "our Group", "the Group", "we" or "us" | our Company and our subsidiaries, or, where the context so requires, in respect of the period prior to our Company becoming the holding company of its present subsidiaries, such subsidiaries as if they were subsidiaries of our Company at the relevant time or the businesses which have since been acquired or carried on by them or as the case may be their predecessors |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "HKFRSs" | Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "Hong Kong" or "HK" | the Hong Kong Special Administrative Region of the PRC |
| "Hong Kong dollars" or "HK dollars" or "HK$" | Hong Kong dollars, the lawful currency of Hong Kong |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |

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| "[REDACTED]" | [REDACTED] |
| "Housing Provident Funds Regulations" | the Regulations on Management of Housing Provident Funds (《住房公積金管理條例》), which was promulgated by the State Council, came into effect on April 3, 1999, and was amended on March 24, 2002 and March 24, 2019 |
| "Independent Technical Consultant" or "SRK" | SRK Consulting (Hong Kong) Limited, an Independent Third Party that specializes in providing expert advice and solutions for clients requiring specialized services in the fields of mining, geotechnics, water, waste, energy and the environment |
| "Independent Technical Report" | the report prepared by the Independent Technical Consultant and commissioned by us, the text of which is set out in Appendix III to this document |
| "Independent Third Party(ies)" | an individual(s) or a company(ies) who or which, to the best of our Directors' knowledge, information and belief having made all reasonable enquiries, is/are not a connected person of our Company |
| "Internal Control Consultant" | Moore Advisory Services Limited, an Independent Third Party, that provides corporate governance, controls assurance, internal audit and risk management advice to clients |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |

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| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "Latest Practicable Date" | June 13, 2022, being the latest practicable date prior to the printing of this document for the purpose of ascertaining certain information contained in this document |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "Listing Rules" | the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended or supplemented or otherwise modified from time to time |
| "Loans" | a loan in the amount of approximately RMB47.0 million due from Yixiang Graphite to Mr. Zhao and a loan in the amount of approximately RMB26.2 million due from Yixiang New Energy to Mr. Zhao as at May 27, 2021, whose rights in both of the loans have been assigned to the WFOE |
| "Loan Consideration Capitalization" | the capitalization of the consideration for the assignment of the Loans in an aggregate sum of approximately RMB73.1 million by way of issuance of one new Share, credited as fully paid, by our Company to Sandy Mining Limited |
| "M&A Provisions"/ "M&A Rules" | the Provisions on the Merger and Acquisition of Domestic Enterprises by Foreign Investors (《關於外國投資者併購境內企業的規定》), which was jointly promulgated by six PRC regulatory agencies, including MOFCOM, the State-Owned Assets Supervision and Administration Commission of the State Council, SAT, the State Administration for Industry and Commerce, SAFE, and China Securities Regulatory Commission on September 8, 2006, and subsequently amended by MOFCOM on June 22, 2009 |

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| "Main Board" | the stock exchange (excluding the option market) operated by the Stock Exchange which is independent from and operates in parallel with GEM of the Stock Exchange |
| "Memorandum" or "Memorandum of Association" | the amended and restated memorandum of association of our Company, conditionally adopted on [●] with effect from the [REDACTED], a summary of which is set out in Appendix V to this document |
| "MOF" | the Ministry of Finance of the PRC (中華人民共和國財政部) |
| "MOFCOM" | the Ministry of Commerce of the PRC (中華人民共和國商務部) (formerly known as the Ministry of Foreign Trade and Economic Cooperation of the PRC (中華人民共和國對外經濟貿易部)) |
| "Mr. Zhao" | Mr. Zhao Liang (趙亮), our chairman, executive Director, chief executive officer and one of our Controlling Shareholders |
| "NDRC" | the National Development and Reform Commission of the PRC (中華人民共和國國家發展和改革委員會) |
| "NEV(s)" | new energy vehicles |
| "NPC" | the National People's Congress (全國人民代表大會) |
| "Occupational Diseases Prevention Law" | the Law of the PRC on the Prevention and Control of Occupational Diseases (《中華人民共和國職業病防治法》), which was promulgated by the SCNPC on October 27, 2001, became effective on May 1, 2002, and was amended on December 31, 2011, July 2, 2016, November 4, 2017, and December 29, 2018 |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |

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| "[REDACTED]" | [REDACTED] |
| "PRC Company Law" | the Company Law of the PRC (《中華人民共和國公司法》), which was issued by the SCNPC on December 29, 1993, last revised and became effective on October 26, 2018 |
| "PRC Government" or "State" | the central government of the PRC, including all political subdivisions (including provincial, municipal and other regional or local government entities) and its organs or, as the context requires, any of them |
| "PRC Labor Contract Law" | the Labor Contract Law of the PRC (《中華人民共和國勞動合同法》), which was promulgated on June 29, 2007, became effective on January 1, 2008, and was further amended on December 28, 2012 |
| "PRC Labor Law" | the Labor Law of the PRC (《中華人民共和國勞動法》), which was promulgated on July 5, 1994, became effective on January 1, 1995, and was further amended on August 27, 2009 and December 29, 2018 |
| "PRC Legal Advisers" | Tian Yuan Law Firm, our legal advisers as to PRC law |
| "PRC Social Insurance Law" | the Social Insurance Law of the PRC (《中華人民共和國社會保險法》), which was promulgated by the SCNPC on October 28, 2010 and amended on December 29, 2018 |
| "[REDACTED]" | [REDACTED] |
| "Product Quality Law" | the Product Quality Law of the PRC (《中華人民共和國產品質量法》), which was issued by the SCNPC on February 22, 1993, last revised and became effective on December 29, 2018 |
| "[REDACTED]" | [REDACTED] |

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| "Reorganization" | the reorganization of our Group conducted in preparation for the [REDACTED], details of which are set out in "History, Reorganization and Corporate Structure" in this document |
| "Reporting Accountant" | PricewaterhouseCoopers |
| "RMB" or "Renminbi" | Renminbi, the lawful currency of the PRC |
| "SAFE" | the State Administration of Foreign Exchange of the PRC (中華人民共和國外匯管理局) |
| "SAIC" | the State Administration for Industry and Commerce of the PRC (中華人民共和國國家工商行政管理總局) (since March 2018 known as the State Administration for Market Regulation (國家市場監督管理總局)) |
| "SAT" | the State Taxation Administration of the PRC (中華人民共和國國家稅務總局) |
| "SCNPC" | the Standing Committee of the National People's Congress of the PRC (全國人民代表大會常務委員會) |
| "SFC" | the Securities and Futures Commission of Hong Kong |
| "SFO" | the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented or otherwise modified from time to time |
| "Share(s)" | ordinary share(s) with nominal or par value of HK$0.001 each in the capital of our Company |
| "Share Option Scheme" | the share option scheme conditionally adopted by our Company on [●], the principal terms of which are summarized in "Statutory and General Information — D. Other Information — 1. Share Option Scheme" in Appendix VI to this document |
| "Shareholder(s)" | holder(s) of the Shares from time to time |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "Sole Sponsor" | Lego Corporate Finance Limited, a licensed corporation to carry out type 6 (advising on corporate finance) regulated activity under the SFO, being the sole sponsor of the [REDACTED] |

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| "[REDACTED]" | [REDACTED] |
| "State Council" | State Council of the PRC (中華人民共和國國務院) |
| "Stock Exchange" | The Stock Exchange of Hong Kong Limited |
| "subsidiary(ies)" | has the meaning ascribed to it in section 15 of the Companies Ordinance |
| "substantial shareholder(s)" | has the meaning ascribed to it under the Listing Rules |
| "Takeovers Code" | the Codes on Takeovers and Mergers and Share Buy-backs issued by the SFC, as amended, supplemented or otherwise modified from time to time |
| "Track Record Period" | the period comprising the financial years ended December 31, 2019, 2020 and 2021 |
| "[REDACTED]" | [REDACTED] |
| "[REDACTED]" | [REDACTED] |
| "U.S." or "United States" | the United States of America, including its territories and possession and all areas subject to its jurisdiction |
| "U.S. dollar(s)" or "US$" | United States dollar(s), the lawful currency of the United States of America |
| "[REDACTED]" | the [REDACTED] of 1933, as amended from time to time, and the rules and regulations promulgated thereunder |
| "VAT" | value added tax |
| "VAT Law" | the collection of major governing laws of value-added tax in the PRC, which consists of the Interim Value-added Tax Regulations of the PRC (《中華人民共和國增值稅暫行條例》) which was amended and became effective on November 19, 2017 and the Implementing Rules for the Interim Regulations of the PRC on Value-added Tax (《中華人民共和國增值稅暫行條例實施細則》) which was amended on October 28, 2011 and became effective on November 1, 2011 |
| "WFOE" | Beijing Yixiang Carbon Technology Company Limited* (北京溢祥烯碳科技有限公司), a limited liability company established in the PRC on November 26, 2020 and a wholly-owned subsidiary of China Graphite Holdings Group (HK) Limited |

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| "Yixiang Graphite" | Heilongjiang Baoquanling Farmland Yixiang Graphite Company Limited* (黑龍江省寶泉嶺農墾溢祥石墨有限公司), a company established under the laws of the PRC with limited liability on June 26, 2006 and is our indirect wholly-owned subsidiary |
| "Yixiang New Energy" | Heilongjiang Baoquanling Farmland Yixiang New Energy Materials Company Limited* (黑龍江省寶泉嶺農墾溢祥新能源材料有限公司), a company established under the laws of the PRC with limited liability on April 20, 2011 and is our indirect wholly-owned subsidiary |
| "%" | per cent |

*Unless otherwise expressly stated or the context otherwise requires, all data in this document are as at the Latest Practicable Date.*

*Unless otherwise stated, the conversion of RMB and USD into HKD in this document have been based on the exchange rates of RMB1.00 to HK$1.20 and US$1.00 to HK$7.80. No representation is made that any amounts in RMB and/or US$ can be or could have been converted into HK$ at the related dates at the above rates or any other rates or at all.*

*Certain amounts and percentage figures included in this document have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures preceding them. Where information is presented in thousands or millions of units, amounts may have been rounded up or down.*

*The English names of PRC entities, PRC laws or regulations, and PRC governmental authorities referred to in this document are translations from their Chinese names and are for identification purposes only. If there is any inconsistency, the Chinese names shall prevail. The English translation of names or any descriptions in Chinese marked with "*" is for identification purposes only.*

*This glossary contains explanations of certain technical terms used in this document, which its use and meaning may not correspond to standard industry meanings or usage of these terms.*

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| "anode material" | the negative electrode in lithium-ion batteries |
| "beneficiation" | the process(es) that improves the economic value of the ore by removing the gangue minerals, which results in a concentrate and tailings. |
| "CIP" | construction in progress |
| "ºC" | degrees Celsius |
| "EIA" | Environmental Impact Assessment |
| "ESG" | Environment, Social and Governance |
| "ESHS" | Environmental, Social, Health and Safety |
| "flake graphite concentrate" | one of the main forms of natural graphite which occurs as flat plate-like crystals with angular rounded or irregular edges, through the process of Beneficiation becomes a commercial item, as a "concentrate" of relatively high carbon content, which is also one of the principal products of our Group |
| "flake graphite recovery" | the level of case which flake graphite can be detached from the extracted ore |
| "flotation" | the process(e)s of separating hydrophobic particles from hydrophilic particles |
| "GDP" | gross domestic product |
| "Indicated Resource" | resource that has been sampled by drill holes or other sampling procedures at locations too widely spaced to ensure continuity, but close enough to give a reasonable indication of continuity and where geoscientific data are known with a reasonable level of reliability |
| "Inferred Resource" | part of a Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes |
| "JORC Code" | 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves |
| "km" | kilometers |

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| "km$^2$" | square-kilometers |
| "KWH" | Kilowatt-Hour |
| "m ASL" | meters above sea level |
| "m$^2$" or "sq.m." | square-meters |
| "m$^3$" | cubic-meters |
| "mining rights" | the rights to mine Mineral Resource and obtain mineral products in areas where mining activities are licensed |
| "Measured Resource" or "Measured Mineral Resource" | part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. |
| "Mineral Resource(s)" or "Resource(s)" | concentration or occurrence of material of intrinsic economic interest upon or inside the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge |
| "Modifying Factors" | factors to be considered in the conversion from Reserves to Resources, such as mining, processing, metallurgical, infrastructure, economic, marketing, legal, environment, social and government factors |
| "open-pit mining" | mining of a deposit from a pit open to surface and usually being carried out by stripping of overburden materials |
| "Reserve(s)" | the economically mineable part of a Mineral Resource |
| "spherical graphite" | one of the principal products of our Group, manufactured from flake graphite concentrate. Flake graphite concentrate is processed to spherical graphite through micronizing, rounding and purifying. Flake graphite concentrate is micronized to approximately 10–15 μm |
| "TGC" | total graphitic carbon |
| "TSF" | tailings storage facility |
| "tpa" | tonnes per annum |

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| "unprocessed graphite" | raw material used in the beneficiation of spherical graphite, mostly extracted directly from a graphite mine |
| "μm" | micrometer, or micron |

# FORWARD-LOOKING STATEMENTS

This document contains certain forward-looking statements and information relating to us and our subsidiaries that are based on the beliefs of our management as well as assumptions made by and information currently available to our management. When used in this document, the words ''aim'', ''anticipate'', ''believe'', ''consider'', ''could'', ''estimate'', ''expect'', ''going forward'', ''intend'', ''may,'', ''might'', ''ought to'', ''plan'', ''potential'', ''predict'', ''project'', ''seek'', ''should'', ''will'', ''would'' and the negative of these words and other similar expressions, as they relate to us or our management, are intended to identify forward-looking statements. These forward-looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future. Such statements reflect the current views of our management with respect to future events, operations, liquidity and capital resources, some of which may not materialize or may change. These statements are subject to certain risks, uncertainties and assumptions, including the risk factors as described in this document and other factors, some of which are beyond our control, which may cause our actual results, performance or achievements, or industry results to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. You are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. The risks and uncertainties facing us which could affect the accuracy of forward-looking statements include, but are not limited to, the following:

- our business strategies and plans to achieve these strategies;
- our capital expenditure plans;
- our operation and business prospects;
- our financial condition;
- availability of bank loans and other forms of financing;
- our ability to control or reduce costs;
- the actions of and developments affecting our major customers and suppliers;
- the ability to attract and retain our users;
- the ability of third parties to perform in accordance with contractual terms and specifications;
- the amount and nature of, and potential for, future development of our business;
- future developments, trends and conditions in the industries and markets in which we operate;
- changes to the regulatory environment, policies, operating conditions and general outlook in the industries and markets in which we operate;
- general economic, political and business conditions in the PRC; and
- certain statements included in ''Risk Factors'', ''Industry Overview'', ''Regulatory Overview'', "Business'', "Financial Information" and "Future Plans and [REDACTED]" in this document with respect to operations, margins, overall market trends, risk management and exchange rates.

By their nature, certain disclosures relating to these and other risks are only estimates and should one or more of these uncertainties or risks materialise or should underlying assumptions prove to be incorrect, our financial condition and actual results of operations may be materially and adversely affected and may vary significantly from those estimated, anticipated or projected, as well as from historical results.

Subject to the requirements of applicable laws, rules and regulations, we do not have any and undertake no obligation to update or otherwise revise the forward-looking statements in this document, whether as a result of new information, future events or otherwise. As a result of these and other risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this document might not occur in the way we expect or at all. Accordingly, the forward-looking statements are not a guarantee of future performance and you should not place undue reliance on any forward-looking information. Moreover, the inclusion of forward-looking statements should not be regarded as representations by us that our plans and objectives will be achieved or realized. All forward-looking statements in this document are qualified by reference to the cautionary statements in this section.

In this document, statements of or references to our intentions or any of our Directors are made as at the date of this document. Any such information may change in light of future developments.

*You should carefully consider all of the information set out in this document, including the risks and uncertainties described below before making any investment in the [REDACTED]. Our business, financial condition or results of operations could be affected materially and adversely by any of these risks and uncertainties. The [REDACTED] of the [REDACTED] could decline significantly due to any of these risks and uncertainties, and you may lose all or part of your [REDACTED]. Additional risks and uncertainties not presently known to us or that we currently deem immaterial could also harm our business, financial condition or results of operations.*

There are certain risks relating to an [REDACTED] in our Shares. These risks can be categorized into: (i) risks relating to our business and operations; (ii) risks relating to our industry; (iii) risks relating to conducting business in the PRC; (iv) risks relating to the [REDACTED] and our Shares; and (v) risks relating to the statements made in this document.

## RISKS RELATING TO OUR BUSINESS AND OPERATIONS

### Our current business operation depends on the stable supply of unprocessed graphite from our suppliers and also our Beishan Mine

Whilst we continue to source unprocessed graphite from third parties, for the three years ended December 31, 2019, 2020 and 2021, unprocessed graphite extracted from our Beishan Mine represented approximately 60.0%, 52.7% and 50.4% of our total graphite supply. For the three years ended December 31, 2019, 2020 and 2021, the unit cost for procuring unprocessed graphite from our third-party suppliers was approximately RMB63, RMB75 and RMB75 per tonne. The costs for extracting unprocessed graphite from our Beishan Mine were approximately RMB3.8 million, RMB5.6 million and RMB5.2 million, thus approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne for the three years ended December 31, 2019, 2020 and 2021, respectively. Our Beishan Mine is expected to continue being our only self-owned graphite mine in the near future, upon which we partially depend on for the supply of unprocessed graphite required for the production of our principal products, namely flake graphite concentrate and spherical graphite. Hence the amount of unprocessed graphite sourced from our Beishan Mine may affect our revenue and cash flows. For instance, seeing the difference in the unit cost of unprocessed graphite extracted as compared to those procured, our material costs will likely increase if we had to rely more on procurement. Similarly, if our Beishan Mine was rendered unoperational due to any circumstances beyond our control, we would incur additional procurement cost at a higher unit cost and decrease our revenue due to cessation of sales of unprocessed marble. Our Beishan Mine is subject to various operating risks and hazards. If we fail to obtain the expected economic benefits from our Beishan Mine due to the occurrence of any event that causes it to operate at a lower capacity than anticipated or other significant negative development, our business, future prospects, financial condition and results of operations could be materially and adversely affected. Furthermore, should our one and only mine be closed and/or discontinued and/or we cannot extend the valid period for mining rights for our Beishan Mine pursuant to the mining license, we will incur significant expenses in procuring more unprocessed graphite. Our Directors believe that it would lead to adverse impacts on our business, financial condition and results of operations.

**Fluctuations in the market prices of, and the supply and demand for, graphite related products and our products could materially and adversely affect our business, financial condition and results of operations**

Our revenue is mainly derived from the sale of our graphite products. Any drastic change in China's market demand for graphite products, and hence its market price, will have a corresponding impact on the price of our products. Government policies, macroeconomic factors, the global economic environment and other factors beyond our control may result in imbalance in supply and demand for our products, which may in turn lead to fluctuation in market price for our products. In addition, if there are other minerals that can replace or act as a substitute for graphite, the demand for our products may not grow as anticipated, or even decline. There is no assurance that the market price of graphite or our graphite products will not decline in future or that such price will remain at sufficiently high level to ensure our profitability. Any adverse impact on China's market demand or price of graphite and/or our products could materially and adversely affect our business, financial condition and results of operations.

**Our business operations are exposed to mining risk, environmental and social risks and workplace safety and occupational health risks and hazards associated with our operations**

Our operations are subject to a number of operating risks and hazards, some of which are beyond our control and cannot be completely eliminated through prevention efforts.

*Mining risk.* These operating risks and hazards of mining include (i) unexpected maintenance or technical problems; (ii) interruptions to our mining operations due to hazardous weather conditions and natural disasters, such as, floods, landslides and earthquakes; (iii) industrial accidents; (iv) electricity or fuel supply interruptions; (v) critical equipment failures in our mining, processing and production operations; (vi) the handling and storage of certain dangerous substances and the use of heavy machinery; (vii) unusual or unexpected variation in the mine and geological or mining conditions, such as instability of the slopes and subsidence of the working areas; and (viii) exposure to noise and dust emission from the open-pit area and from the process of crushing under dry and windy weather conditions. The above risks and hazards may result in personal injury, damage to, or destruction of, properties or production facilities, environmental damages, business interruptions and damage to our business reputation. Further, dust emission from our production process may adversely affect the health of our on-site employees and in extreme cases, it may cause pneumoconiosis or other occupational diseases.

*Environmental and social risk.* Our Directors are of the view that our current and future operations may be subject to the extensive environmental risks inherent in the mining and processing industries, such as risks of accidental spills, leaks or overflows and discharges from tailing storage or other facilities or other unforeseen circumstances, which could possibly subject us to considerable liability. One of the main environmental issues in the mining industry could potentially be waste water and tailing management. Waste water and tailings can contain substances that are potentially harmful to people and the environment, especially in large quantities. We may be subject to claims for personal injury or damage to property and the environment as a result of waste disposal, improper waste management or other events, such as water or tailing residue being released or overflowed from our operations into the environment, in particular any discharge or overflow into rivers, and the inappropriate and uncontrolled disposal of hazardous waste alongside with domestic waste. In addition, our operations involve handling and storage of toxic and other dangerous materials. Accidents arising from the mishandling of dangerous materials may occur in the future. The occurrence of any of these risks and hazards could result in damage to environment or destruction of production facilities, personal injury, business interruption, delay in production, increased production cost, monetary loss and possible legal liability to us, which could materially and adversely affect our business, financial condition and results of operations. Moreover, our existing mining operations have a limited life and our Directors consider certain procedures are needed to be performed for remediation and rehabilitation of the environmental and social impact been caused on local communities. Operation, rehabilitation, closure and removal of our facilities will incur various costs and are subject to various risks. There is no assurance that the operation and maintenance of our Beishan Mine will be successful on an on-going basis and without delays or additional costs. In the event of non-compliance with applicable requirements on operations and closure of our Beishan Mine, we could be subject to a variety of penalties and other administrative actions, including inability to proceed with certain administrative procedures relating to mining permits, suspension and cancelation or mining permits or ceasing of operations.

*Safety and occupational health risks.* Our operations may be carried out under potential hazardous conditions. Liabilities might arise in the future as a result of accidents, fatalities or other workforce-related misfortunes, some of which may be beyond our control. Any such events could lead to significant expenditures by us in respect of compensation claims or payments, and insurance may be unavailable or prohibitively expensive. The occurrence of accidents could delay production, increase production costs and result in liability and adverse publicity for us. These factors could have a material adverse effect on our business, financial condition and results of operations. A violation of health and safety laws in relation to a mine or other operating facilities, or failure to comply with instruction imposed by the relevant health or safety authorities, such as, imposing prescribed health and safety measures, adopting work shift systems and organizing union activities, or insufficient protection to employees from health and safety hazards, failure to replace defective personal protective equipment, imposing long working shifts and long working weeks for employees without proper compensation, could lead to, among other, shutdown of all or portion of the mine or relevant facilities, a loss or suspension of the right to mine or operate the relevant facilities, imposition of costly rectification measures and fines, or serious reputational damage to us.

As an inherent risk in the mining industry, we may face disputes or legal actions for injuries or other health or safety related issues suffered by our employees or even death under extreme circumstances, such as operating machinery improperly, industrial accidents and natural hazards. We may also face disputes or legal actions for health related issues suffered by residents neighboring our Beishan Mine due to the noise and dust emission from the open-pit area. Disputes or legal actions of this nature may be expensive and time-consuming, result in significant diversion of resources and management attention from our operations, and adversely affect our business, reputation, financial condition, and results of operations.

In addition, any breakdown of machinery and equipment, difficulties or delays in obtaining replacement machinery and equipment, natural disasters, industrial accidents or other events may temporarily disrupt our operations. Between November 2020 and May 2021, we experienced a temporary suspension in our spherical graphite processing plant's purification stations to conduct enhancement and repair works. We also had a temporary suspension in our processing plant in June 2020 as enhancements were required for our air-drying process. For details, please see "Business — Our business model — Our beneficiation and processing operations — Maintenance of our spherical graphite processing plant". Hence, we had to engage third-party service providers to provide purification services for our unfinished products from November 2020. If we experience any temporary suspension in our production processes and we cannot rectify or engage service providers to process in a timely manner for us or if so, at a higher cost, our business and results of operations would be materially and adversely affected.

The Independent Technical Consultant carried out a risk assessment highlighting the potential risks in relation to our mining operations. For further details on our Group's remedial actions or plan addressing the aforementioned risks, please see "Business — Environmental, Social and Governance (ESG)", covering our implementation status of environmental protection measures recommended by the Independent Technical Consultant, safety inspections conducted by relevant regulatory authority and training sessions provided to our employees by us.

**We are subject to credit risk in collecting the trade and bills receivables due from the customers**

Our sales are generally made on credit terms of up to three months, and most of our trade receivables were settled by telegraphic transfers or bills issued by financial institutions. Furthermore, our bills receivables generally have maturity period of six to 12 months. As a result, for the three years ended December 31, 2019, 2020 and 2021, the trade and bills receivables turnover days of our Group were approximately 331.6 days, 297.7 days and 284.8 days, respectively. As at December 31, 2019, 2020 and 2021, we had recorded trade receivables of approximately RMB55.1 million, RMB79.1 million and RMB55.5 million, respectively, out of which approximately 5.1%, 5.7% and 8.6% were aged over one year based on due date. Our Directors consider that a long payment period inevitably increases the potential credit risk of our Group. There is no assurance that all such amounts due to our Group will be settled on time. Accordingly, our Group faces credit risk in collecting the accounts receivable due from the customers. For details, please see "Business — Our customers — Payment terms and credit control". Our Group's performance, liquidity and profitability will be adversely affected if significant amounts due to our Group are not settled on time. The bankruptcy or deterioration of the credit condition of any of our major customers could also materially and adversely affect our business and financial condition.

**We rely on a limited number of customers for a substantial portion of our revenue**

For the three years ended December 31, 2019, 2020 and 2021, revenue generated from our five largest customers amounted to approximately RMB77.8 million, RMB99.6 million and RMB110.5 million, respectively, representing approximately 62.9%, 59.0% and 55.7% of our Group's total revenue, respectively. We may be subject to concentration and counter-party risk from these customers. There is no assurance that we will be able to maintain good business relationships with our existing customers in future. There is also no assurance that we will be able to successfully broaden and diversify our customer base by increasing the number of customers in various different industries. Any decline in our existing customers' business could indirectly lead to a decline in purchase orders for our graphite products. If (i) any of our existing customers were to substantially reduce the quantity of their purchase orders from us or terminate their business relationship with us, and we are not be able to obtain similar quantities of purchase orders from other existing customers or new customers in a timely manner to replace any such lost sales on comparable terms, or at all; or (ii) if there is any adverse event resulting from a general economic downturn, the entry of new competitors to the graphite industry, unanticipated shift in customer preference, government policies or any other factors affecting the demand for our products, our business, financial condition, results of operations and future prospects may be materially and adversely affected.

**Our operations are subject to various potential risks as identified by our Independent Technical Consultant, which may disrupt our business operations**

The industry in which we operate and our operation of our Beishan Mine is subject to different levels of risks in various areas, such as occupational health and safety, environmental, nature of the mineral body and natural disaster that may affect our mining and production operations. The Independent Technical Consultant carried out a risk assessment highlighting the potential risks in relation to our extraction, beneficiation and processing operations. The table below sets out the initial assessment results, recommendations on prevention, and their risk rating:

| Potential risk | Description | Prevention recommendations/ measures implemented | Likelihood | Consequence | Rating |
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| Graphite flake size | Smaller flake size and lower graphitic content, resulting in lower head grade | Regular production grade control and feed ore grade monitoring as well as ore grade reconciliation | Unlikely | Moderate | Low |
| Geological structure | Geological continuity is disrupted by much complicated geological structures | Production in-fill drilling to further constrain areas with complex geological structures | Unlikely | Moderate | Low |
| Mineral Resource | Lower Mineral Resource to support Ore Reserve conversion | Lower the current mining elevation limit | Unlikely | Moderate | Low |
| Mine plan | Failure to meet production targets | Ensure adequate planning to supervision to ensure maximum efficiency, and identify and address issues that may cause production delays | Unlikely | Moderate | Low |
| Waste rock management | Inadequate space for waste rock storage | An alternative waste rock disposal plan should be developed before the storage space is full | Possible | Moderate | Medium |
| Water management | Pollution of surface and/or groundwater | Develop a comprehensive water monitoring program and prevention of wastewater leakage | Unlikely | Moderate | Low |
| TSF management | Failure to reclaim tailings in winter, resulting insufficient space for tailings storage in the next year | Develop a long-term plan on winter tailings excavation program | Unlikely | Moderate | Low |
| Capital and operating costs | Higher capital and operating costs, resulting in poor financial performance | Secure long-term contracts with contractors and confirm advanced procurement orders with suppliers | Possible | Moderate | Medium |

| Potential risk | Description | Prevention recommendations/ measures implemented | Likelihood | Consequence | Rating |
|---|---|---|---|---|---|
| Processing equipment efficiency | Lower throughput and performance due to the lower processing efficiency | Gradually replace aged equipment and streamline the flowsheet | Unlikely | Moderate | Low |
| Graphite recovery | Lower graphite recovery than the designed targets, inducing lower product outputs | Feed ore blending and flowsheet optimization | Unlikely | Moderate | Low |
| Product quality | Lower quality product produced, reducing the profit margin | Process monitoring and flowsheet optimization | Possible | Moderate | Medium |
| Sales & pricing | Forecast sales not achieved at expected prices, reducing cashflow | Modify production volume; actively seek new customers and establish long-term contracts | Possible | Moderate | Medium |
| Increased competition | Competition and possible reduction of price and sales volume leading to reduced cashflow | Market and prices be monitored to ensure the prices received are maximized | Possible | Moderate | Medium |

For details, please see "Appendix III — Independent Technical Report — 12. Risk Assessment".

The Independent Technical Consultant is of the opinion that the above risks are generally manageable if our Company (i) conducts regular risk assessments; (ii) properly implements the relevant recommended procedures; and (iii) strictly adheres to the standards and regulatory requirements in the PRC. If we are unable to manage the above potential risks in a timely and appropriate manner, or should any of the above potential risks materialize, our business operations may be disrupted, which may in turn materially and adversely affect our business, financial condition and results of operations.

**Failure to obtain, retain and renew governmental approvals, permits and licenses required for our operations could materially and adversely affect our business, financial condition and results of operations**

Under the Mineral Resources Law of the PRC, all mineral resources in China are stated-owned and thus, all mining companies are required to obtain certain governmental approvals, permits and licenses prior to conducting any exploration, mining and relevant production activities. These permits and licenses generally stipulate a validity period and specify the type of activities that may be undertaken by the permit or license applicant. For further details on our mining license as well as other permits and approvals required for our mining and processing operations, please see "Business — Licenses, permits and approvals". Our current mining license on our Beishan Mine will expire in April 2024. Whether we can carry on our mining and processing activities depends on our ability to renew and obtain our mining license and other approvals and permits from the relevant PRC authorities upon the expiration of their respective validity periods. Our applications for renewal are subject to a certain degree of the PRC government's discretion and uncertain changes in national policies. Therefore, there is no assurance that we will be able to renew the licenses, permits and approvals required for our business operations in future, and any failure to do so could materially and adversely affect our business, financial condition and results of operations. Should we fail to renew the mining license for our Beishan Mine after April 2024, it is expected that there will be an overall decrease in our profitability, considering (i) the cost of unprocessed graphite per tonne would experience an overall increase as we are no longer able to extract such from our Beishan Mine; and we need to purchase more unprocessed graphite from suppliers at higher costs per tonne, thereby increasing overall procurement and transportation costs; (ii) there would be no more revenue generated from the sales of unprocessed marble, while our extraction cost would be nil due to non-operation of our Beishan Mine. The overall gross profit margin is expected to decrease, attributable to the increase on costs of raw materials and consumables and transportation as we are no longer able to extract unprocessed graphite from our Beishan Mine together with the loss of revenue from sales of unprocessed marble, which would be offset by the decrease of extraction costs incurred with respect to our Beishan Mine. Our Group's liquidity in terms of cash generated from our operating activities may also be adversely affected as a result of decrease in overall profitability attributable to the decrease of our gross profit margin. For details, please see "Financial Information — Principal Income Statement Components — Cost of Sales — Extraction Costs".

**There may be disruptions to the supply of, or an increase in prices of, among others, electricity and materials and supplies**

Our business operations, in particular our beneficiation and processing operations, require a constant and reliable supply of electricity. For the three years ended December 31, 2019, 2020 and 2021, the costs incurred for electricity amounted to approximately RMB21.6 million, RMB22.5 million and RMB23.0 million, respectively. Considering that there has been a disruption to electricity supply in the PRC in 2021, to reduce energy intensity in various provinces, including the Heilongjiang Province, the PRC, where our production plants are based, our production was suspended for a total of approximately 105 hours in the second half year of 2021. If power rationing measures are implemented in the Heilongjiang Province in the future, we cannot assure that we would not be subject to any power outages. Any shortage or disruption in the availability of electricity could lead to delay or even suspension of our mining and production operations, while any increase in costs of electricity will lead to an increase of our overall operating costs. In the hypothetical case that, based on (i) our production of beneficiation plant is at approximately 216 tonnes per day; and (ii) our production of processing plant is at 22 tonnes per day; and (iii) reference to our historical operating costs, our production are suspended due to electricity outage, our Directors expect we would incur daily loss of revenue from production of flake graphite concentrate and spherical graphite of approximately RMB0.6 million and RMB0.3 million respectively, and continue to incur daily operating costs of approximately RMB0.1 million, until our productions can be resumed with the availability of electricity. The occurrence of any of the foregoing could materially and adversely affect our business, financial condition and results of operations if we are unable to (i) secure a reliable supply of electricity; or (ii) pass on the increased costs to our customers.

Our beneficiation and processing operations also require the use of other consumables, materials and supplies such as acid base and, other compound additives and packaging. For the three years ended December 31, 2019, 2020 and 2021, the expenses incurred for raw materials and consumables represented 39.2%, 47.8% and 47.3% of our cost of sales, respectively. There is no assurance that the supply of consumables, materials and supplies will not be interrupted or will be delivered in a timely manner, or that prices will not increase in the future. According to the F&S Report, coal prices increased sharply since March 2020. As a large percentage of coal is used for power, many enterprises in the PRC had to reduce power generation to save costs. Many provinces in the PRC release relevant policies to adjust the market based transaction prices of electricity. The "Key Points of Energy Supervision Work in 2022 (2022年能源監管工作要點)" issued by the National Energy Administration (國家能源局) of the PRC proposed that it is necessary to continuously improve the level of energy marketization system construction, and further promote the improvement of the marketization mechanism of coal power prices and expand the range of market transaction electricity price floating. Accordingly, the range of market based electricity price in the PRC may be widen and there is no assurance that the price of electricity or the price of materials used to generate electricity would not rise in the future. In the event of a shortage in supply of consumables, materials and supplies, our business, financial condition and results of operations may also be materially and adversely affected.

**We rely on third-party service providers for certain services**

Whilst the most mining functions were conducted by our own team, we engage third-party service providers for blasting tasks such as explosives charging, safety and blasting works. For the three years ended December 31, 2019, 2020 and 2021, we incurred approximately RMB1.6 million, RMB2.3 million and RMB2.7 million, respectively in engaging such blasting services.

For the three years ended December 31, 2019, 2020 and 2021, we engaged transportation service providers to transport unprocessed graphite from our suppliers to our production site and finished graphite goods to our customers. For the years ended December 31, 2019, 2020 and 2021, we incurred a total of approximately RMB7.3 million, RMB9.1 million and RMB12.5 million in transportation costs. As at the Latest Practicable Date, our major customers and suppliers were located in the PRC, and our products and materials and supplies were generally transported by road. If the major road networks connecting our Beishan mine to, among others, our customers, our suppliers, and the production site are blocked off for an extended period of time due to traffic accidents or are significantly damaged or rendered inaccessible due to unforeseeable incidents, such as, natural disasters, the delivery of our products will be significantly affected, resulting in late delivery and/or even loss of existing customers. In addition, there is no guarantee that the transportation companies engaged will not: (i) increase the price of their services; or (ii) fail to perform their obligation or comply with relevant laws, rules and regulations. If the major road networks are blocked for an extended period of time or we are unable to pass on increase in transportation costs to our customers, our business, reputation, financial condition, results of operations and future prospects may be materially and adversely affected.

During the Track Record Period, we engaged external graphite product processing service providers to assist with (i) handling orders made during the off-season months of January to March; and (ii) purification of our unfinished products between November 2020 and May 2021 as the purification station of our spherical graphite processing plant was undergoing enhancement and repair. For the two years ended December 31, 2020 and 2021, we incurred subcontractor fees of approximately RMB0.2 million and RMB6.5 million.

We leased certain equipment and machineries from service providers to assist with the mining operation. For the three years ended December 31, 2019, 2020 and 2021, we incurred a total cost of approximately nil, RMB0.6 million and RMB1.9 million for leasing of equipment and machineries.

We will continue to engage such service providers when in need. Sub-standard performance of any of our service providers leading to their failure to meet, among others, our Group's quality, safety and environmental protection standards may result in us being liable to our end-customers, which could materially and adversely affect our business, financial condition and results of operations. Being able to engage suitable service providers to perform the relevant services is also crucial to our business operations. Any failure to retain suitable service providers at a reasonable cost or seek replacements on reasonable terms, or at all, in a timely manner and any failure of our service providers to perform their obligations or comply with relevant laws, rules and regulations may have a material and adverse impact on our business and results of operations.

**Any labor shortage or unstable supply of labor may adversely affect our results of operations**

Our Directors believe that, due to the competition in our industry and that our operations are located near the boundary between the PRC and Russia, we may experience difficulties in recruiting sufficient frontline workers to attend to work. This was particularly apparent after the Chinese New Year holidays as some of our workers may not return after the winter break. If we experience such labor shortage, we may be unable to operate our mine, our beneficiation plant and our processing plant at full capacity. Our Directors are of the view that it is important to retain suitable frontline workers and attract new frontline workers for our business operations. We cannot assure you that we will not face labor shortage in the future. If there is an insufficient number of workers in the future, it will have an adverse impact on our business operations.

**Failure to retain our management team and other key personnel may materially and adversely affect our business and prospects**

Our success is significantly dependent on the continued service of our management team and skilled employees, all of whom are critical to the development of our business and our strategic direction. For further details on our management team, please see "Directors and Senior Management". Any loss of one or more of our key executives and/or skilled member of the senior management team without immediate and adequate replacements may impede our future competitiveness and growth, and affect our daily business operations and implementation of our business strategies, we may also be required to expend additional financial resources on higher compensation and other employee benefits to attract, recruit and train new personnel, which could be difficult and time-consuming and lead to a significant increase in our operating costs. If we fail to attract or retain the personnel required to achieve our business objectives, our business, financial condition and results of operations could be materially and adversely affected.

**Changing weather conditions may adversely affect our mining, beneficiation and processing operations**

Our operations are located in an area where the climate is classified as a humid-continental climate, with average minimum and maximum temperatures of -21°C and 21°C respectively, and an average temperature of 2°C, whereby mines generally would have to close down for up to three months from January to March where there would be a severe drop in temperature, which is a major consideration when planning our work schedule at our mine, given that we adopt the open-pit mining method. The suspension of our mine would lead to the suspension of the supply of graphite to our beneficiation and processing plants, which would nevertheless close due to the cold weather as any water required in the production process would become frozen. There is no guarantee that we will be able to predict or foresee adverse weather conditions in a timely manner, or at all, such that we will be able to make preparations or arrangements in advance, such as extracting additional graphite ore and increasing production before winter, in view of impending adverse weather conditions. Any failure to do so may materially and adversely affect our business operations, financial conditions and profitability. For further details, please see "Business — Seasonality".

### We may not have adequate financing to fund our future expansion plans, and such capital resources may not be available on commercially reasonable terms or at all

As a part of our expansion plans, we are expected to continue to incur a high level of capital expenditure for land acquisition and construction for the foreseeable future. For information on our capital expenditure as at December 31, 2019, 2020 and 2021, please see "Financial Information — Capital expenditure". For each year during the Track Record Period, we financed our operations and mine development projects primarily through a combination of internally generated funds and borrowings from financial institutions, such as commercial banks. Our ability to obtain external financing in the future and the cost of such financing are subject to uncertainty beyond our control, including (i) requirements to obtain PRC government approvals necessary for obtaining financing; (ii) our future results of operations, financial condition and cash flows; (iii) the condition of the financial markets and the availability of financing; (iv) changes in the monetary policies of the PRC government with respect to bank interest rates and lending practices; and (v) changes in policies regarding regulation and control of the graphite market. Should the PRC government introduce similar additional initiatives, we may not be able to secure adequate financing or renew our existing credit facilities prior to their expiration on commercially reasonable terms or at all. Also, the Company's capital expenditure for implementing future business strategies, including, land acquisition and construction, is expected to be approximately RMB202.1 million, of which approximately RMB[REDACTED] million would be paid by the [REDACTED] of the [REDACTED] and approximately RMB127.5 million would be financed by internal resources and by external financing if needed. For details, please see "Business — Our Business Strategies". As at December 31, 2021, the Group has a total of approximately 54.0 million in cash and cash equivalent and unutilized banking facility, and the estimated costs for our expansion plan at approximately RMB71.6 million in 2024 and RMB35.4 million in 2025 are larger than the historical cash outflow from investing activities during the Track Record Period at approximately RMB27.6 million in 2019, RMB20.7 million in 2020 and RMB29.1 million in 2021, it is expected for the Group to primarily rely on the net cash generated from operating activities to satisfy the financial resources to carry out and complete our expansion plan in 2022, 2023, 2024 and 2025. If the capital expenditure is ultimately significantly more than our internally generated funds and borrowings from financial institutions, our business, financial condition and results of operations may be adversely affected in the future.

### Our future expansion plans may result in an increase in depreciation expenses

For the three years ended December 31, 2019, 2020 and 2021, our Group recorded depreciation on property, plant and equipment of approximately RMB5.8 million, RMB7.5 million and RMB10.9 million, respectively. As part of our expansion plan, we expect to incur a high level of capital expenditure continuously on land and machinery acquisition and construction in the foreseeable future. Considering if our depreciation expenses be charged to the consolidated statements of comprehensive income, such expenditure is anticipated to increase after the [REDACTED], which may ultimately result in a material adverse effect on our business, financial condition and results of operations in the future.

### Our research and development activities may not yield the expected benefits for us

Our Group's continued success may partly depend on our ability to maintain our commitment to research and development efforts. For the three years ended December 31, 2019, 2020 and 2021, we expended approximately RMB4.8 million, RMB5.8 million and RMB8.1 million, respectively on research and development activities. There is no assurance that research and development activities undertaken by us will be successful or yield the anticipated benefits. Even if such activities are successful, we may not be able to apply the new technologies or launch the new products in a timely manner to take advantage of the market opportunities available. Market demand anticipated at the initial stages of the research and development cycle may not materialize by the end of the research, and the benefits that may be reaped from such newly developed technologies or products may be adversely affected and undermined by other competitors' rampant replication of similar technologies or products. Technologies or products developed may also be rendered obsolete by new technologies and new products developed by other competitors in the graphite industry. In the event that technologies or products developed by us are replicated, replaced or made redundant, our revenues may not be sufficient to offset the costs incurred for such research and development activities and collaborations, which could subsequently affect our Group's business and financial condition.

**Our current insurance may not adequately cover all losses and liabilities arising from our operations**

During the Track Record Period, we maintained various types of insurance. Nevertheless, there is no assurance that our existing insurance coverage will fully cover us from all potential risks and losses associated with our operations. In the event that we incur substantial losses or liabilities but are not insured against such losses or liabilities, or that our insurance is unavailable or inadequate to cover such losses or liabilities, our business, financial condition and results of operations could be materially and adversely affected.

**Any infringement on our intellectual property rights or by us on the intellectual property rights of others may adversely affect our reputation and profitability**

As at the Latest Practicable Date, we were the registered owner of one trademark in the PRC, one trademark in Hong Kong, 89 patents in the PRC and one domain name. We have also applied for the registration of 13 patents in the PRC. There is no guarantee that the steps taken by our Group are sufficient to prevent or deter infringement or misappropriation of our intellectual property rights. Any significant infringement could weaken our competitive position and adversely affect our business.

In order to protect our intellectual property rights, we may have to expend large amounts of financial resources to commence legal proceedings against any third party infringement or misappropriation. Conversely, there is also the risk that we may infringe the intellectual property rights of others, thereby incurring costs in either defending or settling any intellectual property disputes alleging infringement or misappropriation. In the event that we are subject to any infringement claims, we may be required to spend a significant amount of financial resources to defend ourselves, to develop non-infringing alternatives or to obtain licenses. There is no assurance that we will prevail in litigation or similar proceedings commenced by us or that we will be able to succeed in developing non-infringing alternatives or obtain the relevant licenses on reasonable terms, or at all. The occurrence of any of the foregoing may potentially lead to a material and adverse impact on our business, reputation, financial condition and results of operations.

**We may have difficulty in managing our business growth effectively**

Our future expansion, whether through organic growth or acquisitions, requires us to maintain a stable workforce of qualified and skilled workers and to efficiently allocate our resources. In addition, our future expansion may place significant strains on our managerial, operational, technical and financial resources. In order to better allocate our resources to manage our growth, we must manage our workforce effectively and implement adequate internal controls in a timely manner. In the event that we fail to effectively manage our internal resources, such as our facilities and logistics, and to secure external sources of funding for future growth, we may encounter, among other things, delays in production and operational difficulties. The inability to manage our workforce, internal resources allocation and the associated enlarged scale of our operations effectively could have a material adverse effect on the output and quality of our products, our ability to attract and retain key personnel, our business and future prospects. Moreover, any failure to ramp up our expansion to meet our strategies, for instance, to increase our extraction, beneficiation and processing volume to reach the licensed limit, may affect our business and future prospects.

**We plan to derive revenue from a limited number of products and any changes in the demand and fluctuations in the market prices of such graphite could materially affect our growth and profitability**

Our principal graphite products are flake graphite concentrate and spherical graphite produced by our beneficiation and processing plants. Our business and profitability are dependent on the sales of our graphite products which can be further processed by our customers for their downstream products, such as heat resisting materials and lithium-ion batteries. A decrease in demand in such downstream products may result in consequential decrease in demand for our graphite products by our customers, thereby adversely affecting our business, financial condition and results of operations.

As technology advances, the application and required specification of graphite products may change over time. Such change may have an adverse impact on the demand for our graphite products, for instances, our graphite products may not be advanced enough to continue being applied or utilized in our customer's downstream products. If we fail to anticipate, identify or react to the changes in product requirements and market preferences relating to the latest specification, our business, financial condition and results of operation would be adversely affected.

**We are exposed to risks of obsolete or slow-moving inventory which may adversely affect our financial position**

As at December 31, 2019, 2020 and 2021, our inventory balance amounted to approximately RMB35.4 million, RMB26.0 million and RMB18.9 million, respectively, representing approximately 14.5%, 8.4% and 5.6% of our total assets as at the respective year end dates. During the Track Record Period, the average inventory turnover days were approximately 184.8 days, 131.4 days and 77.7 days, respectively. For details of the movement of inventory of our unprocessed graphite, flake graphite concentrate and spherical graphite during the Track Record Period, please see "Business — Inventory Management". Our sales are made on purchase orders placed by our customers and we did not enter into any long-term agreement with our customers during the Track Record Period. After completion of our sales, our customers are not obliged to purchase our products on a continuous basis. As a result, the sales of our products are highly dependent on our customers' demand from time to time, in which there is no assurance that we will be able to retain these customers or that they will maintain their current level of purchases with us. If we fail to secure sufficient sales from our customers in the future, the volume of obsolete or slow-moving inventory would increase and we may need to either sell off such inventory at a discounted price or write off such inventory, thereby adversely affecting our financial condition.

**Government grants and preferential tax treatment currently available to us may not be recurring**

Our other income and other gains, net, are primarily comprised of government grants which are non-recurring in nature. For the year ended December 31, 2019, 2020 and 2021, our other income generated from government grants amounted to approximately RMB0.5 million, RMB0.6 million and RMB7.9 million, respectively. For details, please see "Financial Information — Other income and other gains, net". For the three years ended December 31, 2019, 2020 and 2021, the effective tax rate of our Group decreased from 22.6% in 2019 to 21.9% in 2020, and further down to 12.4% in 2021. The decrease of effective tax rate was due to the fact that the major operating subsidiaries of the Group, namely Yixiang New Energy and Yixiang Graphite, became eligible for the tax concession granted by the PRC government as a high-tech enterprise since 2020 and 2021, respectively, such that their corporate income tax rate changed from 25% to 15%. For details, please see "Financial information —

Income tax expense". There is no assurance that we will continue to entitle to such government grants or preferential tax treatment. In the event that any of the government grants or preferential tax treatment we currently enjoy are discontinued, our financial condition would be adversely affected.

**The value of our mining rights is subject to possible impairment which may adversely impact our financial position in the future**

As at December 31, 2019, 2020 and 2021, the net carrying amounts of our mining rights were approximately RMB20.6 million, RMB27.0 million and RMB25.9 million, respectively. For details, please see "Financial Information — Intangible assets — Mining rights". Mining rights and mining structures are amortized and depreciated over the estimated total proven and probable reserves of the mines using units of production method. We assess on an annual basis the estimated reserve of our Beishan Mine. However, the remaining license period of the mining rights held by us is shorter than the estimated useful lives of our Beishan Mine estimated by us. Our Directors expect that the Group is able to renew the license of the mining rights from the relevant authority continuously and at minimal charges. If the expectation differs from the original estimate, such differences will impact the amortization charged in the period in which such estimate is changed. Also, engineering estimates of our Beishan Mine reserves involve subjective judgments by engineers in developing such information and reserves are estimated in accordance with national standards set by relevant authorities. Estimates of proven and probable reserves involve subjective judgments and assumptions are required for a range of geological, technical and economic factors, so the proven and probable reserves are only approximate values. Any material decrease in the amount of resources in our Beishan Mine may result in impairment on the carrying value of our mining rights and related assets, which may have a material adverse effect on our business, financial condition and results of operations.

**Our ability to fulfill our obligations with respect to contract liabilities may impact our cash and liquidity position.**

Our contract liabilities primarily include advanced payment of graphite products. As at December 31, 2019, 2020 and 2021, we had contract liabilities of approximately RMB0.4 million, RMB9.8 million and RMB5.3 million, respectively. We may fail to fulfill our obligations under our contracts with customers for various reasons within or beyond our control. For example, customers may not be satisfied with our graphite products and decide not to place any further purchase orders with us going forward, which may thus require us to refund the cash we have received upfront and it could have a material adverse impact on our cash and liquidity position and financial condition.

**Figures in relation to our Reserve, Resource and graphite quality are only estimates based on certain assumptions and may be inaccurate**

Our Reserve and Resource estimates are based on a number of assumptions that have been made by our Independent Technical Consultant in accordance with the JORC Code. Reserve and Resource estimates stated in this document involve an element of judgment based on industry knowledge, experience and industry practice, while the accuracy of such estimates may be affected by factors such as quality of geological exploration results, drilling and analysis of graphite samples, and the procedures adopted by and the experience of the person making the estimates.

Although our estimates on Reserve and Resource described in this document are in accordance with standard evaluation methods generally used in the international mining industry and the JORC Code, these estimates may need to be revised from time to time to take into account new information and new interpretations on which the estimates are based. Should our actual Resource and Reserve levels and quality differ substantially from that predicted by past drilling, sampling and similar examination, our Reserve and Resources estimates may require a downward adjustment which could materially and adversely affect our business, financial condition, results of operations and future prospects.

In addition, the mineralogical and chemical composition, water absorption and other properties of the graphite ultimately mined may differ from those indicated by drilling results. Should the graphite ore mined be of a lower quality than expected, the demand for, and the realizable price of our graphite products may decrease, which could materially and adversely affect our business, financial condition, results of operations and future prospects.

Furthermore, graphite ore and marble ore may not ultimately be extracted at a profit in the future. There is no guarantee that our Resource and Reserve disclosed in this document can be economically exploited in the future and nothing contained herein should be interpreted as an assurance of the economic value of our Reserve and Resource or the profitability of our future business operations.

**Any unforeseeable changes in regulations of the mining industry or any inaccuracy of the information that our Independent Technical Consultant relied on when preparing the Independent Technical Report may materially and adversely affect the findings and conclusions in the Independent Technical Report**

There might be unforeseeable changes in regulations of the mining industry or graphite industry that are not disclosed in the Independent Technical Report, but may potentially have a material and adverse impact on our future business operations. In preparing the Independent Technical Report, reference was made to reports compiled by other third parties. In addition, the Independent Technical Report only reflects the mining and marketing conditions and SRK's interpretation of regulations of the mining industry in China as at the date of the Independent Technical Report, and SRK is not responsible for updating the Independent Technical Report after the effective date of the Independent Technical Report.

## RISKS RELATING TO OUR INDUSTRY

**Competition in the PRC graphite industry is intense and there is no assurance that we can compete effectively**

The PRC graphite industry is highly competitive and we compete based on a plethora of factors, including but not limited to, graphite quality and characteristics, stability of supply, cost of transportation, reliability and timeliness of delivery, customer service and price. We face competition primarily from other manufacturers of graphite products in Eastern China. If we are unable to differentiate ourselves from other manufacturers of graphite products and are unable to compete effectively in attracting and retaining customers, our business, financial condition, results of operations and future prospects would be materially and adversely affected.

**Changes to PRC laws, regulations and government policies in relation to environmental protection could adversely impact our business, financial condition and results of operations**

Our mining and production operations are subject to various PRC environmental protection laws and regulations relating to a broad range of environmental protection matters, such as land rehabilitation, water and soil preservation, noise control and discharge of wastewater and pollutants. These environmental protection laws and regulations are complex and constantly evolving and have become more stringent in recent years and quantification of the cost incurred in order to comply with such laws and regulations may not always be possible. Any breach of the PRC environmental protection regulations could subject us to a substantial fine, damage our reputation, cause delays in production or result in some or all of our production facilities being temporarily suspended or permanently shut down. There is no assurance that the national or local authorities will not enact additional laws or regulations or amend or enforce new regulations in a more rigorous manner or establish local practice to enforce the laws or regulations in any manner which is unfavorable to our business. We may also need to substantially alter our production processes to cater for the changes to environmental protection regulations, which could result in increased operating costs and thus adversely affecting our financial condition and results of operations.

**Changes to PRC laws, regulations and governmental policies for the mining industry could have an adverse impact on our business, financial condition and results of operations**

The PRC local, provincial and central authorities exercise a substantial degree of control over the mining industry in the PRC. A wide range of PRC laws, regulations, policies, standards and requirements in relation to, among other things, mine exploration, production and workplace safety, environmental protection, taxation, labor and foreign investment govern our business operations. Any changes to these laws, regulations, policies, standards and requirements or to the interpretation or implementation or establishment of any local practice in enforcing such laws, regulations, policies, standards and requirements may require us to incur additional expenses, and hence an increase in our operating costs, to ensure on-going compliance. Such additional expenditure to ensure compliance with new laws, regulations, policies, standards and requirements may have an adverse impact on our business, financial condition and results of operations.

Mining companies that fail to comply with the applicable laws and regulation may be subject to fines, penalties or even suspension of operations or revocation of licenses. Relevant government authorities also conduct inspections of the mines and facilities of mining enterprises. Failure to pass such inspections may have an adverse impact on our reputation and reflect negatively on the credibility of our management, and ultimately adversely affecting our business, financial condition and results of operations.

There is no assurance that we will be able to fully comply with any new or revised PRC laws, regulations, policies, standards and requirements applicable to the graphite mining industry, or at all. Additionally, any such new or revised PRC laws, regulations, policies, standards and requirements or any such changes in existing laws, regulations, policies, standards and requirements may also place further constraints on our development plan and adversely affect our future profitability and future prospects.

**The COVID-19 outbreak may materially and adversely affect our business, financial condition and results of operations**

The ongoing outbreak of COVID-19 has continued to spread across the world and has created unique global and industry-wide challenges. COVID-19 has resulted in quarantines, travel restrictions, and the temporary closure of offices and facilities in China.

Our business and operations have also been affected as a result. In an effort to contain the spread of COVID-19, the government has taken precautionary measures that reduced economic activities, including temporary closure of corporate offices, retail outlets and manufacturing facilities and strict implementation of quarantine measures. These measures adversely impacted our general operation, there had been lockdowns at workplaces and places of commerce in Heilongjiang Province, including our Beishan Mine. However, the closure of our Beishan Mine and plants due to restrictions under the COVID-19 outbreak coincided with our seasonal shutdown period (i.e. the months of January to March, due to severe cold weather). As many of the precautionary measures had later been uplifted or relaxed, we and our business partners gradually resumed normal operations since the second quarter of 2020.

There had been a drop in the overall market price for spherical graphite and flake graphite concentrate during the months of the COVID-19 outbreak. Leveraging on our cost-effective methods of beneficiation and processing, and the synergies of our vertical integration, we managed to offer our products at lower costs customers struggling during the COVID-19 outbreak for the purposes of maintaining a positive business relationship. As a result, our sales volume increased significantly in the year ended December 31, 2020 and our growth of revenue for the year ended December 31, 2021 remained positive at approximately RMB198.4 million. Accordingly, the disruption caused by the COVID-19 outbreak on our business operations was not considered to be severe by our Directors.

We cannot guarantee that we will continue to be relatively unaffected by COVID-19 as the epidemic subsists. Any further development of the pandemic could negatively affect the overall market price for spherical graphite and flake graphite concentrate and our supply chain such as manufacturing, warehousing and transporting of our products. In addition, we may need to make adjustments to operation hours, make work-from-home arrangements and even temporarily close our Beishan Mine in the event that COVID-19 strikes in a future wave, and we may experience substantially lower work efficiency and productivity during such period.

The potential downturn brought by and the duration of the COVID-19 outbreak may be difficult to assess or predict, and any associated negative impact on us will depend on many factors beyond our control. The extent to which the COVID-19 outbreak impacts our long-term results remains uncertain, and we are closely monitoring its impact on us. Our business, financial condition, results of operations and future prospects could be adversely affected directly, as well as indirectly, to the extent that the ongoing COVID-19 outbreak harms the PRC and global economy in general.

## RISKS RELATING TO CONDUCTING BUSINESS IN THE PRC

### Changes in the economic, political and social conditions of the PRC could adversely affect our business

For the three years ended December 31, 2019, 2020 and 2021, we derived all of our revenue from sales to customers in the PRC. Our business performance may thus be affected by the general economic conditions in the PRC, which may be affected by various general economic conditions beyond our control, including but not limited to, GDP growth rate, consumer confidence, levels of inflation, unemployment levels and mortgage and interest rates. A downturn or anticipated slowdown in economic activities in the PRC could therefore lead to a corresponding slowdown in our downstream industries, which include, the drilling industry and the iron and steel industry. A slowdown in our downstream industries may in turn, result in decreased demand for our products and ultimately a material adverse effect on our business, financial position and results of operations.

Our ability to conduct and expand our business operations in the PRC depends on a number of factors that are beyond our control, including macro-economic and other market conditions. Any change in the political, economic and social policies and conditions of the PRC may bring uncertainty to our business operations and may materially and adversely affect our business, financial condition and results of operations.

There is no assurance that the economic, political or legal systems of China will not develop in a way that is detrimental to our business, financial condition, results of operations and future prospects. Our business, financial condition and results of operations may be adversely affected by political instability or changes in social conditions in China, changes in laws, regulations or policies or the interpretation of laws, regulations or policies, measures which may be introduced to control inflation or deflation, changes in the rate or method of taxation, and imposition of additional restrictions on currency conversion and remittance abroad.

**PRC regulation of direct investment and loans by offshore holding companies to PRC entities may delay or limit us from using the [REDACTED] from the [REDACTED] to make additional capital contributions or loans to our PRC subsidiaries**

As an offshore holding company of our PRC subsidiaries, we may make additional capital contribution or loan to our PRC subsidiaries. Any capital contribution or loan to our PRC subsidiaries are subject to PRC regulations and foreign exchange loan registrations. For example, any of our loan to our PRC subsidiary cannot exceed twice the net assets of our PRC subsidiaries or the difference between the total amount of investment of which our PRC subsidiary is approved to make under relevant PRC laws and regulations and the registered capital of our PRC subsidiary, and such loan must be registered with the local branch of the SAFE.

There is no assurance that we will be able to complete or obtain the necessary government registrations or approvals in a timely manner, or at all, with respect to making future loan or capital contribution to our PRC subsidiaries with the [REDACTED] from the [REDACTED]. If we fail to complete such registrations, our ability to make equity contribution or provide loan to our PRC subsidiaries or to fund their operations may be materially and adversely affected, which may materially and adversely affect their ability to fund their working capital and expansion projects as well as meet their obligations and commitments.

**Companies having business in China may be classified as a "resident enterprise" for EIT purposes, and such classification could result in unfavorable tax consequences to us and our non-PRC Shareholders**

The EIT Law provides that enterprises established outside of China whose "de facto management bodies" are located in China are considered PRC "tax resident enterprises" and will generally be subject to the uniform 25% EIT rate on their global income. Under the implementation rules to the EIT Law, a "de facto management body" is defined as a body that has material and overall management and control over the manufacturing and business operations, personnel and human resources, finances and other assets of an enterprise. However, the circumstances under which an enterprise's "de facto management body" would be considered to be located in China are currently unclear. Circular 82, a tax circular issued by the State Administration of Taxation on April 22, 2009 provides that certain foreign enterprises controlled by a PRC company or a PRC company group will be classified as "resident enterprises" if the following are located or resident in China: senior management personnel and departments that are responsible for daily production, operation and management; financial and personnel decision making bodies; key properties, accounting books, company seal, and minutes of board meetings and shareholders' meetings; and half or more of the senior management or directors having voting rights.

If we are considered as a PRC tax resident enterprise for PRC tax purposes, we will be subject to a uniform 25% EIT rate as to our global income as well as tax reporting obligations. In addition, we cannot assure you that such dividends, which would normally qualify as "tax-exempted income" under applicable rules, will not be subject to a 10% withholding tax, as no guidance has been issued by the

PRC taxation authorities with respect to the processing of outbound remittances to entities that are treated as resident enterprises for PRC tax purposes. Further, dividends payable by us to our investors that are non-resident enterprises and gain on the sale of our Shares may become subject to PRC withholding tax, if such dividends and gains are regarded by PRC tax authorities to be sourced from China.

Furthermore, Yixiang New Energy was subject to a tax rate of 15% for the year ended December 31, 2020 and 2021, and Yixiang Graphite was subject to a tax rate of 15% for the year ended December 31, 2021, as they were eligible for the tax concession granted by the PRC government as a high-tech enterprise. The validity period of high technology enterprises shall be three years from the date of issuance of the certificate of high technology enterprise. The enterprise shall apply for re-examination three months before the expiration of the qualification; where an enterprise fails to apply for re-examination or where an enterprise fails in the re-examination, its qualification as high and new technology enterprise shall be null and void automatically at the expiration of its valid period. We cannot assure that such certificates may be successfully renewed, and thus may affect the concession granted in the future.

The heightened scrutiny over acquisitions from the PRC tax authorities may have an adverse impact on our business, acquisition or restructuring strategies or the value of your investment in us.

In February 2015, the State Administration of Taxation issued the Public Announcement on Several Issues Concerning Enterprise Income Tax for Indirect Transfer of Assets by Non-Resident Enterprises (國稅務總局關於非居民企業間接轉讓財產企業所得稅若干問題的公告) (the "**Circular 7**"), which provides comprehensive guidelines relating to, and also heightened the PRC tax authorities' scrutiny over, indirect transfers by a non-resident enterprise of assets (including equity interests) of a PRC resident enterprise (the "**PRC Taxable Assets**").

Circular 7 specifies that the PRC tax authorities are entitled to reclassify the nature of an indirect transfer of PRC Taxable Assets, when a non-resident enterprise transfers PRC Taxable Assets indirectly by disposing of equity interests in an overseas holding company directly or indirectly holding such PRC Taxable Assets, by disregarding the existence of such overseas holding company and considering the transaction to be a direct transfer of PRC Taxable Assets, if such transfer is deemed to have been conducted for the purposes of avoiding PRC enterprise income taxes and without any other reasonable commercial purpose. Although Circular 7 contains certain exemptions (including, (i) where a non-resident enterprise derives income from the indirect transfer of PRC Taxable Assets by acquiring and selling shares of a listed overseas holding company which holds such PRC Taxable Assets on a [REDACTED] market; and (ii) where there is an indirect transfer of PRC Taxable Assets, but if the non-resident enterprise has directly held and disposed of such PRC Taxable Assets, the income from the transfer would have been exempted from enterprise income tax in the PRC under an applicable tax treaty or arrangement), it remains unclear whether any exemptions under Circular 7 will be applicable to the transfer of our Shares or to any future acquisition by us outside of the PRC involving PRC Taxable Assets, or whether the PRC tax authorities will reclassify such transaction by applying Circular 7. Therefore, the PRC tax authorities may deem any transfer of our Shares by our Shareholders that are non-resident enterprises, or any future acquisition by us outside of the PRC involving PRC Taxable Assets, to be subject to the foregoing regulations, which may subject our Shareholders or us to additional PRC tax reporting obligations or tax liabilities.

**We are a holding company and rely principally on dividend payments from our subsidiaries in the PRC for funding**

We are incorporated in the Cayman Islands and rely principally on dividends paid by our PRC subsidiary for cash requirements, including the funds necessary to service any debt we may incur. If our subsidiary incurs debt in its own name in the future, the instruments or agreements governing the debt may restrict dividends or other distributions from our PRC subsidiaries to us. Furthermore, applicable PRC laws, rules and regulations permit payment of dividends by our PRC subsidiaries only out of their accumulated retained earnings, if any, determined in accordance with PRC accounting standards. Our PRC subsidiaries are required to set aside a certain percentage of their after tax profits based on PRC accounting standards each year to their statutory reserves in accordance with the requirements of relevant PRC laws and provisions in their respective articles of associations. As a result, our PRC subsidiary is restricted in its ability to transfer a portion of its net income to us whether in the form of dividends, loans or advances. These restrictions and requirements could reduce the amount of distributions that we receive from our subsidiaries, which would restrict our ability to fund our operations, generate income, pay dividends and service our indebtedness.

**RISKS RELATING TO THE [REDACTED] AND OUR SHARES**

**There has been no prior [REDACTED] for our Shares, and the liquidity and [REDACTED] of our Shares after the [REDACTED] may be volatile so that an [REDACTED] may not develop**

Before the [REDACTED], there was no [REDACTED] for our Shares. The initial [REDACTED] [REDACTED] for our Shares was the result of negotiations between the Sole Sponsor and us, and the [REDACTED] may differ significantly from the [REDACTED] for our Shares following the [REDACTED]. While we have applied for [REDACTED] of and permission to [REDACTED] our [REDACTED] on the Stock Exchange, there is no guarantee that the [REDACTED] will result in the development of an active, liquid [REDACTED] for our Shares. The [REDACTED] of our [REDACTED] may be volatile. Factors such as variations in our revenue, earnings and cash flows or any other developments of us may affect the [REDACTED] and the [REDACTED] of our [REDACTED].

**[REDACTED] of our [REDACTED] under the [REDACTED] will experience immediate dilution and may experience further dilution if we issue additional Shares in the future**

The [REDACTED] of our Shares is higher than our net tangible assets value per Share immediately prior to the [REDACTED]. Therefore, [REDACTED] of our Shares under the [REDACTED] will experience an immediate dilution in [REDACTED] net tangible assets value per Share. In order to expand our business, we may consider [REDACTED] and [REDACTED] additional [REDACTED] in the future or to [REDACTED] in the future to finance our business expansion, for existing operations or new acquisitions. If additional funds are [REDACTED] through the issuance of new equity or equity-linked securities of our Company, other than on a pro rata basis to existing Shareholders, then (i) the percentage ownership of the existing Shareholders may be reduced, and they may experience subsequent dilution and reduction in their earnings per share, (ii) such newly issued securities may have rights, preferences or privileges superior to those of the Shares of the existing Shareholders and/or (iii) [REDACTED] of our Shares may experience dilution in the net tangible assets value per Share if we issue additional Shares in the future at a [REDACTED] which is lower than our net tangible assets value per Share.

**Substantial future sale or the expectation of substantial [REDACTED] of our Shares in the [REDACTED] could adversely affect the [REDACTED] of our Shares**

The future [REDACTED] of a significant number of our Shares in the [REDACTED] after the [REDACTED], or the perception that these sales could occur, could adversely affect the [REDACTED] of our Shares and could materially impair our future ability to raise capital through [REDACTED] of our Shares. Please see "[REDACTED]" for further details. After these restrictions lapse, any sale of a substantial amount of our Shares or other securities relating to our Shares in the [REDACTED], the issuance of new Shares or other securities relating to our Shares (or the perception that such sales or issuances) may cause the prevailing [REDACTED] of our [REDACTED] to decline which could adversely affect our future ability to raise capital.

**We may not be able to distribute dividends to our Shareholders**

We cannot assure you when and in what form dividends will be paid on our Shares following the [REDACTED]. The declaration and distribution of dividends is at the discretion of the Board, and our ability to pay dividends or make other distributions to our Shareholders is subject to various factors, including without limitations, our business and financial performance, capital and regulatory requirements and general business and operating conditions. We may not be able to have sufficient or any profits to enable us to make dividend distributions to our Shareholders in the future, even if our financial statements indicate that our operations have been profitable. As a result of the above, we are not able to guarantee that we will make any dividend payments on our Shares in the future. Please see "Financial Information — Dividends" for further details.

**The [REDACTED] of our Shares when [REDACTED] begins could be lower than the [REDACTED]**

The [REDACTED] will be determined on the [REDACTED]. However, our Shares will not commence [REDACTED] on the Stock Exchange until they are delivered, which is expected to be a few Business Day after the [REDACTED]. [REDACTED] may not be able to [REDACTED] or otherwise [REDACTED] the Shares during that period. Accordingly, holders of the Shares are subject to the risk that the [REDACTED] of our Shares when [REDACTED] begins could be lower than the [REDACTED] as a result of adverse market conditions or other adverse developments that may occur between the time of [REDACTED] and the time [REDACTED] begins.

**The [REDACTED] and [REDACTED] of [REDACTED] may be volatile, which could result in substantial losses for [REDACTED] in the [REDACTED]**

Factors such as fluctuations in our revenue, earning, cash flow, new investment, regulatory development, addition or departure of key personnel, or action taken by competitors could cause the [REDACTED] of our Shares or [REDACTED] of our Shares to change substantially and unexpectedly. In addition, stock prices have been subject to significant volatility in recent years. Such volatility has not always been directly related to the performance of the specific companies whose shares are [REDACTED]. Such volatility, as well as general economic conditions, may materially and adversely affect the [REDACTED] of shares, and as a result [REDACTED] may incur substantial losses.

**If securities or industry analysts do not publish research reports about our business, or if they adversely change their recommendations regarding our Shares, the [REDACTED] and [REDACTED] of our Shares may decline**

The [REDACTED] for our Shares will be influenced by the research and report that industry or securities analysts publish about us or our business. If one or more of the analysts who cover us downgrade our Shares, the [REDACTED] of our Shares would likely decline. If one or more of these analysts cease coverage of our Company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our [REDACTED] or [REDACTED] to decline.

**[REDACTED] may experience difficulties in enforcing Shareholder rights**

Our Company is an exempted company incorporated in the Cayman Islands with limited liability and the laws of the Cayman Islands differ in some respects from those of Hong Kong or other jurisdictions where [REDACTED] may be located. The corporate affairs of our Company are governed by the Memorandum and the Articles, the Companies Act and the common law of the Cayman Islands. The rights of Shareholders to take legal action against our Company and/or our Directors, actions by minority Shareholders and the fiduciary duties of our Directors to our Company under Cayman Islands laws are to a large extent governed by the common law of the Cayman Islands. The rights of the Shareholders and the fiduciary duties of our Directors under Cayman Islands laws may differ in some respects as they would be under statutes or judicial precedents in Hong Kong or other jurisdictions where investors reside. As a result, Shareholders may have more difficulties in exercising their rights against the management of our Company, Directors or major Shareholders than they would as shareholders of a Hong Kong company or company incorporated in other jurisdictions.

**The laws of the Cayman Islands relating to the protection of the interests of minority shareholders may differ from the laws of Hong Kong and other jurisdictions.**

Our corporate affairs are governed by, among other things, our Memorandum of Association and Articles of Association, the Cayman Companies Act, and the common law of the Cayman Islands. The rights of our Shareholders to take action against our Directors, the rights of minority shareholders to instigate actions and the fiduciary responsibilities of our Directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The rights of our Shareholders and the fiduciary responsibilities of our Directors under Cayman Islands law may not be the same as they would be under statutes or judicial precedent in Hong Kong or other jurisdictions. In particular, the Cayman Islands may have different securities laws as compared to Hong Kong and may not provide the same protection to investors. A summary of Cayman Islands company law is set out in Appendix V to this document.

## RISKS RELATING TO THE STATEMENTS MADE IN THIS DOCUMENT

**You should read the entire document carefully, and we strongly caution you not to place any reliance on any information contained in press articles or other media regarding us or the [REDACTED]**

There may be, subsequent to the date of this document but prior to the completion of the [REDACTED], press and media coverage regarding us and the [REDACTED], which may contain, among other things, certain financial information, projections, valuations and other forward-looking information about us and the [REDACTED]. We have not authorized the disclosure of any such information in the press or media coverage. We make no representation as to the appropriateness, accuracy, completeness or reliability of any of the projections, valuations or other forward-looking information about us. To the extent that such statements are inconsistent with, or conflict with, the information contained in this document, we disclaim responsibility for them. Accordingly, prospective [REDACTED] are cautioned to make their [REDACTED] on the basis of the information contained in this document only and should not rely on any other information.

You should rely solely upon the information contained in this document, the [REDACTED] and any formal announcements made by us in Hong Kong in making [REDACTED] regarding our Shares. We do not accept any responsibility for the accuracy or completeness of any information reported by the press or other media, nor the fairness or appropriateness of any forecasts, views or opinions expressed by the press or other media regarding [REDACTED], the [REDACTED] or us. We make no representation as to the appropriateness, accuracy, completeness or reliability of any such data or publication. Accordingly, [REDACTED] should not rely on any such information, reports or publications in making their decisions as to whether to [REDACTED]. By [REDACTED] our Shares in the [REDACTED], you will be deemed to have agreed that you will not rely on any information other than that contained in this document and the [REDACTED].

**Certain information contained in this document is extracted from various official government publications and other publicly available publications and no representation is given as to its accuracy**

This document includes certain information and statistics extracted in whole or in part from various official government publications, other publicly available publications, the F&S Report or the Independent Technical Report. In particular, the information from official government sources has not been independently verified by our Company, the Sole Sponsor, the [REDACTED], the [REDACTED], the [REDACTED], any of our or their respective directors and advisers or any other persons or parties involved in the [REDACTED]. Therefore, we make no representation as to the accuracy of such information.

**Forward-looking statements contained in this document are subject to risks and uncertainties**

This document contains certain forward-looking statements and information relating to us that are based on the beliefs of our management as well as assumptions made by and information currently available to our management. When used in this document, the words "aim", "anticipate, "believe", "can", "continue", "could", "estimate", "expect", "going forward", "intend", "ought to", "may", "might", "plan", "potential", "predict", "project", "seek", "should", "will", "would", and similar expressions, as they relate to our Company or our management, are intended to identify forward-looking statements. Such statements reflect the current views of our management with respect to future events, operations, liquidity and capital resources, some of which may not materialize or may change. These statements are subject to certain risks, uncertainties and assumptions, including the other risk factors as described in this document. Subject to the requirements of the Listing Rules, we do not intend publicly to update or otherwise revise the forward-looking statements in this document, whether as a result of new information, future events or otherwise. [REDACTED] should not place undue reliance on such forward-looking statements and information.

In preparation for the [REDACTED], our Company has sought the following waiver from strict compliance with the relevant provisions of the Listing Rules.

## MANAGEMENT PRESENCE IN HONG KONG

Rule 8.12 of the Listing Rules provides that a new applicant applying for a primary [REDACTED] on the Stock Exchange must have a sufficient management presence in Hong Kong. This normally means that at least two of its executive directors must be ordinarily resident in Hong Kong.

Since our Company's principal business operations are primarily based in the PRC and will continue to be based in the PRC, save for Mr. Lei Wai Hoi, another executive Director, Mr. Zhao, and our senior management members spend the majority of their time supervising our Company's principal business operations in the PRC and do not ordinarily reside in Hong Kong. We consider that it would be more efficient and effective for our executive Directors and our senior management members being based in the PRC to supervise and manage our daily business operations.

Accordingly, we [have applied] to the Stock Exchange for, and the Stock Exchange [has granted] us, a waiver from strict compliance with Rule 8.12 of the Listing Rules subject to the following conditions:

(a) we have appointed two authorized representatives pursuant to Rule 3.05 of the Listing Rules, who will act as our principal channel of communication with the Stock Exchange. The two appointed authorized representatives are Mr. Lei Wai Hoi and Ms. Mak Po Man Cherie, who will be readily contactable by the Stock Exchange and can meet with the Stock Exchange on reasonable notice. Their contact details (including office and mobile phone numbers, email addresses, correspondence address and facsimile numbers (if available)) have been provided to the Stock Exchange;

(b) our Company has provided the contact details of our Directors (including their respective office and mobile phone numbers, email addresses and facsimile numbers) to the authorized representatives and the Stock Exchange. Our authorized representatives have means for contacting all Directors promptly at all times as and when the Stock Exchange wishes to contact the Directors for any matters. Each of our Directors either possesses, or can apply for, valid travel documents to visit Hong Kong in order to meet with the Stock Exchange within a reasonable period upon the Stock Exchange's request;

(c) our Company has, in accordance with Rule 3A.19 of the Listing Rules, also appointed Lego Corporate Finance Limited as our compliance advisor, who will act as an additional channel of communication with the Stock Exchange. The compliance advisor will advise ongoing compliance requirements and other issues arising under the Listing Rules and other applicable laws and regulations in Hong Kong for a period commencing on the [REDACTED] at least until the date on which our Company complies with Rule 13.46 of the Listing Rules in respect of our Company's financial results for the first full financial year after the [REDACTED]. Our Company will inform the Stock Exchange promptly of any changes of our compliance advisor; and

(d) our Company will appoint other professional advisers (including legal advisers and accountants) to advise our Company on ongoing compliance requirements and other issues arising under the Listing Rules and other applicable laws and regulations in Hong Kong after the [REDACTED].

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## DIRECTORS

| Name | Residential address | Nationality |
|---|---|---|
| *Executive Directors* | | |
| Mr. Zhao Liang (趙亮) | Room 2302, Unit 3<br>Building 10, Yard 3<br>Taiyanggong Second Street<br>Chaoyang District<br>Beijing, PRC | Chinese |
| Mr. Lei Wai Hoi (李偉海) | Flat F, 18/F, Block 10<br>Ocean Shores<br>88 O King Road<br>Tseung Kwan O<br>New Territories<br>Hong Kong | Chinese |
| *Independent non-executive Directors* | | |
| Mr. Chiu G Kiu Bernard (趙之翹) | Flat G, 28/F<br>Tower 1, Century Gateway<br>83 Tuen Mun Heung Sze Wui Road<br>Tuen Mun<br>New Territories<br>Hong Kong | Chinese |
| Mr. Shen Shifu (申士富) | Room 1303, Building 2<br>Huayuan Sanli<br>Fengtai District<br>Beijing, PRC | Chinese |
| Mr. Liu Zezheng (劉澤政) | Flat 505, Unit 3, Building 2<br>District 1, Wanfang Garden<br>Wannian Huacheng<br>Fengtai District<br>Beijing, PRC | Chinese |
| Ms. Zhao Jingran (趙婧冉) | Flat F, 21/F<br>Tower 5<br>The Waterfront<br>1 Austin Road West<br>Tsim Sha Tsui<br>Kowloon<br>Hong Kong | Chinese |

For further information regarding our Directors, please see "Directors and Senior Management".

## PARTIES INVOLVED IN THE [REDACTED]

| | |
|---|---|
| **Sole Sponsor** | **Lego Corporate Finance Limited**<br>*A licensed corporation to carry out type 6 (advising on corporate finance) regulated activity under the SFO*<br>Room 1601, 16/F<br>China Building<br>29 Queen's Road Central<br>Central, Hong Kong |
| **[REDACTED]** | [●] |
| **[REDACTED]** | [●] |
| **Legal advisers to our Company** | *as to Hong Kong law:*<br>**Tian Yuan Law Firm LLP**<br>Suites 3304–3309, 33/F<br>Jardine House<br>One Connaught Place<br>Central, Hong Kong<br><br>*as to PRC law:*<br>**Tian Yuan Law Firm**<br>10/F, Tower B, China Pacific Insurance Plaza<br>28 Fengsheng Hutong<br>Xicheng District, Beijing<br>PRC<br><br>*as to Cayman Islands law:*<br>**Appleby**<br>Suites 4201–03 & 12, 42/F, One Island East<br>Taikoo Place, 18 Westlands Road<br>Quarry Bay, Hong Kong |
| **Legal advisers to the Sole Sponsor and [REDACTED]** | *as to Hong Kong law:*<br>**Kenneth Chong Law Office**<br>Unit B, 16/F<br>Tesbury Centre<br>28 Queen's Road East<br>Wanchai, Hong Kong<br><br>*as to PRC law:*<br>**Dentons**<br>3/F & 4/F, Block A<br>Shenzhen International Innovation Center<br>No. 1006, Shennan Boulevard<br>Futian District, Shenzhen<br>PRC |

# DIRECTORS AND PARTIES INVOLVED IN THE [REDACTED]

| | |
|---|---|
| **Auditor and Reporting Accountant** | **PricewaterhouseCoopers**<br>*Certified Public Accountants and Registered Public Interest Entity Auditor*<br>22/F, Prince's Building<br>Central<br>Hong Kong |
| **Industry consultant** | **Frost & Sullivan (Beijing) Inc., Shanghai Branch Co.**<br>Room 2504, Wheelock Square<br>No.1717, West Nanjing Road<br>Jinan, Shanghai<br>PRC |
| **Independent Technical Consultant** | **SRK Consulting (Hong Kong) Limited**<br>Suite A1, 11/F<br>One Capital Place<br>18 Luard Road<br>Wanchai, Hong Kong |
| **Property valuer** | **Roma Appraisals Limited**<br>22/F, China Overseas Building<br>139 Hennessy Road<br>Wanchai, Hong Kong |
| **Internal Control Consultant** | **Moore Advisory Services Limited**<br>812 Silvercord, Tower 1<br>30 Canton Road<br>Tsimshatsui<br>Kowloon, Hong Kong |
| **Compliance advisor** | **Lego Corporate Finance Limited**<br>Room 1601, 16/F<br>China Building<br>29 Queen's Road Central<br>Central, Hong Kong |
| **[REDACTED]** | [REDACTED] |

| | |
|---|---|
| **Registered office in the Cayman Islands** | 71 Fort Street<br>PO Box 500<br>George Town<br>Grand Cayman, KY1-1106<br>Cayman Islands |
| **Headquarters and principal place of business in the PRC** | No. 1, Building 1<br>Graphite Development Zone<br>Yanjun Farm<br>Luobei County<br>Hegang City<br>Heilongjiang Province<br>PRC |
| **Principal place of business in Hong Kong** | 40/F, Dah Sing Financial Centre<br>No. 248 Queen's Road East<br>Wanchai, Hong Kong |
| **Company's website** | www.yxxny.cn<br>*(The contents of the website do not form a part of this document)* |
| **Company secretary** | Ms. Mak Po Man Cherie<br>40/F, Dah Sing Financial Centre<br>No. 248 Queen's Road East<br>Wanchai, Hong Kong |
| **Authorized representatives** | Mr. Lei Wai Hoi<br>Flat F, 18/F, Block 10<br>Ocean Shores<br>88 O King Road<br>Tseung Kwan O<br>New Territories<br>Hong Kong<br><br>Ms. Mak Po Man Cherie<br>40/F, Dah Sing Financial Centre<br>No. 248 Queen's Road East<br>Wanchai, Hong Kong |
| **Board committees** | **Audit committee**<br>Mr. Chiu G Kiu Bernard *(Chairperson)*<br>Mr. Shen Shifu<br>Mr. Liu Zezheng<br>Ms. Zhao Jingran |

| | |
|---|---|
| | **Nomination committee**<br>Mr. Zhao Liang *(Chairperson)*<br>Mr. Chiu G Kiu Bernard<br>Mr. Shen Shifu<br>Mr. Liu Zezheng<br>Ms. Zhao Jingran |
| | **Remuneration committee**<br>Mr. Liu Zezheng *(Chairperson)*<br>Mr. Zhao Liang<br>Mr. Shen Shifu<br>Mr. Chiu G Kiu Bernard<br>Ms. Zhao Jingran |
| | **Compliance committee**<br>Mr. Liu Zezheng *(Chairperson)*<br>Mr. Chiu G Kiu Bernard<br>Mr. Lei Wai Hoi |
| **[REDACTED]** | **[REDACTED]**<br>[REDACTED] |
| **[REDACTED]** | **[REDACTED]**<br>[REDACTED] |
| **Principal banks** | **Agricultural Bank of China Limited**<br>Luobei Branch<br>31 Yingbin Road<br>Fengxiang Town<br>Luobei County<br>Hegang City<br>Heilongjiang Province<br>PRC |
| | **Industrial and Commercial Bank of China Limited**<br>Luobei Branch<br>27 Yingbin Road<br>Fengxiang Town<br>Luobei County<br>Hegang City<br>Heilongjiang Province<br>PRC |

*The information and statistics set out in this section and other sections of this document were extracted from the report prepared by Frost & Sullivan, which was commissioned by us, and from various official government publications and other publicly available publications. We engaged Frost & Sullivan to prepare the F&S Report, an independent industry report, in connection with the [REDACTED]. The information from official government sources has not been independently verified by us, the [REDACTED], the [REDACTED], the [REDACTED], the [REDACTED], any of our or their respective directors and advisers or any other persons or parties involved in the [REDACTED], and no representation is given as to its accuracy.*

## SOURCE AND RELIABILITY OF INFORMATION

Our Group have commissioned Frost & Sullivan, an independent global market research and consulting firm, to conduct an analysis of, and to prepare a report on, the China graphite industry. The information from Frost & Sullivan disclosed in this document is extracted from the F&S Report. A total fee of RMB970,000 was paid to Frost & Sullivan for the preparation of the report, which we believe reflects market rates for reports of this type. Frost & Sullivan is an independent global consulting firm founded in 1961 in New York and has over 40 global offices with more than 2,000 industry consultants, market research analysts, technology analysts and economists.

The F&S Report was undertaken through both primary and secondary research obtained from' various sources. Primary research involved discussing the status of the industry with certain leading industry participants and conducting interviews with relevant parties to obtain objective and factual data and prospective predictions. Secondary research involved reviewing official government publications, company reports, independent research reports and data based on Frost & Sullivan's own research database.

In compiling and preparing the F&S Report, Frost & Sullivan has adopted the following assumptions (i) the social, economic and political environment in China is likely to remain stable in the forecast period; and (ii) industry key drivers are likely to drive graphite industry in China in the forecast period.

Our Directors have confirmed that after taking reasonable care, Frost & Sullivan is an independent professional market research agency, and the source of information used in this section, which are extracted from the F&S Report, are reliable and not misleading. There is no adverse change in the market information since the date of the F&S Report which may qualify, contradict or have impact on the information of this section.

## China graphite industry overview

### *Introduction and classification*

Graphite is a mineral composed of stacked sheets of carbon atoms with a hexagonal crystal structure. It is gray to black, opaque, and has a metallic luster. Natural graphite is mined from deposits in metamorphic rocks, such as marble, schist, and gneiss, and from accumulations in vein deposits. Natural graphite typically forms as a result of metamorphism of accumulations of organic matter in sedimentary rocks. Synthetic graphite is manufactured by high-temperature heat treatment (graphitization) of, or chemical deposition from, hydrocarbon materials. Synthetic graphite is more than 99.9% graphite, but it has slightly higher porosity, lower density, lower electrical conductivity, and a much higher price than natural graphite. Graphite is considered as a critical and strategic mineral because of its essential applications in the aerospace and energy sectors, especially in the emerging non-carbon energy sector.

***Characteristics:*** Graphite has physical and chemical characteristics of high temperature resistance, high thermal and electrical conductivity, chemical inertness, thermal shock resistance, high radiation emissivity, flame retardance, high compressive strength, flexibility, high resistance to erosion, good machinability, low friction and self-lubrication and many other special properties.

***Applications:*** Natural graphite is suitable for coatings, pencils, powder metallurgy, steelmaking, refractories, lubricants and batteries. For some of these uses, no suitable substitutes are available. Steelmaking and refractory applications in metallurgy use the largest amount of produced graphite; however, emerging technology uses in large-scale fuel cell, battery, and lightweight high-strength composite applications could substantially increase the world demand for graphite.

***Classification:*** For commercial purposes, natural graphite is classified into the following three categories based on its crystallinity, grain size, and morphology: (i) flake graphite concentrate; (ii) crystalline vein (or lump) graphite; (iii) amorphous (microcrystalline) graphite. Flake graphite concentrate and crystalline vein graphite belong to scaly graphite. Well-crystallized graphite flakes have a black metallic luster, whereas microcrystalline material is black and earthy with an amorphous appearance. Flake graphite concentrate can also be further processed into spherical graphite.

- **Flake graphite concentrate:** Flake graphite concentrate is the commercial designation for well-developed crystal platelets of graphite that are between 40 micrometers and 4 centimeters in size. Flake graphite concentrate can be found as a lamella or scaly form in specific metamorphic rocks such as limestone, gneisses, and schists. Froth flotation is used to extract flake graphite concentrate. Most flake graphite concentrates are made by chemical beneficiation processes. Flake graphite concentrates are produced in numerous places worldwide. Major producers include China, Brazil, India, Madagascar, Germany, Austria, Norway, Canada, Zimbabwe, etc. Flake graphite concentrate's main use include refractories, brake linings, lubricants, batteries, and expandable graphite applications.

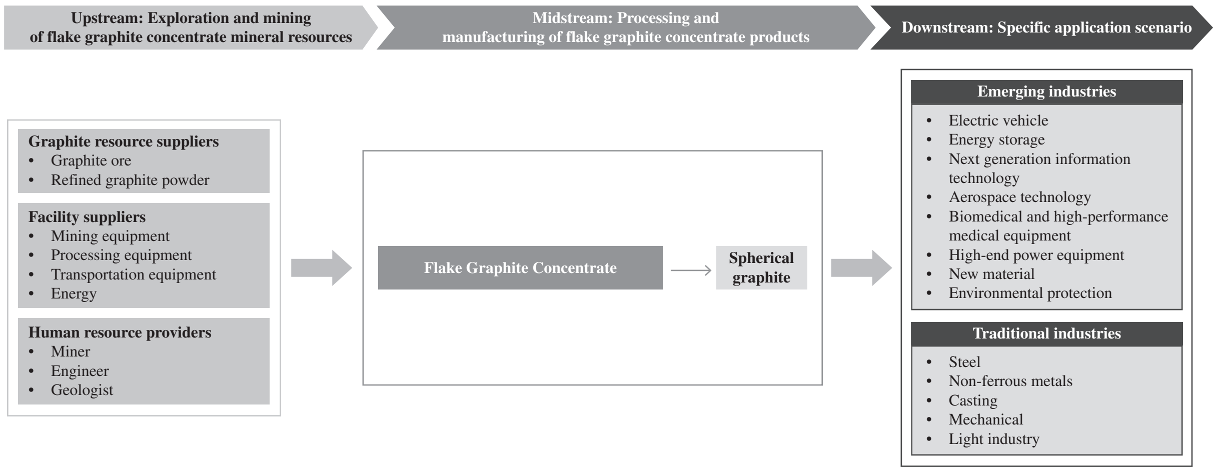
- **Spherical graphite:** Spherical graphite is manufactured from the flake graphite concentrates produced by graphite mines and is the anode material used in lithium-ion batteries (LiB). Typically, flake graphite concentrate is shaped into a rounded, spherical shape by a mechanical attrition process. The rounded shape of spherical graphite, allows for more efficient packaging of particles in a LiB anode, which increases the energy and recharge capacity of the LiB. LiB's require different spherical graphite sizes as the particle size impacts the performance targets of the LiB. For example, a small spherical graphite particle, would be used in a LiB that has faster charging requirements, while a LiB battery that had large power requirements would use a larger spherical graphite particle. The global production of spherical graphite is currently dominated by China. China uses the mechanical shaping and hydrofluoric acid purification techniques to produce purified spherical graphite. Clean technology of spherical graphite is the continuous application of the integrated preventive environmental strategy to operate and manufacture in order to reduce risk to human beings and the workplace environment. With the transition of the world to a clean, green energy platform, many LiB's manufacturers are actively seeking alternative supply options. Leading graphite providers are committed to adopt the sustainable and safe production procedure of spherical graphite for green energy and clean technologies.

China has developed six major graphite production and processing bases, which account for more than 80% of the country's output. Among them, crystalline graphite (including flake graphite) is mainly deposited and produced in Heilongjiang (Jixi, Luobei), Shandong (Pingdu) and Inner Mongolia (Xinghe); amorphous graphite is mainly deposited and produced in Hunan (Chenzhou) and Jilin (Panshi).

***Value chain of the flake graphite concentrate industry***

The industry players in the value chain of the flake graphite concentrate industry mainly consist of mine owners, flake graphite concentrate distributors, flake graphite concentrate product manufacturers and end consumers. The upstream of the flake graphite concentrate industry mainly consists of graphite resource suppliers including graphite ore and refined graphite powder suppliers, facility suppliers such as mining equipment, processing equipment, transportation equipment suppliers and energy suppliers, and human resource providers. After ore mining and primary processing, flake graphite concentrate are sold to the midstream graphite product manufacturers, to be further processed into material grade graphite products. Flake graphite concentrate may also be sold to graphite distributors by mine owners and then sold to graphite manufacturers. Certain manufacturers in midstream are capable of processing mining resources. The downstream of the flake graphite concentrate industry are broad application scenarios of various graphite products. Driven by continuous technology upgrading and policy stimulus, the application scope of flake graphite concentrate products has expanded to many emerging fields, such as electric vehicles, consumer electronics, energy storage, information technology, aerospace, etc. The following chart demonstrates the value chain of the flake graphite concentrate industry.

**Value chain of the flake graphite concentrate industry**

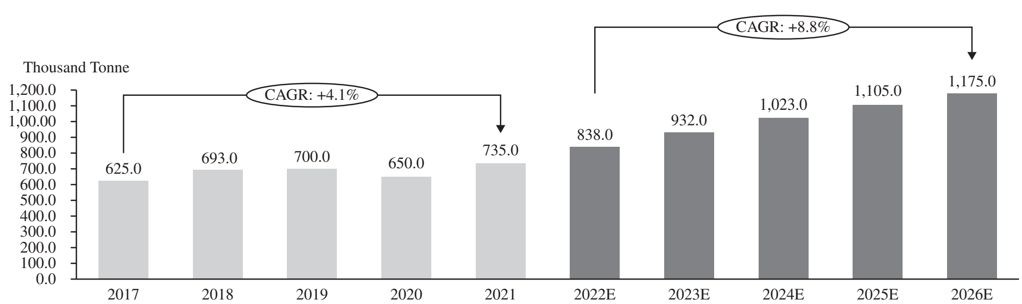



*Source: F&S Report*

***Overview of the China graphite industry***

Driven by the growth in lithium-iron batteries and EAF (Electric Arc Furnace) steel sector in China, domestic production of natural graphite increased steadily to approximately 700.0 thousand tonnes in 2019 from approximately 625.0 thousand tonnes in 2017. The decrease of the production of natural graphite in 2020 was mainly due to the outbreak of COVID-19. With the recovery of economy and the resumption of production, the production volume in 2021 increased to approximately 735.0 thousand tonnes. Going forward, with the increasing demand from downstream sectors including refractory materials, lubricant and lithium-ion batteries, the production volume of natural graphite in China is expected to increase continuously at a CAGR of approximately 8.8% from approximately 838.0 thousand tonnes in 2022 to approximately 1,175.0 thousand tonnes in 2026. China is a major producer of natural graphite in the world. In 2021, China produced more than 60% of the world's graphite. In terms of the production volume of natural graphite, flake graphite accounted for more than 60% in 2021. The following chart sets forth the historical and forecasted production volume of natural graphite in China:

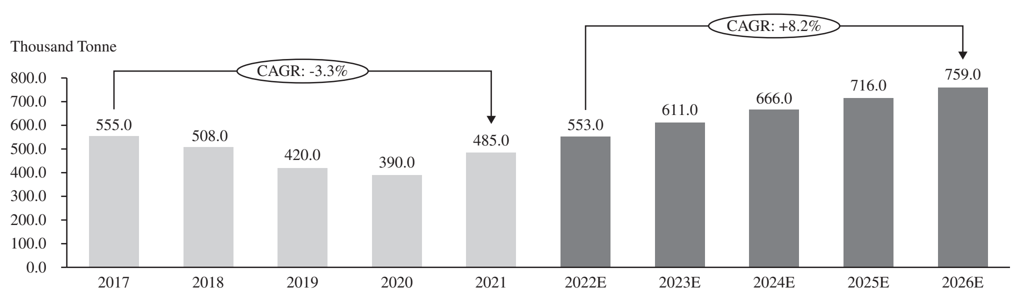
**Production volume of natural graphite (China), 2017–2026E**




*Source: F&S Report, USGS*

The production volume of flake graphite concentrate in China dropped from approximately 555.0 thousand tonnes in 2017 to approximately 390.0 thousand tonnes in 2020. The publication of "National Mineral Resources Planning (2016–2020)" (全國礦產資源規劃(2016–2020年)) reinforced the inspections of companies towards unlicensed exploration, waste of resources and environmental damage. Therefore, the shutting down of enterprises affected by environmental inspections is the main reason behind the shrinkage in domestic flake graphite concentrate production over the past few years. Additionally, many of the deposits being exploited were getting deeper and more expensive to mine which raised the cost of domestic graphite mining. Whereas, leading companies in the flake graphite concentrate industry with rich graphite resources and mature techniques on the production of the graphite are likely to achieve economy of scale and costs reduction. Rapid advances in technological innovation, including automation, digitization, and electrification, are having a fundamental impact on the graphite mining sector. For instance, automated technologies allow companies to avoid staffs working in dangerous conditions, which offer companies further opportunities to reduce and manage their operating costs. The cost of deeper graphite mining could be relatively reduced. Moreover, crystalline graphite (including flake graphite concentrate) has been declared as a strategic mineral due to its potential strategic applications in "National Mineral Resources Planning (2016–2020)". The Graphite Industry Specific Conditions has also strengthened the strategic position of graphite. Especially flake graphite concentrate has growing importance in high technology applications and green energy sector due to its unique physical and chemical properties. With the rapid development of Chinese economy and increasing downstream demand, especially the expansion of new material industries such as lithium-ion batteries, the use of lithium-ion batteries in vehicles and consumer electronic products will witness a rapid growth. Therefore, the demand for flake graphite concentrate as the main material of lithium-ion batteries will increase. Besides, the demand from steel industry would further drive the production volume of flake graphite concentrate. The production volume of flake graphite concentrate rebounded to approximately 485.0 thousand tonnes in 2021 and is forecasted to experience an increase from approximately 553.0 thousand tonnes to approximately 759.0 thousand tonnes in the next five years, representing a CAGR of approximately 8.2%. The following chart sets forth the historical and forecasted production volume of flake graphite concentrate in China:

**Production volume of flake graphite concentrate (China), 2017–2026E**



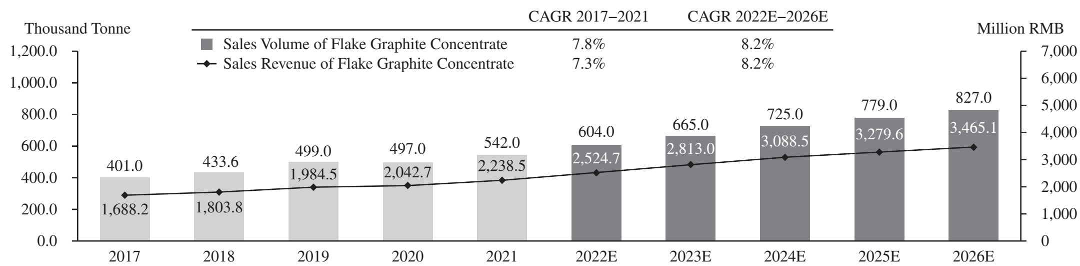

*Source: F&S Report*

The substitution of graphite by other minerals is currently low due to its unique chemical and physical properties. Flake graphite concentrate is ideally suited for a wide range of industrial and technological applications. The current major application of flake graphite concentrate includes batteries, refractories, foundries, lubricants, etc. The batteries segment is expected to be one of the fastest growing application sectors over the forecast period. The lithium-ion batteries market in China is expected to grow rapidly, owing to the growth in adoption of NEVs and energy storage systems. Therefore, the demand of flake graphite concentrate would further increase. The sales volume and revenue of China flake graphite concentrate have grown steadily since 2017. In 2021, the sales volume and revenue of flake graphite concentrate reached 542.0 thousand tonnes and RMB2,238.5 million, respectively.

The graphite mining technology has constantly been upgraded and improved as emerging technology such as Internet of things, drones and automation has been adopted. As graphite is the core materials of EV batteries, the graphite industry is expected to witness a higher growth rate in the next few years driven by the positive policies such as 14th Five-Year Plan (2021–2025) for National

Economic and Social Development and Long-Range Objectives for 2035 and increasing demand from downstream markets. Driven by the opportunities including benefits from industry-favored policies, advancement on graphite manufacturing technology and increasing demand of downstream industries, the sales volume of flake graphite concentrate is expected to increase to approximately 827.0 thousand tonnes in 2026, representing a CAGR of approximately 8.2% from 2022. The sales revenue of flake graphite concentrate is expected to further increase to approximately RMB3,465.1 million in 2026, illustrating a CAGR of approximately 8.2% from 2021. The following chart sets forth the historical and forecasted sales volume and sales revenue of flake graphite concentrate in China:

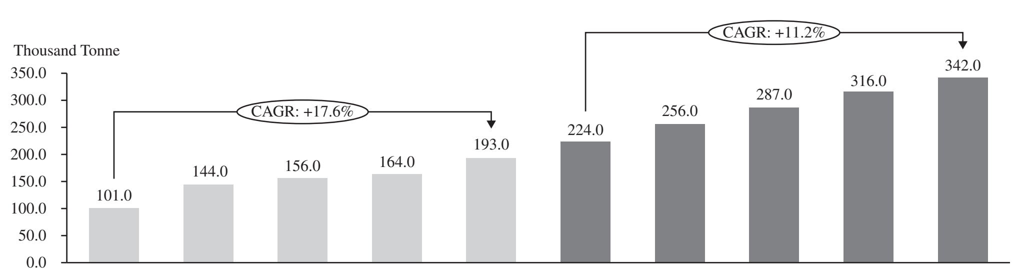
**Sales volume and sales revenue of flake graphite concentrate (China), 2017–2026E**




*Source: F&S Report*

Spherical graphite is manufactured from flake graphite concentrate and can be used in the production of lithium-ion batteries (being one of the key raw materials). Influenced by the continuous policy incentives in electronic vehicle manufacturing and electronic information industry, according to China Association of Automobile Manufacturer, the sales volume of electronic vehicle increased from approximately 0.5 million units in 2016 to approximately 3.3 million units in 2021, with a CAGR of approximately 45.7%. The electronic vehicle market in the PRC is expected to grow in next few years driven the proposal of carbon neutral and green energy. The sales volume is expected to reach 9.6 million in 2026. The booming development of electronic vehicle industry promoted the growing demand of lithium-ion batteries in previous years, which paves the way for the market growth of spherical graphite. The domestic production volume of spherical graphite witnessed a steady increase at a CAGR of approximately 17.6% from approximately 101.0 thousand tonnes in 2017 to 193.0 thousand tonnes in 2021. Affected by the outbreak of COVID-19, the growth rate of spheric graphite production volume slowed down a little bit in 2020. Looking forward, the growing downstream markets are projected to offer opportunities for the spherical graphite providers over the next five years. Along with potential technology improvement, domestic production will increase steadily from approximately 224.0 thousand tonnes in 2022 to approximately 342.0 thousand tonnes in 2026, illustrating a CAGR of approximately 11.2%. The following chart sets forth the historical and forecasted production volume of spherical graphite in China:

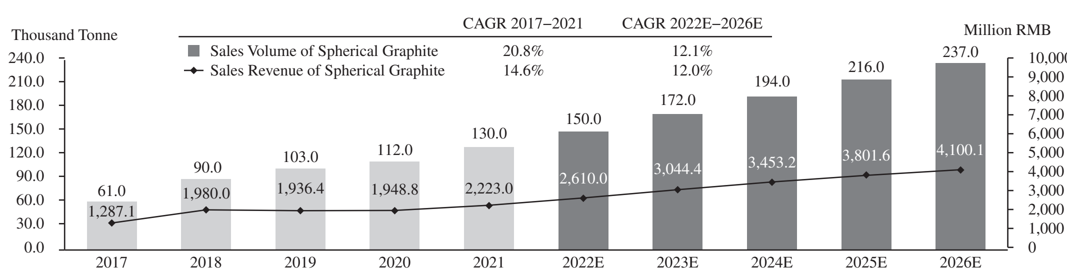
**Production volume of spherical graphite (China), 2017–2026E**




*Source: F&S Report*

The sales volume of spherical graphite in China went through a significant increase in previous five years, growing from approximately 61.0 thousand tonnes in 2017 to approximately 130.0 thousand tonnes in 2021, illustrating a fast CAGR of approximately 20.8%. Likewise, the sales revenue also benefited from the huge market demand, which increased from approximately RMB1,287.1 million in 2017 to approximately RMB2,223.0 million in 2021 at a CAGR of approximately 14.6% during the same period. China possesses the vast majority of processing and consumption of battery-grade spherical graphite in the world. The fining and processing technology of spherical graphite are expected to improve continuously in the near future in response to huge demand from downstream market. The incentives of NEVs, especially the "Notice on Further Improving the Policy for the Promotion and Application of Financial Subsidy for New Energy Vehicles" (關於進一步完善新能源汽車推廣應用財政補貼政策的通知) issued by the Ministry of Finance, Ministry of Industry and Information Technology, Ministry of Science and Technology and National Development and Reform Commission in December 2020, will further promote the production of NEVs as well as the demand for lithium-ion batteries. On January 21, 2022, seven departments including the National Development and Reform Commission issued the "Implementation Plan for Promoting Green Consumption" (促進綠色消費實施方案), proposing to vigorously develop green transportation consumption. Moving forward, the sales volume of spherical graphite in China is estimated to surge from approximately 150.0 thousand tonnes in 2022 to approximately 237.0 thousand tonnes in 2026, representing a CAGR of approximately 12.1%. The sales revenue is expected to grow from approximately RMB2,610.0 million in 2022 to approximately RMB4,100.1 million in 2026 at a CAGR of approximately 12.0%. The following chart sets forth the historical and forecasted sales volume and sales revenue of spherical graphite in China:

**Sales volume and sales revenue of spherical graphite (China), 2017–2026E**




*Source: F&S Report*

**Overview of graphite industry in Heilongjiang province**

Heilongjiang Province is a large province of graphite mineral resources and rich in graphite resources. The reserve of graphite in Heilongjiang Province is mainly deposited and produced in Jixi City and Luobei County. As at April 2021, there were 14 graphite extraction and processing companies with mining rights in Heilongjiang Province. According to the "Heilongjiang Provincial Government Work Report"《黑龍江省政府工作報告》, it is proposed to continue to promote the construction of industrial projects and promote the construction of graphite production and processing bases in Jixi City and Hegang City, as well as to improve the technological innovation ability and level of graphite industry. The favorable government policies and rich graphite resources in Heilongjiang Province would further drive the expansion and booming development of the graphite industry in Heilongjiang Province. In 2020, the production volume of flake graphite concentrate in Heilongjiang accounted for over 60% of the total production volume of flake graphite concentrate in China. Due to the advantages of graphite reserve in Heilongjiang Province, the graphite industry represented a promising prospect with over 50% of flake graphite concentrate market participants concentrated in Heilongjiang Province.

### *Entry barriers*

According to the F&S Report, the entry barriers of China graphite industry include the followings:

(i) **Technology barrier:** Due to the limited upstream graphite resources and supply, the graphite market is very competitive. When selecting graphite materials or products, downstream application companies will take technology as a key factor into account. At the same time, driven by the upgrading of terminal electronic products as well as the further penetration of electric vehicles, the downstream manufacturers will have higher requirements on the technology and performance indicators of graphite materials and products. For example, anode materials will develop towards high specific capacity, high charge-discharge efficiency, high cycle performance and lower cost. As a result, anode material suppliers have been promoted to increase research and development investment, speeding up technological innovation and continuously developing high-performance products, which usually requires strong technology and talent accumulation as well as time and capital investment. Therefore, technology become one of the major barriers of graphite industry.

(ii) **Customer barrier:** The customers of graphite providers are mainly industrial manufacturers. These customers tend to have strict requirement and screening process to do business with new supplier. The relationship between graphite providers and customers are mostly long-term and recurring, which allows experienced graphite providers to establish a solid customer-base and set up a high barrier to new entrants. New entrants would have to compete against experienced players who have mature setup and networks, and would not able to build close relationship and networks in a short time.

(iii) **Channel barrier:** Driven by technology and policies, the application of graphite has penetrated a variety of fields, and the demand for graphite products is rising rapidly among enterprise-level users in different regions and industries, especially in the fields of electric vehicles and consumer electronics. Whether the sales channels of graphite manufacturing companies are complete and whether the coverage of the marketing network is extensive determines the company's market competitiveness. Leading companies have gradually established a stable and extensive distribution system and marketing network in the long-term business process. At the same time, major graphite providers continue to deepen their communication and integration with upstream and downstream market participants as the scarcity of upstream raw materials becomes more and more evident. Graphite manufacturers consolidate their leading positions in the industry through partnerships with or direct acquisitions of upstream graphite miners and raw material suppliers or with a variety of downstream companies. It is difficult for new entrants to establish a competitive channel system in the short term.

(iv) **Capital barrier:** The graphite industry is a capital-intensive industry, which requires a lot of investment in infrastructure and production equipment in the early stage. This is mainly because the graphite manufacturing needs a large amount of initial capital for the procurement of upstream primary graphite, the construction of manufacturing factories as well as the purchase or installation of machineries in order to produce various graphite materials and products. With the rapid changes of the market, the need to expand production and upgrade manufacturing techniques in time poses a challenge to the capital of the enterprise. If the new entrants do not have enough capital reserves to cope with the changes and follow up the trends of the market, it is difficult for them to keep a leading position in the competition.

***Market drivers and trends***

According to the F&S Report, the main drivers and trends of China graphite industry includes the followings:

*(i) Wider application and rising downstream demand:*

Steelmaking and refractory applications in metallurgy use the largest amount of produced graphite; however, emerging technology uses in battery, large-scale fuel cell, and lightweight high-strength composite applications could substantially increase the world demand for graphite.

- ***High demand from refractories manufacturing:*** The development of refractory manufacturing has led to an increase in demand for graphite. One of the main usages of natural graphite is to produce refractory materials (such as magnesia-carbon refractory bricks, crucibles, ladles and molds containing molten metal), making the demand for graphite closely linked with metallurgy and steelmaking, chemical engineering, petroleum, machinery manufacturing, silicate, power and other industrial fields. According to World Steel Association, in 2021, the production of crude steel in China reached 1,032.8 million tonnes and expect to increase to around 1,200.0 million tonnes in 2025. Although the graphite industry has made considerable progress in other new application fields in recent years, the refractory manufacturing industry remains as the largest consumption field of graphite. As the metallurgical and steelmaking industries will still maintain a fundamental position in economic development, the demand for graphite will remain robust in the future.

- ***Increasing demand for lithium-ion batteries:*** The structure of graphite consumption growth is gradually shifting from traditional industries to strategic emerging industries such as new energy vehicles, energy storage, nuclear energy, and electronics is increasing rapidly. The conductivity of graphite is significantly better than other non-metals, making it the most widely used anode material for lithium-ion batteries at present. Lithium-ion batteries are smaller, lighter and more powerful than traditional batteries and have a flat voltage profile meaning they provide almost full power until discharged, whose production volume in China increased rapidly from approximately 7.84 billion in 2016 to approximately 17.56 billion in 2020, illustrating a CAGR of approximately 22.3%. As the world transforms to a clean energy base across the NEVs and energy storage, the global demand for cost effective energy storage solutions continues to drive the growth of the lithium-ion batteries market and graphite market as well. Specifically, the electric vehicle industry in China has achieved rapid development in the past few years, with the sales volume of NEVs representing a CAGR of approximately 45.7% from approximately 507 thousand units in 2016 to approximately 3,334 thousand units in 2021. Driven by policy stimulus and technology progress, the market space for the application of graphite in the field of electric vehicle will be further released. Moreover, lithium-ion batteries have become one of the world's major energy storage systems due to the high energy density, high power density and high efficiency. It has been widely used in various energy storage fields such as grid energy storage, household energy storage, and communication energy storage. With the continuous development of clean energy, distributed power grids, micro grids, NEVs charging piles and other industries, the market demand for lithium-ion batteries will further increase, promoting the application of graphite as well. Hence, under the energy conservation and environmental protection trend globally, the driving force for the demand in the lithium-ion battery market in the future will mainly come from transportation and industrial energy storage, thus boosting the fast and continuous growth of graphite industry.

- ***Emerging demand for expandable graphite:*** Expandable graphite is one of the fastest growing markets along with lithium-ion batteries though its market size is quite small at present. It is produced by treating flake graphite with a dilute acid solution and heating it to cause the flakes to split apart, expand and increase hundreds of times in volume. This material is pressed into sheets which can be used in many applications including thermal management in consumer electronics, advanced building materials, heat and corrosion resistant gaskets, flow batteries and fuel cells which have the potential to consume as much graphite as all other uses combined in the future. In addition, expandable graphite is the only segment of graphite market to experience rising prices in recent years. The emerging commercial applications and unexpectable potential of expandable graphite is a new significant force to promote the development of graphite industry.

*(ii) Upgrading and innovations of mining and producing techniques*

- ***Development of deep processing technologies for high-end products:*** With the constantly breakthroughs of deep processing technologies including chemical & thermal purification technology, coating technology, carbonization technology, etc., the mass-production and wide application of high-end graphite products including spherical graphite, expandable graphite, high-purity graphite, flexible graphite and graphene is achievable in nearly future. For example, the chemical purification technology is applied to further purify the graphite concentrate to TGC (total graphitic carbon) 99.99%, used for producing high-tech products such as fuel cells which require higher purity than typically upgraded by flotation. In order to get ultra-high purity graphite, the fine intergrown minerals residing between the graphite layers have to be removed, which can be achieved by one or multi-stage acid washing with different acids or combinations. An alternative to acid treatment is thermal purification by heating the graphite above 2,000°C. High-end graphite products has become indispensable key materials in the fields of aerospace, nuclear, new energy cars, energy storage, nuclear, environmental protection, new materials and other strategic emerging industries. The industrialization and successful applications of graphene is once again pushing up the strategic position of the graphite. The modern high-end deep processing of graphite will be of significance in promoting the upgrading of China graphite industry, as well as one of the most important means of China graphite manufacturers into the global market.

- ***Improvement of graphite mining technology:*** During the graphite mining process, the use of automation, IoT and underground-drones for 3D mapping are gaining popularity, which brings higher levels of safety, improvements in performance and productivity, and reducing costs of mining. The application of equipment with high degree of autonomy and efficiency for the roughening and flotation of graphite facilitates the beneficiation of high carbon content flake graphite concentrate without severe damage to graphite crystals. Moreover, IoT allows machineries to become smarter and more productive through the use of sensors, and also facilitates time savings, safer mining, predictive maintenance, and other benefits related to automation, energy and costs. In addition, 3D maps of graphite mines enable engineers and designers to plan the layout and action plan before setting foot on the mine, resulting in short gestation periods. 3D maps of graphite mines are obtained by deploying underground-mapping drones with onboard sensors that scan the surroundings of the mines and build a schematic 3D map. In addition to 3D mapping, sensors on underground-mapping drones can also be used to monitor fluid levels, temperatures and vibrations at mines, resulting in timely maintenance based on the evidence rather than waiting for planned routine operations.

*(iii) Favorable policy environment*

- ***More scientific and comprehensive regulation system of graphite industry:*** Recently, China has been making efforts on improving and upgrading graphite industry by establishing a regulation basis. The "Graphite Industry Specification Conditions" (《石墨行業規範條件》) issued by the Ministry of Industry and Information Technology in July 2020 put forward higher requirements for graphite industry in terms of processing technology, product quality, and resource protection. With the improvement of the strategic position of graphite resources, the graphite industry chain is facing a trend of integration and upgrading. At present, the domestic graphite industry is still in a state of low-end and disorderly development, and the supply of low-end products exceeds demand. The introduction of new regulations is expected to drive the industry to shift to high value-added products and technological innovation-driven transformation. In addition, the project of "the Key Technology and Demonstration of Reduction of Graphite Resources from the Mining and Processing Source" (《石墨資源開採加工源頭減量關鍵技術與示範》) was successfully approved by Ministry of Science and Technology. The project focuses on conquering bottlenecks of deep processing technologies, puts forward the solutions and technical routes to produce high-end graphite products, and is expected to improve the technology of utilizing and recycling graphite solid waste.

- ***Supportive initiatives for graphite downstream industries*:** Graphite and cutting-edge graphene materials are is widely used in many fields such as the new generation of information technology, energy-saving and new energy vehicles, power equipment, new materials, etc., which are the key development fields promoted by "Made in China 2025" (《中國製造2025》). According to the newly issued "Electric Vehicle Industry Development Plan (2021–2035)" (新能源汽車產業發展規劃(2021–2035年)) in November 2020, major breakthroughs in key technologies such as power batteries, drive motors and vehicle operating systems are expected to be made by 2025. Driven by policy stimulus and technology progress, the market space for the application of graphite in the field of electric vehicle will be further released. In addition, China also promulgated a series of policies supporting the development of graphene industry, including "Several Opinions on Accelerating the Innovation and Development of the

Graphene Industry'' (《關於加快石墨烯產業創新發展的若干意見》), ''Guide to the Development of New Materials Industry'' (《新材料產業發展指南》), ''Guiding Catalogue for the First Batch Application Demonstration of Key New Materials (2019 Edition)'' (《重點新材料首批次應用示範指導目錄(2019年版)》), etc. These policies have established the important strategic position of graphene in the fields of electrochemical energy storage, marine engineering, flexible electronic devices, major environmental protection technology and equipment, automobiles, and aerospace industries.

***Average selling price of major products of flake graphite concentrate and spherical graphite***

Flake graphite concentrates are normally classified by different carbon content specification. Flake graphite concentrates with different carbon concentrations are applied in different areas. Spherical graphite is usually classified by different size. The average selling prices of flake graphite concentrate and spherical graphite may vary by different specification and generally influenced by factors such as production costs, market demands and macro economy. From 2018, many Chinese spherical graphite companies began to expand the spherical production capacity, which resulted in the decrease in the average selling price of spherical graphite in 2019 and 2020. Going forward, with the recovery of economy and continuously increasing demand from lithium-ion batteries industry, the demand of graphite would increase, which in turn would drive the average selling price of flake graphite concentrate and spherical graphite. The following table sets forth the average selling price of major products of flake graphite concentrate with different carbon content specification and spherical graphite, respectively in China:

***Average Selling Price of Major Products of Flake Graphite Concentrate and Spherical Graphite (China), 2019–2021***

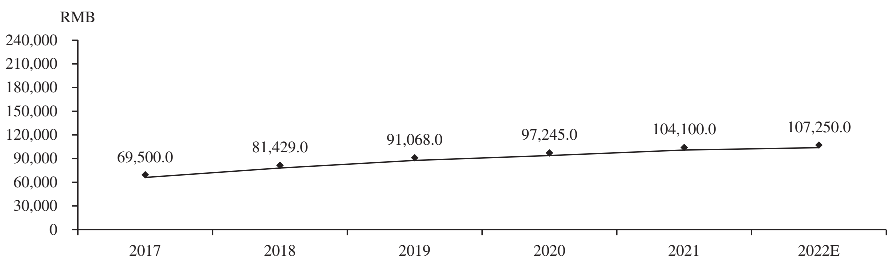
| | **2019 ASP** *(Thousand RMB/tonne)* | **2020 ASP** *(Thousand RMB/tonne)* | **2021 ASP** *(Thousand RMB/tonne)* |
|---|---|---|---|
| **Flake graphite concentrate** | | | |
| **194** | 3.7 | 3.6 | 3.8 |
| **195** | 4.1 | 4.0 | 4.1 |
| **196** | 4.4 | 4.4 | 4.5 |
| **Spherical graphite** | | | |
| **SG-10** | 19.2 | 18.0 | 17.8 |
| **SG-9** | 15.4 | 13.4 | 14.3 |

*Note:* The SG-9 products above refer to the spherical graphite products that have not been purified.

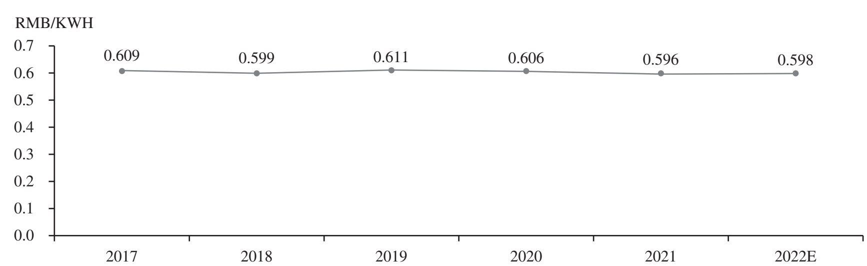
***Average annual wage level of workers in the graphite industry, electricity price and unprocessed graphite price***

Labor cost is considered as one of the key cost components comparing to other operational costs for graphite industry in China. The average annual wages of workers in graphite industry in China increased from approximately RMB69,500 in 2017 to approximately RMB104,100 in 2021, representing a CAGR of approximately 10.6%. From 2017 to 2021, the CAGR of average annual wage of workers in graphite industry was slightly higher than the average level in China, mainly due to the transformation in the mining and graphite industry. The promulgation of environmental protection policies and frequent inspections from government have accelerated the transformation of many graphite manufacturers and promoted the improvement of the graphite mining technology. The use of automation, IoT and underground-drones for 3D mapping are gaining popularity, which brings higher levels of safety, improvements in performance and productivity, and reducing costs of mining. Also, many graphite manufacturers have introduced sophisticated regulation to manage the environmental protection issue. This trend brought positive development for major graphite manufacturers and thus the average annual wage of workers in graphite industry is expected to continuously increase. The average selling price of electricity in China was approximately RMB0.596 per KWH in 2021. Going forward, the average selling price of electricity is expected to decrease as provincial governments are continuously improving business environments for companies and reducing electricity costs. The average selling price of electricity is expected to drop to approximately RMB0.598 per KWH in 2022. Moreover, the price of unprocessed graphite maintained stable from 2017 to 2019. In 2019, the average price of unprocessed graphite in China reached approximately RMB53.3 per tonne. Due to the impact of COVID-19, the average price of unprocessed graphite increased to approximately RMB68.0 per tonne in 2020. Going forward, with the recovery of the economy, the average price of unprocessed graphite would maintain at a stable level. The below chart sets forth the historical and forecasted average annual wage of workers in graphite industry, average price of electricity and average price of unprocessed graphite in China:

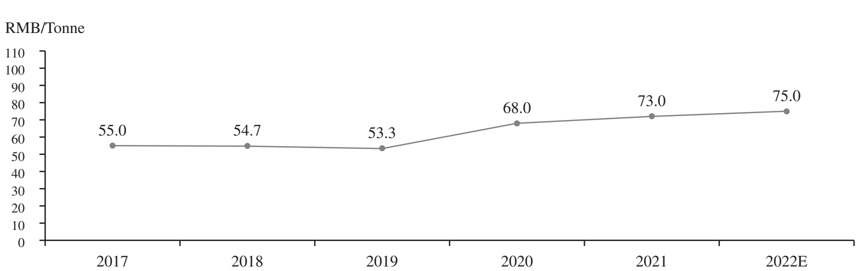
**Average annual wage of workers in graphite industry (China), 2017–2022E**




**Average selling price of electricity (China), 2017–2022E**




**Average price of unprocessed graphite (China), 2017–2022E**




*Source: F&S Report*

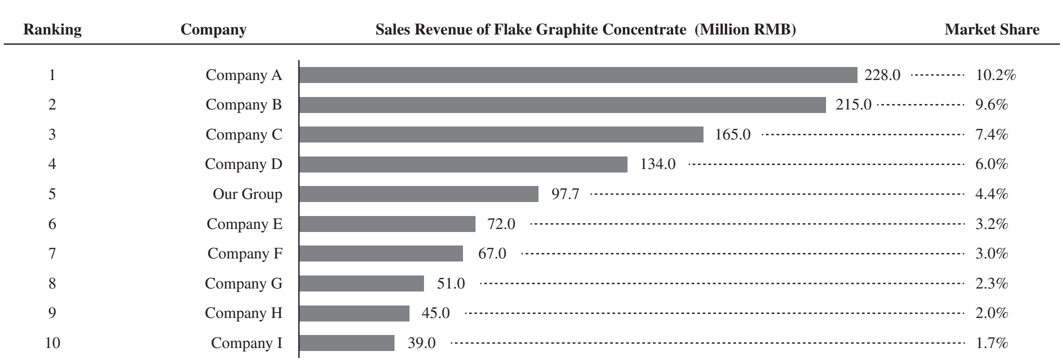
***Competitive landscape***

In most cases, producers of the graphite products may directly purchase graphite ores from upstream suppliers or explore the graphite from the mining resources owned by themselves. According to the China Graphite Resources Survey Report published by Chinese Academy of Geological Sciences, graphite resources are widely distributed throughout China, and there are more graphite resources in the east than in the west. At present, graphite mines have been discovered in around 25 provinces (municipalities, autonomous regions), with a total of 91 mining areas. Specifically, in terms of the reserves of crystalline graphite ores, Heilongjiang, Inner Mongolia, Sichuan, Shanxi and Shandong Provinces account for more than 85% of China crystalline graphite reserves.

Graphite has become an important strategic resource in the world as it is widely used in many industries and further promotes the development of national economy. However, graphite in nature contains many impurities, which makes it difficult to be used directly. Therefore, the graphite needs to be purified before used in the downstream markets. Flake graphite concentrates with different carbon concentrations are applied in different areas. For instance, flake graphite concentrate with carbon content mainly between 94% and 98% are used for the production of the heat resistant magnesia carbon brick and other heat resistant materials. Moreover, spherical graphite is mainly manufactured from high carbon content flake graphite concentrate, which can be used for anode materials and batteries in computers, mobile devices and electric vehicles. The production of flake graphite concentrate with high carbon concentrations normally requires advanced purification techniques and equipment, which poses a higher technique barrier to the new entrants.

In 2021, the sales revenue of flake graphite concentrate in China reached RMB2,238.5 million. China flake graphite concentrate industry was concentrated with top ten companies accounting a total market share of 49.8% by sales revenue in 2021. There were over 120 market participants in flake graphite concentrate industry in 2021. The flake graphite concentrate sales revenue of our Group was ranked fifth in 2021 with approximately RMB97.7 million, accounting for a market share of 4.4% of total flake graphite concentrate industry by sales revenue. According to the F&S Report, the leading companies of flake graphite concentrate industry in China by sales revenue include the following:

**Top ten companies by sales revenue in flake graphite concentrate industry (China), 2021**




*Source: F&S Report*

*Notes:*

1. Company A refers to Qingdao Haida Graphite Co., Ltd.* (青島海達石墨有限公司), an unlisted Chinese company established in 1988, which primarily engages in the production of flake graphite concentrate, high-carbon graphite, high-purity graphite, and spherical graphite. It has graphite production lines with innovative technological process.

2. Company B refers to Jixi Northeast Asia Mineral Resources Co., Ltd* (雞西東北亞礦產資源有限公司), an unlisted Chinese company established in 2011, which primarily engages in the production of flake graphite concentrate, high-carbon graphite, and medium-carbon graphite.

3. Company C refers to Jixi Changyuan Mining Co., Ltd* (雞西長源礦業有限公司), an unlisted Chinese company established in 2011, which mainly engages in the production of flake graphite concentrate and artificial graphite. It is indirectly owned by BTR New Material Group Co. Ltd.* (貝特瑞新材料集團股份有限公司). Headquartered in Shenzhen, China, BTR New Material Group Co., Ltd.* (貝特瑞新材料集團股份有限公司) has been listed on the National Equities Exchange and Quotations since 2015.

4. Company D refers to Ulanqab Darsen Graphite New Material Co., Ltd.* (烏蘭察布市大盛石墨新材料股份有限公司), an unlisted Chinese company established in 2012, which mainly engages in the production of flake graphite concentrate and spherical graphite. It established a development model of the industry chain of graphite deep processing.

5. Company E refers to Jixi Puchen Graphite Co., Ltd* (雞西市普晨石墨有限責任公司), an unlisted Chinese company established in 2004, which primarily engages in the production of flake graphite concentrate. It owns mining rights and is one of the graphite production enterprises in Heilongjiang Province, the PRC.

6. Company F refers to Jixi Jinhuafeng Graphite Manufacturing Co., Ltd* (雞西市金華豐石墨製造有限公司), an unlisted Chinese company established in 2006, which primarily engages in the production of flake graphite concentrate and other graphite products.

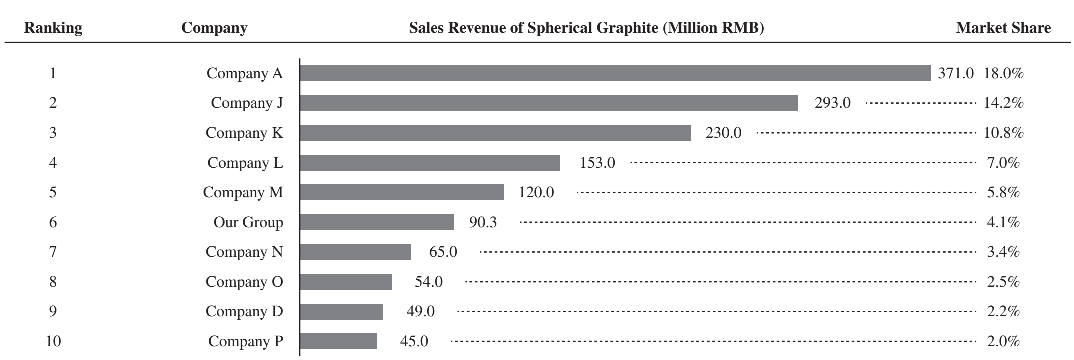
7. Company G refers to Luobei Aoxing New Material Co., Ltd* (蘿北奧星新材料有限公司), an unlisted Chinese company established in 2011, which primarily engages in the production of flake graphite concentrate and other graphite products. It is a sino-foreign joint venture of graphite deep processing.

8. Company H refers to Jixi Fenglu Graphite Co., Ltd* (雞西市豐祿石墨有限責任公司), an unlisted Chinese company established in 1999, which mainly engages in the production of flake graphite concentrate.

9. Company I refers to Luobei Xinlongyuan Graphite Products Co., Ltd* (蘿北縣鑫隆源石墨製品有限公司), an unlisted Chinese company established in 2008, which mainly engages in the production of flake graphite concentrate.

In 2021, the sales revenue of spherical graphite in China reached RMB2,223.0 million. China spherical graphite industry was concentrated with top ten companies accounting a total market share of 70.0% by sales revenue in 2021. There were over 60 market participants in spherical graphite industry in 2021. Our Group ranked sixth in 2021 with a market share of 4.1% by sales revenue. According to the F&S Report, the leading companies of spherical graphite industry in China by sales revenue include the following:

**Top ten companies by sales revenue in spherical graphite industry (China), 2021**




*Source: F&S Report*

*Notes:*

1. Company J refers to Qingdao Guangxing Electronic Materials Co., Ltd* (青島廣星電子材料有限公司), an unlisted Chinese company established in 2010, which primarily engages in the production of spherical graphite and flake graphite concentrate. Its products are used in mercury-free alkaline batteries, power batteries, lithium-ion batteries, nickel-hydrogen batteries and nanomaterials.

2. Company K refers to Qingdao GR-TAIDA Carbon Co., Ltd* (青島泰達天潤碳材料有限公司), an unlisted Chinese company established in 2003, which primarily engages in the production of spherical graphite and other graphite products. Its products are exported to overseas countries, including, Japan, the United States and Southeast Asia.

3. Company L refers to Zhanjiang Juxin New Energy Co., Ltd* (湛江市聚鑫新能源有限公司), an unlisted Chinese company established in 2006, which mainly engages in the production of spherical graphite.

4. Company M refers to Graphex Group Limited* (烯石電動汽車新材料控股有限公司), a Hong Kong listed company (HKEx Stock Code: 6128) established in 2013, which primarily engaged in the development, production and sale of graphene products. It also focuses on the research and development of renewable energy.

5. Company N refers to Qingdao Qingbei Carbon Co., Ltd* (青島青北碳素製品有限公司), an unlisted Chinese company established in 2014, which mainly engages in the production of spherical graphite.

6. Company O refers to Qingdao Taihelong New Energy Co., Ltd* (青島泰和隆新能源材料有限公司), an unlisted Chinese company established in 2009, which mainly engages in the production of spherical graphite.

7. Company P refers to Qingdao Black Dragon Graphite Co., Ltd.* (青島黑龍石墨有限公司), an unlisted Chinese company established in 1996, which mainly engages in the production of spherical graphite, high-carbon graphite, high purity graphite and micro-powder graphite. It focuses on research and development and established cooperation with research institutions in the PRC and overseas.

This section sets out a summary of the most significant aspects of laws and regulations in the PRC that are material to our business operations and the JORC code.

## PRC LAWS AND REGULATIONS

Our business operations are primarily in the PRC and primarily subject to PRC laws and regulations. The following is a summary of the most material PRC laws and regulations relevant to our business and operations.

### Laws and regulations relating to foreign investment

The establishment, operation and management of corporate entities in the PRC is governed by the PRC Company Law (《中華人民共和國公司法》) (the "**PRC Company Law**"), which was issued by the Standing Committee of the National People's Congress of the PRC (全國人民代表大會常務委員會) ("**SCNPC**") on December 29, 1993, last revised and became effective on October 26, 2018. A foreign-invested company is also subject to the PRC Company Law unless otherwise provided by the foreign investment laws.

The Law of Sino-Foreign Equity Joint Ventures of the PRC (《中華人民共和國中外合資經營企業法》) was passed on July 1, 1979 and issued and implemented on July 8, 1979. It was revised for several times afterwards, and the latest version was implemented on October 1, 2016. Implementation Rules for the Law on Sino-Foreign Equity Joint Ventures (《中華人民共和國中外合資經營企業法實施條例》) was issued by the State Council on September 20, 1983. It was revised for several times afterwards, and the latest version was implemented on March 2, 2019. The provisions of the Law on Sino-Foreign Equity Joint Ventures and its implementation rules cover the issues related to the Sino-Foreign joint ventures, such as the establishment and approval procedures, registered capital requirement, foreign exchange, accounting management, tax, and labor.

On September 3, 2016, the Decisions of the SCNPC on Revising Four Laws Including the Law of the PRC on Wholly Foreign-owned Enterprises (全國人民代表大會常務委員會關於修改《中華人民共和國外資企業法》等四部法律的決定) (the "**Decisions on Revision of Four Laws**") was promulgated and took effect on October 1, 2016. The Decisions on Revision of Four Laws revised relevant administrative approval provisions of the Law of the PRC on wholly Foreign-owned Enterprises, the Law of Sino-Foreign Equity Joint Ventures of the PRC (《中華人民共和國中外合資經營企業法》), the Law of Sino-Foreign Contractual Joint Ventures of the PRC (《中華人民共和國中外合作經營企業法》) and the Law of the Protection of Investments by Taiwan Compatriots of the PRC (《中華人民共和國台灣同胞投資保護法》), and modifies relevant articles for administrative approval to change "foreign-invested companies beyond the special management measures enacted by the country shall be established upon approval" into "foreign-invested companies beyond the special management measures enacted by the country shall be established upon filing for management".

The Foreign Investment Law of the PRC (《中華人民共和國外商投資法》) (the "**Foreign Investment Law**") was adopted by the National People's Congress (全國人民代表大會)("**NPC**") on March 15, 2019, which came into force as on January 1, 2020, and replaced the Law of Sino-Foreign Equity Joint Ventures of the PRC, the Law of the PRC on Sino-Foreign Contractual Joint Ventures and the Law of the PRC on Wholly Foreign-owned Enterprise to become the legal foundation for foreign investment in the PRC. Under the Foreign Investment Law, the State shall implement the management systems of pre-establishment national treatment and negative list for foreign investment, according to which the treatment given to foreign investors and their investments during the investment access stage shall be not lower than that given to their domestic counterparts, and the State shall give national treatment to foreign investment beyond the negative list where special administrative measures for the access of foreign investment in specific fields is specified. Besides, the State shall protect foreign investors' investment, earnings and other legitimate rights and interests within the territory of the PRC in accordance with the law. The State will take measures to prompt foreign investment such as ensuring fair competition for foreign-invested enterprises to participate in government procurement activities, and protection of intellectual property rights of foreign investors and foreign-invested enterprises. In respect of administration of foreign investment, foreign investment shall go through relevant verification and record-filing formalities if required by relevant state laws and regulations. The organization form, institutional framework and standard of conduct of a foreign-funded enterprise shall be subject to the provisions of the PRC Company Law or the Partnership Enterprise Law of the PRC (《中華人民共和國合夥企業法》), if applicable.

On December 26, 2019, the State Council promulgated the Implementation Regulations on the Foreign Investment Law (外商投資法實施條例), which came into effect on January 1, 2020, and it further requires that foreign-invested enterprises and domestic enterprises shall be treated equally with respect to policy making and implementation. Pursuant to the Implementation Regulations on the Foreign Investment Law, if the existing foreign-invested enterprises fail to change their original forms as at January 1, 2025, the relevant market regulation departments will not process other registration matters for the enterprises, and may disclose their relevant information to the public.

On December 30, 2019, the MOFCOM and the State Administration for Market Regulation jointly issued the Measures for Reporting of Foreign Investment Information (《外商投資信息報告辦法》), which came into effect on January 1, 2020 and replaced the Interim Administrative Measures for the Record-filing of the Establishment and Modification of Foreign-invested Enterprises (《外商投資企業設立及變更備案管理暫行辦法》). Since January 1, 2020, for foreign investors carrying out investment activities directly or indirectly in the PRC, foreign investors or foreign-invested enterprises shall submit investment information through the Enterprise Registration System and the National Enterprise Credit Information Publicity System operated by the State Administration for Market Regulation. Foreign investors or foreign-invested enterprises shall disclose their investment information by submitting reports for their establishments, modifications and cancelations and their annual reports in accordance with the Foreign Investment Information Measures. If a foreign-invested enterprise investing in the PRC has finished submitting its reports for its establishment, modifications and cancelation and its annual reports, the relevant information will be shared by the competent market regulation department to the competent commercial department, and does not require such foreign-invested enterprise to submit the reports separately.

**Catalogue for the Guidance of Foreign Investment Industries**

According to the Provisions for Guiding Foreign Investment Direction (《指導外商投資方向規定》) issued by the State Council on February 11, 2002 and implemented on April 1, 2002, the foreign-invested projects can be classified into the following categories by industries: encouraged, permitted, restricted and prohibited. The industries not listed in the catalogue belong to the permitted investment projects.

According to the Special Administrative Measures for the Admission of Foreign Investment (Negative List) (2021 Edition) (《外商投資准入特別管理措施(負面清單)》)(2021年版) promulgated by MOFCOM and NDRC on December 27, 2021 and became effective on January 1, 2022, the industry in which our PRC subsidiaries are primarily engaged does not fall into the category of restricted or prohibited industries. The Negative List stipulates in detail the special administrative measures for the market entry of foreign investment. Unless otherwise provided in the PRC laws, the industries which are not set out in the Negative List are permitted foreign invested industries.

**Laws and regulations relating to mineral resources**

Pursuant to the Mineral Resource Law of the PRC (《中華人民共和國礦產資源法》) effective on October 1, 1986 and revised on August 29, 1996 and August 27, 2009 and the Rules for the Implementation of the Mineral Resources Law (《中華人民共和國礦產資源法實施細則》) promulgated and effective on March 26, 1994, (i) mineral resources are owned by the State with the State Council exercising ownership over such resources on behalf of the State. The State ownership of mineral resources shall remain unchanged notwithstanding that the ownership or the right to use the land to which such mineral resources are attached has been granted to a different entity or individual; (ii) the Ministry of Land and Resources of the PRC (中華人民共和國國土資源部) (currently known as the Ministry of Natural Resources of the PRC (中華人民共和國自然資源部)) is the department in charge of geology and mineral resources and is authorized by the State Council to supervise and administer the exploration and exploitation of mineral resources nationwide. The department in charge of geology and mineral resources, of each province, autonomous region or municipality directly under the PRC government is responsible for the supervision and administration of the exploration and exploitation of mineral resources within its respective administrative regions; (iii) exploration rights and mining rights may be acquired with consideration. Enterprises engaged in the mining or exploration of mineral resources must pay a certain amount of money for obtaining mining rights and exploration rights; (iv) an enterprise that intends to explore and exploit mineral resources shall apply for each exploration and mining rights separately according to the relevant PRC laws, regulations and policies, and is required to undergo the registration process for each of the exploration and mining rights, unless the mining enterprise which intends to conduct exploration operations for its own production within the defined mining areas has previously obtained mining rights; (v) anyone who exploits mineral resources must pay resources tax and resources compensation levy in accordance with relevant regulations of the State.

Under the Rules for the Implementation of the Mineral Resources Law of the PRC (《中華人民共和國礦產資源法實施細則》), a holder of a mining permit (採礦許可證) has the right to and is also obligated to conduct mining activities in the designated area and within the time period subscribed under the mining permit. A holder of a mining permit has certain additional rights including, among others, rights to (i) set up necessary production and living facilities within the designated area and (ii) acquire the land use rights necessary for the production. A holder of mining permit has certain additional obligations including, among others, obligations to (i) conduct reasonable exploitation, and protect and fully utilize mineral resources; (ii) pay resources tax and resources compensation levy; (iii) comply with the laws and regulations relating to occupational safety, soil and water conservation, reclamation and environmental protection; and (iv) submit mineral resource, reserve and utilization reports to relevant government authorities as required.

The Administrative Measures for the Registration of Mineral Resources Exploitation (《礦產資源開採登記管理辦法》) (the "**Administrative Measures**") was promulgated by the State Council on February 12, 1998 and was amended on July 29, 2014. Under the Administrative Measures, anyone with mining rights shall file an application for registration of change(s) with the appropriate registration administration authority within the duration of the mining permit term if there is any change in the scope of the mining area, the main exploited mineral categories, the exploitation mode, the name of the mining enterprise and/or the transfer of the mining right according to the relevant laws. According to the Administrative Measures, holders of mining permits are subject to mining right usage fees. Mining right usage fees shall be payable on an annual basis. The rate of mining right usage fee shall be RMB1,000 per square kilometer of mining area per year. The validity period of a mining permit shall be determined according to the scale of the mine. The maximum validity period of the initial term of a mining permit for a big-scale mine, medium-scale mine and small-scale mine shall be 30 years, 20 years and 10 years, respectively. If continuation of mining is necessary after the expiration of the mining permit, the holder of a mining permit shall apply for an extension with the registration authority within 30 days prior to the expiration of the term of the mining permit. If the holder of a mining permit fails to apply for an extension prior to the expiration of the term, the mining permit shall terminate automatically.

**Laws and regulations relating to labor protection**

***Labor laws***

Companies in the PRC are subject to (i) the PRC Labor Law (《中華人民共和國勞動法》) (the "**PRC Labor Law**") which was promulgated on July 5, 1994 and became effective on January 1, 1995. It was further amended on August 27, 2009 and December 29, 2018, (ii) the PRC Labor Contract Law (《中華人民共和國勞動合同法》) (the "**PRC Labor Contract Law**") which was promulgated on June 29, 2007 and became effective on January 1, 2008, and was further amended on December 28, 2012, and (iii) the Implementation Regulations of the PRC Labor Contract Law (《中華人民共和國勞動合同法實施條例》) which was promulgated by the State Council on September 18, 2008 and became effective on the same date, as well as other related regulations, rules and provisions promulgated by the relevant government authorities from time to time.

Compared to previous PRC Laws and regulations, the PRC Labor Contract Law imposes stricter requirements in such respects as signing of labor contracts with employees, stipulation of probation period and violation penalties, termination of labor contracts, payment of remuneration and economic compensation, use of labor dispatches as well as social security premiums.

According to the PRC Labor Law and the PRC Labor Contract Law, a labor contract in writing shall be concluded when a labor relationship is to be established between an employer and an employee. An employer shall pay an employee two times of his salary for each month in the circumstance where he fails to enter a written labor contract with the employee for more than a month but less than a year; where such period exceeds one year, the parities are deemed to have entered an unfixed-term labor contract. Employers shall pay wages that are not lower than the local minimum wage standards to the employees. Employers are also required to establish labor safety and sanitation systems in compliance with PRC rules and standards, and to provide relevant training to the employees.

The Employment Promotion Law of the PRC (《中華人民共和國就業促進法》) which became effective on January 1, 2008, last amended and became effective on April 24, 2015, requires that individuals shall have equal employment opportunities and free choice of occupation, without discrimination on the basis of ethnicity, race, gender, religious belief, communicable disease or rural residence. Under this law, enterprises are also required to provide workers with vocational training.

***Social insurance and housing provident funds***

The PRC social insurance system is mainly governed by the Social Insurance Law of the PRC (《中華人民共和國社會保險法》) (the "**PRC Social Insurance Law**") which was promulgated by the SCNPC on October 28, 2010 and amended on December 29, 2018. According to the PRC Social Insurance Law, the Decision on the Establishment of the Medical Insurance Program for Urban Workers of the State Council (國務院關於《建立城鎮職工基本醫療保險制度》的決定) (effective from December 14, 1998), the Regulation of Insurance for Work-Related Injuries (《工傷保險條例》) (effective from January 1, 2011), the Trial Measures for Maternity Insurance of the Staff and Workers in Enterprises (《企業職工生育保險試行辦法》) (effective from January 1, 1995), the Regulations on Unemployment Insurance (《失業保險條例》) (effective from January 22, 1999) and the Interim Regulations on the Collection and Payment of Social Insurance Premiums (《社會保險費徵繳暫行條例》) (effective from January 22, 1999 and most recently amended on March 24, 2019),employers in the PRC shall register social insurance with the competent authorities, and pay five basic types of social insurance premiums for their employees, or rather, basic pension insurance, basic medical insurance, work-related injury insurance, unemployment insurance and maternity insurance. According to the Social Insurance Law, if an employing entity does not pay the full amount of social insurance premiums as scheduled or required, the social insurance premium collection institution shall order it to make the payment or make up the difference within the stipulated period and impose a daily fine equivalent to 0.05% of the overdue payment from the day on which the payment is overdue. If the payment is not made within the prescribed time, the social insurance authority shall impose a fine ranging from one to three times of the overdue payment amount.

According to the Regulations on Management of Housing Provident Funds (《住房公積金管理條例》) (the "**Housing Provident Funds Regulations**") which were promulgated by the State Council and came into effect on April 3, 1999 and was amended on March 24, 2002 and March 24, 2019, all business entities (including foreign invested enterprises) are required to register with the local housing provident funds management center and then maintain housing fund accounts and pay the related funds for their employees. In addition, for both employees and employers, the payment rate for housing provident fund shall not be less than 5% of the average monthly salary of the employees in the previous year. The payment rate may be raised if the employer desires so. Where an entity violates the Housing Provident Funds Regulations by failing to deposit the housing accumulation fund within the time limit or by under-depositing the fund, it shall be ordered by the housing accumulation fund management center to deposit the fund within a time limit; if it fails to deposit the fund within the time limit, it may apply to the Court for enforcement.

**Laws and regulations relating to environmental protection**

Laws and regulations relating to environmental protection enterprises conducting manufacturing activities in the PRC are subject to provisions under PRC environmental laws and regulations on noise, waste water, air emission and other industrial waste. The major governing environmental laws and regulations consist of the Environmental Protection Law of the PRC (《中華人民共和國環境保護法》), which was most recently amended on April 24, 2014 and became effective on January 1, 2015, the Law on the Prevention and Control of Water Pollution of the PRC (《中華人民共和國水污染防治法》), which was most recently amended on June 27, 2017 and became effective on January 1, 2018, the Law on the Prevention and Control of Air Pollution of the PRC (《中華人民共和國大氣污染防治法》), which was most recently amended and became effective on October 26, 2018, the Law on the Prevention and Control of Solid Waste Pollution of the PRC (《中華人民共和國固體廢物污染環境防治法》), which was partially amended on April 29, 2020 and became effective on 1 September, 2020, and the Law of the People's Republic of China on the Prevention and Control of Noise Pollution (《中華人民共和國噪聲污染防治法》), which was promulgated on December 24, 2021 and came into effective on June 5, 2022 (collectively "**the Environmental Laws**"). Pursuant to the Environmental Laws, PRC enterprises shall build requisite environmental treatment facilities affiliating to the manufacturing facilities, where waste air, waste water and waste solids generated can be treated properly in accordance with the relevant provisions.

Pursuant to the Law on the Evaluation of Environment Effects of the PRC (《中華人民共和國環境影響評價法》), which was promulgated on October 28, 2002 and was amended on July 2, 2016 and on December 29, 2018, the Administrative Regulations on the Environmental Protection for Construction Projects (《建設項目環境保護管理條例》), which was promulgated on November 29, 1998 and amended on July 16, 2017 and became effective on October 1, 2017, and the Interim Measures for the Acceptance Inspections of Environment Protection Facilities of Construction Projects (《建設項目竣工環境保護驗收暫行辦法》), which was promulgated by the Ministry of Environmental Protection of the PRC on November 20, 2017, enterprises that are planning construction projects should provide assessment reports, statement or registration form on the environmental impact of such projects. The assessment reports and statements must be approved by the competent environmental protection authorities prior to commencement of any construction work, while the registration forms shall be filed to them. Unless otherwise stipulated by laws and regulations, enterprises which are required to provide assessment reports and statements shall undertake the responsibility of acceptance inspections of the environmental protection facilities by itself upon the completion of the construction project. A construction project may be formally put into production or use only if the corresponding environmental protection facilities have passed the acceptance examination. The competent authorities may carry out spot check and supervision on the implementation of the environmental protection facilities.

Pursuant to the Administrative Regulation for Pollutant Discharge Licensing (《排污許可管理條例》), which became effective on March 1, 2021, enterprises, public institutions and other producers and business operators that are subject to the administration of pollutant discharge permits in accordance with the provisions of the law shall apply for pollutant discharge permit in accordance with the provisions of these Regulations. Based on factors such as the amount of pollutants produced, the amount of pollutants discharged and the impact on the environment, pollutant discharge units are subject to two different level of pollutant discharge permit administration, namely priority administration and simplified administration.

**Law and regulations on fire protection acceptance check of construction projects**

Pursuant to Fire Protection Law of the People's Republic of China (《中華人民共和國消防法》) (the "**Fire Protection Law**"), which was promulgated by the SCNPC on April 29, 1998, last revised and became effective on April 29, 2021, with respect to construction projects which are required fire protection design according to national fire protection technical standards for construction work, an acceptance check and/or record-filing for fire protection shall be conducted in accordance with the following provisions upon completion of such construction projects:

(i) With respect to construction projects specified by the competent housing and urban-rural development authorities, the construction entities shall file an application for fire protection acceptance check with the authorities in charge of housing and urban-rural development; and

(ii) With respect to other construction projects, the construction entities shall complete filing formalities with the competent housing and urban-rural development authorities following the inspection and acceptance. The competent housing and urban-rural development authorities shall carry out spot check on such record-filings.

**Laws and regulations relating to land and leases**

Pursuant to the Land Administration Law of the PRC (《中華人民共和國土地管理法》) promulgated on June 25, 1986, amended on December 29, 1988, August 29, 1998, August 28, 2004 and August 26, 2019 and became effective on January 1, 2020, and Regulations for the Implementation of the Land Administration Law of the PRC (《中華人民共和國土地管理法實施條例》) promulgated on January 4, 1991 and last amended on July 2, 2021, all land in the PRC is either state-owned or collectively owned, depending on the location of the land. All land in the urban areas of a city or town is state-owned, and all land in the rural areas of a city or town and all rural land is, unless otherwise specified by law, collectively owned. The State has the right to reclaim land in accordance with law if required for public interest. Land owned by the State and land collectively-owned by rural collective economic entities or village committee may be allocated and used by units or individuals according to law. The ownership of land and land use rights registered according to the relevant laws shall be protected by law. In the case of short-term use of State-owned land or land collectively-owned by rural collective economic entities for construction projects or for geological exploration purposes, approval shall be obtained from the land administrative department of the government at or above the county level. Land users shall sign contracts with the relevant land administrative department, rural collective economic entities or village committee for the short-term use of land, depending on the ownership of land and shall pay land compensation fees as stipulated in the contracts for the temporary use of land. The term for the short-term use of land shall generally not exceed two years.

In accordance with the Regulations on Land Rehabilitation (《土地復墾條例》) promulgated and effective on March 5, 2011, and the Measures for the Implementation of the Regulations on Land Rehabilitation (《土地復墾條例實施辦法》) promulgated on December 27, 2012 and amended on July 16, 2019, a production or construction entity or individual (the "**Land User**") must undertake measures to restore a mining site to its original state within a prescribed time frame if its mining activities result in damage to arable land, grassland or forestry land. The land user is also required to formulate and implement a land rehabilitation plan and to restore the land to a state appropriate for use by rehabilitation if its mining activities result in damages to the land. The land rehabilitation plan shall be approved by the relevant land resources authority. The land user is also required to set aside funds to be used in land rehabilitation. The rehabilitated land is legally required to meet rehabilitation standards and may only be subsequently used upon examination and approval by the land authorities. Any failure to comply with this requirement or failure to restore the mining site to its original state will result in the imposition of fines, rehabilitation fees, rejection of applications for land use rights or rejection of application for new mining permits or renewal, alteration or cancellation of mining permits by the local bureau of natural resources.

Pursuant to the Law on Administration of Urban Real Estate (《中華人民共和國城市房地產管理法》) which was promulgated by the SCNPC in 1994 and amended in 2007, 2009 and 2019, when leasing premises, the lessor and lessee are required to enter into a written lease contract, containing such provisions as the leasing term, use of the premises, rental and repair liabilities, and other rights and obligations of both parties. Both lessor and lessee are also required to register the lease with the real estate administration department. If the lessor and lessee fail to go through the registration procedures, both lessor and lessee may be subject to fines.

According to the Civil Code of the PRC (《中華人民共和國民法典》) ("**Civil Code**"), which was promulgated by the NPC and became effective on January 1, 2021, the lessee may sublease the leased premises to a third party, subject to the consent of the lessor. Where the lessee subleases the premises, the lease contract between the lessee and the lessor remains valid. The lessor is entitled to terminate the lease contract if the lessee subleases the premises without the consent of the lessor. In addition, if the lessor transfers the premises, the lease contract between the lessee and the lessor will still remain valid.

**Laws and regulations relating to product quality**

The principal law governing product quality is the Product Quality Law of the PRC (《中華人民共和國產品質量法》) (the "**Product Quality Law**"), which was issued by the SCNPC on February 22, 1993, last revised and became effective on December 29, 2018. The Product Quality Law is applicable to all activities of production and sale of any product within the territory of the PRC, and the producers and sellers shall be liable for product quality in accordance with the Product Quality Law. Businesses in production and sale of our PRC subsidiaries should comply with the Product Quality Law and they shall be liable for product quality.

Pursuant to the Civil Code, manufacturers shall assume tort liability where the defects in relevant products cause damage to others. Sellers shall assume tort liability where the defects in relevant products causing damage to others are attributable to the sellers. The aggrieved party may claim for compensation from the manufacturer or the seller of the relevant product in which the defects have caused damage.

According to the Standardization Law of the PRC (《中華人民共和國標準化法》) which was issued by the SCNPC on December 29, 1988, last revised on November 4, 2017 and took effect on January 1, 2018 and the Implementation Rules for the Standardisation Law of the PRC (《中華人民共和國標準化法實施條例》) promulgated and became effective on April 6, 1990, standards shall be formulated for the varieties, specifications, quality and grades of industrial products as well as the safety and sanitary requirements for them; and for the design, production, testing, inspection, packing, storage, transportation and method of operation of industrial products as well as the safety and sanitary requirements for them in the process of production, storage and transportation. Any production, sale or import of products which are not in compliance with such compulsory standards shall be subject to ordered cessation of production, confiscation of products, destruction of products under supervision or necessary technical treatment or monetary penalties.

**Laws and regulations relating to production safety**

The PRC government has formulated a relatively comprehensive set of laws and regulations on production safety, including the Law on Production Safety of the PRC (《中華人民共和國安全生產法》), which became effective on November 1, 2002 and last amended on September 1, 2021, the Law on Mine Safety of the PRC (《中華人民共和國礦山安全法》), which became effective on May 1, 1993 and amended on August 27, 2009, as well as the Regulations on the Implementation of the Law on Mine Safety of the PRC (《中華人民共和國礦山安全法實施條例》), which became effective on October 30, 1996, pertaining to the exploration and mining of mineral resources, mine construction, disuse of pits and other related activities.

Pursuant to the Law on Production Safety Law of the PRC (《中華人民共和國安全生產法》), entities engaging in production are required to implement production safety measures specified in the Production Safety Law and other relevant laws, administrative regulations, national standards and industry standards. Any entity that does not implement such measures for safe production is prohibited from engaging in production and business operation activities. Entities are required to provide their employees with education and training on production safety. Entities shall also provide their employees with protective gear that meet national or industry standards as well as supervision and proper training to ensure their correct utilization.

The Regulation on Production Safety Licenses (《安全生產許可證條例》) was promulgated on January 13, 2004 and amended on July 29, 2014. The Measures for the Implementation of Production Safety Licenses for Non-coal Mine Enterprises (《非煤礦礦山企業安全生產許可證實施辦法》) was promulgated on May 17, 2004, amended on April 30, 2009 and amended on May 26, 2015. Pursuant to such regulations and measures, (i) the production safety licensing system is applicable to any enterprise engaging in non-coal mining and such enterprise may not produce any products without obtaining a production safety license. Enterprises which fail to fulfill the production safety may not carry out any production activity; (ii) prior to producing any products, the non-coal mining enterprise shall apply for a production safety license, which is valid for three years; (iii) the production safety bureau at or above provincial level are in charge of issuing the production safety license for non-coal mining enterprise; (iv) if a production safety license needs to be extended, the enterprise must apply for an extension with the administrative authority who issued the original license three months prior to the expiration of the original license; and (v) mining enterprises which have obtained the production safety license may not lower their production safety standards, are subject to supervision and inspection by the licensing authorities. If the authorities are of the opinion that the mining enterprises do not fulfill the safety requirements, the safety license may be withheld on a temporary basis or revoked.

The Law of the PRC on the Prevention and Control of Occupational Diseases (《中華人民共和國職業病防治法》) (the "**Occupational Diseases Prevention Law**"), promulgated by the SCNPC on October 27, 2001, became effective on May 1, 2002, and amended on December 31, 2011, July 2, 2016, November 4, 2017, and December 29, 2018 is applicable to activities for the prevention and control of diseases contracted by the workers due to their exposure in the course of work to dust, radioactive substances and other toxic and harmful substances. Pursuant to the Occupational Diseases Prevention

Law, the employer shall strictly abide by the national occupational health standards and implement the measures for occupational disease prevention and control in accordance with laws and regulations. Violation of the Occupational Diseases Prevention Law may result in the imposition of fines and penalties, the suspension of operation, an order to cease operation, and/or criminal liability in severe cases.

We should implement safe production and occupational diseases prevention and control as required by PRC laws and regulations.

**Laws and regulations relating to foreign exchange**

The Regulation of the PRC on Foreign Exchange Control (《中華人民共和國外匯管理條例》) (the "**Foreign Exchange Regulation**"), most recently amended by the State Council on August 1, 2008 and effective on August 5, 2008, is the principal regulation on foreign currency exchange in the PRC. According to the Foreign Exchange Regulation, the Renminbi is freely convertible for current account items after due process, including distribution of dividends, trade-related foreign exchange transactions and service-related foreign exchange transactions, whereas foreign exchange for capital account items, such as direct investments or loans, requires prior approval of and registration with SAFE.

According to the Notice of State Administration of Foreign Exchange on Reforming and Standardizing Capital Account Foreign Exchange Settlement Administration Policies (國家外匯管理局關於《改革和規範資本項目結匯管理政策》的通知) issued by SAFE on June 9, 2016, it has been specified clearly in the relevant policies that, for the capital account foreign exchange income subject to voluntary foreign exchange settlement (including the repatriation of the proceeds from overseas listing), the domestic institutions may conduct the foreign exchange settlement at the banks according to their operation needs. The proportion of the capital account foreign exchange income subject to voluntary foreign exchange settlement was tentatively set as 100%, provided that SAFE may adjust the above proportion according to the international payment balance status in good time.

On January 26, 2017, SAFE promulgated the Circular on Further Improving Reform of Foreign Exchange Administration and Optimizing Genuineness and Compliance Verification (國家外匯管理局關於《進一步推進外匯管理改革完善真實合規性審核》的通知) (the "**SAFE Circular 3**"), which became effective on January 26, 2017 and stipulates several capital control measures with respect to the outbound remittance of profit from domestic entities to offshore entities, including (i) under the principle of genuine transaction, banks shall check board resolutions regarding profit distribution, the original version of tax filing records and audited financial statements; and (ii) domestic entities shall hold income to account for previous years' losses before remitting the profits. Further, pursuant to SAFE Circular 3, domestic entities shall make detailed explanations of the sources of capital and utilization arrangements, and provide board resolutions, contracts and other proof when completing the registration procedures in connection with an outbound investment.

### Laws and regulations relating to taxation

#### *Enterprise income tax*

According to the EIT Law which was issued by the National People's Congress on March 16, 2007 and last revised and came into effect on December 29, 2018, and the Implementation Rules to the EIT Law (《中華人民共和國企業所得稅法實施條例》) (the "**EIT Regulation**") issued by the State Council on December 6, 2007 and effective on January 1, 2008 and was revised on April 23, 2019, both domestic and foreign-invested enterprises established under the laws of foreign countries or regions whose "de facto management bodies" are located in the PRC are considered resident enterprises, and will generally be subject to EIT at the rate of 25% of their global income. "De facto management bodies" is defined as "establishments that carry out substantial and overall management and control over production and operations, personnel, accounting, and properties" of the enterprise. If an enterprise is considered a PRC resident enterprise under the above definition, its global income will be subject to enterprise income tax at the rate of 25%. Pursuant to the newly revised Administrative Measures for the Accreditation of High-tech Enterprises (《高新技術企業認定管理辦法》) which became effective on January 1, 2016, high-tech enterprises, which are recognized in accordance with the Administrative Measures referred to immediately above, may apply for the tax preferential policy in accordance with the EIT Law and the EIT Regulation. Qualifying high-tech enterprises would be taxed at a rate of 15% on EIT.

#### *Value-added tax*

Pursuant to the Interim Value-added Tax Regulations of the PRC (《中華人民共和國增值稅暫行條例》) which was amended and became effective on November 19, 2017 and the Implementing Rules for the Interim Regulations of the PRC on Value-added Tax (《中華人民共和國增值稅暫行條例實施細則》) which was amended on October 28, 2011 and became effective on November 1, 2011 (collectively the "**VAT Law**"), all entities and individuals that are engaged in the sale of goods, the provision of repairs and replacement services and the importation of goods in China are generally required to pay value-added tax (the "**VAT**") at a rate of 17.0% of the gross sales proceeds received, less any deductible VAT already paid or borne by the taxpayer. Further, when exporting goods, the exporter is entitled to all the refund of VAT that it has already paid or borne unless otherwise stipulated.

On November 16, 2011, MOF and SAT jointly promulgated the Pilot Plan for Levying VAT in Lieu of Business Tax (《營業稅改徵增值稅試點方案》). Starting from January 1, 2012, the PRC government has been gradually implementing a pilot program in certain provinces and municipalities, to levy a 6% VAT on revenue generated from certain kinds of modern services in lieu of business tax.

On March 23, 2016, MOF and SAT jointly issued the Circular of Full Implementation of Business Tax to VAT Reform (《關於全面推開營業稅改徵增值稅試點的通知》) (the "**Circular 36**") which confirms that business tax will be completely replaced by VAT from May 1, 2016.

On April 4, 2018, MOF and SAT jointly issued Circular on Adjusting Value-added Tax Rate (《關於調整增值稅稅率的通知》) to further adjust the VAT rate, including the change of tax rate from 17% and 11% to 16% and 10% respectively for the taxable sales or import of goods by the tax payer.

According to the Announcement on Policies Concerning Deepening the Reform of Value-added Tax (《關於深化增值稅改革有關政策的公告》), which was promulgated on March 20, 2019 and became effective on April 1, 2019, a VAT general taxpayer who is previously subject to 16% on VAT-taxable sales activities shall have the applicable tax rates adjusted to 13%.

***Withholding income tax and tax treaties***

The EIT Law provides that since January 1, 2008, an income tax rate of 10% will normally be applicable to dividends declared to non-PRC resident enterprise investors which do not have an establishment or place of business in the PRC, or which have such establishment or place of business but the relevant income is not effectively connected with the establishment or place of business, to the extent such dividends are derived from sources within the PRC.

Pursuant to an Arrangement between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Incomes (《內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排》) (the "**Double Tax Avoidance Arrangement**"), and other applicable PRC laws, if a Hong Kong resident enterprise is determined by the competent PRC tax authority having satisfied the relevant conditions and requirements under such Double Tax Avoidance Arrangement and other governing laws, the 10% withholding tax on the dividends the Hong Kong resident enterprise receives from a PRC resident enterprise may be reduced to 5%. However, in compliance with the Notice of SAT on the Issues concerning the Application of the Dividend Clauses of Tax Agreements (《國家稅務總局關於執行稅收協定股息條款有關問題的通知》), which was promulgated and became effective on February 20, 2009, if the relevant PRC tax authorities determine in their discretion that a company benefits from such reduced income tax rate due to a structure or arrangement that is primarily tax-driven, such PRC tax authorities may adjust the preferential tax treatment. On February 3, 2018, SAT issued the Announcement on Certain Issues Concerning the Beneficial Owners in a Tax Agreement (《關於稅收協定中"受益所有人"有關問題的公告》) (the "**Circular 9**"), which provides the guidance for determining whether a resident of a contracting state is the "beneficial owner" of an item of income under China's tax treaties and similar arrangements. Under Circular 9, a beneficial owner generally shall be engaged in substantive business activities and an agent may not be regarded as a beneficial owner and, therefore, may not qualify for these benefits.

**Laws and regulations relating to merger and acquisition**

On August 8, 2006, six PRC regulatory agencies, including MOFCOM, the State-Owned Assets Supervision and Administration Commission of the State Council, SAT, the State Administration for Industry and Commerce, SAFE, and China Securities Regulatory Commission, jointly promulgated the Provisions on the Merger and Acquisition of Domestic Enterprises by Foreign Investors (《關於外國投資者併購境內企業的規定》) (which was subsequently amended by MOFCOM on June 22, 2009) (the "**M&A Provisions**") to regulate merger and acquisition of non-foreign investment enterprises ("**domestic enterprises**") by foreign investors, which became effective on September 8, 2006.

Pursuant to the M&A Provisions, a foreign investor is required to obtain necessary approvals when it (i) acquires the equity of a domestic enterprise or subscribes for the increased capital of a domestic enterprise so as to convert the domestic enterprise into a foreign-invested enterprise; or (ii) establishes a foreign-invested enterprise through which it purchases the assets of a domestic enterprise and operates these assets or purchases the assets of a domestic enterprise and then invests such assets to establish a foreign-invested enterprise. According to Article 11 of the M&A Provisions, where a domestic company or enterprise, or domestic natural person, through an overseas company legally established or controlled by it/him, acquires a domestic company which is related to or connected with it/him, approval from MOFCOM is required.

## SUMMARY OF JORC CODE

The Mineral Resource and Ore Reserve statements in this document have been prepared in accordance with the JORC Code. The JORC Code is one of the internationally accepted Mineral Resource and Ore Reserve classification systems established in Australia, which was first published in February 1989 and last revised in December 2012. This is commonly used in independent technical reports and competent person's reports for reporting Mineral Resource and Ore Reserve for public companies reporting to the Stock Exchange. This is used by the competent person to report the Mineral Resources and Ore Reserves of graphite in this document.

The JORC Code defines "Mineral Resource" as a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided in order of increasing geological confidence into the following categories:

- *Inferred Mineral Resource* — is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

- *Indicated Mineral Resource* — is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

  *Geological evidence* — is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.; and

- *Measured Mineral Resource* — is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

  *Geological evidence* — is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

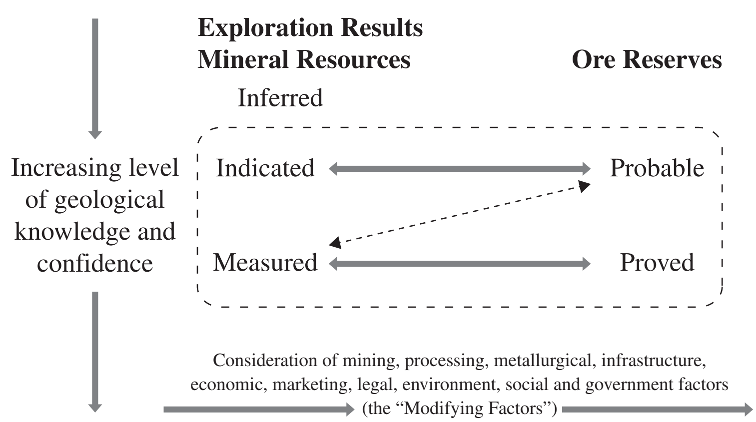
The JORC Code defines "Ore Reserve" as the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

Ore reserves are sub-divided into the following categories:

- *Probable Ore Reserve* — is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve; and

- *Proved Ore Reserve* — is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

The following diagram summarizes the general relationship between Exploration Results, Mineral Resources and Ore Reserves under the JORC Code:




Ore Reserves are generally quoted as comprising a portion of the total Mineral Resource rather than the Mineral Resources being additional to the Ore Reserves quoted. Under the JORC Code either procedure is acceptable, provided the method adopted is clearly identified. The Independent Technical Report in this document reports all of the Ore Reserves as part of the Mineral Resources.

## HISTORY AND DEVELOPMENT

Our Group's history can be traced back to June 2006 when Yixiang Graphite was founded by Mr. Zhao Changshan, Mr. Zhao and Mr. Zhao Ming as a family business. Mr. Zhao Changshan and Mr. Zhao Ming are the father and brother of Mr. Zhao, respectively. Mr. Zhao Changshan, who has stepped down from the management of our Group has entrusted the management and affairs of our Group in the hands of Mr. Zhao, deferring to decisions of Mr. Zhao both at the shareholders' level and at the senior management level, when Mr. Zhao was the general manager and/or executive director of Yixiang Graphite and Yixiang New Energy, since 2008 and up until Mr. Zhao Changshan left our Group. Although Mr. Zhao Ming was named as a shareholder since the establishment of Yixiang Graphite and Yixiang New Energy, his role was that of a passive investor and has not been involved in the affairs of the business of our Group. Mr. Zhao Changshan and Mr. Zhao Ming have each transferred their entire equity interests in Yixiang Graphite and Yixiang New Energy to Mr. Zhao during the Track Record Period. Mr. Zhao Ming had transferred his 30% equity interest in Yixiang Graphite to Mr. Zhao and 33% equity interest in Yixiang New Energy to Mr. Zhao Changshan in December 2019. Mr. Zhao Changshan later transferred his 38% equity interest in Yixiang Graphite and 31.35% equity interest in Yixiang New Energy to the WFOE in December 2020, which is indirectly wholly-owned by Mr. Zhao as at the Latest Practicable Date, upon completion of which Mr. Zhao Changshan had ceased to be a shareholder of the Group. For further details, please see "— Our Corporate Development" in this section.

Mr. Zhao, our executive Director, chairman of our Board and chief executive officer, has approximately 20 years of experience in the graphite industry and has been involved in the operation of our Group since its establishment. Mr. Zhao has been the sole executive director of both Yixiang Graphite and Yixiang New Energy since May 2019 and throughout the Track Record Period, respectively. For family estate planning purpose, Mr. Zhao Changshan has entrusted the management of the Group to Mr. Zhao since 2008 as evidenced by the two management entrustment agreements entered into between Mr. Zhao Changshan and Mr. Zhao on January 1, 2008 and April 20, 2011 in relation to the entrustment of management decisions in the hands of Mr. Zhao by Mr. Zhao Changshan in relation to the affairs of Yixiang Graphite and Yixiang New Energy respectively. Our Directors confirm that Mr. Zhao Changshan held the position of executive director of Yixiang Graphite from June 2006 to May 2019 as the business of the Group was essentially a family business and he would continue to provide advice to Mr. Zhao in relation to the Group's operation but has otherwise not participated in any operation or management of the Group between 2008 and May 2019. Our Directors confirm that having entrusted the management of Yixiang Graphite and Yixiang New Energy in the hands of Mr. Zhao, Mr. Zhao Changshan would provide advice to Mr. Zhao but Mr. Zhao has been the final decision maker for the affairs of the Group. Mr. Zhao Changshan then stepped down from his position of executive director of Yixiang Graphite in May 2019, as he reached his age of retirement and had moved outside of Heilongjiang province. Mr. Zhao Changshan had been in a passive position in the decision-making process of the Group and has always followed decisions of Mr. Zhao in relation to the exercise of his voting rights at the meetings of shareholders of the Group and they voted unanimously with Mr. Zhao in all decisions concerning Yixiang Graphite and Yixiang New Energy throughout the Track Record Period whilst Mr. Zhao Changshan was still in the Group.

Prior to founding our Group, Mr. Zhao had served Yixiang Graphite's predecessor, Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) from April 2002 to May 2004, where he started his career. Our Directors confirm that Mr. Zhao Changshan had worked at a PRC entity that engaged in the production of graphite products for more than 15 years, where he provided logistic services and later engaged in the production of graphite products. Mr. Zhao had no prior experience before serving Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司). For further information of Mr. Zhao, please see "Directors and Senior Management — Directors — Executive Directors". Mr. Zhao Ming has no relevant experience in the graphite industry. Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) was established on April 12, 2002 and was principally engaged in the mining of graphite ore and the production of flake graphite concentrate. Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) was owned as to 60% by Mr. Zhao Changshan, 20% by Mr. Zhao and 20% by Mr. Zhao Ming from its establishment to its deregistration. As a result of the exhaustion of resources at the relevant mines in Jixi, extractions of carbon ores became increasingly difficult. Coupled with the promotion of local graphite resources by the Luobei County government on numerous occasions, Mr. Zhao Changshan, Mr. Zhao and Mr. Zhao Ming decided to cease the operation of Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) in 2007 and moved their principal business from Jixi to Hegang, both in Heilongjiang Province, the PRC, and founded Yixiang Graphite. Our Directors confirm that Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) went out of production and became dormant. Our Directors confirm that as Mr. Zhao Changshan retired in 2019, Mr. Zhao Changshan, Mr. Zhao and Mr. Zhao Ming decided to deregister the dormant Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) in April 2020 as part of Mr. Zhao Changshan's plan in streamlining his asset portfolio after his retirement.

We are engaged in the production and sales of flake graphite concentrate and spherical graphite in the PRC. As at the Latest Practicable Date, we had two principal operating entities, Yixiang Graphite and Yixiang New Energy. In June 2006, we commenced operations and established Yixiang Graphite for engaging in the beneficiation of flake graphite concentrate with carbon content mainly between 94% and 96.8%. In April 2011, we expanded our operations by establishing Yixiang New Energy which is engaged in the processing of spherical graphite and the extraction operations at our Beishan Mine. In 2019, we acquired the mining rights of our graphite mine located approximately 28 km northwest of Luobei County in Heilongjiang Province in which we began extraction in 2019.

Our Company was incorporated in the Cayman Islands on August 3, 2020 in anticipation of the [REDACTED]. As part of the Reorganization and for the purpose of the [REDACTED], we undertook a series of reorganization steps, upon which our Company became the ultimate holding company of our various subsidiaries. Please see "— Reorganization" in this section for further details.

**Business milestones**

Set out below are the significant milestones and our corporate and business development since our establishment:

| Time | Event |
|---|---|
| June 2006 | Yixiang Graphite was established and commenced business operations in beneficiating and selling flake graphite concentrate |
| April 2011 | Yixiang New Energy was established and commenced business operations |

| Time | Event |
|---|---|
| August 2012 | Yixiang Graphite was awarded the "Outstanding Private Entrepreneurs of Hegang" (鶴崗市傑出民營企業家) by CPC Hegang Municipal Committee (中共鶴崗市委) and People's Government of Hegang (鶴崗市人民政府) |
| September 2012 | Yixiang New Energy began processing and selling spherical graphite |
| July 2013 | Yixiang Graphite began its business relationship with Shenzhen Beiterui New Energy Materials Co., Ltd* (深圳市貝特瑞新能源材料股份有限公司) |
| December 2017 | Yixiang New Energy was awarded the "Outstanding Distributor" (優秀經銷商) by Heilongjiang Longerjia Photoelectric Technology Co., Ltd (黑龍江隆爾嘉光電科技有限公司) |
| December 2017 | Yixiang New Energy was awarded the "2017 Outstanding Distributor Technology Innovation Award" (優秀供應商技術創新獎) by Shenzhen Beiterui New Energy Materials Co., Ltd* (深圳市貝特瑞新能源材料股份有限公司), the largest customer of our Group in 2019 and 2020, and the second largest customer of our Group in 2021 |
| March 2018 | Yixiang Graphite was awarded the "2017 Safety Production KPI Assessment Advanced Unit" (2017年度安全生產目標考核先進單位) by Heilongjiang Agricultural Reclamation Baoquanling Administration (黑龍江省農墾寶泉嶺管理局) |
| April 2019 | Yixiang New Energy acquired the mining rights of our Beishan Mine located at Yanjun |

## OUR CORPORATE DEVELOPMENT

For information on our Company and the offshore holdings companies in our Group, please see "— Reorganization — Incorporation of the Company and offshore holding companies" in this section.

### Yixiang Graphite

Yixiang Graphite was established in the PRC as a limited liability company on June 26, 2006 with an initial registered capital of RMB500,000. At the time of its establishment, Yixiang Graphite was owned as to 40% by Mr. Zhao Changshan, 30% by Mr. Zhao and 30% by Mr. Zhao Ming. The principal business of Yixiang Graphite is the beneficiation and sales of flake graphite concentrate.

On February 5, 2012, the registered capital of Yixiang Graphite increased from RMB0.5 million to RMB5 million, with the additional RMB4.5 million capital contributed by its respective shareholders, the amount of which was fully settled on March 27, 2012. Our Directors confirm that Mr. Zhao Ming's role in the Group had been that of a passive investor and has not been involved in the affairs of the business of the Group. To the best knowledge and belief of our Directors and having made all reasonable enquiries, Mr. Zhao Ming had decided to step down as a shareholder of the Group for his own career pursuit as he had no involvement in the business of the Group. On December 11, 2019, Mr. Zhao Ming transferred his 30% equity interest in Yixiang Graphite to Mr. Zhao at the consideration of RMB1.5 million, which was based on the amount of his capital contribution of Yixiang Graphite at the time. As this was a transfer between family members, the consideration was not immediately settled and was fully settled on March 31, 2021. Upon completion of such equity transfer, Yixiang Graphite was held as to 60% by Mr. Zhao and 40% by Mr. Zhao Changshan.

On July 27, 2020, the registered capital of Yixiang Graphite increased from RMB5 million to approximately RMB5.3 million as Ms. Song Meixin (宋美欣), an Independent Third Party, agreed to inject approximately RMB4.7 million into Yixiang Graphite, of which approximately RMB0.3 million was included in the registered capital of Yixiang Graphite. The consideration for such injection was determined based on arm's length negotiation, having taken into account the asset valuation report of Yixiang Graphite dated May 27, 2020 prepared by an independent valuer, who assessed Yixiang Graphite's net asset value to be approximately RMB89 million at the time, and such consideration was fully settled on October 13, 2020. The independent valuer took an asset-based approach by assessing the value of Yixiang Graphite's assets after deducting Yixiang Graphite's liabilities, in preparing the valuation report. The valuation by the independent third party valuer was also based on, among other things, the key assumptions that (a) Yixiang Graphite would continue operating as a going concern under the then prevailing environment and purposes; (b) there were no material changes to the applicable laws, regulations and governmental policies and there were no material changes in the political, economic or social environment in which Yixiang Graphite operated; (c) the scope and method of operation would remain the same based on the then existing method and level of management; and (d) the valuation was only based on the then existing operating capabilities as at the valuation base date and did not take into account the expansion of operating capabilities in the future. Upon completion of the capital injection, Yixiang Graphite was owned as to 57% by Mr. Zhao, 38% by Mr. Zhao Changshan and 5% by Ms. Song Meixin. To the best knowledge and belief of our Directors and having made all reasonable enquiries, the family of Ms. Song operated and invested in coal businesses and Ms. Song and her family have had over 10 years of investment experiences focusing on mining and energy industries. In particular, Ms. Song and her family have been holding interest in a coal mine production company in Heilongjiang province since 2010, and have been holding equity interest in a company principally engaged in the development, construction, maintenance, operation management and technical consulting of photovoltaic power generation projects since 2016. Our Directors confirm that Ms. Song had become acquainted with Mr. Zhao and Mr. Zhao Changshan at a social event around 5 years ago. Our Directors confirm that in April 2020, Ms. Song expressed her interest in investing in the Group as she believed driven by the continuous policy incentives in NEVs manufacturing, the estimated market demand of the Group's products would increase. Having engaged an independent valuer to assess the asset value of the Group and after arm's length negotiation with Mr. Zhao, Ms. Song then decided to invest in the Group in July 2020. Our Directors confirm that after her investment in Yixiang Graphite, Ms. Song had not been involved in the operation or management of the Group and was a passive investor. Whilst Ms. Song was a shareholder of Yixiang Graphite, she was able to exercise her rights as a shareholder in respect of her 5% equity interest in Yixiang Graphite in accordance with the articles of association of Yixiang Graphite and the applicable laws and there has been no other authority exercisable by Ms. Song since July 2020. Ms. Song Meixin subsequently transferred her interest in Yixiang Graphite to the WFOE at the consideration of approximately RMB4.7 million pursuant to an equity transfer agreement dated December 14, 2020, as a result of which Ms. Song Meixin no longer had any interest in Yixiang Graphite. To the best of our Directors' knowledge, Ms. Song Meixin invested in our Group due to her confidence in the business prospects of our Group, and she later decided to divest and leave our Group mainly because she planned to devote more attention and resources to her other investments with a focus on the property industry and stock market and the businesses of her family. The consideration for the transfer was determined based on arm's length negotiation between the parties, having taken into account the aforementioned asset valuation of Yixiang Graphite dated May 27, 2020. Please see "Financial Information — Indebtedness — Loan Consideration Capitalization" for details of settlement of consideration for the aforementioned transfer.

As at the Latest Practicable Date, Yixiang Graphite is wholly-owned by the WFOE. For further information, please see "— Reorganization" in this section.

**Yixiang New Energy**

Yixiang New Energy was established in the PRC as a limited liability company on April 20, 2011 with an initial registered capital of RMB1 million. At the time of its establishment, Yixiang New Energy was owned as to 67% by Mr. Zhao and 33% by Mr. Zhao Ming. The principal business of Yixiang New Energy is the processing and sales of spherical graphite and the mining operations at our Beishan Mine.

On April 18, 2012, the registered capital of Yixiang New Energy increased from RMB1 million to RMB5 million, with the additional RMB4 million capital contributed by its respective shareholders, the amount of which was fully settled on April 18, 2012. Our Directors confirm that Mr. Zhao Ming's role in the Group had been that of a passive investor and has not been involved in the affairs of the business of the Group. To the best knowledge and belief of our Directors and having made all reasonable enquiries, Mr. Zhao Ming had decided to step down as a shareholder of the Group for his own career pursuit as he had no involvement in the business of the Group. On December 13, 2019, Mr. Zhao Ming transferred his 33% equity interest in Yixiang New Energy to Mr. Zhao Changshan at the consideration of RMB1.65 million which was based on the amount of his capital contribution of Yixiang New Energy at the time. As this was a transfer between family members, the consideration was not immediately settled and was fully settled on April 1, 2021. Upon completion of such equity transfer, Yixiang New Energy was held as to 67% by Mr. Zhao and 33% by Mr. Zhao Changshan.

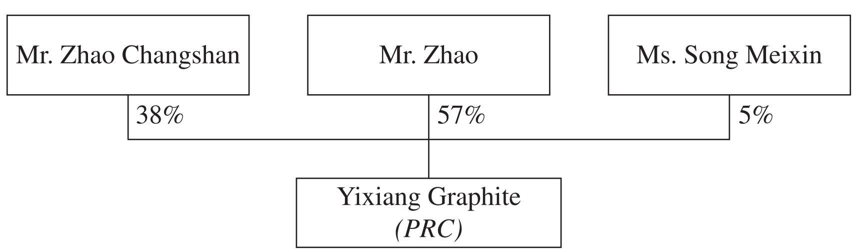
On July 27, 2020, the registered capital of Yixiang New Energy increased from RMB5 million to approximately RMB5.3 million as an Independent Third Party, Ms. Song Meixin (宋美欣), agreed to inject RMB0.3 million into Yixiang New Energy. The consideration for such injection was determined based on arm's length negotiation having taken into account the asset valuation report of Yixiang New Energy dated May 27, 2020 prepared by an independent valuer, who assessed Yixiang New Energy's net asset value to be approximately RMB4.2 million at the time, and such consideration was fully settled on October 28, 2020. The independent valuer took an asset-based approach by assessing the value of Yixiang New Energy's assets after deducting Yixiang New Energy's liabilities, in preparing the valuation report. The valuation by the independent valuer was also based on, among other things, the key assumptions that (a) Yixiang New Energy would continue operating as a going concern under the then prevailing environment and purposes; (b) there were no material changes to the applicable laws, regulations and governmental policies and there were no material changes in the political, economic or social environment in which Yixiang New Energy operates; (c) the scope and method of operation would remain the same based on the then existing method and level of management; and (d) the valuation was only based on the then existing operating capabilities as at the valuation base date and did not take into account the expansion of operating capabilities in the future. Upon completion of the capital injection, Yixiang New Energy was owned as to 63.65% by Mr. Zhao, 31.35% by Mr. Zhao Changshan and 5% by Ms. Song Meixin. For details of Ms. Song Meixin and how she became acquainted with Mr. Zhao, see the paragraph headed "— Our Corporate Development — Yixiang Graphite" in this section. Our Directors confirm that after her investment in Yixiang New Energy, Ms. Song had not been involved in the operation or management of the Group and was a passive investor. Whilst Ms. Song was a shareholder of Yixiang New Energy, she was able to exercise her rights as a shareholder in respect of her 5% equity interest in Yixiang New Energy in accordance with the articles of association of Yixiang New Energy and the applicable laws and there has been no other authority exercisable by Ms. Song since July 2020. Ms. Song Meixin subsequently transferred her interest in Yixiang New Energy to the WFOE at the consideration of approximately RMB0.3 million pursuant to an equity transfer agreement dated December 14, 2020, as a result of which Ms. Song Meixin no longer had any interest in Yixiang New Energy. To the best of our Directors' knowledge, Ms. Song Meixin invested in our Group due to her confidence in the business prospect of our Group, and she later decided to divest and leave our Group mainly because she planned to devote more attention and resources to her other investments with a focus on the property industry and stock market and the businesses of her family. The consideration for the transfer was determined based on arm's length negotiation between the parties, having taken into account the asset valuation report of Yixiang New Energy dated May 27, 2020 prepared by an independent valuer. Please see "Financial Information — Indebtedness — Loan Consideration Capitalization" for details of settlement of consideration for the aforementioned transfer.

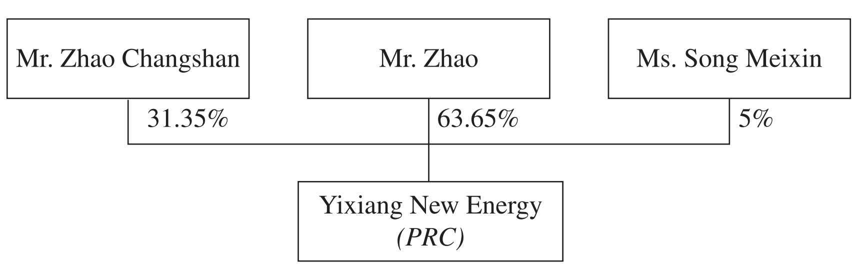
As at the Latest Practicable Date, Yixiang New Energy was wholly-owned by the WFOE. For further information, please see "— Reorganization" in this section.

## REORGANIZATION

In order to optimize our corporate structure to further develop the business of our Group and to be more readily accessible to the international capital markets, we underwent a corporate reorganization in preparation for the [REDACTED], the details of which are set out below.

The shareholding and corporate structure of our Group immediately prior to the Reorganization are set out in the charts below:



We carried out the following reorganization steps in preparation for the [REDACTED]:

**Incorporation of the Company and offshore holding companies**

***Sandy Mining Limited***

On June 11, 2020, Sandy Mining Limited was incorporated in the BVI with liability limited by shares. On July 2, 2020, one ordinary share of par value US$1.00 of Sandy Mining Limited was allotted and issued, credited as fully paid at par, to Mr. Zhao.

***Our Company***

On August 3, 2020, our Company was incorporated in the Cayman Islands as an exempted company with limited liability, with an authorized share capital of HK$380,000.00, divided into 380,000,000 Shares with a par value of HK$0.001 each. At the date of incorporation, one Share was allotted and issued to the initial subscriber, an Independent Third Party, which in turn was subsequently transferred to Sandy Mining Limited at nominal consideration on the same day. As a result of the transfer, our Company was wholly-owned by Sandy Mining Limited.

***Noah Energy Limited***

On August 21, 2020, Noah Energy Limited was incorporated in the BVI with liability limited by shares. On August 28, 2020, 50,000 ordinary shares of par value US$1.00 each of Noah Energy Limited were allotted and issued to our Company. Since then, Noah Energy Limited was wholly-owned by our Company.

***China Graphite Holdings Group (HK) Limited***

China Graphite Holdings Group (HK) Limited 中國石墨控股集團(香港)有限公司 was incorporated in Hong Kong on August 28, 2020 with Mr. Zhao being its sole shareholder. On September 29, 2020, Mr. Zhao transferred his 10,000 ordinary shares in China Graphite Holdings Group (HK) Limited, representing its entire issued share capital, to Noah Energy Limited. As a result of such transfer, China Graphite Holdings Group (HK) Limited was wholly-owned by Noah Energy Limited.

**Establishment of the WFOE and Acquisition of 100% Equity Interests in Yixiang Graphite and Yixiang New Energy**

The WFOE was established in the PRC on November 26, 2020 with an initial registered capital of RMB10.0 million. It was founded and wholly-owned by China Graphite Holdings Group (HK) Limited.

On December 14, 2020, the WFOE entered into an equity transfer agreement with each of Mr. Zhao Changshan, Mr. Zhao and Ms. Song Meixin for the acquisition of the entire equity interests in each of Yixiang Graphite and Yixiang New Energy from Mr. Zhao Changshan, Mr. Zhao and Ms. Song Meixin. On December 31, 2020, the WFOE entered into supplemental agreements to the equity transfer agreement dated December 14, 2020 as aforementioned, as a result of which the consideration for the transfer of the equity interests by Mr. Zhao Changshan and Mr. Zhao to the WFOE, respectively, shall be a nominal value of RMB1 each for Yixiang Graphite and Yixiang New Energy. The aggregate consideration for the transfer of the equity interest in Yixiang Graphite and Yixiang New Energy from

Ms. Song Meixin to the WFOE was approximately RMB4.9 million, which has been settled in April 2021. Pursuant to such equity transfers, Yixiang Graphite and Yixiang New Energy became wholly owned by the WFOE.

**Loan Consideration Capitalization**

Pursuant to a loan assignment agreement dated May 15, 2021 entered into among Mr. Zhao, Yixiang Graphite and the WFOE, Mr. Zhao assigned to the WFOE loans due from Yixiang Graphite to Mr. Zhao in the amount of approximately RMB47.0 million. Pursuant to another loan assignment agreement dated May 15, 2021 entered into among Mr. Zhao, Yixiang New Energy and the WFOE, Mr. Zhao assigned to the WFOE loans due from Yixiang New Energy to Mr. Zhao in the amount of approximately RMB26.2 million. The aggregate amount of approximately RMB73.1 million, being the subject matter of the aforementioned loan assignment agreements, represent the entire amount due to our Controlling Shareholders and their related parties as at May 27, 2021, being the date of the deed of loan novation mentioned below.

Pursuant to a deed for loan novation dated May 27, 2021, the Company is substituted in the aforementioned loan assignment agreements and shall pay the consideration in the aggregate amount of approximately RMB73.1 million for such assignments of the loans due from Yixiang Graphite and Yixiang New Energy to Mr. Zhao, respectively. Mr. Zhao, Sandy Mining Limited, the WFOE, Yixiang Graphite, Yixiang New Energy and the Company entered into a loan consideration capitalization deed dated May 27, 2021, whereby the Company agreed to settle such consideration by way of capitalization by allotting and issuing [REDACTED] credited as fully paid to be allotted and issued to Sandy Mining, an entity designated by Mr. Zhao, as full and final settlement of the consideration payable to Mr. Zhao. The Loan Consideration Capitalization will take place immediately prior to the [REDACTED].

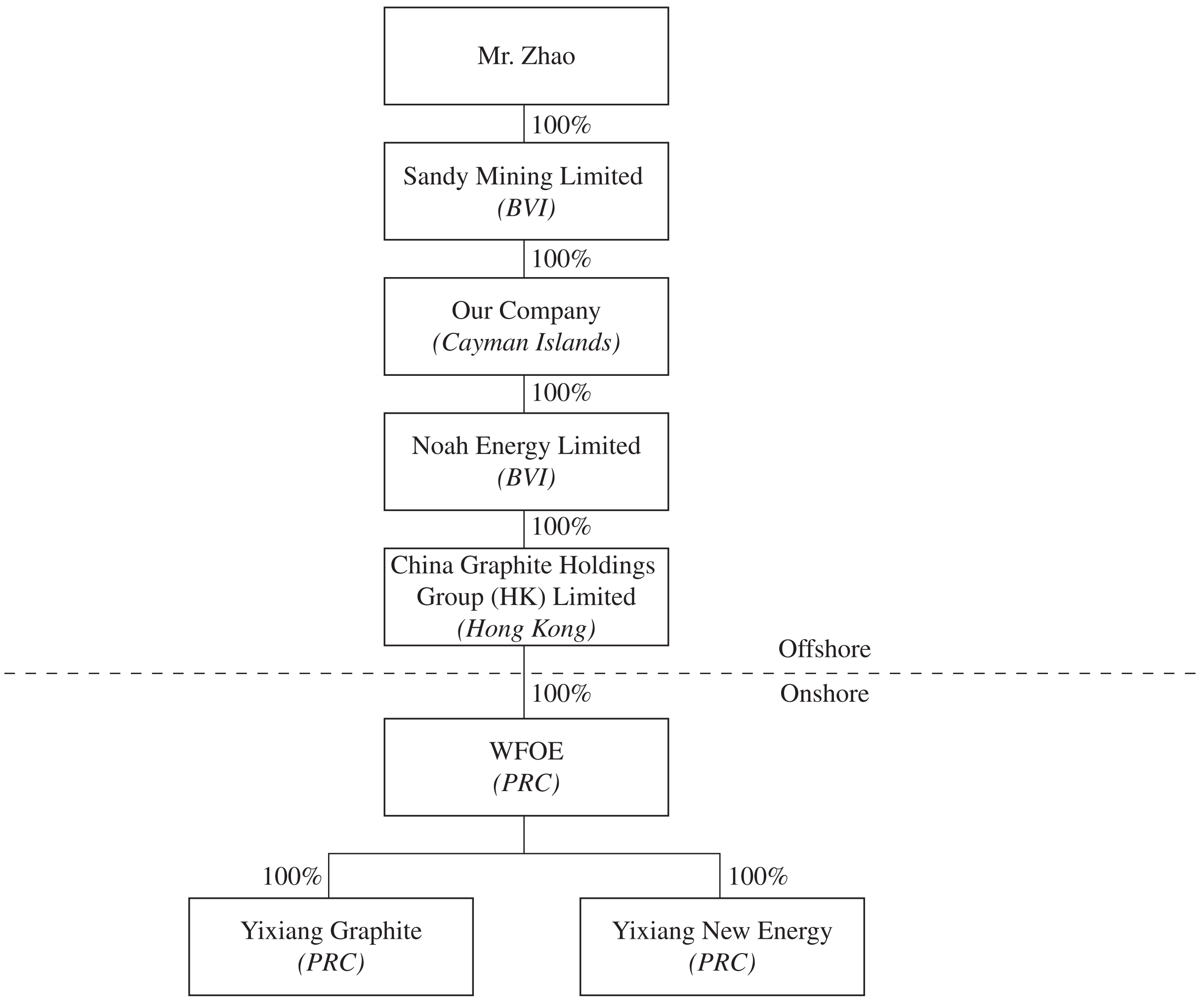
**[REDACTED]**

Subject to the share premium account of our Company having sufficient balance, or otherwise being credited as a result of the [REDACTED] pursuant to the [REDACTED], and conditional upon fulfilment of the conditions of the [REDACTED] as set out in this document, our Company will, on the [REDACTED], allot and issue a total of [REDACTED] Shares, credited as fully paid at par, to the Shareholder(s) whose name(s) appeared on the register of members of our Company or the principal share register of our Company at the close of business on the date on which the resolution of the Shareholder of the Company approving the [REDACTED] was passed (or another date as our Directors may direct), in proportion to their respective shareholdings in our Company (as nearly as possible without involving fractions so that no fraction of a Share shall be allotted and issued) as at such date by way of [REDACTED] of the sum of HK$[REDACTED] standing to the credit of the share premium account of our Company. The Shares to be allotted and issued pursuant to the above [REDACTED] will rank *pari passu* in all respects with the existing issued Shares.

## Corporate Structures

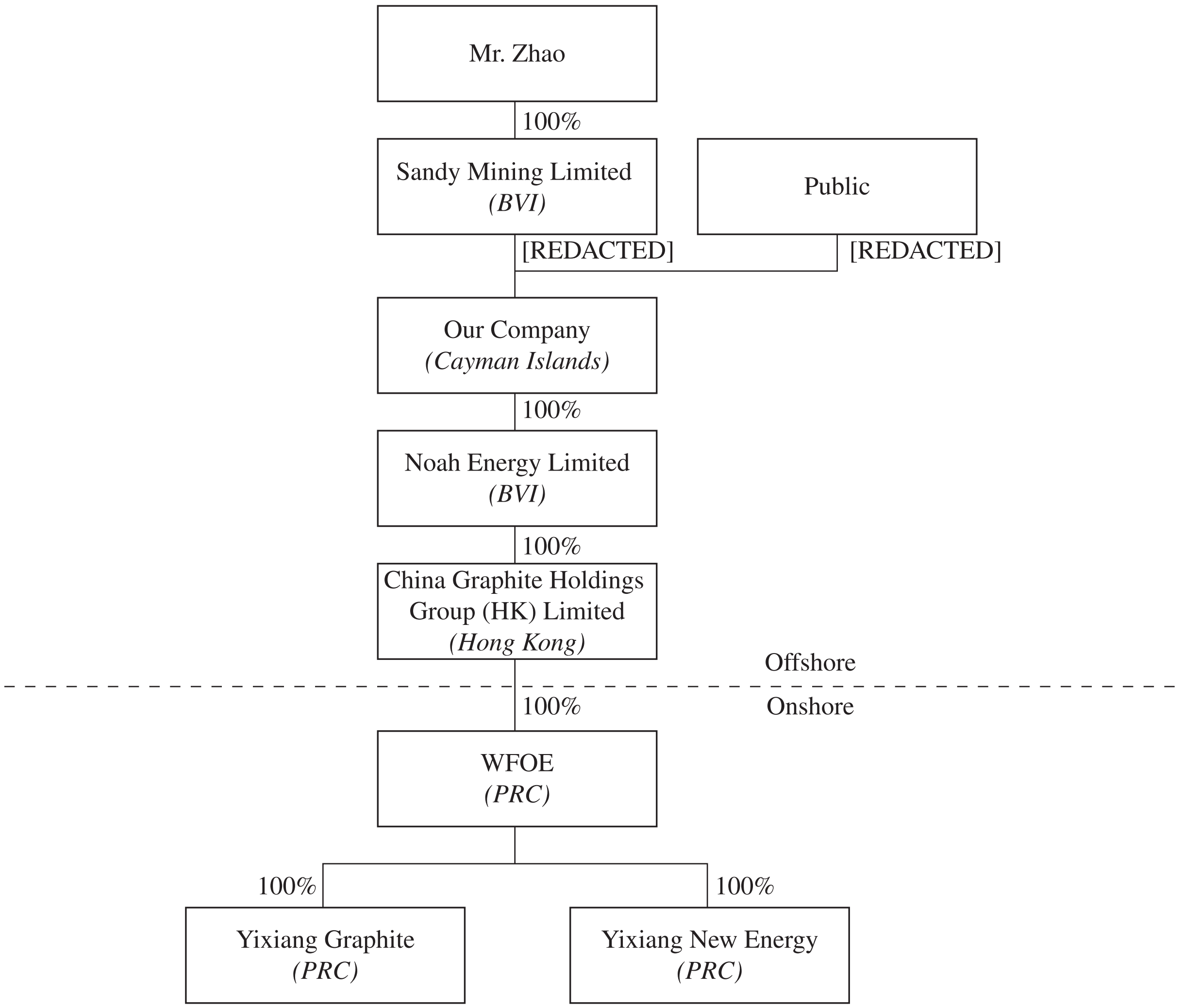
***Corporate structure after the Reorganization, the Loan Consideration Capitalization and the [REDACTED] and before the [REDACTED]***

Our corporate and shareholding structure after the Reorganization, the Loan Consideration Capitalization and the [REDACTED] and immediately prior to the completion of the [REDACTED] is as follows:



***Corporate Structure Immediately after the [REDACTED]***

Our corporate and shareholding structure immediately after the completion of the [REDACTED] (assuming the [REDACTED] is not exercised) will be as follows:



## PRC LEGAL COMPLIANCE

As advised by our PRC Legal Advisers, the Reorganization as described above has been granted all necessary regulatory approvals, registrations or filings in accordance with PRC laws and regulations.

### M&A Rules

Pursuant to the M&A Rules, a foreign investor is required to obtain necessary approvals when it (i) acquires the equity of a domestic enterprise so as to convert the domestic enterprise into a foreign-invested enterprise; (ii) subscribes the increased capital of a domestic enterprise so as to convert the domestic enterprise into a foreign-invested enterprise; (iii) establishes a foreign-invested enterprise through which it purchases the assets of a domestic enterprise and operates these assets; or (iv) purchases the assets of a domestic enterprise, and then invests such assets to establish a foreign-invested enterprise.

As Yixiang Graphite and Yixiang New Energy were sino-foreign joint venture enterprises prior to the WFOE's acquisitions of the 100% equity interest in each of Yixiang Graphite and Yixiang New Energy, as advised by our PRC Legal Advisers, the WFOE's acquisitions of the 100% equity interest in each of Yixiang Graphite and Yixiang New Energy are not subject to the M&A Rules, and the [REDACTED] does not require approvals from CSRC and MOFCOM under the M&A Rules.

### SAFE Registration

Pursuant to the Notice on Relevant Issues Concerning Foreign Exchange Administration for Domestic Residents to Engage in Overseas Investment and in Return Investment Via Special Purpose Companies (《關於境內居民通過特殊目的公司境外投融資及返程投資外匯管理有關問題的通知》) (the "**Circular 37**") promulgated by the SAFE and came into force on July 4, 2014, a PRC resident individual, namely, a PRC citizen holding the PRC resident identity card or other lawfully identity documents, or an overseas individual who does not hold a Chinese identity document but has a habitual residence in China due to economic interests (a "**PRC Resident**") must register with the local branch of SAFE before he contributes legal assets or equity interests in China or overseas in an oversea special purpose vehicle, which is directly incorporated or indirectly controlled by such PRC resident individual for the purpose of overseas investment or financing. According to Circular of SAFE on Further Simplifying and Improving the Direct Investment-related Foreign Exchange Administration Policies (《國家外匯管理局關於進一步簡化和改進直接投資外匯管理政策的通知》) (the "**Circular 13**") promulgated on February 13, 2015 and became effective on June 1, 2015, the foreign exchange registration aforesaid shall be conducted with local banks instead of the local branch of SAFE.

As confirmed by our PRC Legal Advisers, Mr. Zhao, as our individual beneficial owner and PRC resident who is required to complete the registration under Circular 37 and Circular 13, has completed the foreign exchange registrations on September 16, 2020.

## OVERVIEW

We are engaged in the production and sales of flake graphite concentrate and spherical graphite in the PRC. Our origins trace back to 2006 when we began our operations with Yixiang Graphite in the beneficiation and sales of flake graphite concentrate (primarily with a carbon content between 94% and 96.8%) and we expanded with Yixiang New Energy in the processing and sales of spherical graphite (primarily with a carbon content above 99%) in 2012. Due to the high carbon content of our flake graphite concentrate, which we believe was attributable to our beneficiation capabilities, they are suitable to be used as heat resistant materials as well as further value-added applications, such as to be manufactured into spherical graphite and used as anode material in lithium-ion batteries for electronic devices and NEVs. As by-products of processing our spherical graphite, we sell micro graphite powder and high purity graphite powder, and as a by-product of our mining operations, we also sell unprocessed marble. For each year during the Track Record Period, we sold (i) approximately 18,400 tonnes, 34,100 tonnes and 37,300 tonnes of flake graphite concentrate; and (ii) approximately 8,300 tonnes, 10,400 tonnes and 13,800 tonnes of spherical graphite and its by-products, respectively. During such years, our revenue generated from the sale of flake graphite concentrate amounted to approximately RMB57.4 million, RMB85.7 million and RMB97.7 million, whilst the revenue generated from the sale of spherical graphite and its by-products was approximately RMB66.4 million, RMB76.2 million and RMB98.5 million, respectively.

In 2019, we obtained the mining rights to our Beishan Mine as an ancillary to our Group's core operations. Since then, the unprocessed graphite in our Beishan Mine has been extracted only for our Group's own use. According to the Independent Technical Report, our Beishan Mine comprised approximately 14,000 kilo tonnes of Indicated Resource and approximately 1,000 kilo tonnes of Inferred Resource in relation to our graphite resources, and had an estimated life of mine of approximately 20 years as at December 31, 2021. Obtaining such mining rights of our Beishan Mine allows us to access to a secured and stable resource of unprocessed graphite and to benefit from the synergies of a vertical integration such as better control of our inventory and more effective cost structure. For the three years ended December 31, 2019, 2020 and 2021, we extracted approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes of unprocessed graphite, respectively, from our Beishan Mine, at an extraction cost (which includes those for petrol, blasting, machinery, repairs and salary and amortization of mining rights) of approximately RMB3.8 million, RMB5.6 million and RMB5.2 million, respectively, thus approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne, respectively. In comparison, for the three years ended December 31, 2019, 2020 and 2021, we purchased approximately 171,000 tonnes, 189,500 tonnes and 254,200 tonnes of unprocessed graphite from our suppliers, incurring a procurement cost of approximately RMB10.8 million, RMB14.2 million and RMB19.1, thus at a unit cost of approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively. According to the F&S Report, we were one of the graphite companies in Luobei County, Heilongjiang Province, with a vertically integrated supply chain linking a graphite processing operation to a graphite mine in 2019.

Our Directors are of the view that the acquisition of our Beishan Mine results in the enrichment of our product mix to have unprocessed marble for sale and provision of an additional and stable source of supply of unprocessed graphite, which in turn results in the enhancement of our profitability and costs structure. For the risk factors and regulatory requirements in relation to our Beishan Mine, please see "Risk Factor" and "Regulatory Overview and JORC Code", respectively.

For the reasons above, our Group experienced moderate business growth during the Track Record Period, generating a total revenue of approximately RMB123.7 million, RMB168.7 million and RMB198.4 million, with a net profit generated of approximately RMB24.5 million, RMB37.9 million and RMB53.3 million, for the three years ended December 31, 2019, 2020 and 2021, respectively. Despite our Group generated net profits during the Track Record Period, there is no assurance that the unprocessed graphite and unprocessed marble extracted from our Beishan Mine would ultimately be extracted at a profit in the future.

## OUR COMPETITIVE STRENGTHS

We believe that the following competitive strengths distinguish us from our competitors:

### We are a company in the sales of flake graphite concentrate and spherical graphite in the PRC, with a proven operating track record, being well-positioned to benefit from the up-and-coming market growth opportunities

We have been selling flake graphite concentrate, under Yixiang Graphite, since 2006 and maintained sustainable production volume and business growth. For the three years ended December 31, 2019, 2020 and 2021, we sold approximately 18,400 tonnes, 34,100 tonnes and 37,300 tonnes of flake graphite concentrate, respectively, most of which had a carbon content between 94% and 96.8%, generating a revenue of approximately RMB57.4 million, RMB85.7 million and RMB97.7 million, respectively. Furthermore, among many of our technical capabilities in beneficiation, our recently updated rolling mill results in high carbon content flake graphite concentrate without damaging graphite crystals.

Under Yixiang New Energy, since 2012, we have been selling spherical graphite suitable for various applications, including anode materials and batteries to be used in consumer electronic products and electric vehicles. For the three years ended December 31, 2019, 2020 and 2021, we sold approximately 8,300 tonnes, 10,400 tonnes and 13,800 tonnes of spherical graphite and its by-products, respectively, generating a revenue of approximately RMB66.4 million, RMB76.2 million and RMB98.5 million, respectively.

According to the F&S Report, the sales revenue of flake graphite concentrate is expected to increase from approximately RMB2,524.7 million in 2022 to approximately RMB3,465.1 million in 2026, illustrating a CAGR of approximately 8.2% from 2022. Moreover, influenced by the continuous policy incentives in manufacturing NEVs, the sales volume of electronic vehicle increased from approximately 0.5 million units in 2016 to approximately 3.3 million units in 2021, with a CAGR of approximately 45.7%, which paves the way for the market growth of spherical graphite. According to F&S Report, the electric vehicle market in the PRC, driven by the inclination to be carbon neutral and to use green energy, is expected to grow in the next few years and the sales volume of electric vehicle is expected to reach approximately 9.6 million in 2026. The sales revenue of spherical graphite in the PRC increased from approximately RMB1,287.1 million in 2017 to approximately RMB2,223.0 million in 2021 at a CAGR of approximately 14.6%, and is expected to grow from approximately RMB2,610.0 million in 2022 to approximately RMB4,100.1 million in 2026 at a CAGR of approximately 12.0%. Taking into account our market share of approximately 4.4% in the flake graphite concentrate industry and approximately 4.1% in the spherical graphite industry in 2021 in terms of sales revenue, we believe that we are well-positioned to benefit from such up-and-coming market growth opportunities. Our Directors believe that a testament of this would be the promising growth we already experienced during the Track Record Period, partially due to increased orders from our largest customer group, which is considered to be one of the major suppliers of anode material in the PRC. For the three years ended December 31, 2019, 2020 and 2021, purchases from such customer group accounted for approximately 37.9%, 37.9% and 20.1% of our total revenue, respectively. We also benefitted from a series of favorable measures implemented by the local government authorities in Luobei County, including (i) improvement of transportation and communication infrastructure; (ii) financial subsidies; (iii) comparable electricity prices against other regions. This further allowed us to divert more resources into research and development to maintain our competitive advantage.

Our sales volume and revenue experienced moderate growth during the Track Record Period, primarily due to, as our Directors believe, our ability to set a competitive selling price being lower than the dominant market price for flake graphite concentrate and spherical graphite. We believe that this was a result of our vertical integration by extracting from our Beishan Mine for raw materials, and that our research and development outcomes led to more cost effective production methods that allowed us to sell our graphite products at a more competitive price whilst maintaining a profit margin.

**Our senior management team consists of experienced personnel with the requisite vision, industry expertise, management experience and research and development capabilities**

Our senior management team has experience in various aspects of the graphite products industry, including but not limited to, corporate management, accounting and financial management and human resources. In addition, most members of our senior management team generally have more than 10 years of experience in the graphite products industry. Before founding Yixiang Graphite, Mr. Zhao started his career as deputy general manager of Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) in 2002. Later in 2006, he founded Jixi Lishu Yixiang Graphite Factory* (雞西市梨樹區溢祥石墨廠) and served as the deputy general manager, which was dissolved in 2015. Mr. Wu Enming, with over 14 years of industry experience, worked in our Group with a focus on the overall management of the production since May 2007. For further biographical details of our Directors and members of our senior management, please see "Directors and Senior Management". Such industry background, knowledge and expertise in the flake graphite concentrate and spherical graphite market among our Directors and senior management, allowed our Group to dedicate resources to our research and development efforts and enhance the processes in the production of spherical graphite at higher efficiencies and lower costs.

Our Directors believe that since specifications of spherical graphite products have been constantly evolving, such as those requiring longer shelf-life for battery in NEVs, resulting in new graphite products being launched in the market every year, we have to enhance our research and development capabilities to face such ever-changing market demands. By focusing some of research and development efforts or production processes, we will be able to compete with other market players at both price and quality, and improve all overall revenue generation portfolio. For each year during the Track Record Period, we incurred research and development expenses of approximately RMB4.8 million, RMB5.8 million and RMB8.1 million, respectively. Examples of such research and development initiatives led by our Directors include a method in processing high tap density spherical graphite smaller than 10μm thus achieving higher charging and energy density when used in lithium-ion batteries, which we believe is highly favored among our customers. We also developed a demagnetization method which would lead to the existence of low-magnetic substances at 0.1 parts per million, which allowed us to create spherical graphite of a higher quality, fewer impurities, and lower magnetic content, which is more useful in the manufacturing of anode materials. According to the F&S Report, we are capable of producing spherical graphite with a size smaller than 10μm when the most available spherical graphite in the market ranged between 14 and 25μm, which accounts for over 50% of the total market, whereas spherical graphite with smaller size (including SG-10) may achieve higher charging and energy density when used in lithium-ion batteries. As at the Latest Practicable Date, we were the registered owner of 89 patents in the PRC and we also applied for the registration of 13 patents in the PRC.

We believe that, as a result of their accumulated years of experience, our senior management team possess profound technical knowledge in the graphite products industry, as well as a combination of strong analytical, observation, communication and management skills, our management is capable of seizing market opportunities, formulating and implementing sound business strategies and managing risks adequately, which as a whole would enable our Group to achieve sustainable business growth.

**Our Beishan Mine has abundant resources and reserves for future development**

According to the Independent Technical Report, our Beishan Mine comprised approximately 14,000 kilo tonnes of Indicated Resource, and approximately 1,000 kilo tonnes of Inferred Resource in relation to our graphite resources (within the licensed limits of 274m to 150m ASL). Whilst many of the mines that supply to our competitors had already been in operation for some years, according to the Independent Technical Report, our Beishan Mine had an estimated life of 20 years as at December 31, 2021. Obtaining the mining rights of our Beishan Mine from Heilongjiang Provincial Department of Natural Resources allows us access to benefit from the synergies of a vertical integration, to better control and stabilize supply and to have more effective cost structure in sourcing unprocessed graphite. It also allows us to have an additional revenue stream from the sales of unprocessed marble. Although our current mining license on Beishan Mine will expire in April 2024, our Directors believe that such mining license is able to be renewed. As advised by our PRC Legal Advisers, (i) according to the Measures for Registration Administration of Mineral Resources Exploitation (2014 Revision) (礦產資源開採登記管理辦法(2014修訂)) which was issued by the State Council and effective on July 29, 2014, where there is a need to continue mining activities upon the expiration of the period of validity of the mining license, the holder of the mining rights shall, not less than 30 days prior to such expiration, complete the procedures for extension of registration with the registration authority; (ii) according to the Notice of Ministry of Land and Resources on Further Regulating the Mineral Right Application Documents (國土資源部關於進一步規範礦業權申請資料的通知) which was issued by the Ministry of Land and Resources of the PRC and effective on March 18, 2018 and a notice on extension of registration of mining right on the official website of the Natural Resources Department in Heilongjiang Provincial Government Service Center, the applicant is required to submit the following application documents for the extension of mining right: (a) the application registration for the extension of mining right; (b) the duplicate of the applicant's enterprise business license; (c) the original script and duplicate of the original mining license; (d) the verification opinions of the municipal (local) competent department of natural resources on the fulfillment of the applicant's legal obligations (such as land reclamation obligations) of which our PRC Legal Advisers are of the view that there is no material impediment for the Group to obtain if Yixiang New Energy is able to maintain its current legal and compliant operation status; (e) the development and utilization plan of mineral resources and expert reviews; (f) mineral resources reserve report upon appraisal and determination by competent department of natural resources, and registration form thereof; and (g) supporting evidence for payment of income (price) for granting mining rights or paid disposal; (iii) the registration administrative authority shall complete the registration process within 40 working days from the date of application; and (iv) we obtained confirmation letters from the Natural Resource Bureau of Luobei County on January 25, 2022, confirming that we have completed and obtained all the required approval, review, filing, registration and license for our Beishan Mine project, and there has been no administrative investigation or punishment imposed on us for violating the relevant national mineral resources administration laws and regulations, and that Yixiang New Energy has fulfiled the main obligations as the mining right holder and has not been subject to administrative punishment for violating national mineral resources administration laws and regulations. Therefore, if Yixiang New Energy is able to maintain its current legal and compliant operation status and complete the procedures for extension of registration not less than 30 days prior to the expiration of the mining license, and there are residual resources, in the mine upon such expiration after taking into account the reserves, our PRC Legal Advisers are of the view that there is no material legal impediment for Yixiang New Energy to renew the mining license for our Beishan Mine. As advised by our PRC Legal Advisers, Article 10 of the Notice of the Ministry of Land and Resources on Improving the Administration of Approval and Registration of Mineral Resources Exploitation issued by the Ministry of Land and Resources (currently known as the Ministry of Natural Resources) on December 29, 2017, provides that the validity period of the mining license for the extension of mining rights is determined in accordance with Article 7 of the Measures for Registration Administration of Mineral Resources Exploitation. This Article 7 stipulates that the term of validity of a mining license shall be determined in accordance with the scale of mine construction: (a) if the mine is large-scale, the maximum term of validity of the mining license shall be 30 years; (b) for medium-scale mines, the maximum validity period is 20 years; (c) and for small-scale mines, the maximum validity period is 10 years. As advised by our PRC Legal Advisers, the Notice of the Ministry of Land and Resources on Adjusting Production and Construction Scale Standards of Some Mineral Mines (國土資源部關於調整部分礦種礦山生產建設規模標準的通知) issued by the Ministry of Land and Resources on September 30, 2004, the scale of a graphite mine would be determined as "large" if the volume of unprocessed graphite to be extracted is over 10,000 tpa, "medium" if the volume of unprocessed graphite to be extracted is between 10,000 to 3,000 tpa, and "small" if the volume of unprocessed graphite to be extracted is below 3,000 tpa. The Measures for Registration Administration of Mineral Resources Exploitation do not stipulate the minimum term for the renewal of mining licenses. As advised by the PRC Legal Advisers, there is no regulatory requirement and consideration regarding the amount of residual mineral resources for the renewal of mining licenses in the PRC. Based on the above and our volume of extracted unprocessed graphite at 258,300 tonnes for the year ended December 31, 2021 and as advised by our PRC Legal Advisers, our Beishan Mine shall be classified as large scale, and the expected extension period of mining right to be granted upon the Group's renewal shall be for a term not more than the maximum of 30 years.

Furthermore, should we submit an application for the permission to extract below the licensed limit of 150m ASL and that such application be approved by relevant authority, there would be an additional Indicated and Inferred Resources of approximately 20,900 kilo tonnes and 8,400 kilo tonnes, respectively. If we believe there is a need in future, we may consider to apply for the permission to extract below the licensed limit of 150m ASL and we plan to conduct additional technical studies and prepare relevant documents to support an application to increase the graphite ore mining capacity to 1,000,000 tonnes per year. As advised by our PRC Legal Advisers, according to the Opinions of the Ministry of Natural Resources on Several Matters Concerning Promoting the Reform of Mineral Resources Administration (for Trial Implementation) (自然資源部關於推進礦產資源管理改革若干事項的意見(試行)) issued by the Ministry of Natural Resources and effective on May 1, 2020, considering work safety in mines and reasonable development and utilization of resources, where it is necessary to further explore and exploit mineral resources by utilizing the original production system with respect to the same type of minerals in the deeper or upper part of a mining area under an existing mining right (the categories are specified in the Detailed Classification List of Mineral Resources, except for minerals in the category of sand, stone and soil for general construction use), the exploration right and the mining right may be assigned to the original mining rights holder by entering into new agreement. Such policy is also generally adopted in the Implementation Opinion of Natural Resource Bureau of Heilongjiang Province on Several Matters Concerning Promoting the Reform of Mineral Resources Administration (for Trial Implementation) (黑龍江省自然資源廳關於貫徹落實《自然資源部關於推進礦產資源管理改革若干事項的意見(試行)》的實施意見(試行)) which is issued by the Natural Resource Bureau of Heilongjiang Province and effective on August 17, 2020.

Based on the above regulation and after carrying out the additional agreement transfer procedures in accordance with the applicable legal requirements and obtaining the approval for expanding the mining area and appraisal on the mineral resources reserve (if applicable), our PRC Legal Advisers are of the view that there is no material legal impediment for us to obtain the necessary approval for an increase in mining scope (i.e. to extract below the licensed limit of 150m ASL) of its existing mining right. Our Directors believe that, considering the above, there is immense potential to an abundance of resources in our Beishan Mine to support our current operations and future growth.

According to the Independent Technical Consultant, the carbon content of the unprocessed graphite in our Beishan Mine is estimated to be of an average of 9.7%. A supply of unprocessed graphite with a lower carbon content, in general, may result in uncertain production costs, varying qualities, unstable delivery and more costly beneficiation processes. We consider that such difficulties are alleviated once we have integrated our supply chain in graphite extraction, beneficiation and processing. According to the F&S Report, we were one of the graphite companies in the PRC, and one of the companies in the PRC, with a vertically integrated supply chain linking a graphite processing operation to a graphite mine in 2019. Moreover, since obtaining the mining rights to our Beishan Mine, with an integrated supply chain, we have the advantage of a secure and stable supply of raw materials at a lower cost. For the three years ended December 31, 2019, 2020 and 2021, we extracted unprocessed graphite from our Beishan Mine at a unit cost of approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne, respectively. In comparison, for the three years ended December 31, 2019, 2020 and 2021, we purchased unprocessed graphite from our suppliers at a unit cost of approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively.

Considering the above, our Directors are of the view that, with a secure and stable supply of raw materials from a relatively new mine, with such potential for further extraction and an overall higher ore grade, which allows us the benefits of a stable control of a quality supply at a relatively low cost, our Beishan Mine constitutes as a competitive advantage that would enhance our Group's growth potential in the future.

In any event that the mining license for our Beishan Mine cannot be renewed, it is our plan to purchase unprocessed graphite ore from existing suppliers and third party suppliers situated in regions of "Shuang Yashan" (雙鴨山) in Heilongjiang Province, the PRC which is approximately 240 km from our Beishan Mine. Should we fail to renew the mining license for our Beishan Mine after April 2024, our Directors believe there will be an overall decrease in our profitability, considering (i) the cost of unprocessed graphite per tonne would possibly experience an overall increase as we no longer be able to extract such from our Beishan Mine; and we might need to purchase more unprocessed graphite ore from suppliers at a higher costs per tonne, thereby increasing overall procurement costs. For details on impact on our business and financial conditions if we experienced a disruption in extraction of our Beishan Mine, please see "Financial Information — Principal Income Statement Components — Cost of Sales — Extraction Costs".

**Our open-pit mining method is more cost-effective, environmental-friendly and safer as compared to underground mining methods**

According to the Independent Technical Consultant, since the open-pit mining method generally does not require the extensive use of explosive material or hazardous chemicals, workplace safety and environmental pollution concerns are significantly reduced. We adopt the open-pit mining method at our Beishan Mine and do not require the extensive use of explosive materials or hazardous chemicals in our mining operations. Therefore, we can dispense with the use of machinery, equipment or supporting structures that specially cater for underground mining. Such mining method results in lower costs and improved efficiency as compared to underground mining methods, which would also lead to supplying unprocessed graphite to support our core operations at lower costs, resulting in higher profitability. In addition, our open-pit mining method also reduces the risk of workplace accidents caused by collapsed mine roofs, mine floods and leakage of harmful gases.

**Our acquisition of mining rights of our Beishan Mine allows us to access to benefit from the synergies of a vertical integration**

We benefit from the acquisition of mining rights of our Beishine Mine that allows us to access to benefit from the synergies of a vertical integration to better control and stabilize supply and to have more effective cost structure in sourcing unprocessed graphite for our production. For the three years ended December 31, 2019, 2020 and 2021, we purchased approximately 171,000 tonnes, 189,500 tonnes and 254,200 tonnes of unprocessed graphite from our suppliers, incurring a procurement costs of approximately RMB10.8 million, RMB14.2 million and RMB19.1 million, thus at a unit cost of approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively. After our acquisition of mining rights of our Beishan Mine in 2019, we were able to extract approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes of unprocessed graphite, at an extraction cost of approximately RMB3.8 million, RMB5.6 million and RMB5.2 million, thus at approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne, respectively. Accordingly, we are able to reduce our sourcing costs of unprocessed graphite. The synergies from the vertical integration of our acquisition of our Beishan Mine provide our Company with an additional and stable source of our supply of unprocessed graphite and allow us to place less reliance on our suppliers. The acquisition of our Beishan Mine also (i) allows us to adopt price competitive strategy to maintain strong business relationship with our customers and expand our market share; and (ii) enriches our product mix to have unprocessed marble for sale, which in turn, increases our profitability. Our Directors believe that the acquisition of mining rights of our Beishan Mine serves as an important competitive strength and is one of the vital factors to contribute to our business growth.

## OUR BUSINESS STRATEGIES

Our aim is to strengthen our position in the PRC. In order to achieve this objective, we intend to pursue the following strategies:

### We will increase our ramp-up speed to reach the maximum graphite extraction volume permitted at our Beishan Mine

According to our mining license, the permitted graphite extraction volume at our Beishan Mine is set at 500,000 tonnes per year. In comparison, our latest graphite extraction volume was at approximately 258,300 tonnes as at December 31, 2021. In order to maximize the value and benefits of a vertically integrated supply chain, we made investment to increase our extraction capacity by increasing the number of our excavators from two (Model: CAT345 and CAT349) in 2019 to four (Model: CAT345, CAT349, CAT340 and Komatsu360) in 2020, among which the CAT340 model excavator operated for three months in 2020 and was redesigned as hydraulic hammer. In 2021, we continued to exchange our extraction efforts by replacing an excavator (Model: CAT360) with a new excavator (Model: Sany550) which has a larger excavating capacity. As at December 31, 2021, our mining equipment fleet consisted of one KGHG down-the-hole drill, three excavators, 20 dump trucks, one hydraulic hammer, one water tank truck and one front-end loader. According to the Independent Technical Consultant, such equipment is considered to be reasonable for mining operations in our Beishan Mine with a graphite ore mining capacity of 500,000 tonnes per year, and is in-line with commonly used open pit mining practices. We will invest further to sustain the increase of our ramp-up speed to reach such permitted graphite extraction volume to 500,000 tonnes per year by the end of 2023. In addition to continuing our current extraction efforts, we plan to invest approximately RMB0.8 million to purchase an extra front-end loader to assist with our extraction efforts, thus increasing the number of loaders we have from one to two. Such expense will be paid for by our internal resources or via external financing. Our Directors believe that it is in the long-term benefit of purchasing an additional front-end loader in order to sustain the increase of our extraction volume, and it is difficult for us to locate front-end loader rental companies which can be readily available in the region.

The following table summarizes our target ramp up speed with such investment made:

| | Annual graphite extraction volume (Tonnes/year) |
|---|---|
| Year ended December 31, 2020 (actual volume) | 211,200 |
| Year ending December 31, 2021 (actual volume) | 258,300 |
| Year ending December 31, 2022 (target) | 400,000 |
| Year ending December 31, 2023 (target) | 500,000 |

Our Directors believe that this expansion strategy is necessary, given that (i) it would be commercially unwise to not fully utilize the licensed extraction limit under the current mining rights obtained; and (ii) this strategy will be implemented in conjunction with another expansion strategy to increase our beneficiation capacity, thus will require an increased extraction volume of extracted unprocessed graphite for beneficiation, which are detailed below. Nevertheless, we will continue to explore the possibilities in increasing our extraction volume under any new licenses in the future in order to further assist our core operations in graphite beneficiation and processing.

**We will increase our capacity in the beneficiation of flake graphite concentrate**

According to the F&S Report, the sales revenue of flake graphite concentrate is expected to increase from approximately RMB2,524.7 million in 2022 to approximately RMB3,465.1 million in 2026, illustrating a CAGR of approximately 8.2% from 2022. Taking into account of our market share of approximately 4.4% in 2021 in terms of sales revenue of our flake graphite concentrate in the PRC, we consider such opportunities to be promising to support an expansion in our beneficiation capacity in order to allow future business growth, which is supported by the increase in sales of flake graphite concentrate during the Track Record Period. Furthermore, considering the utilization of our current beneficiation plant to be at approximately 93% for the year ended December 31, 2021, and that we had a surge of orders made for our graphite flakes concentrate that we nearly used up our inventory for sale, we believe that such an increase in capacity is needed to prepare us for the future market growth opportunities. We will implement such strategy in two main phases: (i) to upgrade the machinery in our current beneficiation plant; and (ii) to construct a new beneficiation plant. Our target overall beneficiation capacity is set at 100,000 tonnes of flake graphite concentrate per year.

Considering that (i) for the three years ended December 31, 2019, 2020 and 2021, we sold approximately 18,400 tonnes, 34,100 tonnes and 37,300 tonnes of flake graphite concentrate, representing an increase of approximately 85.3% and 9.4% year to year increment in terms of sales volume of our flake graphite concentrate for the years ended 31 December 2020 and 2021, respectively; (ii) for the three years ended December 31, 2019, 2020 and 2021, our beneficiation plant operated at a utilization rate of approximately 78%, 96% and 93%, indicating an increasing demand for graphite product from our customers, and that our production capacity is reaching its designed limit; (iii) the implementation of our competitive pricing strategy will enable us to further attract new customers and diversify our customer base, as evidenced by the increase in number of our customers for the three years ended December 31, 2019, 2020 and 2021 being 53, 59 and 88 and the increase in our revenue for the three years ended December 31, 2019, 2020 and 2021 being approximately RMB123.7 million, RMB168.7 million and RMB198.4 million; (iv) according to the F&S Report, it is not uncommon that companies engaged in the sales of flake graphite concentrate and spherical graphite do not enter into long-term sales agreement with their major customers in the PRC, notwithstanding that we have transacted with the companies that were our five largest customers during the Track Record Period for a period between one to 14 years; and (v) our Directors are of the view that, in general, the increase in industry demand for flake graphite concentrate and spherical graphite products will indicate corresponding increase in demand for our Group's products and our historical track record that our revenue and thus the demand for our products continued to grow along with the increasing industry demand in the PRC. According to the F&S Report, the sales revenue of flake graphite concentrate in China is expected to increase from approximately RMB2,524.7 million in 2022 to approximately RMB3,465.1 million in 2026, illustrating a CAGR of approximately 8.2% from 2022. Furthermore, the sales revenue of spherical graphite in China is expected to grow from approximately RMB2,610.0 million in 2022 to approximately RMB4,100.1 million in 2026, at a CAGR of 12.0%; and (vi) our research and development efforts to process high tap density spherical graphite smaller than 10μm thus achieving higher charging and energy density when used in lithium-ion batteries as evidenced by our research and development expenses of approximately RMB4.8 million, RMB5.8 million and RMB8.1 million, respectively during the Track Record Period, our Directors are of the view that the establishment of our new beneficiation plant and the upgrade of machinery for our existing beneficiation plant is supported by sufficient demand.

Taking into consideration that our graphite extraction volume is limited to a maximum of 500,000 tonnes of unprocessed graphite per year, we estimate that approximately half of our graphite procurement would rely on third-party suppliers in order to support the increased beneficiation capacity once both the current and new plants are in operation. We intend to secure sufficient supply of unprocessed graphite after the proposed expansion in beneficiation capacity by: (i) our extraction in our Beishan Mine which is anticipated to provide approximately 500,000 tpa in 2024; (ii) sourcing from existing suppliers which is anticipated to provide at least 350,000 tpa in 2024 (based on our procurement of unprocessed graphite from existing suppliers accounted for approximately 327,300 tonnes in 2018); and (iii) if needed, procurement for the remaining required unprocessed graphite from other suppliers in Heilongjiang Province, the PRC.

***Upgrading our machinery to increase our current beneficiation capacity***

As at the Latest Practicable Date, our beneficiation capacity was at approximately 50,000 tonnes of flake graphite concentrate per year. Since 2020, we have been putting in place investments to purchase new equipment, and the installation works are completed. Our machineries in our beneficiation plant include run of mine, run of mine bin, crushing circuit, crushed ore storage, primary grinding circuit, flotation plant, concentrate dewatering circuit and concentrate storage shed, with average estimated remaining useful lives at between 18 and 68 months together with the newly installed 44 flotation machines, nine ultrafine mills, 14 vertical sand mills, one ball mill and one jaw crusher. Since 2020 up to the Latest Practicable Date, we invested approximately RMB19.1 million for the purpose of purchasing and installing such machinery, along with any extra construction works needed to accommodate such machinery.

With such new equipment put in place, we reach an annual overall beneficiation capacity of 50,000 tonnes of flake graphite concentrate. Should there be an increase in the graphite extraction volume from our Beishan Mine, we would further benefit from the lowered unit cost when compared to purchasing unprocessed graphite from a third-party supplier.

***Constructing a new beneficiation plant***

Our aim is to increase our overall beneficiation capacity in order to capture the market opportunities as described above. To do so, in addition to upgrading our current machinery, we will be investing in the construction of a new beneficiation plant to be located adjacent to our Beishan Mine. The total site area of our existing beneficiation plant is approximately 41,265 sqm$^2$, where 21,969 sqm$^2$ are permitted to be constructed as existing beneficiation plant and other production facilities, with the remaining area being used as road, loading area for logistics, recreational facilities and green area. The increase of beneficiation capacity by housing the additional production lines within or expanding the existing beneficiation plant on our existing site is limited by the area available for such extension, and our Directors believe that the construction of a new beneficiation plant, which could generate an additional production capacity of approximately 50,000 tpa, is necessary and beneficial to our Group in the long run. Our target beneficiation capacity for this new plant is estimated to be 50,000 tonnes of flake graphite concentrate per year. Adding to the increased beneficiation capacity to 50,000 tonnes per year at our beneficiation plant, our overall beneficiation capacity will thus be expected to increase to 100,000 tonnes per year. By our estimate, the total costs of implementing this strategy will be about RMB108.0 million, with approximately RMB34.0 million on land acquisition, approximately RMB33.0 million for construction and approximately RMB39.0 million for purchasing and installing machinery and equipment and approximately RMB2.0 million for initial staff costs, in the following stages:

*Stage 1: Preparation work and land acquisition*

Our Directors estimate that the site area of the new plant will be approximately 185,000 $m^2$ (i.e., approximately 45,000 $m^2$ for the beneficiation plant and approximately 140,000 $m^2$ for a tails pond for tailings storage), to be located adjacent to our Beishan Mine, with an estimated consideration of approximately RMB34.0 million for land acquisition with reference to (i) estimated forest land acquisition fee of approximately RMB11.0 million calculated by multiplying estimated forest land acquisition fee of approximately RMB60 per $m^2$ and estimated site area of the new plant of approximately 185,000 $m^2$; (ii) estimated forest land fees of approximately RMB5.0 million calculated by multiplying estimated forest land fees of approximately RMB165 per tree and estimated number of approximately 31,000 trees; and (iii) estimated fees for converting the purpose of the land from forest land to industrial of approximately RMB18.0 million calculated by multiplying estimated fees for such conversion of approximately RMB100 per $m^2$ and estimated site area of new plant of approximately 185,000 $m^2$. The estimated forest land acquisition fees of approximately RMB60 per $m^2$, the estimated forest land fee of approximately RMB165 per tree, and the estimated fees for converting the purpose of the land from forest land to industrial use of approximately RMB100 per $m^2$ are based on the respective historical amounts of these natures paid to the relevant authorities when we first prepared to commence our mining operation at our Beishan Mine in January 2019 and Yixiang Graphite paid transfer fees under the state-owned construction land use right assignment agreement (國有建設用地使用權出讓合同) with Luobei County Natural Resources Administration in 2021, divided by the site area in $m^2$ and estimated number of trees needed to be removed in that site area, as applicable. The site area of current tails pond amount to approximately 142,500 $m^2$. As at the Latest Practicable Date, we have identified a target land parcel which is located approximately 900 meters east from our Beishan Mine. As advised by our PRC Legal Advisers, based on our consultation with Luobei County Natural Resources Bureau, relevant documents were submitted to Luobei County Natural Resources Bureau relating to the application of the land acquisition and principally there will be no material legal obstacle to obtain the necessary regulatory approvals and permits. While we are still assessing the feasibility of acquiring that land parcel, our Directors are of the view that there remains available and suitable land for acquisition and construction of the new plant, and our Group may consider applying to such government authorities for the land acquisition procedures and plant construction procedures as required, and principally there will be no legal obstacle to obtain the necessary regulatory approvals and permits. In order to successfully acquire the land for the specific purpose of constructing a beneficiation plant, the following preliminary steps will need to be completed as a part of the acquisition and approval process:

| **Item** | **Estimated time required (days)** | **Target completion date** |
|---|---|---|
| Planning and technical design | 90 | July 2022 |
| Preparation of documents | 90 | July 2022 |
| Obtaining approval of use of forestry land | 20 | August 2022 |
| Obtaining approval of land use and conversion of farm land to construction land | 14 | August 2022 |
| Obtaining national land use rights approval | 30 | September 2022 |
| Registration of land use rights via offer-for-sale, auction or tender | 5 | September 2022 |
| Environmental impact study and approval | 60 | October 2022 |
| Paying the land acquisition consideration | N/A | October 2022 |
| Obtaining construction pre-approval | 20 | October 2022 |
| Obtaining construction planning permit | 30 | November 2022 |
| Obtaining construction works permit | 7 | December 2022 |

According to our action plan, the amount of approximately RMB[REDACTED] million for land acquisition will be paid by using the [REDACTED] from the [REDACTED], our internal resources and/or via external financing.

*Stage 2: Construction*

Upon obtaining the permits and approvals as stated above, we plan to commence the construction of our new beneficiation plant in fourth quarter of 2022. Our estimated construction costs would be at approximately RMB33.0 million. The estimated consideration for the construction of approximately RMB33.0 million is based on market quotations obtained from our contractors. We will be relying on the [REDACTED] from the [REDACTED], our internal resources and/or via external financing, with the following detailed items breakdown:

| **Item** | | | **Basis of the construction cost** *(RMB'000)* | |
|---|---|---|---|---|
| | **Percentage of total floor space** *(%)* | **Cost** *(RMB'000)* | **Construction area** *($m^2$)* | **Unit price** *(RMB/$m^2$)* |
| **Construction of factory space for beneficiation equipment** | | | | |
| — For rounding stations | 8.0 | 1,500 | 1,000 | 1,500 |
| — For flotation stations | 20.0 | 3,750 | 2,500 | 1,500 |
| — For air-drying stations | 10.0 | 1,500 | 1,000 | 1,500 |
| **Sub-total** | **38.0** | **6,750** | **4,500** | **4,500** |
| **Construction of supporting facilities** | | | | |
| — Warehouses for finished goods | | 1,000 | 2,000 | 500 |
| — Storage space for raw materials | | 200 | 400 | 500 |
| — Weighbridge room | | 50 | 100 | 500 |
| — Multi-purpose building (office, mess hall, etc.) | | 3,000 | 2,000 | 1,500 |
| — Utilities, covering | | 1,450 | | |
| (i) electrical substation and switch room | | | 1,000 | 300 |
| (ii) roads paving | | | 1,000 | 500 |
| (iii) fire safety works such as pump room for water intake | | | 100 | 500 |
| (iv) combined room for production and fire safety, and | | | 300 | 1,000 |
| (v) drainage system of the factory and fire pipe network | | | 1,000 | 300 |
| **Sub-total** | **62.0** | **5,700** | **6,900** | **5,600** |

| Item | Percentage of total floor space (%) | Basis of the construction cost (RMB'000) Cost (RMB'000) | Construction area ($m^2$) | Unit price (RMB/$m^2$) |
|---|---|---|---|---|
| **Tailings storage facilities** | | | | |
| — Tailings pond | N/A | 20,000 | 10,000 | 2,000 |
| — Water pump room | | 100 | 200 | 500 |
| **Sub-total** | N/A | 20,100 | 10,200 | 2,500 |
| **Total** | **100.0** | **32,550** | **21,600** | **12,520** |

After the completion of the construction, we will need to obtain the following major approvals before we commence our beneficiation operations:

| Item | Estimated time required (days) | Target completion date |
|---|---|---|
| Fire safety inspection approval (after construction) | 20 | April 2024 |
| Environmental protection acceptance (after construction) | 30 | April 2024 |
| Pollution permit | 20 | April 2024 |
| Construction completion inspection approval | 5 | April 2024 |

*Stage 3: Purchasing and installation of machinery and equipment*

Half-way through the construction progress, we will begin the purchase and installation of the necessary equipment for beneficiation in the new plant.

Considering that (i) leasing costs would be higher than the acquisition costs of such equipment as the leasing would be in the form of finance leasing, considering that (a) it is difficult for us to locate fixed machinery and equipment leasing service providers which can be readily available in the region; and (b) crushing, grinding and classification station, roughing, scavenging and flotation station, and filtering and drying station are of fixture nature, as different to the nature of excavator or truck which do not need installation nor fixed to site area. Assuming these equipment and machinery are leased by way of finance leasing from third party leasing service provider from the second quarter of 2023 until the end of the finance lease, it is expected that we will incur not less than the estimated acquisition costs of such equipment, as we are required to pay interest for the lease financing; (ii) acquiring such equipment allows for an increase in our Group's assets, thus benefiting our business developments in the long run; (iii) incurrence of leasing costs would have an adverse effect on the profitability of the Group; (iv) the gearing ratio of the Group would increase as a result of the incurrence of the leasing costs; and (v) subcontracting the beneficiation functions (as different to processing functions) of such equipment to third party service provider is not feasible in that it requires to transport a much larger volume of unprocessed graphite to beneficiation subcontractor, as compared to the relatively less volume of spherical graphite when outsourcing processing function, thereby incurring much higher costs which is not economically viable, our Directors consider that acquiring such equipment, rather than leasing or subcontracting, would be the most cost effective and in the interest of our Group in the long run. The current estimated cost is at approximately RMB[REDACTED] million, which will be paid by using the [REDACTED] from the [REDACTED], our internal resources and/or via external financing, with the following list of items:

| **Item** | **Cost** *(RMB'000)* |
|---|---|
| **Purchase of equipment and/or machinery** | |
| — For the crushing, grinding and classification station | 11,500 |
| — For the roughing, scavenging and flotation station | 14,500 |
| — For the filtering and drying station | 5,000 |
| **Sub-total** | 31,000 |
| **Installation costs** | 8,000 |
| **Total** | **39,000** |

The details of the equipment and/or machinery to be acquired under each station are as follows:

| **For the crushing, grinding and classification station** | **Price** *(RMB)/unit* | **unit** | **Total** *(RMB)* |
|---|---|---|---|
| 15-tonne electric double beam | 270,000 | 1 | 270,000 |
| Heavy plate feeder | 1,366,000 | 1 | 1,366,000 |
| Jaw crusher | 1,488,000 | 1 | 1,488,000 |
| Belt conveyor A | 244,000 | 1 | 244,000 |
| Suspended iron remover A | 79,000 | 1 | 79,000 |
| Bag filter (model no.: MC-200) | 34,750 | 2 | 69,500 |
| 5-tonne electric single beam | 80,000 | 2 | 160,000 |
| Cone crusher A | 2,760,000 | 1 | 2,760,000 |
| Cone crusher B | 3,180,000 | 1 | 3,180,000 |
| Belt conveyor B | 133,000 | 4 | 532,000 |
| Suspended iron remover B | 42,000 | 4 | 168,000 |
| Linear vibrating screen | 507,000 | 2 | 1,014,000 |
| Bag filter (model no.: DMC) | 53,450 | 1 | 53,450 |
| Oil-injected screw compressor | 21,000 | 1 | 21,000 |
| **Total (Approximately):** | | | **11,405,000** |

| **For the roughing, scavenging and flotation station** | **Price** *(RMB)/unit* | **unit** | **Total** *(RMB)* |
|---|---|---|---|
| Belt conveyor | 48,000 | 1 | 48,000 |
| Ball mill A | 7,700,000 | 1 | 7,700,000 |
| Spiral classifier | 1,071,000 | 1 | 1,071,000 |
| Mixing drum | 52,000 | 1 | 52,000 |
| Rough flotation machine | 118,000 | 6 | 708,000 |
| Sweeping flotation machine | 105,000 | 1 | 105,000 |
| Ball mill B | 315,000 | 1 | 315,000 |
| Fine flotation machine A | 105,000 | 20 | 2,100,000 |
| Fine flotation machine B | 33,000 | 27 | 891,000 |
| Stirring mill | 93,000 | 7 | 651,000 |
| 50/10-tonne electric double beam | 450,000 | 1 | 450,000 |
| Slurry pump | 73,490 | 6 | 440,940 |
| **Total (Approximately):** | | | **14,532,000** |

| **For the filtering and drying station** | **Price/unit** | **unit** | **Total** *(RMB)* |
|---|---|---|---|
| Automatic diaphragm filter press (model no.: XAZG 500/1500-U) | 479,000 | 4 | 1,916,000 |
| Belt conveyor | 39,000 | 1 | 39,000 |
| Tumble dryer | 2,800,000 | 1 | 2,800,000 |
| Electric single beam | 270,000 | 1 | 270,000 |
| **Total (Approximately):** | | | **5,025,000** |

*Stage 4: Recruiting and hiring new staff members*

We expect to begin the recruitment process near the end of the construction works, based on the current size of our staff members, we plan to hire around 85 staff members for the new facility, with an estimated salary costs of approximately RMB6.8 million for the full year of operations in 2025, which will be paid by our internal resources and/or via external financing.

Our target is that by second quarter in 2024, we may gradually commence our beneficiation operations at the new plant, targeting to reach an annual beneficiation capacity of 50,000 tonnes (i.e. the licensed limit and also the full capacity) by the end of 2025. The following sets out the timeline of our investment in our new beneficiation plant:

| | Investments to be made during each period indicated | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **2022Q3** | **2022Q4** | **2023Q1** | **2023Q2** | **2023Q3** | **2023Q4** | **2024Q1** | **2024Q2** | **Sub-total** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Land acquisition costs | 34,000 | — | — | — | — | — | — | — | 34,000 |
| Construction costs | — | 5,500 | 5,500 | 5,500 | 5,500 | 5,500 | 5,500 | — | 33,000 |
| Purchasing equipment and installation | — | — | — | 12,300 | 11,270 | 9,130 | 6,300 | — | 39,000 |
| Staff costs | — | — | — | — | — | — | — | 2,030 | 2,030 |
| **Total investment** | | | | | | | | | **108,030** |

Our Directors believe that all of such machinery upgrades and the establishing of a new beneficiation plant will enhance our overall efficiency as well as allow us to have better control over our operating costs, and ultimately increase our production volume and profitability in order to capture the promising market opportunities for future growth. It is estimated that the utilization rate of flake graphite beneficiation production lines following our construction of new beneficiation plant will be approximately 90.0% for the year ending December 31, 2025; and the utilization rate to achieve breakeven position of our new beneficiation plant is expected to be approximately 31.1%. It is estimated that: (a) the breakeven period (being the period of time from the commencement of operation of the new beneficiation plant to the month when the annualized operating revenue is at least equal to the annualized total operating expenses including cost of materials, employee expenses, utilities, and other variable and fixed costs) will be approximately four months; and (b) the investment payback period (being the period of time from the commencement of operation of the production facility to the month in which the accumulated operating revenue is at least equal to its construction costs and operating costs including any incurred capital expenditures and accumulated ongoing cost and operating expenses) would be approximately 44 months. For reference and illustration purpose only, set out below are the key assumptions used in calculating the breakeven period and investment payback period in respect of the new beneficiation plant:

a. The new beneficiation plant will commence commercial production in the second quarter of 2024 and become fully operational by third quarter of 2024.

b. The total capital expenditure required for the development of the new beneficiation plant is estimated to be approximately RMB108.0 million. Please see "Our Business Strategies — We will increase our capacity in the beneficiation of flake graphite concentrate — Constructing a new beneficiation plant" in this section in respect of the estimates used for the land costs, construction costs and costs of machineries and equipment of the new beneficiation plant.

c. In respect of the new beneficiation plant, it is expected that we will allocate purchase orders to the new plant for production after it has come into operation. Starting from third quarter of 2024, we plan to allocate purchase orders for flake graphite concentrate received by us during 2024 to the new beneficiation plant. Furthermore, it is assumed that (i) the annual growth in sales volume of graphite concentrate for 2022 and 2023 will be approximately 42.3% with reference to the annualized growth of the sales volume from 2019 to 2021; (ii) our Group will be able to continue its beneficiation production in substantially the same manner as our Group has been operating during the Track Record Period with reference to our revenue from beneficiation production at approximately RMB97.7 million and gross profit at RMB52.0 million in 2021; (iii) the production and operating cost and expenses to be incurred by the new beneficiation plant are estimated with reference to the cost structure of the beneficiation production of our Group in 2021 including cost of sales at approximately RMB45.7 million, selling and distribution expenses, general and administrative expenses, and research and development expenses attributable to our beneficiation production; (iv) the depreciation is calculated based on the total capital expenditure required for the new beneficiation plant with reference to the useful life of our existing lands, factories and machines; and (v) the utilization rate of the new beneficiation plant would reach above 90.0% by the end of 2025 and maintain at such level thereafter on a prudent estimate basis. As our beneficiation plant has already been well-established, we could allocate sufficient purchase order to the new beneficiation plant and therefore it is expected that the new beneficiation plant would be able to achieve stable and sufficient revenue and to breakeven in four months and investment payback period in 44 months.

**We will increase our spherical graphite processing capacity**

According to the F&S Report, influenced by the continuous policy incentives in manufacturing NEVs, the sales volume of electronic vehicle increased from approximately 0.5 million units in 2016 to approximately 3.3 million units in 2021, with a CAGR of approximately 45.7%, which paves the way for the market growth of spherical graphite. According to F&S Report, the electric vehicle market in the PRC, driven by the inclination to be carbon neutral and to use green energy, is expected to grow in the next few years and the sales volume of electric vehicle is expected to reach approximately 9.6 million in 2026. The sales revenue of spherical graphite in China increased from approximately RMB1,287.1 million in 2017 to approximately RMB2,223.0 million in 2021 at a CAGR of approximately 14.6%, and is expected to grow from approximately RMB2,610.0 million in 2022 to approximately RMB4,100.1 million in 2026, at a CAGR of 12.0%. Taking into account of our market share of approximately 4.4% in terms of sales revenue of our flake graphite concentrate in the PRC in 2021, we consider such opportunities to be promising to support an expansion in our processing capacity. Moreover, with our expected increase in capacity in the beneficiation of flake graphite concentrate as detailed above, it is effective for us to further penetrate into the spherical graphite market.

We will implement such a strategy in two main phases: (i) to expand, maintain and repair the machinery in our current processing plant wherever necessary in order to upgrade the current capacity to above 6,500 tonnes of spherical graphite per year; and (ii) to construct a new processing plant with a target processing capacity of 6,000 tonnes of spherical graphite per year.

***Expanding our station to increase our current processing capacity***

As at December 31, 2021, our processing capacity was at approximately 5,000 tonnes of spherical graphite per year. Since the fourth quarter of 2021, we have been putting in place investments to expand the station and machinery and such works are expected to complete by the second quarter of 2022. We added a new pulverizing and rounding production line for our spherical graphite production. This expansion primarily included installation of new crusher, turbine classifier, double cyclone separator, fan switcher, dust filter, low-voltage frequency converter and crane and electric hoist in our pulverizing and rounding process. We invested approximately RMB1.2 million in 2021 and approximately RMB3.2 million in 2022 to complete this expansion. This expansion was completed in May 2022 and is expected to be in full operation by July 2022. Upon being fully operational, our processing capacity is expected to increase to above 6,500 tpa.

***Constructing a new processing plant***

We plan to locate the new processing plant to a location approximately 900 meters east from our Beishan Mine, with working hours comprising three eight-hour shifts per day, for 240 days a year, details of which are set out in the paragraph headed "Our Business Strategy — Constructing a new beneficiation plant — Stage 1: Preparation work and land acquisition" of this section. Wastage and tailings can be stored at the same tailings storage at the new beneficiation plant. We estimate that the total cost for implementing this strategy would be approximately RMB91.2 million, with a target capacity of processing 6,000 tonnes of spherical graphite and 9,200 tonnes of micro powder graphite per year. We target to start the construction in the second half of 2024 and to commence operations in 2nd quarter of 2025, because by then, our beneficiation capacity would have been increased to 100,000 tonnes a year, thus providing sufficient materials for processing our spherical graphite. Our Directors estimate that the increased capacity of beneficiation to 100,000 tonnes a year in total would be sufficient to support our spherical graphite processing operations and the sales of flake graphite concentrate. It is estimated that the utilization rate of processing spherical graphite following to our construction of new processing plant will be approximately 95.4% for the year ended December 31, 2026, and the utilization rate to achieve breakeven position of our new processing plant is expected to be of approximately 36.2%.

The following table summarizes the costs breakdown estimate of constructing the new processing plant based on quotations obtained from our suppliers:

| Items | Percentage of total floor space | Cost |
|---|---|---|
| | *(%)* | *(RMB'000)* |
| **Purchase and installation of equipment, and construction of factory space for such equipment** | | |
| — Rounding station | 20.0 | 29,000 |
| — Purification station | 6.0 | 8,500 |
| — Drying station | 7.6 | 6,100 |
| — Iron removal station | 6.0 | 8,500 |
| **Sub-total** | **34.0** | **52,100** |
| **Supporting facilities, utilities and other expenses** | | |
| — Auxiliary facilities (including warehouse for finished goods and raw materials, testing facilities and other offices) | | 4,800 |
| — Works and purchases in relation to utilities (including electricity, lighting, water, roads, fire safety and others) | | 14,180 |
| — Other expenses (including land use fees, management fees, furniture, preliminary works, testing works, and inspection and approval expenses) | | 20,020 |
| **Sub-total** | **61.0** | **39,000** |
| **Total** | **100.0** | **91,100** |

By our Directors' estimate, such costs are expected to be paid by a combination our internal resources and/or via external financing such as bank borrowings or lease arrangements. The hiring of new staff members shall take place near the completion of the construction works, and our Directors estimate the initial costs in recruiting and hiring new staff members would be approximately RMB6.8 million for the first year of operation, which will be paid by our working capital. It is estimated that: (a) the breakeven period (being the period of time from the commencement of operation of the new processing plan to the month when the annualized operating revenue is at least equal to the annualized total operating expenses including cost of materials, employee expenses, utilities, and other variable and fixed costs) will be approximately four months; and (b) the investment payback period (being the period of time from the commencement of operation of the production facility to the month in which the accumulated operating revenue is at least equal to its construction costs and operating costs including any incurred capital expenditures and accumulated ongoing cost and operating expenses) would be approximately 52 months. For reference and illustration purpose only, set out below are the key assumptions used in calculating the breakeven and investment payback period in respect of the new processing plant:

a. The new processing plant will commence commercial production in the 2nd quarter of 2025 and become fully operational by the end of 2025.

b. The total capital expenditure required for the development of the new processing plant is estimated to be approximately RMB91.2 million. Please see "Our Business Strategies — We will increase our spherical graphite processing capacity" in this section in respect of the estimates used for the construction costs, costs of machineries and equipment and other expenses of the new processing plant.

c. In respect of the new processing plant, it is expected that we will allocate purchase orders to the new factory for production after it has come into operation. Starting from 2nd quarter of 2025, we plan to allocate purchase orders for spherical graphite received by us during 2025 to the new processing plant. Furthermore, it is assumed that (i) the annual growth in sales volume of graphite concentrate for 2022 and 2024 will be approximately 42.4% with reference to annualized growth from 2019 to 2021; (ii) our Group will be able to continue its processing production in substantially the same manner as our Group has been operating during the Track Record Period with reference to our revenue from processing production at approximately RMB98.5 million and gross profit at RMB41.2 million in 2021; (iii) the production and operating cost and expenses to be incurred by the new processing plant are estimated with reference to the cost structure of the processing production of our Group in 2021 including cost of sales at approximately RMB57.3 million, selling and distribution expenses, general and administrative expenses, and research and development expenses attributable to our processing production; (iv) the depreciation is calculated based on the total capital expenditure required for the new processing plant with reference to the useful life of our existing lands, factories and machines; and (v) the utilization rate of the new processing plant would reach above 90% by the end of 2026 and maintain at such level thereafter on a prudent estimate basis. As our processing plant has already been well-established, we could allocate sufficient purchase order to the new processing plant and therefore it is expected that the new processing plan would be able to achieve stable and sufficient revenue and to achieve breakeven in four months with investment payback period in 52 months.

The following timeline illustrates the implementation plan of the three strategies as mentioned above:

| | Year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| **Strategy** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** |
| **1. Increase our ramp up speed to reach our maximum extraction volume** | Extraction graphite volume currently at approximately 258,300 tpa | Extraction graphite volume to be increased to 400,000 tpa.<br><br>Investments will be made to purchase a new front-end loader at approximately RMB0.8 million. | Extraction graphite volume to be increased to 500,000 tpa | Extraction graphite volume target of 500,000 tpa to be reached | Extraction graphite volume maintaining at 500,000 tpa | Extraction graphite volume maintaining at 500,000 tpa |
| **2. Increase our beneficiation capacity** | | | | | | |
| — ***To upgrade our current machinery*** | Beneficiation capacity currently at approximately 50,000 tpa.<br><br>Investments had been made to upgrade the equipment in the current beneficiation plant, with installations being completed in September 2021. | Beneficiation capacity maintaining at 50,000 tpa at the current plant | Beneficiation capacity maintaining at 50,000 tpa at the current plant | Beneficiation capacity maintaining at 50,000 tpa at the current plant | Beneficiation capacity maintaining at 50,000 tpa at the current plant | Beneficiation capacity maintaining at 50,000 tpa at the current plant |
| — ***To construct a new beneficiation plant*** | — | To commence preparation work in relation to the acquisition of land for the construction of a new beneficiation plant adjacent to our Beishan Mine. Preparation work includes applying for all necessary permits.<br><br>Investment of approximately RMB34.0 million for land acquisition to be made for the second half of the year, with construction of the factory to commence by the end of the fourth quarter. Total construction cost is estimated at RMB33.0 million | — | Completion of factory construction alongside with the purchasing and installation of all necessary machinery and equipment. Such equipment costs are estimated at approximately RMB39.0 million.<br><br>Commence operations of the new beneficiation. | Beneficiation capacity target of 50,000 tpa to be reached by the end of the year and maintained thereafter | Beneficiation capacity maintaining at 50,000 tpa |
| **3. Increase our processing capacity** | | | | | | |
| — ***Expanding and maintaining our current processing plant*** | Spherical graphite processing capacity currently above 5,000 tpa | Spherical graphite processing capacity being expanded to above 6,500 tpa | Spherical graphite processing capacity maintaining at above 6,500 tpa at the current plant | Spherical graphite processing capacity maintaining at above 6,500 tpa at the current plant | Spherical graphite processing capacity maintaining at above 6,500 tpa at the current plant | Spherical graphite processing capacity maintaining at above 6,500 tpa at the current plant |

| | Year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| **Strategy** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** |
| — ***To construct a new processing plant*** | — | — | Preparation work to commence in the first half of the year in relation to the acquisition of land for the construction of a new processing plant adjacent to our Beishan Mine. | Investment for land acquisition to be made for the first half of the year.<br><br>Commencement of the construction of the factory in the second half of the year, with the purchasing and installation of all necessary machinery and equipment later on. | Commence operations, with a spherical graphite processing capacity target of 6,000 tpa to be reached by the end of the year. | Maintaining full operation of 6,000 tpa |

Our Directors believe that the increase in processing capacity (i.e. approximately 150% for spherical graphite) will be supported by sufficient market demand as:

a. According to the F&S Report, spherical graphite is manufactured from flake graphite concentrate and can be used in the production of lithium-ion batteries (being one of the key raw materials). Influenced by the continuous policy incentives in electronic vehicle manufacturing and electronic information industry, the sales volume of electronic vehicle increased from approximately 0.5 million units in 2016 to approximately 3.3 million units in 2021, with a CAGR of approximately 45.7%. The booming development of electronic vehicle industry promoted the growing demand of lithium-ion batteries in previous years, which paves the way for the market growth of spherical graphite. According to F&S Report, the electric vehicle market in the PRC, driven by the inclination to be carbon neutral and to use green energy, is expected to grow in the next few years and the sales volume of electric vehicle is expected to reach approximately 9.6 million in 2026. The domestic production volume of spherical graphite witnessed a steady increase at a CAGR of approximately 17.6% from approximately 101.0 thousand tonnes in 2017 to 193.0 thousand tonnes in 2021. Domestic production will increase steadily from approximately 224.0 thousand tonnes in 2022 to approximately 342.0 thousand tonnes in 2026, illustrating a CAGR of approximately 11.2%.

b. The sales volume of spherical graphite in the PRC grew from approximately 61.0 thousand tonnes in 2017 to an estimated amount of approximately 130.0 thousand tonnes in 2021, illustrating a fast CAGR of approximately 20.8%. Likewise, the sales revenue also benefited from the huge market demand, which increased from approximately RMB1,287.1 million in 2017 to approximately RMB2,223.0 million in 2021 at a CAGR of approximately 14.6% during the same period. The PRC possesses the vast majority of processing and consumption of battery-grade spherical graphite in the world. The fining and processing technology of spherical graphite are expected to improve continuously in the near future in response to huge demand from downstream market. The incentives of NEVs, especially the "Notice on Further Improving the Policy for the Promotion and Application of Financial Subsidy for New Energy Vehicles" (關於進一步完善新能源汽車推廣應用財政補貼政策的通知) issued by the Ministry of Finance, Ministry of Industry and Information Technology, Ministry of Science and Technology and National Development and Reform Commission in December 2020, will further promote the production of NEVs as well as the demand for lithium-ion batteries. The sales volume of spherical graphite in the PRC is estimated to surge from approximately 150.0

thousand tonnes in 2022 to approximately 237.0 thousand tonnes in 2026, representing a CAGR of approximately 12.1%. The sales revenue is expected to grow from approximately RMB2,610.0 million in 2022 to approximately RMB4,100.1 million in 2026 at a CAGR of approximately 12.0%.

c. We had discussed with major customers on their expected demand for spherical graphite. We would continue to maintain our relationship with our existing customers in order to ensure future orders for our spherical graphite products. In addition, we have been actively exploring potential new customer for our spherical graphite products. Our Directors believe that the sale of spherical graphite would increase in a steady pace upon the completion of the establishment of the new processing plant.

Considering the estimated market demand on spherical graphite in future and the increasing trend of our sales volume of spherical graphite products during the Track Record Period, we believe that there are sufficient market demand to support the increase in our process capacity for spherical graphite.

In summary, assuming all of three strategies can be implemented and that the current beneficiation and processing yields (that our beneficiation yield being at around 10% and our processing yield being at around 35%) remain constant, our Directors estimate that, with an extraction volume of 500,000 tonnes of unprocessed graphite at our Beishan Mine, combined with 500,000 tonnes of unprocessed graphite procured by third-parties, we may beneficiate a maximum of 100,000 tonnes of flake graphite concentrate per year, of which 70,000 tonnes of such can be sold to customers to generate revenue and 30,000 tonnes may be used to process into 10,000 tonnes of spherical graphite for sale. Nevertheless, we can also explore the possibilities of applying for the approval of further mining rights in the future.

The table below summarizes the general outstanding costs breakdown of such three strategies:

| | **To be paid with the [REDACTED] of the [REDACTED]** *(RMB'000)* | **To be financed by internal resources and/or by external financing** *(RMB'000)* |
|---|---|---|
| ***Extraction:*** | | |
| Ramp-up our extraction capacity | — | 800 |
| ***Beneficiation:*** | | |
| Land acquisition for our new beneficiation plant | [REDACTED] | 9,900 |
| Construction of our new beneficiation plant | [REDACTED] | 9,400 |
| Purchasing and installing new equipment for our new beneficiation plant | [REDACTED] | 12,100 |
| Other operating costs | — | 2,030 |
| ***Processing:*** | | |
| New processing plant | — | 91,200 |
| Other operating costs | — | 2,040 |
| **Total** | **[REDACTED]** | **127,470** |

**Feasibility of our expansion plan**

Our Directors believe that we will be well-positioned to capitalise on the growing graphite concentrate and spherical graphite products demand in the PRC market, taking into consideration of our positive operation and financial results during the Track Record Period and our management's experience. Subsequent to our expansion, our Directors believe that our capital need will increase due to the implementation of our business strategies and operation scale of our business, which our Directors are of the view that the expansion plan is feasible where:

a. The utilization of the costs of approximately RMB127.5 million financed by internal resources and external financing will be spread at different time intervals from 2022 to 2025 as follows:

| | Utilization of costs | | | |
|---|---|---|---|---|
| | **2022** | **2023** | **2024** | **2025** |
| | | *(RMB'000)* | | |
| **Ramp-up our extraction capacity** | 800 | | | |
| **Land acquisition for our new beneficiation plant** | 9,900 | | | |
| **Construction of our new beneficiation plant** | | 3,900 | 5,500 | |
| **Purchasing and installing new equipment for our new beneficiation plan** | | 5,800 | 6,300 | |
| **Other operation cost of the beneficiation plant** | | | 2,030 | |
| **Construction of our new processing plant** | | | 57,810 | 33,390 |
| **Other operation cost of the processing plant** | | | | 2,040 |
| **Total** | 10,700 | 9,700 | 71,640 | 35,430 |

As shown above, approximately RMB10.7 million will be paid from our internal source in 2022, approximately RMB9.7 million will be paid from our internal source in 2023, approximately RMB71.6 million will be paid from our internal (and external source if needed) in 2024 and approximately RMB35.4 million will be paid from our internal source in 2025.

b. *Revenue:* For the year ended December 31, 2021, our Group generated revenue of approximately RMB198.4 million (as compared to approximately RMB168.7 million for the year ended December 31, 2020). The average selling price of flake graphite concentrate and spherical graphite per tonne was approximately RMB2,600 and RMB14,900 for the year ended December 31, 2021, and it is expected the average selling price of flake graphite concentrate to remain stable. When the new plants are completed, the estimated increase in production capacity of beneficiation and processing will be approximately 100,000 tonnes and 12,500 tonnes per annum, respectively. As a result of our expansion plan, we expect our revenue will continue to increase.

c. *Cash and cash equivalent:* As at December 31, 2021 and April 30, 2022, our Group had cash and cash equivalent of approximately RMB33.9 million and RMB72.1 million (unaudited).

d. *Net cash generated from operating activities:* For the year ended December 31, 2021, our Group generated net cash from operating activities of approximately RMB75.7 million (as compared to approximately RMB24.5 million for the year ended December 31, 2020). Notwithstanding that the Group has a total of approximately RMB54.0 million cash and cash equivalent and unutilized banking facility as at December 31, 2021, and that the estimated costs for our expansion plan at approximately RMB71.6 million in 2024 and RMB35.4 million in 2025 is larger than the historical cash outflow from investing activities during the Track Record Period at approximately RMB27.6 million in 2019, RMB20.7 million in 2020 and RMB29.1 million in 2021, we experienced a substantial increase in net cash generated from operating activities from approximately RMB24.5 million in 2020 to approximately RMB75.7 million in 2021. For details, please see "Financial Information — Liquidity and Capital Resources — Cash Flow". To focus our use of resources on the expansion plan, it is our intention not to incur other significant expenses on property, plant and equipment and other repayments, thereby minimizing the cash outflow on investing activities and financing activities in 2022, 2023, 2024 and 2025. If we are to generate our cash flow from operating activities at the current level, our Directors believe that sufficient cash and cash equivalents would be made available to carry out and complete our expansion plan in 2022, 2023, 2024 and 2025, which is more than the proportional expected costs to be incurred for the expansion plan from 2022 to 2025.

e. *Net profit:* For the year ended December 31, 2021, our Group recorded a net profit of approximately RMB53.3 million. Considering the historical financial records of the Group, the net profit of our Group indicated an increasing trend during the Track Record Period, based on which our Directors are of the view that the profit for our Group is expected to continue to increase for the period from 2022 to 2025, which will result in cash flow generated from operating activities to also increase in line with the profit increase.

f. *Banking facility:* The Group would also consider to seek further banking facilities if needed. As at the Latest Practicable Date, our Group had a RMB20.0 million unutilized banking facility.

g. *Operating costs:* Our Directors are of the view that control be implemented to our operating costs in similar way as our existing factories level and our Group does not expect a material change in our operating costs as a result of our expansion plan.

Considering the above, our Directors are of the view that: (a) there will be sufficient internal resources (and external financing if needed) to carry out the expansion plan; (b) the expansion plan would not have any significant adverse financial and operational impact on our business, (c) our Group will be able to maintain its net current assets position; and (d) the gearing ratio will not increase significantly as a consequence of the expansion plan as we recorded a decreasing trend on our gearing ratio throughout the Track Record Period from 84.7% in 2019 to 41.2% in 2021, and our Group shall not have other needs to obtain a substantial amount of external financing when the expected net cash generating from our operating activities from 2022 and 2025 becomes sufficed.

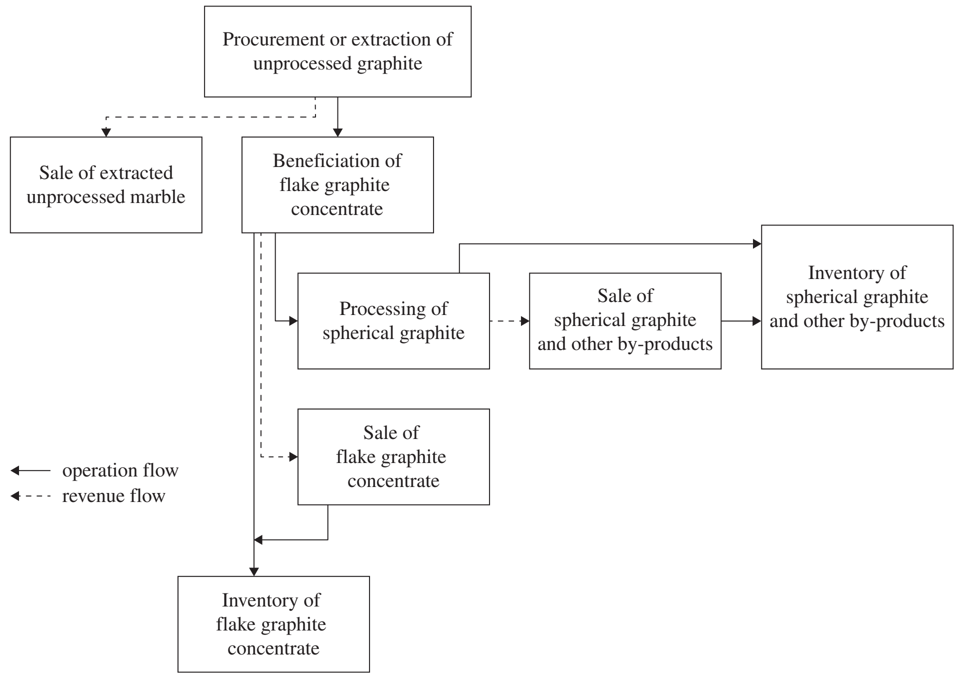
**We will expand our customer base and reach out to more markets**

We believe that building up our customer base and enhancing the recognition of our products among the industry players on an on-going basis is crucial to our future development and success. We intend to broaden our customer base and increase the exposure of our products through the following means (i) collaborating with external institutions in the PRC specialized in lithium-ion batteries technology for the development of new technologies and new graphite products to cater for downstream markets; and (ii) resuming our sales and marketing activities, such as to continue the sponsoring of academic conferences and symposiums, and also expand to other regional markets. For the year ending December 31, 2022, we expect to increase the sales of our flake graphite concentrate, with targeted customers located in the regions of Shandong, Henan, and Liaoning, all being main manufacturing and transport hubs for graphite products, according to the F&S Report. By doing so, not only are we able to broaden our customer base and product range, we are also able to keep abreast of industry trends which will further enhance our corporate profile as well as recognition of our products among industry players and customers.

## OUR BUSINESS MODEL

We are engaged in the production and sales of flake graphite concentrate and spherical graphite in the PRC. In 2019, we obtained the mining rights of our Beishan Mine primarily for graphite extraction, which we believe has further strengthened our integrated supply chain to increase our competitiveness amongst industry players. The production of our principal products, namely flake graphite concentrate and spherical graphite, in our beneficiation and processing plants currently relies on the supply of unprocessed graphite extracted from our Beishan Mine and from our third-party suppliers. As a by-product of our extraction operations, we also sell unprocessed marble.

The following sets forth a flowchart illustrating the movement of graphite material from procurement and extraction, to beneficiation and processing, and to inventories and sales:




### Extraction of unprocessed graphite from our Beishan Mine

Our Beishan Mine is located approximately 10 km to the northwest of our beneficiation and processing plants. The connecting road between such plants and our Beishan Mine consists of approximately 10 km of paved road, which is considered adequate to support the operation. Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, we did not experience any material interruption in transportation and logistics for our graphite products.

The following map and image illustrates the geographical location of our mine, our beneficiation plants and our processing plants:



Our Beishan Mine is an open-pit graphite ore mine with a permitted mining area of approximately 0.3 $km^2$. The estimated life of our Beishan Mine was approximately 20 years as at December 31, 2021. The current mining license on Beishan Mine will expire in April 2024.

***Background***

The background leading to our acquisition of mining rights in our Beishan Mine traces back to 2014 when our Group participated in the tender held by Heilongjiang Provincial Department of Land and Resources for the prospecting rights in Luobei County, Hegang City, Heilongjiang Province, PRC, the area where our Beishan Mine is situated. As our Group was identifying the opportunity to secure and stabilize the supply of unprocessed graphite, Yixiang New Energy participated in and secured the tender, and entered into the prospecting right transfer agreement with Department of Land and Resources of Heilongjiang Province of the PRC on May 25, 2015, pursuant to which Department of Land and Resources of Heilongjiang Province of the PRC transferred the prospecting right to Yixiang New Energy at a consideration of approximately RMB5.1 million. On December 1, 2015, Yixiang New Energy further obtained the permit for mineral resources exploration issued by the Department of Land and Resources of Heilongjiang Province of the PRC with prospecting right over an exploration area of 6.06 square kilometers located in Luobei County, Hegang City, Heilongjiang Province, PRC.

***Exploration, Resources and Reserves***

Exploration on our Beishan Mine was first carried out in 2015, in order to explore the geological conditions, topographic conditions and resource reserves related to our Beishan Mine. Yixiang New Energy engaged Harbin Ruifa Mineral Exploration Company Limited, a qualified third-party exploration company, to conduct exploration work between 2015 and 2017 at a total consideration of approximately RMB4.8 million. In the course of exploration, it was discovered that in addition to graphite, there were also marble ores in the area. Yixiang New Energy paid to the Department of Land and Resources of Heilongjiang Province of the PRC a fee of approximately RMB3.1 million in 2018 for the mineral rights of marble ores in the mine. The first exploration work included geological mapping and a very low frequency electromagnetic geophysical survey. The identified targets were tested by trenching and diamond drilling at a nominal 100 m by 50 m spacing. The 2-year exploration program totalled approximately 6,000 m (36 holes) of diamond drilling and 10,000 $m^3$ of trench excavation. Our Group devoted a considerable amount of time on safety and environmental preparatory work before extraction. In mid-2017, Yixiang New Energy engaged an environmental technology company for an assessment which was conducted by a qualified environmental impact assessment engineer on the environmental impact of the exploration at our Beishan Mine. Subsequent to the assessment and adopting policies recommended by the environmental technology company, an environmental impact assessment report was submitted to the Heilongjiang Forestry and Grassland Administration for review and certification in 2018. We prepared a safety plan and submitted it to Heilongjiang Emergency Management Office and revised the safety plan of our Beishan Mine in compliance with updated notices issued by the State Administration of Work Safety, including (i) adjusting the interception ditches and flood dikes; (ii) reconstructing the power system of the mining area to solar lighting system; and (iii) adjusting the layout of two connecting roads. In 2018, our Group applied to Yunshan Forestry of Luobei County and the Heilongjiang Province to change the land use of the mine from "forest" to "commercial" use which was approved in January 2019. In April 2019, our Group commenced the mining operation in our Beishan Mine.

In 2020, the Independent Technical Consultant conducted a review of the previous exploration work and recommended a verification program. The work program comprised a topographical survey, geological mapping, trenching and 1,647 m (11 holes) of diamond drilling. For further details of the exploration on our Beishan Mine, please see "Appendix III — Independent Technical Report".

According to the Independent Technical Report, the graphite and marble Mineral Resources in our Beishan Mine with the elevation limits of our mining license as at December 31, 2021, being reported in accordance with the JORC Code (2012) via classification as Indicated and Inferred, are approximately as follows:

**Graphite Mineral Resource Statement within the approved mining license elevation limits as at December 31, 2021**

| **Domain** | **Mineral Resource Category** | **Tonnage** *(kt)* | **TGC** *(%)* |
|---|---|---|---|
| V1 | Indicated | 1,740 | 7.86 |
| | Inferred | 138 | 12.62 |
| V2 | Indicated | 229 | 7.71 |
| | Inferred | 48 | 7.97 |
| V3 | Indicated | 3,333 | 10.99 |
| | Inferred | 656 | 11.81 |
| V5 | Indicated | 2,440 | 11.86 |
| V6 | Indicated | 1,348 | 8.37 |
| | Inferred | 107 | 8.87 |
| V7 | Indicated | 2,123 | 8.14 |
| | Inferred | 29 | 4.98 |
| V8 | Indicated | 2,539 | 8.83 |
| | Inferred | 20 | 12.59 |
| | **Indicated** | **13,753** | **9.59** |
| | **Inferred** | **997** | **11.24** |
| | **Total** | **14,750** | **9.70** |

**Marble Mineral Resource Statement within mining license elevation limits as at December 31, 2021**

| **Mineral Resource Category** | **Tonnage** *(kt)* |
|---|---|
| **Indicated** | 1,541 |
| **Inferred** | 582 |
| **Total** | 2,123 |

According to the Independent Technical Report, the graphite and marble ore Reserves in our Beishan Mine within the elevation limits of our mining license as at December 31, 2021, being reported in accordance with the JORC Code (2012), are approximately as follows:

**Graphite Ore Reserve Statement within mining license elevation limits as at December 31, 2021**

| **Type** | **Ore Reserve Category** | **Tonnage** *(kt)* | **TGC** *(%)* |
|---|---|---|---|
| **Graphite** | Probable | 9,549 | 10.15 |

**Marble Ore Reserve Statement within the mining license elevation limits as at December 31, 2021**

| **Type** | **Ore Reserve Category** | **Tonnage** *(kt)* |
|---|---|---|
| **Marble** | Probable | 1,152 |

For further details on the estimation and grades and qualities of the Resources and Reserves in our Beishan Mine, please see "Appendix III — Independent Technical Report". According to the Independent Technical Consultant, there has been no material change to the Resource estimates of our Beishan Mine since December 31, 2021, which is the date of the Independent Technical Report, and up to Latest Practicable Date.

***Acquiring the mining license and material terms***

In 2019, our Group obtained the mining rights of our Beishan Mine granted by the Heilongjiang Province Natural Resources Bureau, and the material terms of the acquisition of mining rights in our Beishan Mine are set out below:

| | |
|---|---|
| Issuing authority: | Heilongjiang Province Natural Resources Bureau |
| Holder of mining license: | Yixiang New Energy |
| Name of mine: | Beishan Graphite Mine |
| License number: | C2300002018097110146712 |
| Mining method allowed: | Open pit mining method |
| Production Volume allowed: | 0.50 Mtpa |
| Area of mine allowed: | 0.2615 km$^2$ |
| Mining elevations allowed: | 274–150m ASL |
| Period of validity granted: | 8 April 2019 to 8 April 2024 |
| Applicable natural resources: | Unprocessed graphite and marble |
| Renewal: | If it is necessary for the mining right holder to continue mining after the expiration of the license, it should complete procedures for an extension with the registration administration prior to the expiration date of the mining license. If the mining right holder fails to complete the extension procedures, the mining license should lapse automatically. |
| Restrictions: | The mining license should not be lent, transferred or traded. If a mining right holder suspends or shuts down the mining operation within the term of the mining license, it should comply with the cancellation procedures of the mining license in accordance with applicable laws and regulations. |
| Modification: | If the mining right holder alters the range of mining area, main types of mining mineral, mining method, company name, or transfers such license within the term of the mining license, it should apply for the modification in accordance with applicable regulations. |

***Our mining method and operations***

According to the Independent Technical Consultant, a conventional open pit mining method is used, comprising drilling, blasting, loading and hauling. The blasting operations are conducted by a third-party service provider whilst others are mainly operated by us. Moreover, to facilitate the dust suppression and drilling, water from a 300 m$^3$ water tank is used. Minimal electric power is needed for the day-to-day mining operations such as lighting, the air compressor and the dewatering pump. A 10kv/0.4 kv substation is located on the mining site to provide electricity from the national power grid. To the best knowledge of our Directors, the electricity and water supplies are generally stable and consistent since we commenced mining in our Beishan Mine. During the Track Record Period and up to the Latest Practicable Date, our Directors confirm that we did not experience any material disruptions as a result of shortages of utilities, including water and electricity.

The main steps involved in open-pit mining are illustrated in the below flow chart and further explained below:

| Drilling (Time required: Approximately 3 days) | → | Blasting (Time required: Approximately 12 hours) | → | Loading (Time required: Approximately 10 minutes per truck) | → | Hauling (Time required: Approximately 1 hour per loading) |
|---|---|---|---|---|---|---|

- ***Drilling*** — One Model KGH6 down-the-hole (model K6H6) drills are used for drilling based on the physical characteristics of the orebody and the mine production rate, with bore diameters of 140 mm and vertical hole depths of 16.5 m, including sub-drilling of 1.5 m.

- ***Blasting*** — Blasting works are contracted to a third-party service provider. The service provider provides hole survey and explosive transportation, charging, and blasting works. Blasting holes are arranged in rectangular or quincunx shapes, with spacing of 5.5 m and burden of 4.5 m.

- ***Loading*** — Loading is carried out using 2.5 $m^3$ hydraulic excavators (Model CAT345/349/Sany550) supported by a bulldozer and a front-end loader to clean and pile the working face.

- ***Hauling*** — The maximum acceptable lump size of the mined materials is 750 mm, and the oversize proportion is designed at 5%. Large waste rocks will be transported directly to the waste dump without re-crushing, while large lumps of mineralized materials will be stockpiled and re-crushed by hydraulic hammers. Broken ore and waste are loaded by the 2.5 $m^3$ hydraulic excavators into 30 to 50 tonne dump trucks and hauled to the beneficiation plant.

As at December 31, 2021, our mining equipment fleet consisted of the following:

| **Equipment** | **Quantity** | **Illustrative photo** | **Purpose** | **Estimated useful lives** *(Months)* | **Approximate average remaining useful lives** *(Months)* |
|---|---|---|---|---|---|
| KGH6 down-the-hole drill with mobile air compressor | 1 |  | Drilling | 120 | 90 |
| Excavators (CAT349, CAT345, Sany550[1]) | 3 |   | Mining | 120 | 96 |

| Equipment | Quantity | Illustrative photo | Purpose | Estimated useful lives *(Months)* | Approximate average remaining useful lives *(Months)* |
|---|---|---|---|---|---|
| Dump trucks with a nameplate capacity of 30 to 50 tonnes[(1)] | 20 |  | Hauling | 48 | 15 |
| Hydraulic hammer equipped on a CAT340 excavator | 1 |  | Crushing rocks before stockpiling | 120 | 99 |
| Modified watering tank truck | 1 |  | Cleaning | 48 | 15 |
| Front-end loader | 1 |  | Loading | 120 | 89 |

*Note:*

(1) As Sany 550 excavator and ten dump trucks were leased by us from third party service providers, their useful life is not included in calculation for the purpose of this paragraph.

According to the Independent Technical Consultant, such equipment is considered to be reasonable for mining operations in our Beishan Mine with a graphite ore mining capacity of 500,000 tonnes per year, and is in-line with commonly used open pit mining practices. However, as the life of our Beishan Mine will be 20 years, we will be replacing such equipment every seven to ten years as recommended.

Our Directors confirm that the key personnel involved in the operations of our Beishan Mine include Mr. Zhao Liang (details of which are set out in the section "Directors and Senior Management"), one vice president of mining operations, one mining manager and one chief of safety production, wherein the vice president of mining operations and the mining manager oversee the overall planning and management and on-site production, and implement the mining operation of our Beishan Mine, while the chief of safety production is responsible for implementing safety measures in our Beishan Mine. All of them possess experience related to the mining industry. To our Directors' best knowledge, our mining manager worked in Luobei County Yunshan Graphite Mining Co., Ltd.* (蘿北縣雲山石墨採礦有限責任公司), which has transferred its mining rights to Supplier B in 2019, while our chief of safety production graduated from Heilongjiang University of Science and Technology majoring in mine engineering, and possesses approximately four years mining experience at the time of joining our Group.

For the three years ended December 31, 2019, 2020 and 2021, we extracted approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes of unprocessed graphite and approximately 199,600 tonnes, 718,500 tonnes and 342,200 tonnes of unprocessed marble, respectively. Our Directors confirm that the unprocessed graphite in our Beishan Mine was extracted only for our Group's own use during the Track Record Period. During the Track Record Period, depending on the yield of unprocessed graphite extracted from our Beishan Mine, all of the unprocessed graphite extracted from our Beishan Mine would be prioritized to be consumed for the reasons that (i) consumption of unprocessed graphite extracted from our Bishan Mine is more cost effective; and (ii) we do not need to make available additional area and facility for storage of unprocessed graphite not consumed in our production, and the remaining unprocessed graphite needed would be purchased from our suppliers depending on our beneficiation production capacity.

According to the Independent Technical Report, our Beishan Mine is located in an area where the climate is classified as a humid-continental climate with average minimum and maximum temperatures of -21°C and 21°C respectively, and an average temperature of 2°C, and that we generally have to close down mines for up to three months between January to March due to a severe drop in temperature. The table below sets out the total number of working days and days on which work was not carried out at our Beishan Mine for the relevant years of the Track Record Period:

| **Number of days** | **Year ended December 31,** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(Days)* | *(Days)* | *(Days)* |
| On which extraction and any ancillary work was carried out | 256 | 261 | 260 |
| On which work was suspended due to unfavorable and unexpected weather conditions | 13 | 8 | 8 |
| Holidays or non-working days due to the seasonal suspension of work as winter months approached (for details, please see "— Seasonality" in this section). | 6 | 97 | 97 |
| Total | **275**[1] | **366** | **365** |

*Note:*

1. As we had only obtained the mining rights to our Beishan Mine in April 2019, our days of operations of the year were only counted from April 2019 onwards.

Our Directors confirm that the mining work schedule of our Beishan Mine is generally prepared based on various factors, including but not limited to (i) historical consumption rate of graphite for processing; (ii) our extraction capacity; (iii) storage capacity of our warehouse; and (iv) weather conditions.

The table below sets out our designed capacity and our utilization rate of the extraction in our Beishan Mine for the relevant years of the Track Record Period:

| | **For the year ended December 31,** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *Tonne ('000)* | *Tonne ('000)* | *Tonne ('000)* |
| Total materials mined | 1,020 | 1,650 | 1,550 |
| — Unprocessed graphite[(4)] | 260 | 210 | 260 |
| — Unprocessed marble | 200 | 720 | 340 |
| — Waste materials | 560 | 720 | 950 |
| Designed capacity[(1)] | 1,220 | 1,900 | 2,050 |
| Utilization rate[(2), (4)] | 84%[(3)] | 87%[(3)] | 76%[(3)] |

*Notes:*

(1) For illustrative purposes only, the estimated maximum designed capacity is arrived at by multiplying: (a) the estimated number of hours for which the extraction in our Beishan Mine is in operation in a calendar year, assuming 15 hours and 260 working days of operation in 2019, 2020 and 2021, taking into account of: (i) sufficient labor is available at all times; (ii) machine downtime for maintenance, statutory holidays and suspension of mining operation from January to March due to severely cold weather for each year during the Track Record Period; (iii) two seven and a half hour shifts per working day; (iv) extraction capacity of approximately 4,600 tonnes per day in 2019 based on two excavators (Model: CAT345 and CAT349) in operation, and 7,300 tonnes per day in 2020 based on three excavators (Model: CAT345, CAT349 and Komatsu360) operating for full year and one excavator (Model: CAT340) operating for approximately three months before being redesigned as hydraulic hammer, and 7,900 tonnes per day in 2021 based on three excavators (Model: CAT345, CAT349 and Sany550) with a newer excavator model in operation; and (v) no major equipment breakdown, by (b) the estimated extraction volume (per tonne) per hour of the graphite ore extracted from our Beishan Mine. While our level of extraction capacity depends on all the mining machineries and equipment operating together as a whole, our Directors believe excavator is one of the key and effective components to contribute to the increase of our extraction capacity. Based on all mining machineries and equipment operating together as a whole, it is estimated that (a) the extraction capacity of each excavator (Model: CAT345 and CAT349) is approximately 2,300 tonnes per day; (b) the extraction capacity of excavator (Model: Komatsu360) is approximately 2,100 tonnes per day; the extraction capacity of excavator (Model: CAT340) is approximately 2,000 tonnes per day; and the extraction capacity of excavator (Model: Sany550) is approximately 3,300 tonnes per day.

(2) The utilization rate for each of the years ended is calculated based on the actual extraction volume (based on the total material mined from our Beishan Mine) for the relevant year divided by the annual designed capacity.

(3) The increase of utilization rate from 2019 to 2020 was mainly due to increase of overall operational efficiency by having more available working spaces on our mining site, which was caused by our accelerated sales of unprocessed marble placed thereon. The decrease of utilization rate from 2020 to 2021 was due to slowdown in operation of extraction as a result of upgrade construction work on the path connecting our Beishan Mine to the main road during July and August 2021.

(4) For the three years ended December 31, 2019, 2020 and 2021, the volume of unprocessed graphite consumed that were extracted from our Beishan Mine was approximately 225,000 tonnes, 211,200 tonnes and 258,300 tonnes, accounting for approximately 60.0%, 52.7% and 50.4% of our total unprocessed graphite supply. Our unutilized mining capacity recorded approximately 200,000 tonnes, 250,000 tonnes and further to 500,000 tonnes in the corresponding period, in which the increase in 2021 was due to road upgrade work. Although there was excess extraction capacity and the unit extraction costs was significantly lower than the unit procurement cost, increasing the extraction volume of our Beishan Mine leading to the decrease of unutilized mining capacity does not necessarily result in a corresponding increase in the volume of unprocessed graphite to be extracted from our Beishan Mine. According to the Independent Technical Consultant, our extraction is at the initial stage involving stripping of overburden materials in the outer area of our Beishan Mine, where it comprises a larger amount of unprocessed marble and waste proportional to the unprocessed graphite over the total materials mined and there is a maximum volume of unprocessed graphite that can be extracted from our Beishan Mine according to the mining schedule regardless of the extraction capacity. As our extraction goes deeper into our Beishan Mine without much of the top soil material that need to be stripped, the proportional volume of unprocessed graphite to be extracted from our Beishan Mine would increase accordingly. Please see "Appendix III — Independent Technical Report — 6.7 Mining Schedule" for details. For this reason, after considering the volume of unprocessed graphite that can be extracted from our Beishan Mine according to the mining schedule, we elected to procure the required amount of unprocessed graphite from third party suppliers to satisfy our production needs during the Track Record Periods.

For the three years ended December 31, 2019, 2020 and 2021, we extracted approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes of unprocessed graphite, respectively, from our Beishan Mine, at an extraction cost of approximately RMB3.8 million, RMB5.6 million and RMB5.2 million, thus approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne. Taking into account the differences in the unit cost of unprocessed graphite sourced from our suppliers and those from our Beishan Mine, our Directors are of the view that our extraction operations are essential to our core business.

Our operation of our Beishan Mine are subject to different levels of risks in various areas, such as occupational health and safety, environmental, nature of the mineral body and natural disaster that may affect our mining and production operations. The Independent Technical Consultant carried out a risk assessment highlighting the potential risks in relation to our extraction, beneficiation and processing operations. For details, please see "Risk Factors — Our operations are subject to various potential risks as identified by our Independent Technical Consultant, which may disrupt our business operations".

**Procurement or extraction of unprocessed graphite**

Prior to obtaining the mining rights of our Beishan Mine in 2019, we purchased unprocessed graphite from third-party suppliers mainly located in Heilongjiang Province for the purpose of beneficiation of flake graphite concentrate. After obtaining mining rights of our Beishan Mine, we continue to procure from our raw materials suppliers. For each year during the Track Record Period, we purchased approximately 171,000 tonnes, 189,500 tonnes and 254,200 tonnes of unprocessed graphite from our suppliers, respectively, incurring a procurement cost of approximately RMB10.8 million, RMB14.2 million and RMB19.1 million, respectively thus at a unit cost of approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively. For details of the supply of unprocessed graphite, please see "— Our suppliers — Procurement of unprocessed graphite from third-party suppliers" in this section.

**Our beneficiation and processing operations**

For the three years ended December 31, 2019, 2020 and 2021, we were engaged in the beneficiation of flake graphite concentrate (with a production volume of approximately 31,100 tonnes, 38,500 tonnes and 48,200 tonnes of flake graphite concentrate, respectively) and the processing of spherical graphite (with a production volume of approximately 3,300 tonnes, 2,700 tonnes and 4,000 tonnes, respectively).

During the Track Record Period, we increased one processing line of spherical graphite in August 2019 and had an upgrade of machinery of beneficiation plant since 2020 and as a result, we had two beneficiation lines and three processing lines for our flake graphite concentrate and spherical graphite, respectively, as at the Latest Practicable Date. We purchase our production machinery and equipment from Independent Third Parties. We have established a maintenance system for our production machinery and equipment, including regular inspections at our beneficiation and processing plants, to ensure our production lines run smoothly. Our Directors confirm that, save as disclosed in "— Our beneficiation and processing operations — Maintenance of our spherical graphite processing plant" in this section, during the Track Record Period, we did not experience any material or prolonged interruption to our production processes due to machinery and equipment failure.

As at the Latest Practicable Date, the useful life of our major beneficiation and processing equipment was estimated to be at least 10 years. We conduct regular maintenance for our machinery and equipment so as to ensure that our business operations will not be disrupted unnecessarily. Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, save and except as disclosed below, our Group did not encounter any material machinery and/or equipment breakdown that had a material adverse impact on our business operations.

The table below sets out our designed production capacity, actual production volume and our utilization rate of our production lines for the relevant years of the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Designed production capacity(1) (tonne) | Actual production volume (tonne) | Utilization rate(2) (%) | Designed production capacity(1) (tonne) | Actual production volume (tonne) | Utilization rate(2) (%) | Designed production capacity(1) (tonne) | Actual production volume (tonne) | Utilization rate(2) (%) |
| Flake graphite beneficiation | 39,974 | 31,113 | 78% | 39,974(3) | 38,464 | 96% | 51,756(3) | 48,218 | 93% |
| Processing spherical graphite | 4,176(3) | 3,267 | 78% | 5,184(3) | 2,668 | 51%(4) | 5,184 | 3,992 | 77%(4) |

*Notes:*

(1) For illustrative purposes only, the estimated maximum production capacity is arrived at by multiplying: (a) the estimated number of hours for which both beneficiation plants and processing plants are in operation in a calendar year, assuming 24 hours and 240 working days of operation per year, taking into account of: (i) sufficient labor is available at all times; (ii) machine downtime for maintenance, statutory holidays and suspension of production from January to March due to severely cold weather for each year during the Track Record Period; (iii) three eight-hour shifts per working day; (iv) production capacity of approximately 167 tonnes per day for our beneficiation plants (before the machinery upgrade) and 216 tonnes per day (after the machinery upgrade); and production capacity in the range of approximately 14 tonnes per day (before the addition of production line of spherical graphite) and approximately 22 tonnes per day (after the addition of production line of spherical graphite) for our processing plants and (v) no major equipment breakdown, by (b) the estimated processing volume (per tonne) per hour of the flake graphite concentrate processed from the beneficiation plants, and graphite spherical processed from the processing plants respectively. Before the machinery upgrade, the production capacity of beneficiation was at 167 tonnes per day, which was based on the use of key machineries, including 184 floatation machines, six ball mills and six jaw crushers. After the machinery upgrade, the production capacity is at 216 tonnes per day, the increase of which is contributed by the new addition of key machineries, including 44 flotation machines, one ball mill and one jaw crusher.

(2) The utilization rate for each of the years ended is calculated based on the actual production volume (based on final output of a finished product) for the relevant year divided by the annual designed production capacity. Unfinished products that had undergone some of the stages and then sent to external processors were excluded from the calculation of production volume. As unprocessed marble is directly sold to customers in its original form and does not require processing, it is excluded from the calculation of our utilization rate. For the year ended December 31, 2021, the calculation of utilization rate included finished product of SG-10 spherical graphite and unfinished product of SG-9 spherical graphite for the reasons that (a) due to our suspension of its purification station from November 2020 to May 2021 where our processing of spherical graphite as finished product (i.e. SG-10 spherical graphite) was outsourced to third party service providers, and our processing plant was primarily utilized to produce SG-9 spherical graphite as we experienced an substantial increase of sales volume of SG-9 spherical graphite, attributable to the large purchase orders received from our customer for the year ended December 31, 2021. Save for SG-9, other unfinished products that had undergone some of the stages and then sent to external processors were excluded from the calculation of production volume for the year ended December 31, 2021.

(3) The calculation for designed production capacity varies for the two years ended December 31, 2020 and 2021 due to (i) the commencement of an additional production line of spherical graphite in August 2019, which led to an increase in designed production capacity; and (ii) the upgrade of machinery of flake graphite beneficiation since 2020.

(4) Between November 2020 and May 2021, we experienced a temporary suspension in the processing of spherical graphite as enhancements were required to our purification station in our processing plant. We also had a temporary suspension in June 2020 as enhancements were required for our air-drying process. Hence, we had to engage third-party service provider to provide processing services for our unfinished products. For details, please see "— Our business model — Our beneficiation and processing operations — Maintenance of our spherical graphite processing plant" and "— Our suppliers — Third-party service providers — Graphite products processing services" in this section. As a result, our processing plant was only opened for 179 days for the year ended December 31, 2020. In

the hypothetical sense, should the designed production capacity's assumed working days be reduced from 240 to 179 days, thus leading to capacity to be lowered from approximately 5,184 tonnes for the year to approximately 3,867 tonnes for the year, the utilization rate of our spherical graphite processing plant for the year ended December 31, 2020 would then be approximately 69%. For the year ended December 31, 2021, if the actual production volume includes other unfinished products that had undergone some of the stages and then sent to external processors (i.e. unfinished SG-10 sent to external processor for purification process), the actual production volume shall be 5,119 tonnes with utilization rate of approximately 99%.

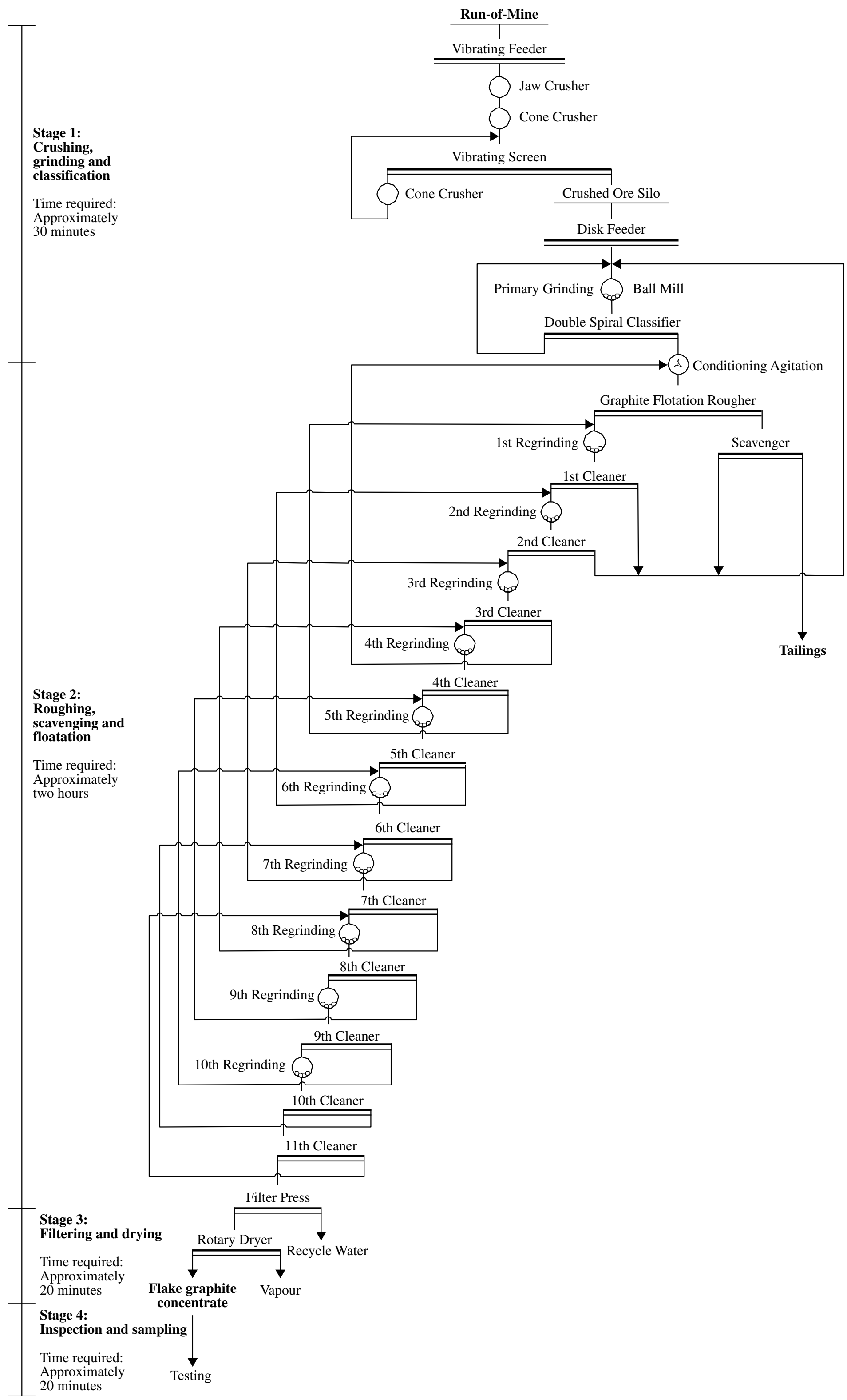
We consider that the production volume of our beneficiation operations primarily depends on the steady supply of quality unprocessed graphite. For instance, during the year ended December 31, 2019 we began using graphite extracted from our Beishan Mine, and our production volume and utilization rate of flake graphite beneficiation increased for the year ended December 31, 2020 as the raw materials procured from our suppliers were of a higher quality, combined with our own extracted unprocessed graphite, led to the highest processing volume during the Track Record Period. In general, we also sourced a larger amount of unprocessed graphite, in aggregate, every year during the Track Record Period in face of the anticipated increase in demand for our products.

We are of the view that the production volume of processing our spherical graphite primarily depends on the actual working days at the processing plant, which would generally be affected by the suspension of our operations during the months between January and March every year due to severe cold weather. For the year ended December 31, 2019, we maintained a steady production volume as a result of (i) increased orders made from other customers; and (ii) an additional processing line of spherical graphite in August 2019. The production volume for the year ended December 31, 2020 dropped because of the temporary suspension of production as enhancements were required for our air-drying process in June 2020. Moreover, between November 2020 and May 2021, we experienced a temporary suspension in the processing of spherical graphite as enhancements were required to our purification stations in our processing plant. For details, please see "— Our business model — Our beneficiation and processing operations — Maintenance of our spherical graphite processing plant" in this section. Hence, we had to engage third-party service providers to provide processing services for our unfinished products, which led to a lower overall production volume of processing our spherical graphite. For the year ended December 31, 2021, we experienced an increase in our production volume due to an increased orders on our SG-9 model spherical graphite products.

***Beneficiation of our flake graphite concentrate***

For the three years ended December 31, 2019, 2020 and 2021, we beneficiated approximately 31,000 tonnes, 38,500 tonnes and 48,200 tonnes of flake graphite concentrate, respectively. Our beneficiation plant occupies a total site area of approximately 41,000 $m^2$ with a total gross floor area of approximately 27,000 $m^2$. By our estimate, the shelf-life of this plant would be approximately 20 years. According to the Independent Technical Consultant, our beneficiation plant grew from the original design production capacity of approximately 10,000 tonnes per year to the current approximately 50,000 tonnes per year. We have completed further expansions and updates to our current beneficiation plants to increase our design production capacity of flake graphite concentrate to approximately 50,000 tonnes per year. For further details, please see "— Our business strategies" in this section.

The following flowchart illustrates the beneficiation process:



*Crushing, grinding and classification*

Once extracted from our Beishan Mine, the unprocessed graphite ore undergoes the first process of physical separation, i.e. being crushed into smaller pieces by jaw crusher, before being transported into the ball mill for primary grinding, which further reduces the size of the graphite and through which impurities are be detached from the graphite, following which the graphite is classified. Graphite ore is crushed from a maximum lump size of 750 mm to the final particle size of less than 20–30–mm before entering the ball mill. Water is injected into the process after grinding to prepare the materials for the subsequent stages. After the physical separation stage, the materials processed separate into graphite flakes of various carbon content and other refuse substances. Graphite which is not sufficiently grounded is returned to the ball mill. The general amount of time involved in this stage per cycle would be approximately 30 minutes.

*Roughing, scavenging and floatation*

After preliminary physical separation, graphite flakes enters flotation process, which embodies roughing, scavenging and flotation. The materials entering this stage generally achieve a desired level of carbon content. Roughing refers to the process the material to further remove impurities and to further reduce its size of the ore, which is also known as rough magnetic separation. The graphite ore will be going through ten separate cycles of roughing before being sent to the flotation stage. Scavenging refers to the collection of minerals that are attached to the graphite and could not be further processed, such minerals shall be pumped away to a previous stage for re-processing, or to storage area for later disposal. Floatation is the process of removing hydrophilic substances from hydrophobic substances (such as graphite, due to its water-repellent characteristics, thus being very susceptive to flotation). By removing the non-graphite substances, the carbon content of the processed material will be enhanced and determined. Our graphite material will be going through 10-stage regrinding on primary (rougher) concentrate followed by 11-stage cleaning and collective middlings recycling, before progressing onto the final stages. The general amount of time involved in this stage per cycle would be approximately two hours.

*Filtering and drying*

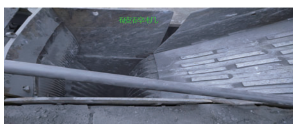
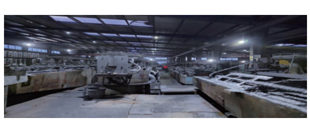
As water is used in the flotation stages, filtering, dehydration and heat-drying are employed to dry the product. Dusts and tiny particles are also removed during the heat-drying process. The general amount of time involved in this stage per cycle would be approximately 20 minutes.

*Inspection and sampling*

After the products are dried, they will be packaged before sampling, screening and inspected. The sampling size of our packaged products will be about 200g and the inspection will mostly review the compound, structure, size and carbon content of the material after processing, adhering to industry and national standards. Once all inspections have been performed, the materials will be relocated to our storage facilities. The general amount of time involved in this stage per cycle would be approximately 20 minutes.

*Major equipment*

The table below sets out information on our major equipment for the beneficiation of flake graphite concentrate as at December 31, 2021:

| **Types of equipment** | **Illustrative photo** | **Quantity** | **Principal use in our operations** | **Estimated useful lives** *(Months)* | **Approximate average remaining useful lives** *(Months)*[(1)] |
|---|---|---|---|---|---|
| Jaw crusher |  | 7 | Widely used to reduce the size, or change the form, of waste materials so they can be more easily disposed of or recycled, or to reduce the size of a solid mix of raw materials (as in graphite ore), so that pieces of different composition can be differentiated. | 120 | 20 |
| Ball mill |  | 7 | Used to grind solid materials through mechanical forces that break down graphite microstructures. After the grinding, the grain size, the grain size disposition and the grain shape will be changed. | 120 | 38 |
| Flotation machine |  | 228 | Used for graphite flotation. | 120 | 68 |
| Rotary dryer |  | 3 | Used to dry flake graphite concentrate after flotation. | 120 | 18 |

*Note:*

(1) The average remaining useful lives of our major production machinery and equipment are estimated based on (i) the historical usage of such production machinery and equipment since its acquisition; and (ii) the current and expected condition of such production machinery and equipment.

*Beneficiation yield and tailings storage*

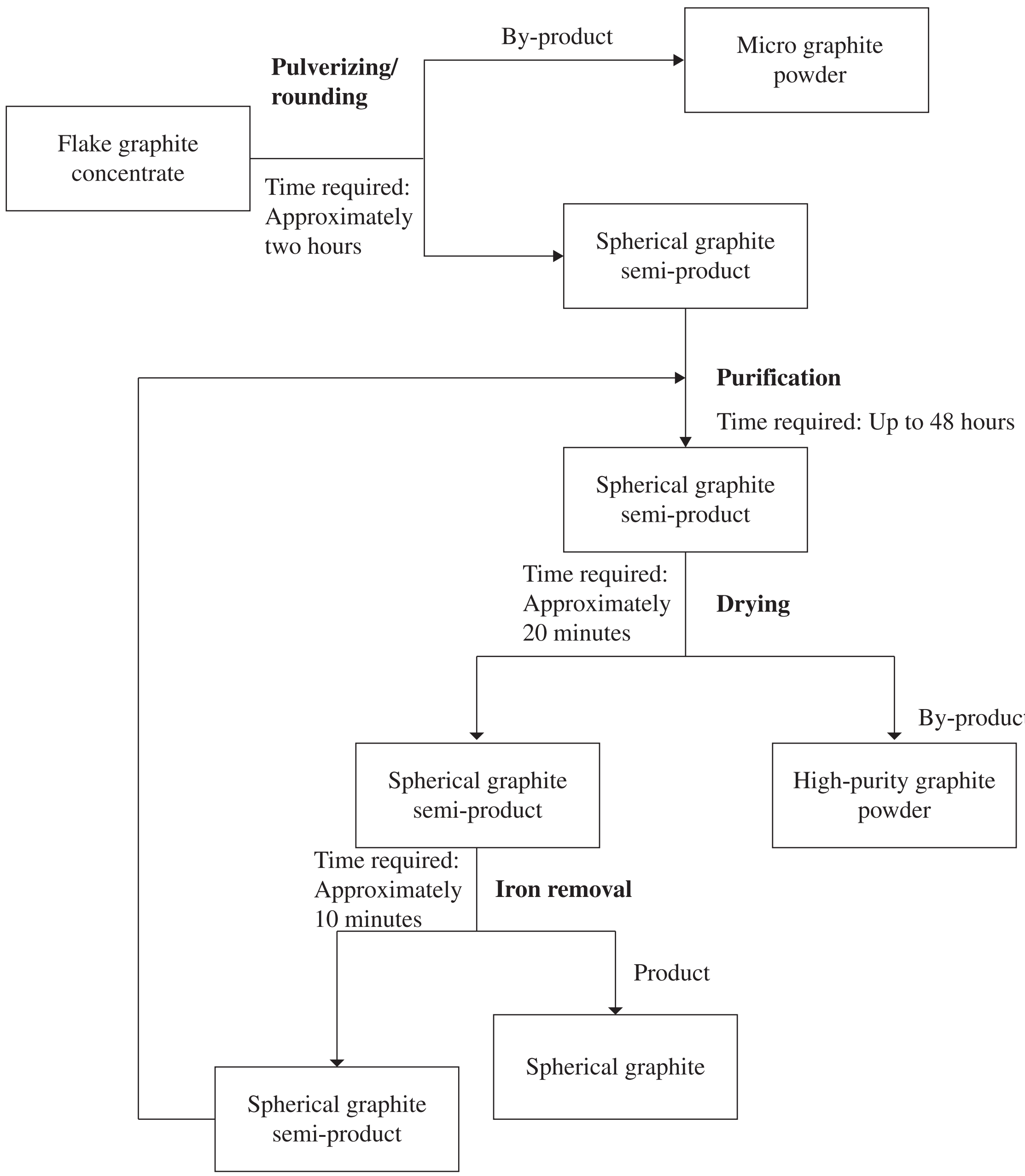
For the three years ended December 31, 2019, 2020 and 2021, our beneficiation plant had an input of unprocessed graphite of approximately 419,700 tonnes, 385,000 tonnes and 507,600 tonnes, and an output of beneficiated flake graphite concentrate of approximately 31,100 tonnes, 38,500 tonnes and 48,200 tonnes, thus reaching a yield of approximately 7.4%, 10.0% and 9.5%, respectively. The beneficiation yield is calculated by dividing the output amount of beneficiated flake graphite concentrate by the input amount of unprocessed graphite of the respective year. According to the F&S Report, our Group's beneficiation yield is in line with the industry average. The beneficiation yield of flake graphite concentrate of comparable carbon content specifications of type 194, 195 and 196 normally ranges from 5%–10% in the flake graphite concentrate industry. The beneficiation yield increased for the year ended December 31, 2020 and remained stable for the year ended December 31, 2021, primarily due to the carbon content of the unprocessed graphite extracted from our Beishan Mine was also increased as the extraction went deeper into the mine, without much of the top soil material extracted for beneficiation. Our Directors are of the view that the abovementioned fluctuation of yield during the Track Record Period would not affect the designed production capacity.

As an outcome of our beneficiation, we had generated approximately 388,600 tonnes, 346,600 tonnes and 459,400 tonnes of tailings, respectively, for the three years ended December 31, 2019, 2020 and 2021. Such tailings were stored in our current tailings storage plant located on the northern bank of Yadan River, adjacent to the north of beneficiation plant and processing plant. The storage plant was constructed on a flat ground with an embankment dam with a height of 21.5 m. According to the Independent Technical Report, our tailings storage plant has an effective storage capacity of approximately 1.2 million $m^3$. Some of the tailings are stored at the secondary tailing storage facility with designed-capacity of 900,000 $m^3$, located 3 km to the east of our tailing storage plant. As at the Latest Practicable Date, the storage plant had already accumulated approximately 572,000 $m^3$ of tailings that were pumped from the beneficiation plant through a pressurized pipeline. A decant water pond, an overflow pipe, a draining pipe and an overflow pond are built in the vicinity as a flood control. Clarified water in the tailings pond is drained into the decant pond using a well-pipe drainage facility and pumped back for use in the beneficiation plant. The Independent Technical Consultant is of the opinion that the decant well and draining pies are able to water via gravity under normal working conditions. Two water pumps have been installed in the western dam as auxiliary discharge equipment.

***Processing of spherical graphite***

For the three years ended December 31, 2019, 2020 and 2021, we processed approximately 3,300 tonnes, 2,700 tonnes and 4,000 tonnes of spherical graphite, respectively. Our processing plant uses flake graphite concentrate mostly with a carbon content of 95% as raw material to process spherical graphite through the steps of pulverizing, rounding, purifying, drying and iron removal. Through this process, we also produce micropowder graphite and high-purity graphite as by-products.

The following flowchart illustrates the spherical graphite process:




*Pulverizing and rounding*

When the flake graphite concentrate arrive at the processing plant, it will first undergo the process of pulverizing and rounding through our pulverizers, which essentially crushes the flake graphite concentrate to a smaller size (around 40 microns). During the pulverizing process, flake graphite concentrate that are not adequately pulverized will be removed for further micronization and those that have met the size requirements will progress to further stages. After pulverizing, the small-sized graphite powder will then be rounded, i.e. to gather the power into spherical forms. The round shape is necessary for them to be spread thinly and uniformly during the high-speed manufacturing process. The round shape also results in a higher density in the battery when used, better rate capacity and longer battery life. They have also been described as a "clenched-fist" or a "cabbage" structure. The final size varies between five and 20 microns depending on the application. After this process, there will be micro graphite powder produced as a by-product, separated via a classifier. The general amount of time involved in this stage per cycle would be about two hours.

*Purification and drying*

The micronized and rounded material is then purified using hydrofluoric and sulphuric acid through leaching impurities as such impurities affect battery performance. Such purification will be conducted twice. After purification, it will be dehydrated first via a press filter, and then with a centrifuge. After this process, there will be high-purity graphite powder produced as a by-product. The general amount of time involved in this stage per cycle would be about 24 hours for purification and 20 minutes for drying. The remaining and scavenged semi-product at the end of the process will return to the purification station again to enhance our overall processing yield.

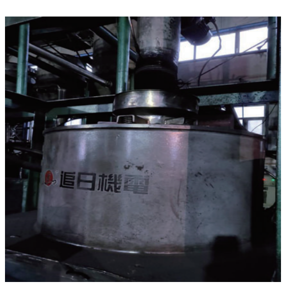
*Iron removal*

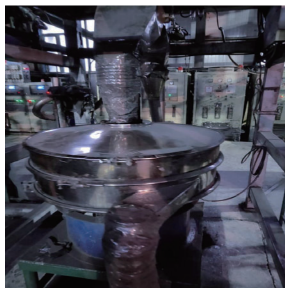
Graphite ore will often have residues or impurities of some magnetic content, which still exist after the previous stages, though in smaller quantities. Thus, before commercial use of spherical graphite, iron removal work will be required to remove via the Magnetic separator such substances. Then the spherical graphite will be screened via an ultrasound shaking sieve so that there will be little to no impurities before being sample-checked and then packed into the shape of the anode required for the lithium-ion batteries as specified by our customers. The general amount of time involved in this stage per cycle would be about ten minutes.

*Major equipment*

The table below sets out information on our major equipment for the processing of spherical graphite as at December 31, 2021:

| Types of equipment | Illustrative photo | Quantity | Principal use in our operations | Estimated useful lives | Approximate average remaining useful lives |
|---|---|---|---|---|---|
| | | | *(Months)* | *(Months)*[1] | |
| Ultrafine pulverizing unit |  | 162 | To reduce the size of the flake graphite concentrate and to re-shape the flake graphite concentrate from crystalline shape to powder form. | 120 | 60 |

| Types of equipment | Illustrative photo | Quantity | Principal use in our operations *(Months)* | Estimated useful lives *(Months)*[(1)] | Approximate average remaining useful lives |
|---|---|---|---|---|---|
| Classifier |  | 52 | To separate the ready made products from the yet to be ready substances. | 120 | 45 |
| Filter press |  | 4 | To dehydrate the spherical graphite with the filter method. | 120 | 47 |
| Centrifuge |  | 4 | To dehydrate the spherical graphite by using centrifugal force. | 120 | 56 |
| Magnetic separator |  | 3 | To remove the iron content | 120 | 43 |

| Types of equipment | Illustrative photo | Quantity | Principal use in our operations *(Months)* | Estimated useful lives *(Months)*[(1)] | Approximate average remaining useful lives |
|---|---|---|---|---|---|
| Ultrasound shaking sieve |  | 3 | To further remove impurities with the use of ultrasound. | 120 | 40 |

*Note:*

(1) The average remaining useful lives of our major production machinery and equipment are estimated based on (i) the historical usage of such production machinery and equipment since its acquisition; and (ii) the current and expected condition of such production machinery and equipment.

*Processing yield*

For the three years ended December 31, 2019, 2020 and 2021, our processing plant reached a processing yield (which is derived from each step of processing) of approximately 35.3%, 36.1% and 36.8%, respectively. Such processing yield increased steadily as primarily benefited from our research and development efforts and the patents developed and adopted by us which enhance our processing yield. The processing yield is the percentage of multiplying the yield of the pulverizing and rounding stage (40.2% in 2019, 41.9% in 2020 and 41.5% in 2021), purification stage (94.6% in 2019, 94.2% in 2020 and 94.2% in 2021), drying stage (96.4% in 2019, 95.1% in 2020 and 96.4% in 2021) and iron removal stage (96.5% in 2019, 96.3% in 2020 and 97.7% in 2021). The yield of each stage is calculated by dividing the output amount of processed graphite materials by the input amount at each different stage for the respective year. At different stages, we may add in the input amount certain work-in-progress graphite materials from current inventory, or deduct from the input amount certain work-in-progress graphite materials as reserved inventory for future use, which depends on the then inventory level and the sales demand. This calculation is different to the calculation of beneficiation yield, as the processing processes are fundamentally different from beneficiation processes. According to the F&S Report, our Group's processing yield is in line with the industry average. The processing yield of spherical graphite of comparable carbon content specification of SG-10 and with the above processing method normally ranges from 35%–40% in the spherical graphite industry. We allocate our flake graphite concentrate between direct sales and further processing into spherical graphite based on customers' demand on our spherical graphite products and our flake graphite concentrate inventory level. Our Directors are of the view that the abovementioned fluctuation of yield during the Track Record Period would not affect the designed production capacity of our processing of spherical graphite.

***Maintenance of our spherical graphite processing plant***

In June 2020, we had to temporarily suspend the processing of our spherical graphite as enhancements were required for our air-drying process, which is a bottleneck that connects all of our three processing lines. Between November 2020 and May 2021, our processing plants' purification station had undergone the enhancement in which the purification process had been suspended. Such enhancement work, in the view of our Directors, is vital for the future growth and sustainability in the processing and sales of our spherical graphite, and our Directors observe that there might be potential risks of water leakage. Upon completion of the enhancement works, our Directors observed that there was no water leakage identified, and as a result there were no damages on our equipment and facilities, environmental risks and safety hazard with respect to such potential risks of water leakage. In order to carry out the enhancement works, we suspended our purification operations. During such a period, we had engaged outsourced graphite products processing service providers to provide purification services for our unfinished products after the rounding and pulverizing stage, in order for us to continue the sales of spherical graphite to our customers. Due to the effects of severe weather from January to March 2021, such enhancement works were also suspended. Our Directors confirm that such enhancement work was completed in May 2021, and our processing plant resumed full operations.

During the suspension period in June 2020, we continued our sales of spherical graphite and by-products to our customers where we continued to generate revenue totaling approximately RMB3.4 million and did not engage any service provider to perform the work as we had sufficient inventory for sale. During the suspension period from November 2020 to May 2021, we continued our sales of spherical graphite and by-products to our customers where we continued to generate revenue totaling approximately RMB35.4 million, as we expected high demand from customer on spherical graphite and engaged service providers to perform the work for a total fee of approximately RMB6.7 million until our enhancement work was completed. Despite the incurrence of service provider fees had an impact on our gross profit of the sale of spherical graphite for the year ended December 31, 2021, our Directors are of the view that such impact was not material and there had been no material business interruption to our Group's facilities, considering that our Group remained profitable and sustainable by generating a revenue of approximately RMB198.4 million and net profit of approximately RMB53.3 million for the year ended December 31, 2021.

***Quality control***

We believe that the quality of our products is crucial to our success. We have implemented quality control procedures throughout our operations (including but not limited to, mining, procurement, and production), aiming to ensure that we can produce high quality products consistently.

As advised by our PRC Legal Advisers, according to the Standardization Law of the PRC (中華人民共和國標準化法), national standards are classified into compulsory standards and recommended standards. Compulsory standards must be complied with, while the state encourages the adoption of recommended standards. Our Directors confirm that our products are not subject to compulsory national standards.

We have established and maintained quality control standards and testing and inspection procedures during the production of our products. These standards and procedures are documented in our quality control policies or procedures. In addition, we provide training to our employees aiming to ensure effective application of our quality control procedures. As at the Latest Practicable Date, our quality control team consisted of personnel from beneficiation and processing team.

Our quality control measures primarily consist of the following:

- ***Materials and supplies*** — We consider the quality of our materials and supplies would affect the overall quality of our final products. Our materials and supplies include, among others, flake graphite concentrate supplied by Yixiang Graphite and other materials sourced from our suppliers. We perform checks and tests, if necessary, on samples of incoming materials and supplies.

- ***Beneficiation and processing*** — Quality checks and testing are performed at various stages of our processes. We perform tests on unprocessed graphite to determine its suitability for the beneficiation of flake graphite concentrate, and tests on flake graphite concentrate to ensure its suitability for the production of spherical graphite, based on carbon and moisture content. Graphite ore or flakes that do not meet the relevant quality requirements will be reprocessed, which will thereafter be subject to the same quality checks and testing again.

- ***Finished goods*** — A final test will be performed on our finished goods, by sampling, to ensure that they comply with all necessary quality specifications and requirements before they are delivered to our customers. Finished goods that do not meet the relevant chemical and quality specifications and requirements will be reprocessed and in case of spherical graphite products, could also be treated as tailings. All reprocessed finished goods will be subject to the same quality checks and inspections again.

Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, we did not receive any material claims or complaints by our customers in respect of the quality of our products and there was no incident of failure of our quality control systems which had a material and adverse impact on our business operation.

*Product feedback and returns*

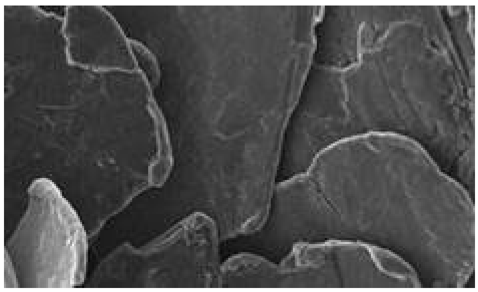
We have in place a product returns management policy governing the product returns procedures. Our agreements with major customers generally provide our major customers the right to return purchased products should such products fail to comply with the relevant standards as agreed. Upon receiving any complaints or feedback from customers regarding our products, we would examine the products sent to the customer, and to a further extent, we would also visit the site of the customer to ascertain all the necessary information. The initial feedback or complain will be handled by our sales and marketing staff whereas the follow-up will be handled by our production team. Our Directors confirm that we had not experienced any product returns during the Track Record Period.

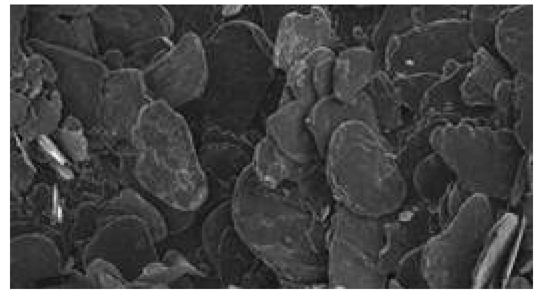
**Our products**

***Flake graphite concentrate***

Flake graphite concentrate constitutes a unique set of properties, accredited to its molecular structure. It is a crystalline form of carbon, which is (i) a solid-state lubricant; (ii) the only non-metallic conductor; and (iii) can sustain temperature greater than 3000°C. Though it is a non-metal, it has unique properties of both metal and non-metal. Given these molecular characteristics, the flake graphite concentrate is the preferred and mostly non-replaceable choice in various industries, products and applications. After being processed from flake graphite concentrate, spherical graphite is suitable and can be used as anode materials in lithium-ion batteries for electronic devices and NEVs.

The following are microscopic photos of our flake graphite concentrate:





The flake graphite concentrate being beneficiated by our Group is mainly used as heat resistant materials, and after processed to spherical graphite, as anode materials in lithium-ion batteries for further production by our customers. Mostly such flake graphite concentrate (i.e. those with a carbon content between 94% and 96.8%) is used for the production of the heat resistant magnesia carbon brick. Our flake graphite concentrate with a carbon content of 95% (or from 95% to less than 96%) can also be used for further processing into spherical graphite.

We have been selling flake graphite concentrate since our business was founded in 2006, with a focus on those with a carbon content between 94% and 96.8%. For each year during the Track Record Period, sales from our flake graphite concentrate, mainly included types, "194" (indicating a carbon content of 94% or from 94% to less than 95%), "195" (indicating a carbon content of 95% or from 95% to less than 96%) and "196" (indicating a carbon content of 96% or from 96% to 96.8%) generated revenue of approximately RMB48.6 million, RMB74.0 million and RMB92.9 million, respectively. Both 194 and 195 are applied in refractory materials, coatings, catalyzers and others. 196 is suitable for many applications such as lubricants, dispersions and friction. The following table summarizes the revenue generated, the sales volume and the average selling prices of our flake graphite concentrate during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| **Type** | **Revenue** | **Sales volume** | **Average selling price** | **Revenue** | **Sales volume** | **Average selling price** | **Revenue** | **Sales volume** | **Average selling price** |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* |
| 194 | 26,479 | 8,396 | 3,154 | 28,288 | 11,132 | 2,541 | 47,254 | 18,094 | 2,612 |
| 195 | 14,139 | 4,007 | 3,529 | 35,525 | 13,837 | 2,567 | 41,806 | 15,803 | 2,645 |
| 196 | 7,968 | 2,002 | 3,980 | 10,218 | 3,671 | 2,783 | 3,889 | 1,339 | 2,904 |
| Others[(1)] | 8,788 | 3,996 | 2,199 | 11,678 | 5,494 | 2,126 | 4,723 | 2,022 | 2,336 |
| **Total** | **57,374** | **18,401** | | **85,709** | **34,134** | | **97,672** | **37,258** | |

*Note:*

(1) Others primarily include flake graphite concentrates of other carbon content specifications.

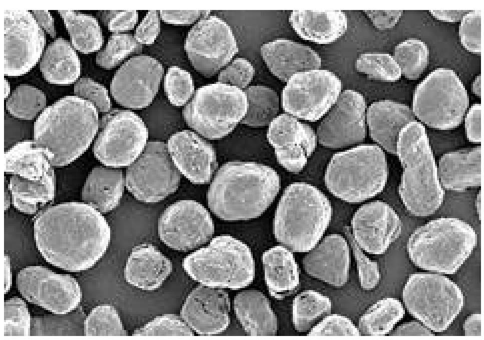
Our revenue generated from the sale of flake graphite concentrate is determined by our average selling price and sales volume. The selling price of our flake graphite concentrate is generally influenced by factors such as production costs and product specifications required by our customers. For instance, there is a general increase in the average selling price of each of our flake graphite concentrate type by the percentage of carbon content, which means the higher percentage of the carbon content, the higher the average selling prices will be. Our Directors believe that, due to the standardized nature of such flake graphite concentrate, such products may be price sensitive and easily replicated by competitors. For such reasons, we believe that our advantage on flake graphite concentrate primarily lies with effective cost structure through a vertically integrated supply chain since the year ended December 31, 2019. Another key to our success in generating revenue from the sales of flake graphite concentrate is our ability to secure new customers, or secure more orders from existing customers. Our Directors consider this to be a major contributory factor to the general increase in our revenue generated from the sales of flake graphite concentrate during the Track Record Period. This allows us to effectively pursue a competitive pricing strategy, even during the COVID-19 outbreak in the year ended December 31, 2020.

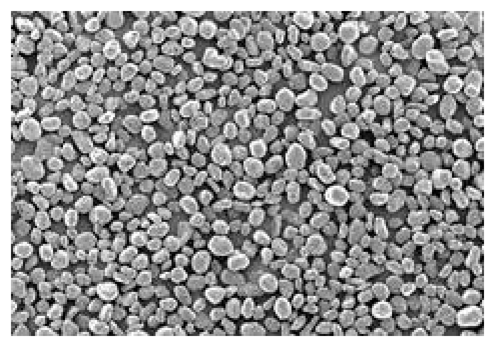
Across all the three main types of flake graphite concentrate during the Track Record Period, there had been a general increasing trend for sales volume and revenue generated, whilst there was a general declining trend for the average selling prices from 2019 to 2020. According to the F&S Report, the market average selling price for the three main types of flake graphite concentrate of type 194, 195 and 196 was approximately RMB3,700, RMB4,100 and RMB4,400 per tonne in 2019. Our average sales price for all the three main types of flake graphite in 2019 was approximately RMB3,200, RMB3,500 and RMB4,000 per tonne. The benefits from vertical integration by obtaining the mining rights of our Beishan Mine allow us to sell such products at a lower cost to capture a higher market share. According to the F&S Report, market average selling price for the three main types of flake graphite concentrate was approximately RMB3,600, RMB4,000 and RMB4,400 per tonne respectively, in 2020. Our average sales price for all the three main types of flake graphite in 2020 was approximately RMB2,500, RMB2,600 and RMB2,800 per tonne. Our average selling prices decreased in 2020, as our Directors decided to provide discounts to existing customers who might have been facing difficulties during the COVID-19 outbreak, in order to maintain our long-term relationships with such customers and to strengthen our competitiveness, and further discounts were given to two newly engaged customers during the same year. These two customers are Jixi Hongxi Graphite Co., Ltd.* (雞西市鴻熙石墨有限公司) and Qingdao Langruite Graphite Co., Ltd.* (青島朗芮特石墨有限公司). For the year ended December 31, 2020, we sold to Jixi Hongxi Graphite Co., Ltd.* (雞西市鴻熙石墨有限公司) approximately 1,378 tonnes of type 194 and 195 flake graphite concentrate for a revenue of approximately RMB2.9 million at the average selling price of approximately RMB2,100 per tonne, and approximately 67 tonnes of other by-products for a revenue of approximately RMB59,000 at the average selling price of RMB885 per tonne. The respective selling prices accounted for an average discount of approximately 17.7% and 11.3%, respectively, against the average selling price of equivalent model products. The revenue generated from Jixi Hongxi Graphite Co., Ltd.* (雞西市鴻熙石墨有限公司) for the two years ended December 31, 2020 and 2021 accounted for approximately 1.8% and 2.8% of our total revenue. For the year ended December 31, 2020, we sold to Qingdao Langruite Graphite Co., Ltd.* (青島朗芮特石墨有限公司) approximately 4,007 tonnes of type 194 and 195 flake graphite concentrate, accounting for approximately RMB8.4 million of revenue at the average selling price of approximately RMB2,100 per tonne. The selling prices accounted for a discount of approximately 17.7% against the average selling price of equivalent model products. The revenue generated from Qingdao Langruite Graphite Co., Ltd.* (青島朗芮特石墨有限公司) for the two years ended December 31, 2020 and 2021 accounted for approximately 5.0% and 5.5% of our total revenue. Jixi Hongxi Graphite Co., Ltd.* (雞西市鴻熙石墨有限公司) is a private company engaged in manufacturing and sales of graphite and carbon products in the PRC. Qingdao Langruite Graphite Co., Ltd.* (青島朗芮特石墨有限公司) is one of our top five customers in 2020 and 2021. Our Directors confirm that, save for the aforesaid business relationship, these two customers do not have any past or present relationship (including, without limitation, business, employment, family, trust, financing, fund flow or otherwise) with our Company, our subsidiaries, shareholders, directors, senior management and any of their respective associates. According to the F&S Report, the market average selling price for the three main types of flake graphite concentrate was approximately RMB3,800, RMB4,100 and RMB4,500, per tonne respectively in 2021. The slight increase in our average selling prices at approximately RMB2,600, RMB2,600 and RMB2,900 for the year ended December 31, 2021 as compared to 2020 was in line with the increase of market demand, while continuing to adopt our competitive pricing strategies.

***Spherical graphite and its by-products***

According to the F&S Report, spherical graphite is a niche technology contributing to the ongoing energy storage revolution by accelerating the performance of lithium-ion batteries. It is majorly used as a battery anode material in the lithium-ion batteries.

The following are microscopic photos of our spherical graphite:





Our spherical graphite is mainly processed from flake graphite concentrate of high carbon content (either from suppliers, or directly from Yixiang Graphite once they have completed the processing of the graphite ore extracted from our Beishan Mine). Spherical graphite processed by our Group can be used for anode materials for consumer electronic products and NEVs and, to the best knowledge of our Directors and according to the F&S Report, spherical graphite processed by us can be used as anode material in lithium-ion batteries which is one of the important material components utilized in the manufacturing of NEVs.

During the Track Record Period, we sold spherical graphite with a carbon content primarily above 99%, processed from our plants. Model numbers of our spherical graphite are designated according to the size of the spherical graphite processed (for example, SG-10, which denotes the radius of 10 μm for each spherical graphite, and it is our predominantly sold spherical graphite model in 2019 and 2020). Our other models of spherical graphite mainly consisted of SG-9 spherical graphite during the Track Record Period. Additional specifications to spherical graphite may include designated density, purity or shapes of such spherical graphite, which even within the spherical graphite model SG-10, there may be over ten variances for sale and subsequent industrial use. SG-10 and other models of spherical graphite are mainly varied by different particle size and carbon content. The application of SG-10 is various in the field of NEVs and electrics. We also sell micro graphite powder and high-purity graphite powder which are by-products of processing our spherical graphite. According to the F&S Report, the use of micro graphite powder includes manufacturing of electric carbon products, fertilizer catalysts, pencil leads, plastic composites, and the use of high-purity graphite power includes manufacturing of battery cells, electrical glue and silicon carbide. The following table summarizes the revenue generated, the sales volume and the average selling prices of our spherical graphite and its by-products from spherical graphite processing during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* |
| **Spherical graphite** | | | | | | | | | |
| *SG-10* | 47,122 | 2,343 | 20,112 | 63,926 | 3,479 | 18,375 | 47,842 | 3,059 | 15,638 |
| *Other models* | 9,998 | 645 | 15,501 | 5,237 | 444 | 11,795 | 42,443 | 3,002 | 14,138 |
| **Subtotal** | **57,120** | **2,988** | | **69,163** | **3,923** | | **90,285** | **6,061** | |
| **Micro graphite powder** | 7,103 | 5,049 | 1,407 | 6,284 | 6,296 | 998 | 8,043 | 7,733 | 1,040 |
| **High-purity graphite powder** | 2,139 | 282 | 7,585 | 712 | 134 | 5,313 | 181 | 48 | 3,771 |
| **Total** | **66,362** | **8,319** | | **76,159** | **10,353** | | **98,509** | **13,842** | |

The selling price of our spherical graphite is generally influenced by factors such as production costs and product specifications required by our customers due to their specific nature as spherical graphite products are often made upon request by customers, with tailored instructions and demands. According to the F&S Report, the market average selling price for spherical graphite for SG-10 product and SG-9 product in the market was approximately RMB19,200 per tonne and RMB15,400 per tonne in 2019. Our average selling price for our SG-10 product and other model product was approximately RMB20,100 per tonne and RMB15,500 per tonne in 2019. Moreover, the market average selling price for spherical graphite for SG-10 product and SG-9 products was approximately RMB18,000 per tonne and RMB13,400 per tonne in 2020. Our average selling price for our SG-10 product and other model products in 2020 was approximately RMB18,400 per tonne and RMB11,800 per tonne. The average selling price of our SG-10 products and other model products was lowered in 2020 as compared to 2019 with an aim to maintain our market share and customer relationships during the COVID-19 outbreak. According to the F&S Report, the market average selling price for SG-10 and SG-9 spherical graphite was approximately RMB17,800 and RMB14,300 per tonne, whereas our average selling price for SG-10 and other models are approximately RMB15,600 and RMB14,100 per tonne in 2021. The decrease in the average selling prices for the year ended December 31, 2021 as compared to 2020 was primarily attributable to an decreased sales of a high-density version of the model from approximately 14% of SG-10 high density model in 2020 to 11% of SG-10 high density model in 2021, as SG-10 lower density model had lower average selling price at approximately RMB15,200 per tonne and also contributed by our adoption of our market competitive pricing strategy. While the average selling price of other models increased, mainly due to the increased demand on our SG-9 model graphite products.

***Unprocessed marble***

The unprocessed marble is used as a material in property building and construction industry in the PRC. We began the sale of unprocessed marble as a by-product of our extraction operations in the year ended December 31, 2020, which we sold approximately 675,200 tonnes of unprocessed marble, generating a revenue of approximately RMB6.9 million. For the year ended December 31, 2021, we sold approximately 341,700 tonnes of unprocessed marble generating a revenue of approximately RMB2.2

million. Our Directors consider that the sales of such unprocessed marble are generally influenced by factors such as typical forces of supply and demand, and our extraction costs of approximately RMB4.1 million for the year ended December 31, 2020 and approximately RMB2.3 million for the year ended December 31, 2021.

**Sales and marketing**

The graphite product market in PRC is considered by our Directors to be niche and only with a finite number of industry players. During the Track Record Period, our sales and marketing team was responsible for harvesting new relationships with such industry players by physical site visits and regular communications to understand the needs of potential customers. This may be followed-up with relationship management efforts by our sales and marketing team once a customer is engaged. We also engaged customer relationship service providers to assist with our sales and marketing, and customer relationship management efforts. For the three years ended December 31, 2019, 2020 and 2021, we incurred approximately RMB0.9 million, nil and nil, respectively, for such services. Under our agreements with such service providers, we generally agree to pay such service providers fees calculated at approximately 15% of the sales revenue generated from customers introduced by such service provider, and generally any variation or termination of such agreement shall be made in written form by mutual consent. For the years ended December 31, 2020 and 2021, our Directors decided to absorb such functions in-house by expanding our sales and marketing team, and confirm that the Group no longer required such services.

Our sales and marketing approach also include sponsoring the hosting of, industry or academic events such as forums, site studies or symposiums. We believe that such an approach to be effective in increasing our exposure among industry players and potential customers, and thus building up a stable clique clientele. Such events include the fields of finance and economics. For the three years ended December 31, 2019, 2020 and 2021, such expenses incurred amounted to approximately RMB3.7 million, nil and nil, respectively. For the year ended 31 December 2019, we had entered into exclusive sponsorship agreements with an event host which are generally (i) for the term of one year; (ii) capped as to the annual sponsorship fee thereunder at a fixed aggregate amount; (iii) that we as the title sponsor shall make full payment to the event host before the opening ceremony of the relevant event (if it is held in the form of forum) or after the relevant event (if it is held in other forms); (iv) that we as the title sponsor shall be entitled to, among others, have our brand name displayed during the relevant event, our promotional materials sent to all guests of the relevant event, and private meeting opportunities with certain guests of the relevant event; and (v) provided for that, in the event of force majeure causing the event to be canceled or suspended, the event host shall return to us all the fees paid.

Our Directors confirm that for the years ended December 31, 2020 and 2021, due to the effects of the COVID-19 outbreak, many of such academic and industry events were put on hold, as our Directors observed that expenses via this sales and marketing avenue were heavily reduced. Our Directors estimate that as the government restrictions on movement and gathering may gradually be lifted, our sales and marketing efforts will continue at the resumption of such events, as these sales and marketing efforts are deemed beneficial to gaining market exposure and building rapport with existing and potential customers.

## OUR CUSTOMERS

During the Track Record Period, our major customers are primarily industrial manufacturers and retailers of heat-resistant materials. The general terms and conditions of sale are set out in the respective sales agreements with such customers. For the three years ended December 31, 2019, 2020 and 2021, our five largest customers accounted for approximately 62.9%, 59.0% and 55.7% of our Group's total revenue, and sales to the largest customer group accounted for approximately 37.9%, 37.9% and 20.1% of our Group's total revenue, respectively. The tables below set forth the basic information of our Group's top five customers during the Track Record Period:

### For the year ended December 31, 2019

| Customer | Transaction amount *(Approximate RMB'000)* | Percentage to total revenue of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Major products purchased | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| BTR New Material Group Co., Ltd. (貝特瑞新材料集團股份有限公司) and its certain subsidiaries (the "**BTR Group**") (1) | 46,943 | 37.9 | 2013 | An associated company of a China-listed company focused on the development of materials to be used in lithium-ion batteries | PRC | Spherical graphite | Within the next month after reconciliation | Bank's acceptance bill or telegraphic transfer |
| Qingdao Longdi Carbon Technology Co., Ltd.* (青島龍迪碳材料科技有限公司) | 8,795 | 7.1 | 2019 | Focused on the manufacturing of graphite products and research and development of materials of lithium-ion batteries | PRC | Spherical graphite | Within the same month after the receipt of invoice | Telegraphic transfer |
| Dashiqiao Guancheng Refractory Co., Ltd. (大石橋市冠誠耐火材料有限公司) | 8,260 | 6.7 | 2013 | A retailer for heat-resistant materials | PRC | Flake graphite concentrate | Within the same month after the receipt of invoice | Bank's acceptance bill |
| Yingkou Guangyang Refractories Materials Co., Ltd. (營口光陽耐火材料有限公司) and YingKou Krosaki Harima Refractories Co., Ltd. (營口黑崎播磨耐火材料有限公司)(2) | 8,034 | 6.5 | 2008 | A manufacturer for magnesium-carbon bricks and other carbonized bricks | PRC | Graphite | Within a month or about 50 days after the receipt of invoice | Bank's acceptance bill |
| Dashiqiao Lele Refractory Materials Co., Ltd. (大石橋市樂樂耐火材料有限公司) | 5,752 | 4.7 | 2018 | A processor and retailer of heat-resistant materials | PRC | Flake graphite concentrate | Within a month after the receipt of invoice | Bank's acceptance bills |
| **Total** | **77,784** | **62.9** | | | | | | |

### For the year ended December 31, 2020

| Customer | Transaction amount *(Approximate RMB'000)* | Percentage to total revenue of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Major products purchased | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| BTR Group[(1)] | 63,926 | 37.9 | 2013 | An associated company of a China-listed company focused on the development of materials to be used in lithium-ion batteries | PRC | Spherical graphite | Within the next month after reconciliation | Bank's acceptance bill or telegraphic transfer |
| Dashiqiao Guancheng Refractory Co., Ltd. (大石橋市冠誠耐火材料有限公司) | 11,662 | 6.9 | 2013 | A retailer for heat-resistant materials | PRC | Flake graphite concentrate | Before the 15th day of the next month after the receipt of invoice | Bank's acceptance bill |
| Qingdao Tianshengda Graphite Co., Ltd.* (青島天盛達石墨有限公司) | 10,378 | 6.1 | 2013 | A processor, retailer and exporter of graphite products | PRC | Flake graphite concentrate | No credit term | Bank's acceptance bill |
| Qingdao Langruite Graphite Co., Ltd.* (青島朗芮特石墨有限公司) | 8,443 | 5.0 | 2020 | A retailer, importer and exporter of graphite products | PRC | Flake graphite concentrate | Up to 60 days | Bank's acceptance bill |
| Yanshi Zhongyue Refractory Materials Co., Ltd. (偃師中岳耐火材料有限公司) | 5,195 | 3.1 | 2008 | A manufacturer and retailer for heat-resistant materials | PRC | Flake graphite concentrate | Before the 15th day of the next month after the receipt of invoice, or within the same month of the receipt of invoice, depending on the invoice terms | Bank's acceptance bill or telegraphic transfer |
| **Total** | **99,604** | **59.0** | | | | | | |

**For the year ended December 31, 2021**

| Customer | Transaction amount *(Approximately RMB'000)* | Percentage to total revenue of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Major products purchased | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| Qingdao Longdi Carbon Technology Co., Ltd.* (青島龍迪碳材料科技有限公司) | 40,523 | 20.4 | 2019 | Focused on the manufacturing of graphite products and research and development of materials of lithium-ion batteries | PRC | Spherical graphite | Within 3 months after the receipt of invoice | Telegraphic transfer |
| BTR Group[1] | 39,956 | 20.1 | 2013 | An associated company of a China-listed company and focused on the development of materials to be used in lithium-ion batteries | PRC | Spherical graphite | Within the next 3 months after reconciliation | Bank's acceptance bill or telegraphic transfer |
| Qingdao Langruite Graphite Co., Ltd.* (青島朗芮特石墨有限公司) | 10,998 | 5.5 | 2020 | A retailer, importer and exporter of graphite products | PRC | Flake graphite concentrate | Within the same month after the receipt of invoice | Bank's acceptance bill or telegraphic transfer |
| Dashiqiao Guancheng Refractory Co., Ltd.* (大石橋市冠誠耐火材料有限公司) | 9,606 | 4.9 | 2013 | A retailer for heat-resistant materials | PRC | Flake graphite concentrate | Within the same month after the receipt of invoice | Bank's acceptance bill |
| Qingdao Luowei New Materials Co., Ltd.* (青島洛唯新材料有限公司) | 9,442 | 4.8 | 2021 | Focused on manufacturing of graphite products | PRC | Flake graphite concentrate and spherical graphite | Within 7 days after signing of contract or within 3 months | Bank's acceptance bill |
| Total | 110,525 | 55.7 | | | | | | |

*Notes:*

1. Our Group conducted businesses with BTR New Material Group Co., Ltd.* (貝特瑞新材料集團股份有限公司) for each of the years ended December 31, 2019, 2020 and 2021. In addition, such amount also included the transactions with two subsidiaries of BTR New Material Group Co., Ltd.* (貝特瑞新材料集團股份有限公司) for the years ended December 31, 2020 and 2021, respectively. Headquartered in Shenzhen, China, BTR New Material Group Co., Ltd.* (貝特瑞新材料集團股份有限公司) has been listed on the National Equities Exchange and Quotations since 2015.

2. To the best of our Directors' knowledge, the two entities are the subsidiaries of a company which principally engages in manufacturing of refractories and magnesia carbon brick located in the proximity of Jinlong Industrial Park, Dashiqiao City, the PRC.

Our Directors confirm that the five largest customers of our Group during the Track Record Period were all independent third parties and that none of our Directors, their respective close associates or any Shareholder (which to the knowledge of our Directors owning more than 5% of our share capital as at the Latest Practicable Date) had any interest, directly or indirectly, in any of our issued Group's top five customers during the Track Record Period. During the Track Record Period, to the best knowledge of our Directors, our Group did not have any material disputes with its customers or face any major return of defective products.

We believe that perceived quality and reputation are of paramount importance for the sales of our products. To the best knowledge of our Directors and based on public information and the F&S Report, our major customers, including, BTR Group, Qingdao Longdi Carbon Technology Co., Ltd.* (青島龍迪碳材料科技有限公司) and Dashiqiao Guancheng Refractory Co., Ltd.* (大石橋市冠誠耐火材料有限公司) use our graphite products as such: (i) in the case of flake graphite concentrate, primarily in manufacturing refractory bulk materials, converter magnesia carbon bricks and other heat-resistant products; (ii) in the case of spherical graphite, primarily in manufacturing of anode materials for lithium-ion batteries for electronic devices and NEVs, the products of which are sold to the PRC and overseas markets; and (iii) in the case of micro-graphite powder and high-purity graphite power, in manufacturing of electric carbon products, fertilizer catalysts, pencil leads, plastic composites, battery cells, electrical glue and silicon carbide. While we have not entered into any long-term sales agreement with our major customers, we believe that our business relationships with our major customers are well-established and that our commitment to product quality and a competitive pricing strategy will enable us to further attract new customers to diversify our customer base. According to the F&S Report, it is not uncommon that companies engaged in the sales of flake graphite concentrate and spherical graphite do not enter into long-term sales agreement with their major customers in the PRC. Nevertheless, our Group aims to continue to broaden our customer base and product range which may eventually reduce any concentration and counter-party risk in future. Whilst it is considered as an advantage to have a stable customer base comprising large industry players, our Group aims to continue to broaden our customer base and product range which may eventually reduce any concentration and counter-party risk in the future. Please see "Risk factors — Risks relating to our business and operations — We rely on a limited number of customers for a substantial portion of our revenue" for details.

**Salient terms of our sale and purchase agreements with our major customers**

During the Track Record Period, we generally entered into legally binding sale and purchase agreements with our major customers, who placed individual purchase orders in accordance with the terms stipulated in our relevant sale and purchase agreements. Our Directors confirm that there had not been any material breaches of these agreements during the Track Record Period. The typical salient terms of the sale and purchase agreements we entered into with our five largest customers for the Track Record Period are set out below:

| | |
|---|---|
| Order details: | Specification, quantity unit price and total purchase amount are to be specified in the purchase orders |
| Quality control: | Standards to be abided by national standards (save that under the agreements with BTR Group it adopts Restriction of Hazardous Substances Directive (ROHS) and the highest one among national standards, industry standards and common standards) and specific standards required by customer in individual orders. Our Directors confirm that our products (including the quality control as stipulated in the agreements) are not subject to compulsory national standards. |

| | |
|---|---|
| Delivery: | Transport directly to customer's factory or designated location, costs of which are borne by us or paid in advance by customer |
| Duration: | Generally not specified as each agreement is for one-off purchase, save that under the agreements with BTR Group the duration is specified to be one year provided that after expiration the parties may choose to continue trading subject to the terms and conditions thereof. |
| Purchase Commitment/ Target: | In general the exact purchase quantities are stipulated in the agreements to be decided by the customer according to its actual needs. |
| Termination: | In general the agreements contain no specific termination clauses but to be governed by the Economic Contract Law of the People's Republic of China, save that under the agreements with BTR Group the customer is entitled to terminate the agreement unilaterally in the event of significant defect of the products, late delivery exceeding 15 days, non-compliance with prescribed standards or our breach of confidentiality provisions regarding commercial secrets or warranties in relation to intellectual property rights. |

**Pricing**

Our overall pricing strategy is to be price-competitive in the market, especially after the better cost control measures implemented since obtaining the mining rights to our Beishan Mine. We normally set the prices for our products based on analysis on market demand and we take into account a variety of factors, including but not limited to, prices of our competitors, production costs and the product specifications required by our customers. Our senior management would rely on (i) communications between our sales staff (either by phone or in person) with our customers on the demand for average selling price, or general feedback of their product, in order to deduce market demand for our graphite products, (ii) monthly market studies conducted by our sales and marketing team; (iii) comparable selling prices of similar products offered by our competitors; (iv) an analysis on revenue, gross profit and net profit provided by our finance and sales departments; and (v) references to sales targets of previous years in order to determine the pricing of our products. We would also adjust our prices as a response to occurrence of unexpected events. For instance, during the COVID-19 outbreak, we adjusted our average selling price in order to maintain stable relationships with existing customers. We also gave further discounts to new customers and those willing to prepay for our products, in order to reduce our trade and bills receivables turnover days.

Leveraging on the cost-saving benefits from vertical integration by acquiring and obtaining the mining rights of our Beishan Mine, we adopt a competitive pricing strategy to attract more customers, of which its success is evidenced by the increase in our number of customers for the three years ended December 31, 2019, 2020 and 2021 being 53, 59 and 88. Our Directors are of the view that such strategy will enable us to continue to attract new customers and will allow us to diversify our customer base.

**Payment terms and credit control**

To the best knowledge and belief of our Directors, it is not uncommon for PRC companies involved in the manufacturing and sale of products to grant credit terms to customers. During the Track Record Period, most of our major customers were granted a credit period up to three months. Given the established business relationships and significant transaction amounts with our major customers, as well as their good credit history, our Directors believe that the aforesaid credit arrangement with our major customers will facilitate our transactions with customers as well as the business operations of our Group as a whole.

In terms of payment, most of our customers pay by bank's acceptance bill. Such bills were given to us at the end of the credit period, with a maturity date between six and 12 months. Upon receipt of the bank acceptance bills paid by our customers for settlement of our invoices, we would then use such bank acceptance bills to settle our outstanding payments owing to our suppliers and third party service providers. Our Directors believe that the bill endorsement arrangement allows our Group to mitigate potential credit losses since the bills are issued and payable by banks and financial institutions which assure any third-party that the banks will back the obligations of the creator of the bills in the event that the creator cannot make payment. Our Directors confirm this payment practice has been a long on-going industry practice.

For the three years ended December 31, 2019, 2020 and 2021, our total trade and bills receivables amounted to approximately RMB113.6 million, RMB160.9 million and RMB148.6 million, of which our bills receivables amounted to approximately RMB61.8 million, RMB85.5 million and RMB98.2 million, respectively. In order to minimize the credit risk that may potentially arise due to the prolonged receivables turnover days and the reliance on bank bills, our Group has implemented internal control measures to monitor the outstanding receivables of our customers and bills receivables. We also paid our creditors by endorsing certain of our bills receivables in order to mitigate our potential credit losses.

The responsibility of collecting accounts receivables lies mainly with our sales staff. In general, our customers should begin to make payment upon receiving an invoice from us. If we receive a bank's acceptance bill, records shall be kept by the finance team and confirmed by the sales supervisor. Sales staff shall check, at the end of each month, that the records between the sales department and the finance depart are consistent, then report to the general manager. The sales staff must also check and confirm with our customers once to twice a year to ensure that the balances of the accounts of both parties are accurate. In the event that certain amounts could not be received from long outstanding trade receivables, we would commence litigation against such customers for liquidated damages as recovery. During the Track Record Period, there was no material breach of sale and purchase agreements nor purchase orders by our customers.

## OUR SUPPLIERS

During the Track Record Period, our major suppliers included suppliers of utilities such as electricity and suppliers of unprocessed graphite. For the three years ended December 31, 2019, 2020 and 2021, purchases from our top five suppliers accounted for approximately 69.2%, 63.8% and 57.0% of our total purchases for the same period, respectively, and purchases from our top supplier accounted for approximately 36.1%, 34.7% and 27.5% of our total purchases for the same period, respectively. The tables below set forth the basic information of our Group's top five suppliers during the Track Record Period:

### For the year ended December 31, 2019

| Supplier | Transaction amount *(Approximate RMB'000)* | Percentage to total purchase of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Products/services principally procured/rendered | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| The State Grid Heilongjiang Luobei County Electric Power Bureau Co., Ltd.* (國網黑龍江蘿北縣電業局有限公司) | 23,532 | 36.1 | 2006 | The state electricity grid | PRC | High voltage electricity | No credit term | Telegraphic transfer |
| Supplier B[(1) and (2)] | 10,776 | 16.5 | 2019 | Focused on the mining investments, consultation, mineral processing and trading | PRC | Unprocessed graphite ore | No credit term | Telegraphic transfer |
| Heilongjiang Hegang Luobei Branch of Petroleum Co., Ltd.* (中國石油天然氣股份有限公司黑龍江鶴崗蘿北石油分公司) and Baoquanling Branch of PetroChina & NK Fuels Co., Ltd.* (中油黑龍江農墾石油有限公司寶泉嶺分公司)[(3)] | 3,958 | 6.1 | 2016 | A retailer of petroleum products, refined oil, gas, hazardous chemicals products and groceries | PRC | Diesel fuel | No credit term | Telegraphic transfer |
| Qingdao Anhe Shengtai Chemical Co., Ltd.* (青島安和盛泰化工有限公司) | 3,557 | 5.5 | 2019 | A manufacturer and distributor of chemical products and containers | PRC | Hydrochloric acid, acid base | 3 days | Telegraphic transfer |
| Hegang Xingxing Coal Mine* (鶴崗市興星煤礦) and Hegang Wanchang Coal Mine* (鶴崗市萬昌煤礦)[(4)] | 3,322 | 5.0 | 2017 | Mining of coal | PRC | Coal | No credit term | Bank's acceptance bill or telegraphic transfer |
| | **45,145** | **69.2** | | | | | | |

**For the year ended December 31, 2020**

| Supplier | Transaction amount *(Approximate RMB'000)* | Percentage to total purchase of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Products/services principally procured/rendered | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| The State Grid Heilongjiang Luobei County Electric Power Bureau Co., Ltd.* (國網黑龍江蘿北縣電業局有限公司) | 25,794 | 34.7 | 2006 | The state electricity grid | PRC | High voltage electricity | No credit term | Telegraphic transfer |
| Luobei County Yunshan Longxing Graphite Development Co., Ltd.* (蘿北縣雲山龍興石墨開發有限公司)(2) | 14,214 | 19.1 | 2020 | A graphite mining company and manufacturer and retailer of flake graphite concentrate products | PRC | Unprocessed graphite ore | No credit term | Telegraphic transfer |
| Yilan Country Rongda Coal Distribution Co., Ltd.* (依蘭縣融達煤炭經銷有限責任公司) | 2,915 | 3.9 | 2020 | A retailer for coal and coal gangue | PRC | Coal | No credit term | Bank's acceptance bill or telegraphic transfer |
| Hegang Shunlong Blasting Engineering Co., Ltd.* (鶴崗市順隆爆破工程有限公司) | 2,287 | 3.1 | 2019 | Focused on the design and construction, safety supervision and blasting operations | PRC | Blasting service | Up to one month | Bank's acceptance bill |
| Yingkou Hongsuo Textile Co., Ltd. (營口宏梭織業有限公司) | 2,189 | 3.0 | 2012 | A manufacturer of processed or woven carry-bag | PRC | Packaging | One month after the delivery date | Bank's acceptance bill |
| | **47,399** | **63.8** | | | | | | |

### For the year ended December, 31, 2021

| Supplier | Transaction amount *(Approximately RMB'000)* | Percentage to total purchase of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Products/services principally procured/rendered | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| The State Grid Heilongjiang Luobei County Electric Power Bureau Co., Ltd.* (國網黑龍江蘿北縣電業局有限公司) and the Luobei Power Supply Branch of State Grid Heilongjiang Electric Power Co., Ltd.* (國網黑龍江省電力有限公司蘿北縣供電分公司)(5) | 29,607 | 27.5 | 2006 | The state electricity grid | PRC | High Voltage electricity | No credit term | Telegraphic transfer |
| Luobei County Yunshan Longxing Graphite Development Co., Ltd.* (蘿北縣雲山龍興石墨開發有限公司)(2) | 19,079 | 17.7 | 2020 | A graphite mining company and manufacturer and retailer of flake graphite concentrate products | PRC | Unprocessed graphite ore | No credit term | Telegraphic transfer |
| Qingdao Zhiqing Economic Service Co., Ltd.* (青島智擎經濟服務有限公司) | 4,946 | 4.6 | 2021 | Crowdsourcing | PRC | Labor services | Withing 3 days upon receipt of invoice | Telegraphic transfer |
| Yilan Country Rongda Coal Distribution Co., Ltd.* (依蘭縣融達煤炭經銷有限責任公司) | 3,902 | 3.6 | 2020 | A retailer for coal and coal gangue | PRC | Coal | No credit term | Bank's acceptance bill or telegraphic transfer |
| Yingkou Hongsuo Textile Co., Ltd. (營口宏梭織業有限公司) | 3,888 | 3.6 | 2012 | A manufacturer of processed or woven carry-bag | PRC | Packaging | One month after the delivery date | Bank's acceptance bill |
| Total | 61,422 | 57.0 | | | | | | |

*Notes:*

1. Our Group procured unprocessed graphite ore from Luobei County Yunshan Graphite Mining Co., Ltd.* (蘿北縣雲山石墨採礦有限責任公司) for the year ended December 31, 2018 for further processing. To our Directors' best knowledge, such company transferred its mining rights to Supplier B in 2019 and thus our Group procured the unprocessed graphite ore from Supplier B.

2. To our Directors' best knowledge, Luobei County Yunshan Longxing Graphite Development Co., Ltd.* (蘿北縣雲山龍興石墨開發有限公司) and Supplier B are each a subsidiary of a company focused on mining investment and mineral consulting service established in 2009 and headquartered in Beijing, China.

3. Heilongjiang Hegang Luobei Branch of Petroleum Co., Ltd.* (中國石油天然氣股份有限公司黑龍江鶴崗蘿北石油分公司) is the subsidiary of PetroChina Co., Ltd.* (中國石油天然氣股份有限公司), a company established in 1999 and headquartered in Beijing, China. PetroChina Co., Ltd.* (中國石油天然氣股份有限公司) which has been listed on the Stock Exchange and Shanghai Stock Exchange since 2000 and 2007, respectively, is ultimately controlled by the State Council of the PRC. Baoquanling Branch of PetroChina & NK Fuels Co., Ltd.* (中油黑龍江農墾石油有限公

司) is 49% held by PetroChina Co., Ltd.* (中國石油天然氣股份有限公司) and 51% held by CNPC Heilongjiang Nongken Petroleum Co., Ltd.* (中油黑龍江農墾石油有限公司), which is also ultimately controlled by the State Council of the PRC.

4. To our Directors' best knowledge and based on enquiry, they are ultimately controlled by an Independent Third Party.

5. The State Grid Heilongjiang Luobei County Electric Power Bureau Co., Ltd.* (國網黑龍江蘿北縣電業局有限公司) was de-registered on 27 November 2021. To our Directors' best knowledge, such company transferred its business to the Luobei Power Supply Branch of State Grid Heilongjiang Electric Power Co., Ltd.* (國網黑龍江省電力有限公司蘿北縣供電分公司) upon de-registration, thus our Group purchased electricity from both suppliers in 2021.

   The State Grid Heilongjiang Luobei County Electric Power Bureau Co., Ltd.* (國網黑龍江蘿北縣電業局有限公司) is a subsidiary of the Heilongjiang Province Power Co., Ltd.* (國網黑龍江省電力有限公司). The Luobei Power Supply Branch of State Grid Heilongjiang Electric Power Co., Ltd.* (國網黑龍江省電力有限公司蘿北縣供電分公司) is one of the branches of the Heilongjiang Province Power Co., Limited.

Our Directors confirm that the five largest suppliers during the Track Record Period were all Independent Third Parties and that none of our Directors, their respective close associates or any Shareholder (which to the knowledge of our Directors owning more than 5% of our share capital as at the Latest Practicable Date) had any interest, directly or indirectly in any of our five largest suppliers during the Track Record Period. Our Directors confirm that our Group did not experience any material disruption, disputes or delay in relation to the supply by our suppliers during the Track Record Period and up to the Latest Practicable Date.

We select our suppliers (and third-party service providers) based on various factors, including but not limited to product or service quality, pricing and delivery time, so as to ensure that materials and supplies supplied by our suppliers meet the required quality standards for our production purposes. We usually source for potential suppliers by conducting market research, after which we will contact them to enquire about the price of the relevant materials and supplies and obtain, among other documents, a copy of their business license, tax registration certificate and any other licenses and permits that are required for the services to be provided.

The results of the price enquiries and the relevant documents of the potential suppliers and service providers are submitted to our general manager for his approval, who will make the final decision on the suppliers to be selected. The selected suppliers will be entered into our Company's approved list, which is maintained and updated on a periodical basis by our procurement team. In addition, we also regularly review and evaluate our suppliers and their product quality to ensure continuing satisfaction of our production and future development needs, compliance with our quality standards.

We consider it important to maintain good business relationships with our suppliers and where possible, diversify our supplier base so as to avoid any disruptions in material supply. Our Directors confirm that during the Track Record Period and as at the Latest Practicable Date: (i) we did not experience any material difficulties in obtaining materials and supplies material to our production processes in a timely manner; (ii) we did not have any material disputes with our major suppliers; (iii) as advised by the Independent Technical Consultant, while the unprocessed graphite extracted from our Beishine Mine and that procured from our suppliers are of similar nature and state as they are located along the same geological belt in Heilongjiang Province, thereby having similar ore age and characteristics, the quality of the unprocessed graphite extracted from our Beishan Mine are generally better than that procured from third party suppliers in terms of carbon content as the average TGC of the unprocessed graphite extracted from our Beishan Mine was assessed at approximately 10.15%, which is higher, and hence better, than the average TGC of that procured from suppliers at approximately 9.43% during the Track Record Period; and (iv) save as disclosed in "— Utilities provider" in this section, we have not entered into any long-term agreements with our suppliers.

**Procurement of unprocessed graphite from suppliers**

Prior to obtaining the mining rights of our Beishan Mine, our raw materials used for beneficiation were purchased from suppliers located in Heilongjiang Province. Such raw materials (i.e. unprocessed graphite) were supplied through the same mine, though operated by different entities with different licenses during the Track Record Period. The salient terms of the supply agreements with such suppliers are generally as follows:

| | |
|---|---|
| Duration: | One year |
| Pricing: | Based on a fixed unit price set out in the agreements |
| Termination: | Among other things, the relevant agreement may be terminated by mutual consent or force majeure. Further, if there are any material changes to governmental mining policy, development system restoration project, graphite resources integration in Yunshan, or governmental policy requirements etc., which would render the continual performance of the agreement impossible, our unprocessed graphite supplier is entitled to unilaterally terminate the agreement without incurring any liabilities for breach of such agreement. |
| Delivery: | Delivery takes place in the quarry stipulated in the agreements |
| Quantity: | In accordance with the quantity stipulated in the agreement |

For the three years ended December 31, 2019, 2020 and 2021, we purchased approximately 171,000 tonnes, 189,500 tonnes and 254,200 tonnes of unprocessed graphite ore from such suppliers at approximately RMB10.8 million, RMB14.2 million and RMB19.1 million, respectively. The unit cost of unprocessed graphite from such suppliers is estimated at approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively.

**Utilities provider**

During the Track Record Period, we paid our electricity supplier based on the unit electricity price promulgated by the PRC government, which we believe was the market rate, and the fee was settled on a monthly basis.

Our electricity supplier was also one of our largest suppliers during the Track Record Period. In order to ensure that we will have a stable supply of electricity sufficient for our business operations, we enter into a legally binding agreement with our electricity supplier for a term of one or five years (with automatic renewal unless either party serve a written notice to object) with the typical salient terms set out below:

| | |
|---|---|
| Designed capacity of electricity point: | One electricity point with a designed capacity of 4,000 to 6,410 kilovolts. |
| Meter reading, price and price adjustment: | Our electricity supplier will generally determine the amount of electricity supplied to our Group based on the meter reading on each month before the $24^{th}$ calendar day (subject to adjustment made by our electricity supplier). The price is determined by the competent administrative authority having electricity administration power. Any price adjustment is made in accordance with the competent administrative authority's price adjustment policies. |
| Payment term: | Monthly settlement (in three installments) of outstanding amounts for electricity supplied in the previous month. In the event of any dispute between the parties in relation to the electricity fees payable, our Group shall still pay the full amount as originally charged in advance. An adjustment will be made once the dispute has been settled. |
| Termination and renewal: | The agreement shall be terminated by: (i) our electricity supplier loses its entity status or is declared bankrupt in accordance with the law; (ii) we as the electricity user lose our entity status or are declared bankrupt in accordance with the law; (iii) the agreement is terminated in accordance with the law or clauses of the agreement; or (iv) both parties or either party file a written notice objecting the continued performance of the agreement.<br><br>If we as the electricity user do not use electricity for six consecutive months and do not apply for suspension of electricity usage, our electricity supplier may take measures to cancel our account and terminate the agreement. |
| Consequences for breach: | If our electricity supplier violates its electricity quality obligation under the agreement and causes us losses, it shall compensate us for our actual loss with a maximum compensation cap, unless the failure to perform its obligation is due to our reasons. If our electricity supplier terminates the electricity supply in breach of the agreement and causes us losses, it shall compensate us for the actual loss with a maximum cap. |

If we commit a breach of the agreement, we shall make corrections in accordance with the government's directions, industry standards of the electricity supply industry or the relevant clauses of the agreement, and shall continue to perform under the agreement.

For the three years ended December 31, 2019, 2020 and 2021, cost of sales incurred for the consumption of electricity amounted to approximately RMB21.6 million, RMB22.5 million and RMB23.0 million, respectively. We believe that the dedicated electricity point to be sufficient for our future mining and processing operations going forward. Our Directors confirm that there had not been any material disruption in such electricity supply during the Track Record Period and up to the Latest Practicable Date. However, our graphite production relies on the consumption of electricity and there is no assurance that the price of electricity or the price of materials used to generate electricity would not rise in the future. Please see "Risk Factors — Risks relating to our business and operations — There may be disruptions to the supply of, or an increase in prices of, among others, electricity and materials and supplies".

**Overlapping customers and suppliers**

For the year ended December 31, 2021, two of our Group's suppliers were also our customers. The following table sets out our Group's total sales revenue and purchase amount from the overlapping customers-suppliers during the period indicated:

| **Sales to the overlapping customer-suppliers** | **For the year ended December 31, 2021** |
|---|---|
| Sales revenue *(RMB'000)* | 593 |
| As a percentage of our total sales revenue *(%)* | 0.3 |
| Gross profit *(RMB'000)* | (46) |
| Gross profit margin *(%)* | (7.7) |

The gross profit margin from overlapping customers and suppliers for the year ended December 31, 2021 was (7.7)% as the products sold to these customers were primarily unprocessed marbles, the price of which was lowered in 2021 to accelerate sales in order to make available working spaces for other extracted materials on our site and our customers' demand on unprocessed marble decreased due to the slowdown in the property building and construction industry in the PRC in second half of 2021.

| **Purchases from overlapping customers-suppliers** | |
|---|---|
| Purchase amount *(RMB'000)* | 1,225 |
| As a percentage of our total purchase costs *(%)* | 1.1 |

Luobei Fengxiang Yongding Building Materials Store* (蘿北縣鳳翔鎮永鼎建材商店) was one of our customers of unprocessed marble for the year ended December 31, 2021, with sales revenue of approximately RMB0.6 million, representing approximately 0.3% of our Group's total revenue for the year ended December 31, 2021. Luobei Fengxiang Yongding Building Materials Store* (蘿北縣鳳翔鎮永鼎建材商店) was one of the suppliers of consumables for the year ended December 31, 2021, with purchase amount of approximately RMB10,000. The shareholder of Luobei Fengxiang Yongding

Building Materials Store* (蘿北縣鳳翔鎮永鼎建材商店) is also the shareholder of Luobei County Yongding Construction Machinery Equipment Rental Co., Ltd.* (蘿北縣永鼎工程機械設備租賃有限公司), which provided leasing of equipment and machinery services to the Company in 2021 for a service fee of approximately RMB1.2 million. As such, Luobei Fengxiang Yongding Building Materials Store* (蘿北縣鳳翔鎮永鼎建材商店) is regarded as an overlapping customer and supplier.

Jiamusi Jinzhu Wear-resistant Materials Co., Ltd.* (佳木斯市金鑄耐磨材料有限公司) was one of our customers of graphite tailings for the year ended December 31, 2021, with sales revenue of approximately RMB1,000, representing approximately 0.0% of our Group's total revenue for the year ended December 31, 2021. Jiamusi Jinzhu Wear-resistant Materials Co., Ltd.* (佳木斯市金鑄耐磨材料有限公司) was one of the suppliers of consumables for the year ended December 31, 2021, with purchase amount of approximately RMB3,000. As such, Jiamusi Jinzhu Wear-resistant Materials Co., Ltd.* (佳木斯市金鑄耐磨材料有限公司) is regarded as an overlapping customer and supplier.

For the year ended December 31, 2021, three of our Group's third party service provider were also our customers. The following table sets out our Group's total sales revenue and subcontractor fee amount from the overlapping customers-third party service provider during the period indicated:

| | **For the year ended December 31, 2021** |
|---|---|
| **Sales to the overlapping customers-third party service provider** | |
| Sales revenue *(RMB'000)* | 11,998 |
| As a percentage of our total sales revenue *(%)* | 6.0 |
| Gross profit *(RMB'000)* | 4,233 |
| Gross profit margin *(%)* | 35.3 |

The gross profit margin from overlapping customers and third party service provider as compared to the overall gross profit margin earned by our Group for the year ended December 31, 2021 was lower, as our Group mainly sold SG-10 spherical graphite which did not undergo the purification processing and SG-15 and SG-16 spherical graphite to such overlapping customer and the gross profit margin of our Group's sale of unpurified SG-10 and SG-15 and SG-16 spherical graphite is relatively lower than the sale of other graphite products.

| | **For the year ended December 31, 2021** |
|---|---|
| **Purchases from the overlapping customers-third party service provider** | |
| Subcontractor fee amount *(RMB'000)* | 6,249 |
| As a percentage of our third-party service fees *(%)* | 26.7 |

Fujian Yongjiu Si&C Industrial Ltd.* (福建永久硅碳材料有限公司) was one of the customers of our spherical graphite products for the year ended December 31, 2021, with sales revenue of approximately RMB1.8 million, representing approximately 0.9% of our Group's total revenue for the year ended December 31, 2021. It was one of the graphite processing service providers for the year ended December 31, 2021, for service fees of approximately RMB3.5 million. As such, Fujian Yongjiu Si&C Industrial Ltd.* (福建永久硅碳材料有限公司) is regarded as an overlapping customer and third party service provider.

Qingdao Luowei New Materials Co., Ltd.* (青島洛唯新材料有限公司) was one of our customers of our spherical graphite and flake graphite concentrate products for the year ended December 31, 2021, with sales revenue of approximately RMB9.4 million, representing approximately 4.8% of our Group's total revenue for the year ended December 31, 2021, respectively. It was one of the graphite processing service providers for the year ended December 31, 2021, for service fees of approximately RMB1.0 million. As such, Qingdao Luowei New Materials Co., Ltd.* (青島洛唯新材料有限公司) is regarded as an overlapping customer and third party service provider.

Qingdao Xintaihe Nanotechnology Co., Ltd. (青島新泰和納米科技有限公司) was one of our customers of our flake graphite concentrate products for the year ended December 31, 2021, with sales revenue amounting to approximately RMB0.7 million, representing approximately 0.4% of our Group's total revenue for the year ended December 31, 2021, respectively. The controlling shareholder of Qingdao Xintaihe Nanotechnology Co., Ltd. (青島新泰和納米科技有限公司) is also the controlling shareholder of Qingdao Xintaihe Energy Materials Co., Ltd (青島新泰和能源材料有限公司), which provided graphite processing services to the Company in 2021 for service fees of approximately RMB1.7 million. As such, Qingdao Xintaihe Nanotechnology Co., Ltd. (青島新泰和納米科技有限公司) is regarded as an overlapping customer and third party service provider.

For the year ended December 31, 2021, due to the temporary suspension of our spherical graphite processing plant's purification station from November 2020 to May 2021, our Group procured processing services from these third party service providers, which incurred a total of approximately RMB6.5 million in subcontractor fees (of which approximately RMB6.2 million were paid to our overlapping customers and third-party service providers, representing approximately 26.7% of our Group's total third-party service fees for the relevant period). On the other hand, these graphite processing service providers purchased flake graphite concentrate and/or spherical graphite products from us, as to the best knowledge of our Directors, (i) Qingdao Luowei New Materials Co., Ltd.* (青島洛唯新材料有限公司) and Fujian Yongjiu Si&C Industrial Ltd.* (福建永久硅碳材料有限公司) engaged in manufacturing of graphite products and research and development, production and sales of carbon and silicon materials, respectively, and had demand on our graphite products; (ii) Qingdao Xintaihe Nanotechnology Co., Ltd. (青島新泰和納米科技有限公司) engaged in production and sale of graphite, anode material and lithium-ion battery products and had demand on flake graphite concentrate products. Depending on the level of our stock inventory, we may consider to sell some of our graphite products to them based on standard market price. Therefore, the aforesaid companies were both our Group's third party service provider and our Group's customers for the year ended December 31, 2021.

Our Directors confirm that our Group's sales and purchases to/from such overlapping customers-suppliers/third party service providers were (i) entered into after due consideration taking into account the prevailing purchase and selling prices at the relevant times, (ii) conducted in the ordinary course of business under normal commercial terms and on an arm's length basis, and (iii) at prices that are no less favorable than from other independent third parties who are not customer-supplier. To the best knowledge of our Directors, our Group did not have any other overlap between our other major customers and major suppliers during the Track Record Period.

**Third-party service providers**

During the Track Record Period, we had engaged third-party service providers for services that are auxiliary to our mining operations in our Beishan Mine (namely, blasting, graphite product processing, logistics and transportation and leasing of equipment and machineries). For the years ended December 31, 2019, 2020 and 2021, we engaged over 35, 25 and 15 service providers. We incurred a total third-party service provider fees of approximately RMB8.8 million, RMB12.1 million and RMB23.4 million for the three years ended December 31, 2019, 2020 and 2021. The tables below set forth the basic information of our Group's top five service providers for services that are auxiliary to our mining operations in our Beishan Mine during the Track Record Period:

*For the year ended December 31, 2019*

| Third-party service provider | Transaction Amount *(Approximate RMB'000)* | Percentage to total third-party service fees of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Services principally rendered | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| Hegang Shunlong Blasting Engineering Co., Ltd.* (鶴崗市順隆爆破工程有限公司) | 1,557 | 17.6 | 2019 | Focused on the design and construction, safety supervision and blasting operations | PRC | Blasting service | Up to one month | Bank's acceptance bill |
| Luobei County Lulushun Transportation Co., Ltd.* (蘿北縣路路順運輸有限公司) | 1,032 | 11.7 | 2018 | Focused on transportation of goods | PRC | Transportation service | 5 days | Telegraphic transfer |
| Third Party Service Provider A | 369 | 4.2 | 2019 | Focused on transportation of goods | PRC | Transportation service | No credit period | Telegraphic transfer |
| Third Party Service Provider B | 321 | 3.6 | 2018 | Focused on transportation of goods | PRC | Transportation service | No credit period | Telegraphic transfer |
| Third Party Service Provider C | 314 | 3.6 | 2019 | Focused on transportation of goods | PRC | Transportation service | No credit period | Telegraphic transfer |
| | 3,593 | 40.7 | | | | | | |

*For the year ended December 31, 2020*

| Third-party service provider | Transaction Amount *(Approximate RMB'000)* | Percentage to total third-party service fees of our Group *(Approximate %)* | Year of commencement of business relationship | Background and principal business activity | Location | Services principally rendered | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| China Reserve Nanjing Smart Logistics Technology Co., Ltd. Jinhu Branch* (中儲南京智慧物流科技有限公司金湖分公司) | 4,243 | 34.9 | 2020 | Focused on transportation | PRC | Transportation service | No credit period | Telegraphic transfer |
| Hegang Shunlong Blasting Engineering Co., Ltd.* (鶴崗市順隆爆破工程有限公司) | 2,287 | 18.8 | 2019 | Focused on the design and construction, safety supervision and blasting operations | PRC | Blasting service | Up to one month | Bank's acceptance bill |
| Luobei County Lulushun Transportation Co., Ltd.* (蘿北縣路路順運輸有限公司) | 1,090 | 9.0 | 2018 | Focused on transportation of goods | PRC | Transportation service | 5 days | Telegraphic transfer |
| Luobei County Yongding Engineering Mechanical Equipment Leasing Co. Ltd.* (蘿北縣永鼎工程機械設備租賃有限公司) | 572 | 4.7 | 2020 | Construction machinery and equipment operating leasing service | PRC | Excavator leasing service | Within 10 days after reconciliation | Bank's acceptance bill and telegraphic transfer |
| Third Party Service Provider C | 297 | 2.4 | 2019 | Focused on transportation of goods | PRC | Transportation service | No credit period | Telegraphic transfer |
| | 8,489 | 69.8 | | | | | | |

*For the year ended December 31, 2021*

| Third-party service provider | Transaction amount (*Approximate RMB'000*) | Percentage to total third-party service fees of our Group (*Approximate %*) | Year of commencement of business relationship | Background and principal business activity | Location | Services principally rendered | Credit period/term | Payment method |
|---|---|---|---|---|---|---|---|---|
| China Reserve Nanjing Smart Logistics Technology Co., Ltd. Jinhu Branch* (中儲南京智慧物流科技有限公司金湖分公司) | 6,687 | 28.6 | 2020 | Focused on transportation | PRC | Transportation service | No credit period | Telegraphic transfer |
| Fujian Yongjiu Si&C Industrial Ltd.* (福建永久硅碳材料有限公司) | 3,549 | 15.2 | 2020 | Research & development, production and sales of carbon materials and silicon materials | PRC | Graphite processing service | Monthly | Bank's acceptance bill |
| Hengang Dongshan Hewen Truck Transporter* (鶴崗市東山區鶴文貨車運輸戶) | 2,159 | 9.2 | 2021 | Focused on transportation of goods | PRC | Transportation service | 15 days | Telegraphic transfer |
| Qingdao Xintaihe Energy Materials Co., Ltd.* (青島新泰和能源材料有限公司) | 1,740 | 7.4 | 2020 | Production and sales of anode materials for lithium-ion batteries and graphite | PRC | Graphite processing service | Monthly | Bank's acceptance bill |
| Poly Xinlian Blasting Engineering Group Co., Ltd. Luobei Branch* (保利新聯爆破工程集團有限公司蘿北分公司) | 1,611 | 6.9 | 2021 | Public works construction general contracting; mining engineering construction general contracting | PRC | Blasting service | Monthly | Telegraphic transfer |
| | 15,746 | 67.3 | | | | | | |

*Note:* One of these third party service providers was our five largest supplier for the respective financial years. For details, please see "Our Suppliers" in this section.

Please see "Business — Our suppliers — Graphite product processing services" for details.

During the Track Record Period, to the best knowledge of our Directors, we did not experience any material product quality issue for graphite products sourced from our external processing service provider.

***Blasting services***

Whilst most mining functions at our Beishan Mine are conducted by our own team, we engage third-party service providers for certain blasting tasks such as surveying, loading of explosives and blasting works. For the three years ended December 31, 2019, 2020 and 2021, we incurred approximately RMB1.6 million, RMB2.3 million and RMB2.5 million, respectively in engaging such services. The salient terms of the services agreements with such service providers are as follows:

| | |
|---|---|
| Duration: | Ranging from two and a half months to 10 months |
| Service fees and payment terms: | (i) Explosives are priced at approximately RMB12,000 per tonne (inclusive of tax);<br>(ii) We shall settle the payment through the bank's acceptance bill on the 20th or 25th day of each calendar month; and<br>(iii) We shall bear the extra fees resulting from any measures taken to render the blasting operation amenable and properly carried out |
| Responsibilities of parties: | (i) We shall be responsible for the unloading of explosives, the drilling of blasting holes, and the communications and coordination with the residents in nearby neighborhoods; and<br>(ii) The service provider shall be responsible for the loading of explosives, onsite safety and security, and any damage or loss caused by flying rocks |
| Termination: | The service provider may terminate the agreement anytime in view of relevant regulations and changing circumstances |

***Graphite product processing services***

During the Track Record Period, we engaged external processing service provider to assist with (i) handling orders made during the off-season months of January to March when our operations were put on hold due to severe cold weather; and (ii) purification of our unfinished products between November 2020 and May 2021 as the purification station of our spherical graphite processing plant was undergoing maintenance and repair. We incurred outsourced processing costs of approximately RMB0.2 million and RMB6.5 million for such services for the two years ended December 31, 2020 and 2021. The salient terms of the agreements with such service providers are as follows:

| | |
|---|---|
| Duration: | Not specified or short-term |
| Service fees and payment terms: | A fixed lump-sum for each tonne of processed product, payable monthly |
| Requirements: | The external processor shall ensure the processed product meet the specifications set by us |
| Orders: | About 80–100 tonnes per month |

| | |
|---|---|
| Delivery: | We shall confirm and bear the transportation fee incurred. The external processor shall be responsible for logistics and delivery |
| Termination: | Not specified |

***Logistics and transportation***

For the three years ended December 31, 2019, 2020 and 2021, we incurred a total of approximately RMB7.3 million, RMB9.1 million and RMB12.5 million for transportation costs (which fall under our cost of sales and transportation fees) primarily for delivery of unprocessed graphite to our production sites and finished graphite goods to our customers.

In 2020, we entered into framework agreements with a third-party logistics services platform provider and its subsidiary, for the transportation of finished goods to our customers. All insurance, costs and liabilities in relation to the goods during transport shall be borne by us until delivery is made. The salient terms of the framework agreements with such logistics services platform provider are as follows:

| | |
|---|---|
| Duration: | Approximately 1 year and 5 months |
| Calculation of service fees: | Based on the transportation itinerary as recorded on the e-logistics system of the logistics services platform provider, payable monthly |
| Credit period/term: | No credit terms |
| Settlement method: | We shall submit invoicing application to our third-party logistics services platform provider on the 20th date of each month, and within five business days after the date our third-party logistics services platform provider received and verified our invoicing application and issued to us a special VAT invoice that meets the national tax requirements, we shall make payment to such service provider in accordance with the agreed settlement period and payment method. |
| Terms of guarantee: | Our logistics services platform provider shall comply with the provisional measures for the operation and management of road freight transport on network platforms* (網絡平台道路貨物運輸經營管理暫行辦法). For every truckload of goods valued under RMB3.0 million, our logistics services platform provider is obliged to purchase "product guarantee services" and the fee is borne by us or the carrier. |
| Late payment: | In the event of late payment, we are obliged to pay damages to our logistics services platform provider at four times the bank's benchmark loan interest rate, calculated from the day following the contractual date of payment to the actual date of payment. |

| | |
|---|---|
| Termination: | Within the contractual period, the framework agreement may be terminated by the mutual consent of all parties. In the event that we do not agree with the policy adjustments made by our logistics services platform provider, any party shall be entitled to terminate the framework agreement. If any party commits a fundamental breach, the compliant party/parties shall be entitled to terminate the framework agreement with written notice to the breaching party. |

***Leasing of equipment and machineries***

For the three years ended December 31, 2019, 2020 and 2021, we incurred a total of approximately nil, RMB0.6 million and RMB1.9 million for leasing of equipment and machineries to be used in the mining operation in our Beishan Mine. Since 2020, we entered into framework agreements with third-party service providers for us to lease equipment and machineries, including the leasing of excavators. The salient terms of the framework agreements with such service providers are as follows:

| | |
|---|---|
| Term: | Ranging from 3 months to unspecified period |
| Leasing fees and payment terms: | Based on the volume of material in tonnes extracted, payable monthly within 10 or 20 days upon receipt of invoice issued by the service provider. |
| Responsibilities of parties: | Service provider shall be responsible for the (i) the wages of the operating personnel of the excavators, and normal maintenance and related fees of the excavators; and (ii) any incidents arisen due to its maloperation of the excavators. We shall be responsible for providing instructions and safety training to the operating personnel of the excavators and ensure safe working environment and road conditions. |

Our Directors believe that engaging such third-party service providers allowed us to have better cost control during the Track Record Period, as it reduced the need for equipment investment and management time such as staff training, hence lowering our overall operating costs. Our Directors also believe that engaging such third-party service providers with the requisite experience and expertise will ensure that the works are carried out efficiently, hence increasing our overall efficiency and reducing our overall operating costs. Our Directors confirm that all third-party service providers that provided services to our Group during the Track Record Period were Independent Third Parties. We will continue to engage such third-party service providers when the need arises.

During the selection of potential third-party service providers, we will request for, among others, their business licenses, certificates of organization code and safe production certificates. For each type of our service that is auxiliary to our mining operations in our Beishan Mine, our selection criteria of the third-party service provider are set forth as follows:

- ***Blasting services:*** We will (i) check whether the service provider possesses blasting operation unit permit allowing it to engage in blasting services under the relevant PRC laws and regulations; (ii) review whether the scope of business in its business certificates covers the services to be provided by such service provider: (iii) check the required blasting operator's permit and qualification of their operating personnel who will handle the blasting on site at our Beishan Mine; and (iv) conduct online checks on the background of such service provider.

- ***Graphite product processing services:*** We will (i) check whether the service provider possesses business certificate allowing it to engage in graphite processing services under the relevant PRC laws and regulations; (ii) conduct on-site visit at the processing plants and facilities of such service provider; and (iii) conduct online checks on the background of such service provider.

- ***Logistics transportation:*** We will (i) check whether the service provider possesses business certificate allowing it to engage in transportation services under the relevant PRC laws and regulations; (ii) conduct physical checks on the transportation vehicles to be used by such service provider; and (iii) conduct online checks on the background of such service provider.

- ***Leasing of equipment and machinery:*** We will (i) check whether the service provider possesses business certificate allowing it to engage in equipment and machinery leasing services under the relevant PRC laws and regulations; (ii) conduct physical checks on equipment and machinery to be leased to us by such service provider; and (iii) conduct online checks on the background of such service provider.

We will keep copies for our own records. If any issues with the licenses, permits and/or certificates provided by such potential service providers are identified, we will either follow up with such third-party service providers directly or with our external legal advisers.

For potential third-party service providers whereby we have identified authenticity issues with, among others, their licenses, permits and/or certificates, we will maintain a list of such questionable service providers and will refrain from outsourcing work to them in the future. We require our third-party service providers to maintain a high standard of quality for the services provided, and to comply with and have in place adequate occupational health and safety and environmental protection procedures in accordance with the applicable laws and regulations and safety requirements as imposed by the relevant PRC government authorities, including (i) our chief of safety monitors the on-site safety of services rendered by the third party service providers, (ii) our mining manager would conduct on-site inspection to ensure no regulations on environmental protection are violated by the third party service providers, (iii) regular meetings are conducted with vice president of mining operations to report on occupational health, safety, environmental issues and protection, and (iv) we continue to communicate with local residents in nearby neighborhood to ensure they are not adversely affected by the services rendered by the third party service providers.

Our Directors confirm that, based on the selection criteria and the checks conducted, these third-party service providers comply with the applicable licensing and qualification requirements in the PRC. Our Directors confirm that the services provided by these third-party service providers are sufficient for our operation and expansion, and we did not experience any material disruption on the services provided by these third-party service providers during the Track Record Period. Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, we did not encounter any material dispute with any of our third-party service providers. In general, if any non-compliance incidents arise, the relevant third party service providers will be required to undertake the necessary remedial actions at their own costs. All losses caused by or incurred as a result of their failure to maintain proper quality, occupational health and safety and environmental protection standards will be borne by the third-party service providers themselves.

## INVENTORY MANAGEMENT

Our inventory primarily consists of raw materials, which principally includes unprocessed graphite, work in progress, finished goods (i.e. flake graphite concentrate, spherical graphite and its byproducts and unprocessed marble), and parts and components. According to the F&S Report, shelf life is not applicable on our Group's major product.

The following table illustrates the movement of inventory of our unprocessed graphite, flake graphite concentrate and spherical graphite during the Track Record Period:

| | For the years ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | | *(Tonne)* | |
| ***Unprocessed graphite*** | | | |
| Opening balance | 10,000 | 16,845 | 32,542 |
| Unprocessed graphite procured from suppliers | 171,040 | 189,521 | 254,245 |
| Unprocessed graphite extracted from our Beishan Mine | 255,544 | 211,210 | 258,287 |
| Unprocessed graphited used in production of flake graphite concentrate | (419,739) | (385,034) | (507,603) |
| Ending balance | 16,845 | 32,542 | 37,472 |
| ***Flake graphite concentrate*** | | | |
| Opening balance | 6,851 | 11,117 | 5,204 |
| Production of flake graphite concentrate | 31,113 | 38,464 | 48,218 |
| Sales of flake graphite concentrate to customers | (18,401) | (34,134) | (37,258) |
| Flake graphite concentrate graphite used in production of spherical graphite | (8,446) | (10,243) | (12,419) |
| Ending balance | 11,117 | 5,204 | 3,745 |
| ***Spherical graphite*** | | | |
| Opening balance | 1,601 | 1,923 | 2,284 |
| Production of spherical graphite[(1)] | 3,310 | 4,284 | 5,119 |
| Sales of spherical graphite to customers | (2,988) | (3,923) | (6,061) |
| Ending balance | 1,923 | 2,284 | 1,342 |

*Notes:*

(1) For the year ended December 31, 2021, our production of spherical graphite at approximately 5,119 tonnes included (a) finished product of SG-10 spherical graphite of approximately 597 tonnes; (b) semi-product of SG-9 spherical graphite of approximately 3,395 tonnes; and (c) remaining semi-products that had undergone some of the other production stages and then sent to external processors. For the two years ended December 31, 2019 and 2020, our

production of spherical graphite at approximately 3,310 tonnes and 4,284 tonnes included finished product of spherical graphite of approximately 3,267 tonnes and 2,668 tonnes, respectively, while the remaining volume comprised semi-products that had undergone some of other production stages or sold to customers.

As at December 31, 2019, 2020 and 2021, our inventory balance amounted to approximately RMB35.4 million, RMB26.0 million and RMB18.9 million, respectively, representing approximately 14.5%, 8.4% and 5.6% of our total assets as at the respective year end dates. For the Track Record Period, average inventory turnover days were approximately 184.8 days, 131.4 days and 77.7 days, respectively. For details, please see "Certain Items of Consolidated Statements of Financial Position — Inventories". Please see below the reconciliation between the volume and balance of the finished goods as at December 31, 2019, 2020 and 2021:

| | As at December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Volume | Inventory costs | Balance | Volume | Inventory costs | Balance | Volume | Inventory costs | Balance |
| | *(Tonne)* | *(RMB'000/ tonne)* | *(RMB' million)* | *(Tonne)* | *(RMB'000/ tonne)* | *(RMB' million)* | *(Tonne)* | *(RMB'000/ tonne)* | *(RMB' million)* |
| Flake graphite concentrate | 11,117 | 1.35 | 15.0 | 5,204 | 1.40 | 7.3 | 3,745 | 1.30 | 4.9 |
| Spherical graphite[(1)] | 1,150 | 9.3 | 10.6 | 472 | 9.1 | 4.3 | 40 | 9.1 | 0.4 |
| By-products | 1,586 | 0.9 | 1.4 | 2,148 | 1.05 | 2.3 | 767 | 0.9 | 0.7 |
| Unprocessed marble | — | — | — | 44,545 | 0.006 | 0.3 | 45,011 | 0.007 | 0.3 |
| Finished goods | | | 27.0 | | | 14.2 | | | 6.3 |

*Note:*

(1) As at December 31, 2019, 2020 and 2021, the ending balance of spherical graphite was approximately 1,923 tonnes, 2,284 tonnes and 1,342 tonnes, in which finished products accounted for approximately 1,150 tonnes, 472 tonnes and 40 tonnes, while semi-products accounted for 773 tonnes, 1,812 tonnes and 1,302 tonnes, respectively. For the purpose of reconciling the volume and balance of the finished goods, only finished products were included.

Our Group has implemented an inventory management system whereby incoming and outgoing materials and supplies are documented to ensure that an optimal inventory level is maintained to satisfy the needs of our customers without over-stocking. We generally procure our materials and supplies based on various factors, including but not limited to: (i) the delivery dates and volumes of our products stipulated in purchase orders from our customers; (ii) historical sales demand; and (iii) our production capacity.

Our stock takes are carried out jointly by one of our Directors, our finance department, procurement department, sales department, and administration department. A stock take report for Yixiang Graphite and for Yixiang New Energy will be prepared, covering aspects including storage conditions, and any surplus or shortages of inventories. The report will be signed by the relevant Director and the representative of each department that participated in the stock take.

Our Directors confirm that, our Group assesses the adequacy of impairment provision on obsolete and slow-moving inventory items which are identified as no longer saleable or usable in accordance with our accounting policy based on the results of stock takes and review on the aging of inventories at the end of each financial reporting period. As at December 31, 2019, 2020 and 2021, we had provision for inventories of approximately RMB0.6 million, RMB0.3 million and nil, respectively. No provision and impairment on our inventory has been made for the year ended December 31, 2021, as for raw materials, they were consumed when our beneficiation and processing plants resume operations from April 2022. As for semi products and finished products, they were sold to customers at price higher than costs.

**Inventory and production planning**

Due to the severe weather conditions in Heilongjiang Province, we had to suspend our operations between the months of January and March each calendar year, whilst maintaining management of inventory, delivery and orders received. In order to ensure that there would be sufficient stock to satisfy customer orders during those winter months, we would increase our production rate of both our beneficiation and processing plants, with a target of creating a buffer of inventory (in the form of finished goods) for two months usually near the fourth quarter of each year. According to our historical sales record, whilst the industry might experience a shut down due to the severe weather conditions, market demand from downstream sector customers still exist, except for the month of February due to the Chinese New Year holidays. Hence, our Directors believe that the buffer of two months is essential to our operations, brand recognition and the maintenance of our business relationships with major customers.

As at December 31, 2019, 2020 and 2021, our inventory balance for finished goods amounted to approximately RMB27.0 million, RMB14.2 million and RMB6.3 million, respectively, representing approximately 74.9%, 54.1% and 33.5% of our inventory balance as at the respective year end dates. For details of our inventory balance, please see "Financial Information — Certain items of consolidated statements of financial position — Inventories". For such reasons, the fourth quarter of each calendar year would be the peak of our production volume, even though the orders received at the time may not be corresponding to such an increased volume. The finished goods would then be stored in our warehouse and product library, and during the months when our operations are suspended, we would continue to sell such products to our customers. As unprocessed graphite ore is the key material for our beneficiation and subsequently the processing of spherical graphite, the mining volume at our Beishan Mine would follow the same pattern in order to ensure that there would be enough raw materials for beneficiation and processing during those peak months.

In the event that our operations encounter any temporary suspension due to repairs or maintenance, we would engage third-party service providers to provide services to process our work in progress items. For instance, during the temporary suspension of our spherical graphite processing plant's purification station, we engaged third-party service providers to provide purification services of our work in progress items which had already undergone the initial rounding and pulverizing stages, in order to ensure that the orders received during the year was met. Moreover, in the event that the market demand is greater than our anticipation based on our forecast by relying on historical figures, we would also engage third party service providers to assist with the production. We consider that, with the benefits of a vertically integrated supply chain since obtaining the mining rights to our Beishan Mine, it would be much easier to procure raw materials to face any sudden changes in market demands in the future.

**Procurement control**

Our procurement team is responsible for the purchase of materials and supplies and negotiation of contracts with our suppliers. We procure our materials and supplies based on various factors, including but not limited to (i) the unit cost of unprocessed graphite that is sourced from suppliers and those from our Beishan Mine; (ii) historical sales demand; and (iii) our production capacity, and have in place an inventory management system, which monitors the level of inventory for each type of materials and supplies utilized in our production processes. Before placing purchase orders with our supplier for a particular type of materials and supplies, our procurement team will check the existing level of that particular type of materials and supplies in stock using the inventory management system to avoid over-purchasing and accumulation of excess inventory. Since obtaining the mining rights of our Beishan Mine, we now have further improved our procurement policy and strategy along with the benefits of an integrated supply chain.

**Materials and supplies and price fluctuations**

The principal raw materials and supplies for our production are mainly consumables used in our production processes, including, unprocessed graphite and other raw materials such as acid base and limestone. For the three years ended December 31, 2019, 2020 and 2021, our total cost of sales for materials and consumables amounted to approximately RMB25.2 million, RMB40.9 million and RMB49.9 million, respectively, representing approximately 39.2%, 47.8% and 47.3%, respectively, of our total cost of sales for the relevant year. Our Directors confirm that we did not encounter any significant delay or shortages in the supply of our major raw materials and supplies during the Track Record Period. We monitor the prices of our materials and supplies closely and adjust our materials and supplies inventory policy in accordance with price fluctuations of our materials and supplies. Our Directors confirm that, during the Track Record Period, we did not experience any significant price fluctuation in relation to our materials and supplies.

We take into account various factors such as cost of our materials and respective margin, market prices and relationship with customers for determining the prices of our products and would adjust our pricing strategy from time to time. To minimize our exposure to such price fluctuations and to avoid shortage or delay in the supply of raw materials, we have implemented the following measures, including but not limited to:

- increase our inventory level of certain materials and supplies in anticipation of price increases and vice versa;

- enter into long-term supply agreement if the prices of certain materials and supplies are expected to increase in the near future and vice versa;

- maintain at least two suppliers for our principal materials and supplies to reduce over-reliance on any one supplier;

- review and monitor our materials and supplies levels on a periodical basis. The quantity of materials to be procured shall take into account the current levels and prices of such materials and supplies; and

- analyze price trends of raw materials on an on-going basis and purchase more materials and supplies in anticipation of price increases.

Nevertheless, since our acquiring of the mining rights of our Beishan Mine, we believe that we have exercised better control of the raw materials for production due to the benefits of a vertically integrated supply chain. For the three years ended December 31, 2019, 2020 and 2021, we extracted unprocessed graphite from our Beishan Mine at a unit cost of approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne, respectively. In comparison, for the three years ended December 31, 2019, 2020 and 2021, we purchased unprocessed graphite from our suppliers at a unit cost of approximately RMB63 per tonne, RMB75 per tonne and RMB75 per tonne, respectively.

## PROPERTIES

Our corporate headquarter is located in Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC. As at the Latest Practicable Date, we owned, occupied and leased the following properties in the PRC:

### Owned Properties with good titles

We have obtained real estate ownership certificate (不動產權證書) for three parcels of granted land for industrial use purpose and the five buildings and/or structure in the PRC. The following table sets out the details of our owned properties.

| Owner | Property type | Location | Total site/gross floor area (approximately) | Tenure | Usage |
|---|---|---|---|---|---|
| Yixiang Graphite | Land | No. 15 Residential Group (Yixiang Graphite No. 2), Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組(溢祥石墨有限公司2號)) | 16,000 $m^2$ | Until October 19, 2036 | Industrial purpose |
| Yixiang Graphite | Building | No. 15 Residential Group (Yixiang Graphite No. 2), Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組（溢祥石墨有限公司2號)) | 9,802 $m^2$ | Until October 19, 2036 | Residential and industrial purposes |
| Yixiang New Energy | Land | No. 15 Residential Group (Yixiang Graphite No. 1), Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組（溢祥石墨有限公司1號)) | 24,610 $m^2$ | Until April 19, 2061 | Industrial purpose |

| Owner | Property type | Location | Total site/gross floor area (approximately) | Tenure | Usage |
|---|---|---|---|---|---|
| Yixiang New Energy | Building | No. 15 Residential Group (Yixiang Graphite No. 1), Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組（溢祥石墨有限公司1號)) | 17,168 $m^2$ | Until April 19, 2061 | Office and industrial purposes |
| Yixiang New Energy | Building | Room 2, Floor 1–4, 16 Wei Education Bureau Multiple-use Building, Fengxiang Town, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣鳳翔鎮十六委教育局綜合樓1–4層2室) | 876 $m^2$ | Until April 15, 2044 | Commercial service purpose |
| Yixiang New Energy | Building | Room 3, Floor 1–2, 16 Wei Education Bureau Multiple-use Building, Fengxiang Town, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣鳳翔鎮十六委教育局綜合樓1–2層3室) | 230 $m^2$ | Until April 15, 2044 | Commercial service purpose |

Please refer to Appendix IV — Property Valuation Report for valuation of the properties situated at No. 1, No. 2 and No. 20. and No. 15 Residential Group, Yanjun Farm, Luobei Country, Hegang City, Heilongjiang Province, the PRC* (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組), the total valuation of which was approximately RMB40.8 million as at April 30, 2022. No single property interest that forms part of our non-property activities has a carrying amount of 15% or more of our total assets as at December 31, 2021.

**Properties with defective titles**

During the Track Record Period, Yixiang Graphite did not obtain certificate or registration for the parcel of land and the structure erected thereon as follows:

| Owner | Property type | Location | Total site/gross floor area (approximately) | Tenure | Usage |
|---|---|---|---|---|---|
| Yixiang Graphite | Land | No. 15 Residential Group (No. 20) Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組 (二十連)) | 25,264.59 $m^2$ | Until April 1, 2071 | Industrial purpose |
| | Structure | No. 15 Residential Group (No. 20) Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC (中國黑龍江省鶴崗市蘿北縣延軍農場第十五居民組 (二十連)) | 12,167.02 $m^2$ | Until April 1, 2071 | Storage and industrial purpose |

A land with a total site area of approximately 25,264.59$m^2$ located in Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, was assigned to Yixiang Graphite on April 2, 2021, but the registration of state-owned construction land use rights was yet to be completed. As advised by our PRC Legal Advisers, Yixiang Graphite has made the payment of the land transfer fee in accordance with the state-owned construction land use right assignment agreement (國有建設用地使用權出讓合同) with Luobei County Natural Resources Administration as well as the corresponding tax. On November 26, 2021, Yixiang Graphite obtained the real estate ownership certificate.

Our Directors confirm that we have constructed structures ("**Structures**") on the abovementioned land in 2007, without first entering into the state-owned construction land use right assignment agreement, obtaining the real estate ownership certificate, construction land use planning permit, construction project planning permit and the construction permit (施工許可證) or completing the inspection and acceptance procedures for these Structures. Details are as follows:

| | | |
|---|---|---|
| **Company involved** | : | Yixiang Graphite |
| **Details of owned properties** | : | We have constructed structures ("**Structures**") for flotation, ball mill, storing finished product, packaging, crushing, sedimentation, drying, screening, pump room and power switching on the abovementioned parcel of land. Together, the Structures have a gross floor area of approximately 12,167.02 $m^2$. |

| | | |
|---|---|---|
| **Nature of title defect** | : | To remedy the title defects, Yixiang Graphite entered into the state-owned construction land use right assignment agreement on April 2, 2021 with Luobei County Natural Resources Administration. Yixiang Graphite has obtained the construction land use planning permits (建設用地規劃許可證), the construction project planning permits (建設工程規劃許可證), the construction permit and completed the inspection and acceptance procedures for the Structures on June 16, 2021, June 17, 2021, August 25, 2021 and November 1, 2021, respectively. On November 26, 2021, Yixiang Graphite obtained the real estate ownership certificate. |
| **Reasons for non-compliance** | : | Our Directors confirm that this is caused by the fact that our senior management staff members lack experience and knowledge in PRC property laws and regulations. |
| **Legal consequences and potential maximum penalty/fine** | : | As advised by our PRC Legal Advisers, the following acts constitute violations of Regulation on Quality Management of Construction Projects (《建設工程質量管理條例》):<br><br>(i) If the construction unit commences construction without having obtained a construction permit or the commencement report has not been approved by the relevant competent authority, the competent authority may order suspension of the construction, require correction measures to be implemented within a specific time and impose a fine at the amount between 1% and 2% of the contract price of the project; and<br><br>The potential maximum penalty is 2% of the contract price of the project for the Structures, being approximately RMB0.2 million.<br><br>(ii) If the construction unit commits one of the followings acts, it may be ordered to make corrections and be fined between 2% and 4% of the contract price of the project; and if losses are caused, the construction unit may be liable for compensation according to the applicable law: (1) failure to organize completion inspection before delivery to use; (2) delivery for use upon unsatisfactory inspection and acceptance; and (3) acceptance of unqualified construction project as a qualified construction project.<br><br>The potential maximum penalty is 4% of the contract price of the project for the Structures, being approximately RMB0.5 million. |

**Backup relocation plan** : As advised by our PRC Legal Advisers, it is unlikely that Yixiang Graphite will be ordered to move out from the properties due to the aforesaid title defects, however, if that happens, we plan to relocate to a site owned by Yixiang New Energy, at the Fifteen Jumin Group (Yixiang Graphite No.1), Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC ("**Backup Site**"). The Backup Site has a total area of approximately 24,610 $m^2$, the usage of which is designated as industrial. We estimate the costs of the relocation will be approximately RMB2.5 million, covering disassembly and reinstallation of machinery and equipment, transport logistics expenses and other expenditures for the Backup Site, which will be funded by our internal resources.

*Relocation Period.* Given that (i) the Backup Site and the properties with title defects are both located in Yanjun Farm; and (ii) each round of transportation of the machinery and equipment by vehicle from our existing production facility to the Backup Site can be completed within a few days, to the best knowledge of our Directors, it is estimated that the relocation and disassembly and transfer of equipment for installation and testing of the production lines require approximately 60 days. We expect our production facility at the Backup Site can be fully ramped up for production after completing the relocation.

*Estimated loss of revenue resulting from stoppage in production.* Our PRC Legal Advisers advised that, according to the Administrative Compulsion Law of the PRC and the Administrative Reconsideration Law of the PRC, if an illegal building needs to be dismantled, the party concerned has the right to file an application for administrative reconsideration within 60 days from the day when it knows the specific administrative act. As such, we believe that we will have sufficient time to devise the requisite preparations and execute our relocation plan without sustaining material disruptions to our production. We expect that our loss resulting from the stoppage in production would account for approximately 60 days of our yearly revenue.

Our Directors believe that if our relocation plan cannot be implemented as expected, we may be forced to suspend our production for a certain period of time resulting in loss of revenue and therefore our business, financial condition and results of operations could be adversely affected.

**Remedial actions taken or to be taken** :

(i) As at the Latest Practicable Date, we have entered into the state-owned construction land use right assignment agreement with Luobei County Natural Resources Administration. We have obtained a construction land use planning permit (建設用地規劃許可證) , construction project planning permit (建設工程規劃許可證) and construction permit (施工許可證) and completed the inspection and acceptance procedures. We have obtained the real estate ownership certificate. To the best knowledge of our Directors, we have not received any notice from the relevant government authorities requiring us to rectify such defective titles, nor been fined or imposed on any from of administrative punishment by the relevant government authorities.

(ii) We have obtained confirmation letters from the Luobei County Natural Resources Administration and Luobei County Housing and Urban and Rural Construction Administration indicating that (a) we may continue to use Structures on an "as is" basis, (b) we would not be imposed any administrative penalties, and (c) there is no obstacle in completing relevant formalities.

As advised by our PRC Legal Advisers, Luobei County Natural Resources Administration and Luobei County Housing and Urban and Rural Construction Administration are the competent authorities to provide the above confirmations for the reason that (i) according to the public service guide and list of rights and responsibilities of Heilongjiang government service website, Luobei County Natural Resources Administration is responsible for, among others, granting state-owned land use right and issuing construction land and construction project planning license in Luobei County; and Luobei County Housing and Urban-Rural Development Administration is responsible for, among others, issuing construction permit and fire safety validation of construction projects in Luobei County; and (ii) according to the confirmation letters issued by the Luobei County Natural Resources Administration and the Luobei County Housing and Urban-Rural Development Administration on August 4, 2021 and August 3, 2021, respectively, the two administrations confirmed that they are the competent administrative authorities of Yixiang Graphite.

(ii) We will obtain an indemnity from the Controlling Shareholder(s) to indemnify our Group against any claims, fines, penalties and other liability arising from such non-compliance.

Our Directors confirm that the conditions of properties without the requisite permits and/or certificates remain safe and in order.

**View of our PRC Legal Advisers** : Our PRC Legal Advisers are of the view that the risk that the competent government authorities may penalize on us due to our failure to register stated-owned construction land use rights, obtain real estate ownership certificate and a construction permit and complete the inspection and acceptance procedures relating to the Structures is remote. The aforesaid authorities are the competent administrative authorities of Yixiang Graphite, and the risk of the confirmations from the aforesaid authorities being revoked by higher authorities is remote.

**Internal Control Measures** : To prevent recurrence of such non-compliance, our Group has set up a compliance committee to check and ensure all land and construction related application procedures are fully complied before commencing construction projects. Our Directors confirm that any failure to comply with such applicable policies and procedures by our employees shall be subject to internal disciplinary actions and be assessed adversely in the annual performance review of our Company. Moreover, our Group will, as part of our internal control work, engage legal and other professional advisers, to ensure that we are compliant with applicable statutory requirements.

Our Directors are of the view that the properties with defective titles set forth above will not have a material adverse impact on our business and financial position, considering the extent of the penalties, our back up relocation plan and risk to be penalized is remote.

| | | |
|---|---|---|
| **Effect on business** | : | After due consideration, we decided not to make any provisions as (i) the maximum amount of fine involved in the above non-compliances is not material; and (ii) our Directors are of the view that the risk of our Group being imposed any fine as a result of the above non-compliances is minimal taking into account the advice from our PRC Legal Advisers. During the Track Record Period and up to the Latest Practicable Date, our Group has not been charged or penalized for the above non-compliance incidents, and has not made any provision for the non-compliance incidents in its financial statements as no provision was considered necessary. Our Directors expect that the non-compliance incidents will not have any material adverse operational and financial impact on our Group. |

### Leased Properties

As at the Latest Practicable Date, we leased approximately 23.1 hectares of land that is material to our business operation located in the Graphite Development Zone and Jinshiling Management Zone in Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC. The leased lands were leased from Independent Third Parties and were used primarily for placing semi-finished products, tailings and waste rocks. With respect to such land lease arrangements, we have obtained a letter from Luobei County Natural Resources Bureau (蘿北縣自然資源局), confirming that (i) such lease will not be objected by them; and (ii) we can continue to use the leased land for production and operation.

## SEASONALITY

According to the Independent Technical Report, our Beishan Mine is located in an area where the climate is classified as a humid-continental climate, with average minimum and maximum temperatures of –21°C and 21°C respectively, and an average temperature of 2°C, whereby mines generally would have to close down for up to three months from January to March where there would be a severe drop in temperature. This would affect the supply of unprocessed graphite during these winter months. Moreover, as the beneficiation of flake graphite concentrate and the processing of spherical graphite would require the use a relatively large amount of water, which would freeze over during such winter months, all of our operations (mining, beneficiation and processing) would be halted from January to March each year. Despite the general shut down among industry players, market demand would not experience a severe drop, thus there would always be demand for graphite products during these winter months. This market demand with a decreased supply would push the average selling price of our graphite products higher during the cold climate seasons due to the overall drop in supply in the market.

## RESEARCH AND DEVELOPMENT

As at December 31, 2021, our research and development team consisted of 11 personnel, some of whom have received tertiary or higher education and with notable experience in graphite products, research and development. Our research and development expenses during the Track Record Period amounted to approximately RMB4.8 million, RMB5.8 million and RMB8.1 million for the three years ended December 31, 2019, 2020 and 2021, respectively. The research and development expenses incurred mainly represented the salaries and other benefits paid to our research and development staff and materials used for our research and development activities, specifically for products of specific requirements as designated by our major customers.

As at the Latest Practicable Date, we successfully obtained certain utility model patents, mostly related to enhancing the performance and efficiency of our production equipment and processes. For details of the patents that we obtained, please see "Statutory and General Information — 2. Further information about the business — B. Our intellectual property rights — (b) Patents" in Appendix VI to this document.

The following summarizes some of our key research and development achievements:

**A method in the production of high tap density spherical graphite**

We observe that in the ordinary course of rounding and micronization, when graphite substances collide with each other for a prolonged period of time, a large amount of graphite at the micro or nano level will be released. This would lead to uneven, unequal and even enlarged surface areas of spherical graphite at the end of production, which also lead to longer time as there would be spherical graphite that is too large for commercial sales, and to be re-processed. We solve such problems by altering the production process of our spherical graphite by improving on the flow speed of substances in the process, allowing particles to travel at a consistent average speed and also shortening the grinding time.

Owing to such new manufacturing methods, we have developed a high tap density spherical graphite with a size smaller than 10μm, which meets the PRC National Standard on spherical graphite (GB/T38887-2020) and produced with automated parts in our processing plant. Due to such high tap density, when used as a part of lithium-ion batteries for NEVs, high charging is achieved and consequently energy density is higher, which we believe is highly favored among our customers of our spherical graphite products.

**A demagnetization process for spherical graphite with low-magnetic substance**

Demagnetization is a key step in the production of spherical graphite, which is often difficult to remove substances with a low-magnetic content. We have developed a new method which would only lead to the existence of low-magnetic substances at 0.1 parts per million, which is much lower than the industry standard. This allows us to create spherical graphite with fewer impurities and lower magnetic content, which is useful in the manufacturing of anode materials.

## INTELLECTUAL PROPERTY

We place great importance on protecting our investment in research and development and our proprietary rights. We strive to secure the widest possible protection for our significant inventions and our other intellectual property rights by registering a combination of patents, domain name and trademarks with the relevant authorities. As at the Latest Practicable Date, we were the registered owner of 89 patents, one domain name and one trademark in the PRC and one trademark in Hong Kong. Our Directors confirm that, as at the Latest Practicable Date, we were not involved in any disputes or litigation relating to the infringement of intellectual property rights, nor are we aware of any such claims either pending or threatened. Please see "Statutory and General Information — 2. Further information about the business — B. Our intellectual property rights" in Appendix VI to this document for details of our Group's intellectual property rights.

During the Track Record Period, to the best of our Directors' knowledge, information and belief and having made all reasonable enquiry, there has been no material infringement of our Group's intellectual property rights, including patent for our operational processes by third parties.

## AWARDS

As a result of our expertise in beneficiation and processing technologies, we have obtained the following awards/certificates:

| Award | Issuing party | Date of issue |
|---|---|---|
| First Prize of China Nonferrous Metal Industry Science and Technology Award* (中國有色金屬工業科學技術獎一等獎) | China Nonferrous Metals Industry Association (中國有色金屬工業協會) and The Nonferrous Metals Society of China (中國有色金屬學會) | December 2019 |
| Innovative unit for Safety Product Target Assessment of 2017* (2017年度安全生產目標考核先進單位) | The Nongken Baoquanling Administration of the Heilongjiang Province* (黑龍江省農墾寶泉嶺管理局) | March 2018 |
| 2017 Excellent Supplier Technology Innovation Award* (2017年度優秀供應商技術創新獎) | BTR New Material Group Co. Ltd (貝特瑞新能源材料股份有限公司) | December 2017 |
| Star-rated Non-public Enterprise* (星級非公有制企業) | CPC Hegang Municipal Committee (中共鶴崗市委) and People's Government of Hegang (鶴崗市人民政府) | August 2012 |

## EMPLOYEES

As at December 31, 2021, our Group had a total of 112 full-time employees, all of which were based in the PRC. The following table sets out a breakdown of our Group's employees by function as at the December 31, 2021:

| Function | Number of employees |
|---|---|
| Management | 13 |
| Finance | 6 |
| Sales and procurement | 10 |
| Research and development | 11 |
| Extraction, beneficiation and processing | 72 |
| **Total** | 112 |

*Note:*

The number of 112 full-time employees of our Group as at December 31, 2021 does not include the 66 workers sourced from our crowdsourcing service provider in 2021. For details, please see "Crowdsourcing services" in this section.

For the three years ended December 31, 2019, 2020 and 2021, we incurred staff costs of approximately RMB14.1 million, RMB14.2 million and RMB14.4 million, respectively, representing mainly wages and other benefits.

We believe that our employees are valuable assets that contribute to the success of our Group. We recruit out employees based on a number of factors such as their industry experience in the graphite mining industry, their educational background, and our vacancy needs. We generally pay our employees a fixed salary and other allowances based on their respective positions and responsibilities. We also enter into individual employment contracts with our employees covering matters such as wages, employee benefits, employment scope and grounds for termination. Our employees do not negotiate their terms of employment through any labor union or by way of collective bargaining agreements.

### *Crowdsourcing services*

Our Directors note that, historically, our Group experienced labor shortages as some of our employees do not resume their duties after returning home for the Chinese New Year Holidays, or when we receive an unanticipated large batch of orders. As such, we note that there was a high turnover rate for our employees in the past. With the aim of fostering our business expansion in 2022 and thereafter, we intend to maintain stability of workforce through crowdsourcing arrangement which was started with our employees performing lower level tasks and administrative and sales support. In March 2021, we engaged a crowdsourcing service provider for better workforce management, labor sourcing and cost control. To the best of our Directors' knowledge, 48 former employees performing lower-level tasks entered into the crowdsourcing arrangement with the crowdsourcing service provider for the benefits mentioned below. As at December 31, 2021, 66 members of our workforce were sourced from such an avenue (out of which 48 were our former employees that opted to be engaged via this service provider) performing lower-level tasks or administrative and sales support. Among these 66 workers, five of them handled administrative works, covering internal security guard and food and beverage services, six of them helped as sales support assisting in liaison with customers at local regions, and the remaining members assisted as drivers and handypersons in our production and operation. For the year ended December 31, 2021, we had incurred approximately RMB4.7 million for such services. Salient terms with such services provider are as follows:

| | |
|---|---|
| Duration: | One year, with auto renewal for another year |
| Fees: | A service fee calculated based on costs, with an additional platform management premium of 9.5% |
| Breach of contract: | We will be entitled to compensation for any losses (direct or indirect) due to the failure of the service provider |
| Termination: | We may unilaterally terminate the agreement by writing on a ten-day notice. The service provider may do so should there by any policy changes on the state or local levels which render it inoperable, but it shall inform us in writing on a ten-day notice. Terminations based on breach of contract also apply. |

During the period from January 1, 2022 and up to the Latest Practicable Date, out of these sourced 66 workers performing lower-level tasks, 21 of them ceased services with our Group, and during such period, we sourced 26 new workers from the crowdsourcing service provider as replacement. As at the Latest Practicable Date, we had a total of 71 workers sourced from the crowdsourcing service provider. In light of the timely replenishment of our workforce in need as provided by the crowdsourcing service provider, which may not be feasible for our Group to do so in a timely manner without the crowdsourcing services provider, our Directors are of the view that the engagement of crowdsourcing service provider would enhance our overall human resources management and stability of workforce based on which our Group can efficiently implement our business strategies from 2022 onwards. As the crowdsourcing service provider charged the Group a service fee which is based on costs plus an additional platform management premium of 9.5%, the Group considers the crowdsourcing arrangement is beneficial as: (i) the crowdsourcing service provider would be responsible for the management of the workers we sourced from them, for instance, in the event of any work injury or illness of the worker, such worker would be sent to the hospital under escort by the officer of crowdsourcing service provider; (ii) the crowdsourcing service provider would be responsible for the work insurance and expense for these workers; and (iii) the crowdsourcing service provider would be responsible for recruiting workers and any issues relating to such services, and on best effort basis, would identify suitable candidates for specific tasks as required by us. Our Directors believe that there are incentives for these workers (including our former employees) to work through the crowdsourcing arrangement, as it provides them with flexibility to continue working with other crowdsourcing service users especially during the period of our suspension of operations from January to March due to severely cold weather every year to earn extra income and to choose those crowdsourcing service users (i.e. our Group) whom they want to work with. Our Directors confirm that the compensation to be paid to the crowdsourcing service provider per headcount remained substantially unchanged as compared to the compensation previously received by the former employees per headcount from our Group. As at December 31, 2021, the Group incurred charges of approximately RMB4.7 million for the crowdsourcing arrangement on the basis that the workers we sourced from them continued working on a full-time basis, the amount of which was allocated to cost of sales for approximately RMB3.1 million, selling and marketing expenses for approximately RMB1.2 million, and administrative expenses for approximately RMB0.4 million, respectively. For details, please see ''Financial Information — Principal Income Statement Components''. Our Directors confirm that there is no material adverse effect on the cost structure of the Group as a result of the crowdsourcing arrangements.

As advised by our PRC Legal Advisers, our Group's engagement of such crowdsourcing services complies with the applicable PRC laws and regulations and does not constitute ''labor dispatch'' as defined in the Labor Contract Law of PRC and the Interim Provisions on Labor Dispatch, and the agreement entered into between our Group and the third-party crowdsourcing service provider does not violate the mandatory provisions of the applicable laws and regulations in the PRC. As advised by our PRC Legal Advisers, (i) ''Labor relation'' refers to the labor contract relation established between employer (such as enterprises, individual industrial and commercial household) and laborers. Individual industrial and commercial household (個體工商戶) can be employer, while laborer refers to natural person. Under labor relations, laborers are subject to labor management of employer, and employer shall pay salaries to laborers; (ii) according to the Labor Contract Law of PRC and the Interim Provisions on Labor Dispatch, ''labor dispatch'' is a form of labor service in which labor dispatch agents establish labor relations with dispatched staff, and is responsible for sending them to the employer, and the dispatched staff engages in labor under the order and supervision of the employer; (iii) the payment of salaries of dispatched staff shall be determined by the employer and paid by the dispatching agents; (iv) based on the agreement entered into between the Group and the crowdsourcing service provider, the crowdsourcing service provider would provide crowdsourcing services and platform services, hence the relationship between our Group and the crowdsourcing service provider is a contractual relationship adjusted and protected by the Civil Code; (v) to our Directors' best knowledge, the platform service members which are registered as individual industrial and commercial households (個體工商戶) and the crowdsourcing service provider had entered into service agreements, therein the platform service members shall complete certain work and deliver the results according to such service agreements, and the crowdsourcing service provider pays service fees therefor, hence the relationship between the crowdsourcing service provider and platform service members are also contractual relationships adjusted and protected by the Civil Code; and (vi) the Group has not entered into any contract with the platform service members. The platform service members are not paid by the Group or subject to labor management of the Group like other employees of the Group, for example, the Group's labor policies and systems do not apply to platform service members, hence the relationship between the platform service members and the Group are not labor relation. Based on the above, our PRC Legal Advisers are of the view that: (i) the platform service members are industrial and commercial households who rely on the platform to independently engage in business activities, there is no labor relationship between the platform service members and crowdsourcing service provider or the Group; (ii) our Group's engagement of such crowdsourcing services does not accord to the ''labor dispatch'' as defined in the Labor Contract Law of the PRC and the Interim Provisions on Labor Dispatch, and hence does not constitute ''labor dispatch''; (iii) the agreement entered into between our Group and the third-party crowdsourcing service provider does not violate the mandatory provisions of the applicable laws and regulations in the PRC and (iv) our Group's engagement of such crowdsourcing service provider complies with the applicable PRC laws and regulations. Save for the non-compliance incidents relating to social insurance contributions and housing provident fund contributions during the Track Record Period as disclosed in ''— Legal proceedings and regulatory compliance — Regulatory non-compliance'' in this section, during the Track Record Period and up to the Latest Practicable Date, we were in compliance with applicable labor laws and regulation in all material aspect.

**Training**

Our employees undergo training to enhance their technical mining skills, knowledge of industry quality standards, occupational health and safety standards and applicable laws and regulations.

**Employee relationship**

We believe that we have maintained good working relationships with our employees. During the Track Record Period and up to the Latest Practicable Date, we did not experience any major labor disputes, work stoppages or labor strikes or any work safety related incidents that led to disruptions in our Group's operations.

According to the written confirmations in respect of safety production issued by the Luobei County Emergency Management Bureau (蘿北縣應急管理局) on January 24, 2022 and the written confirmations in respect of occupational health by Luobei County Health Bureau (蘿北縣衛生健康局) on January 24, 2022, Yixiang Graphite and Yixiang New Energy had not been subject to any administrative penalties by these bureaus and had not been involved in production safety accidents or ongoing investigations regarding violation of occupational health rules since the establishment of these two companies.

We are committed to providing an occupational health and safety mining operation environment for our staff and third party service providers, and have implemented control measures for this purpose, which include but not limited to:

- setting up a safety production design in relation to the mine site, air compressor, ventilation, dewatering, transportation, electricity, etc.;
- setting up a safety leading team, which is responsible to oversee and react to any safety matters;
- setting up safety notice and signs in the production area;
- setting out a safety production policies and procedures to standardize the practice on production safety;
- setting out a safety tool and equipment rules to standardize the application of safety tools and equipment in production;
- setting up an emergency protocol for any emergency response process, incident/accident reporting;
- setting out transportation vehicle safety management rules to standardize the practice of using the vehicles;
- setting out electrical work safety rules and procedures to standardize the practice;
- contracting blasting work to the licensed service provider;
- application of fire suppression tools in the production areas;

- maintaining third party liability insurance policies; and
- provision of personal protective equipment to new staff members and work safety training to all staff.

Luobei County Emergency Management Bureau and Luobei County Health Bureau has issued respective confirmation letters, confirming that they are the competent administrative authorities of Yixiang Graphite and Yixiang New Energy in respect of safety production and prevention of occupational hazards.

According to the agency reports published by the People's Government of Luobei County, Heilongjiang Province, (i) Luobei County Emergency Management Bureau is responsible for reviewing safety measures formulated and imposed by non-coal mine construction projects in Luobei County and issuing administrative order for rectification of irregularities; and (ii) Luobei County Health Bureau is responsible for monitoring occupational disease prevention such as imposing penalty on enterprises for violation of occupational disease prevention law in Luobei County. Based on the above, our PRC Legal Advisers advised that Luobei County Health Bureau and Luobei County Emergency Management Bureau are the competent administrative authorities of Yixiang Graphite and Yixiang New Energy in respect of safety production and prevention of occupational hazards.

## INSURANCE

We have maintained various types of insurance, such as, (i) employee life insurance premium, (ii) safe production for mining production responsibility insurance to insure against operational hazards, and (iii) third party liability insurance in relation to vehicles to insure against the potential damages and loss caused by workplace accidents or work-related incidents. For each year during the Track Record Period, our Group paid approximately RMB0.6 million, RMB0.5 million and RMB0.1 million, respectively, as insurance premium payment for our various insurance policies (excluding social insurance and housing provident fund contributions).

In addition to the aforesaid insurance policies, the platform service provider has maintained employer responsibility insurance and work-related injury insurance for our staff employed by it.

As advised by our PRC Legal Advisers, it is not mandatory under the relevant PRC laws and regulations to maintain, and our Directors confirm that we have not maintained any business interruption insurance. Our Directors also confirm that, during the Track Record Period, we did not experience any business interruptions or losses or damages to our facilities that had a material adverse effect on our business, financial conditions or results of operation.

Our Group's insurance coverage includes employee life insurance premium, safe production for mining production responsibility insurance and third party liability insurance in relation to vehicles. According to Frost & Sullivan, such insurance coverage is in line with the industry norm, which is widely considered by the industry players to be sufficient to insure against the operational hazards and environmental damages involved in mining business. Accordingly, taking into account our Group's mining activities in our Beishan Mine, our Directors are of the view that our current insurance coverage is sufficient for our current operations and is in line with the industry norm. Our Directors and senior management will regularly review the risks relating to our operations and adjust our insurance coverage accordingly from time to time.

### Social insurance and housing provident fund contributions

Under the relevant PRC laws and regulations, we are required to contribute to a number of employee social welfare schemes in respect of our employees. Such schemes include social insurance contributions and housing provident fund contributions. Under the PRC's social insurance system, we are required to make contributions for our employees towards five categories of insurance, including the basic pension insurance, basic medical insurance, work-related injury insurance, unemployment, insurance and maternity insurance. We are also required to make housing provident fund contributions for our employees.

Save for the non-compliance incidents relating to social insurance contributions and housing provident fund contributions during the Track Record Period as disclosed in "— Legal proceedings and regulatory compliance — Regulatory non-compliance" in this section, we have complied with the applicable labor laws and regulations in all material aspects during the Track Record Period and up to the Latest Practicable Date.

## LICENSES, PERMITS AND APPROVALS

The table below summarizes the material licenses and permits required by our Group for our current business operations:

| Name of license/permit | Authority granting license/permit | Holder | Date of issue | Date of expiry |
|---|---|---|---|---|
| Water Drawing License | Water Bureau of Baoquanling Administration, Heilongjiang Province | Yixiang Graphite | June 19, 2018 | December 31, 2022 |
| Safety Production License | Hegang Department of Emergency Management | Yixiang Graphite | January 10, 2020 | January 9, 2023 |
| Pollutant Emission Permit | Hegang Bureau of Ecology and Environment | Yixiang Graphite | July 21, 2020 | July 20, 2023 |
| Work Safety Standardization Certificate as Grade 3 Enterprise (Tailings) | Heilongjiang Province General Bureau of Land Reclamation Safety Production Supervision and Administration Bureau | Yixiang Graphite | December 31, 2018 | December 2021[(1)] |

| Name of license/permit | Authority granting license/permit | Holder | Date of issue | Date of expiry |
|---|---|---|---|---|
| Work Safety Standardization Certificate as Grade 3 Enterprise (Beneficiation plant) | Heilongjiang Province General Bureau of Land Reclamation Safety Production Supervision and Administration Bureau | Yixiang Graphite | December 31, 2018 | December 2021[(1)] |
| Mining License | Heilongjiang Provincial Department of Natural Resources | Yixiang New Energy | April 8, 2019 | April 8, 2024 |
| Safety Production License | Heilongjiang Provincial Department of Emergency Management | Yixiang New Energy | March 19, 2020 | March 18, 2023 |
| Pollutant Emission Permit | Hegang Bureau of Ecology and Environment | Yixiang New Energy | June 19, 2020 | June 18, 2023 |

*Note:*

(1) The Company is in the process of applying for renewal of these certificates and the assessment of the application remains ongoing.

As advised by our PRC Legal Advisers, we obtained all material licenses, permits and approvals required for our operations in compliance with the relevant PRC laws and regulations for our operations in the PRC, and such licenses, permits and approvals remained valid and effective and had not been revoked as at the Latest Practicable Date. Furthermore, if Yixiang Graphite and Yixiang New Energy (i) continue to comply with relevant PRC laws and regulations and requirements of the relevant authorities; and (ii) submit all necessary application materials for the renewal of the licenses and permits in accordance with the requirements of the relevant authorities, our PRC Legal Advisers are of the view that there is no material legal impediment to renew the material licenses and permits obtained by Yixiang Graphite and Yixiang New Energy.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)

The Board, in the performance of its ESG governance responsibilities, has the collective and overall responsibility of: (i) overseeing the formulation and reporting of the ESG strategies, target and internal control measures; (ii) assessing and determining ESG-related risks, and (iii) holding meetings to discuss the ESG governance matters of the Group when necessary. For day-to-day ESG governance, the Board authorizes the senior management to organize and coordinate the ESG work of each subsidiary to ensure that its strategic decisions are implemented. The Board is committed to maintaining good communications with our senior management and making timely decisions on important ESG issues, supported by regular reporting of annual ESG updates by senior management, in order to gain a timely understanding of the ESG performance of the Group's business. The Board understands that the establishment of ESG targets aids in the Group's ESG governance. Therefore, the Board sets ESG targets related to the Group's business where appropriate, and reviews progress made toward improving the Group's ESG performance. The Board will, if deemed necessary, engage independent third parties to evaluate the Group's ESG risks and review existing strategies, targets and internal control measures.

**ESG Risk Assessment and Management**

The Group identifies and manages ESG risks in order to achieve its business objectives and ensure its stable development. We adopt a risk management system under a top-down risk management structure. The Board has the overall responsibility of maintaining sound ESG risk management and internal control systems within the Group. As part of this, the Board is responsible for identifying and assessing the Group's significant ESG risks, determining related risk levels, and formulating counter measures for which management is implemented by relevant departments and business units. The Board and the Compliance Committee are additionally responsible for reviewing and monitoring the effectiveness of the Group's ESG risk management and internal control systems, and for ensuring that the Group has taken reasonable measures to manage significant risks. The Group believes that ESG risks have gradually becoming an important factor in its business, and is therefore considering the incorporation of ESG risks into its routine risk management process as a means of enhancing its overall risk management and control capabilities. Based on the Independent Technical Report, 13 risks have been identified for the Group's operation by analyzing their materiality based on consequence, likelihood of occurrence and rating. Risk, if uncorrected, could have an adverse effect on the cash flow and performance on our operation of mining and beneficiation and processing. In addition to consequence of impact, the likelihood of risk must also be considered. The degree of consequence of a risk and its likelihood are combined into an overall risk assessment to result in a rating of each risk. For details, please see "Appendix III — Independent Technical Report — 12 Risk Assessment". Below sets forth the key risks identified with medium rating:

| Risk | Description | Control Recommendations | Likelihood | Consequence | Rating | Actions taken by the Company |
|---|---|---|---|---|---|---|
| Waste rock management | Inadequate space for waste rock storage | An alternative waste rock disposal plan should be developed before the storage space is full | Possible | Moderate | Medium | Recommendations are accepted. The Group has entered into a land usage agreement with a third party for the Group's disposal and storage of waste rocks. |
| Capital and operating costs | Higher capital and operating costs, resulting in poor financial performance | Secure long-term contracts with contractors and confirm advanced procurements orders with suppliers | Possible | Moderate | Medium | Recommendations are considered. The acquisition of mining rights in our Beishan Mine in 2019 has lowered the Group's costs. The Group will endeavour to negotiate and secure favorable terms with its suppliers. |

| Risk | Description | Control Recommendations | Likelihood | Consequence | Rating | Actions taken by the Company |
|---|---|---|---|---|---|---|
| Product quality | Lower quality product produced, reducing the profit margin | Process monitoring and flowsheet optimization | Possible | Moderate | Medium | Recommendations are accepted. The Group has put in place quality control measures and invested in research and development to optimize production equipment and processes. |
| Sales and pricing | Forecast sales not achieved at expected prices, reducing cash flow | Modify production volume; actively seek new customers and establish long-term contracts | Possible | Moderate | Medium | Recommendations are accepted. The Group has increased the beneficiation capacity from 40,000 to 50,000 tonnes. The Group will continue to develop new customers and foster long term relationship with customers. |
| Increased competition | Competition and possible reduction of price and sales volume leading to reduced cash flow | Market and prices be monitored to ensure the prices received are maximized | Possible | Moderate | Medium | Recommendations are considered. The Group will continue to monitor the market prices and to adjust the product prices in light of market competition and condition. |

### Environmental Responsibility

The Group believes that a sound environmental management policy is essential to achieving sustainable development. The Group has always been committed to minimizing the environmental impact of its routine operations. Save as disclosed in "Legal Proceedings and Regulatory Compliance" in this document, our Directors confirm that during the Track Record Period, the Group has complied with the environmental laws and regulations that significantly relate to the Group's operations.

***Environmental Protection, Land Rehabilitation and Other Social Matters***

Save as disclosed in this section and in "Legal Proceedings and Regulatory Compliance" in this document, our Group adheres to the environmental requirements set or issued by the relevant PRC governmental authorities. The table below summarizes the Environmental Impact Assessment ("**EIA**") reports and environmental approvals that our Group obtained in the PRC for our operations:

**EIA reports and Environmental approvals**

| Area | Produced by | Approved by | Approval date |
|---|---|---|---|
| Beishan graphite mine | Heilongjiang Qingze Environmental Technology Company Limited | Hegang City Environmental Protection Bureau | May 31, 2018 |
| Beneficiation plant | Hegang Environmental Protection Scientific Research Institute | Heilongjiang Agricultural Reclamation Bureau — Environmental Protection Bureau | August 30, 2005 |
| Spherical-graphite processing plant | Heilongjiang Academy of Agricultural Studies | Heilongjiang Province Environmental Protection Bureau — Agricultural Reclamation District Bureau | January 24, 2011 |
| Beneficiation plant expansion | Heilongjiang Bohuan Technology Consulting Co., Ltd | Hegang City Ecology and Environment Bureau | March 25, 2021 |
| Tailings storage facility (Secondary) | Heilongjiang Kedaxinxin Environmental Protection Technology Company Limited | Hegang City Luobei County Ecology and Environment Bureau | January 27, 2022 |

**Environmental final check and acceptance approvals**

| Area | Approved by | Approval date |
|---|---|---|
| Beneficiation plant | Heilongjiang Agricultural Reclamation Bureau, Environmental Protection Bureau | November 5, 2008 |
| Spherical-graphite processing plant | Heilongjiang Province Environmental Protection Bureau — Agricultural Reclamation District Bureau | January 17, 2014 |

**Environmental protection**

Our operations are subject to various PRC environmental protection laws and regulations, as well as local environmental protection regulations promulgated by local authorities on environmental protection. These laws and regulations govern a broad range of environmental protection matters, including but not limited to mining control, land rehabilitation, dust emissions, noise emissions, discharge of wastewater and pollutants. To ensure on-going compliance with the relevant environmental protection laws and regulations in the PRC, we have implemented or will implement certain measures, including but not limited to (i) conducting training on topics relating to environmental protection laws and regulations and safety production; and (ii) nominating our chairman and executive Director to lead our environmental protection team which will be responsible for updating our management and ensuring our compliance with the latest regulatory compliance. Our senior management continuously monitors our environmental policies to ensure compliance with the national legal and regulatory requirements. We also provide regular training to our management and employees to enhance their awareness of our environmental policies.

Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, we did not encounter any material claims, administrative actions or penalties by the relevant PRC authorities in relation to environmental issues. After reviewing the EIA reports pertaining to our Beishan Mine and conducting an environmental site visit, the Independent Technical Consultant notes that the EIA reports of our Beishan Mine complies with the relevant PRC laws and regulations during the Track Record Period. Nevertheless, the Independent Technical Consultant recommended that we develop and implement an operational environmental protection and management plan, inclusive of a monitoring program. We expect to incur approximately RMB1.2 million, RMB1.2 million and RMB1.1 million, on compliance with the applicable environmental protection laws and regulations for the years ending December 31, 2022, 2023 and 2024, respectively.

During each year of the Track Record Period, our Group incurred approximately RMB0.3 million, RMB1.0 million and RMB1.0 million, respectively, on compliance with the applicable environmental protection laws and regulations.

**Site ecological assessment**

The landform and topography in the mining area are commonly modified by open pit mining, waste rock dumping, haul roads, office buildings and dormitories, and other facilities, which may result in impacts to or loss of flora and fauna habitat. If effective measures are not taken to manage and rehabilitate the disturbed areas, the surrounding land can become polluted and the land use function will be changed, causing an increase in land desertification, water loss and soil erosion.

Environmental impact assessments indicated that the area of our Beishan Mine is dominated by man-made forest, natural secondary forest and shrubs, and that there are no rare and endangered species identified within such area. The main vegetation in such area is pine, birch, oak, yellow pineapple, low shrubs and weeds in the understorey. The main animals in such area are sika deer, horse deer, black bear, wild boar, roe deer, fox, small house mouse, frogs, snakes and sparrows. According to the Independent Technical Consultant, the total disturbed area for the mine site is estimated to be 0.3163 $km^2$, according to the environmental impact assessment report. We will take in the recommendations made by the Independent Technical Consultant in relation to the above whilst striking a balance between mining development and ecology, and will commission qualified professionals to conduct annual assessments.

**Waste rock and tailings management**

According to the EIA reports, the waste rock should be temporarily discharged to the waste rock dump located to the west of the mine site, with a capacity of 53,000 $m^3$. The volume of waste rock is estimated to be 373,100 $m^3$ per annum, which will be temporarily stored in the waste rock dump and sold periodically for use as construction material. Whilst, the Independent Technical Consultant observed that a small amount of stripped topsoil and waste rock had been discharged on site and there had been no such dump on site as a part of the review at the time of the site visit in July 2020, our Directors explained that most of the waste rock produced in the period of 2019 to 2021 was sold to local developers, and a small amount was used to maintain our tailings storage facility of the beneficiation plant. The Company is of the opinion that such use will continue consuming the majority of waste rocks. The Company has also leased a piece of land, located 2 km to the west of the mine site with a capacity of hosting approximately 1,000,000 $m^3$ of waste rocks temporarily. The construction of the new tailing storage facility associated with the new beneficiation plant, located in the proximity of our Beishan Mine will also provide opportunity for further consumption of waste rock. The current waste rock management plan appears to have worked successfully, however, the Independent Technical Consultant recommends long term contracts to be secured with local developers to ensure the waste rocks are disposed accordingly.

The tailings generated by the processing plant is discharged to a tailing storage facility on site. According to the latest tailing storage facility design, the tailing storage facility has a total storage capacity of 1,591,800 $m^3$ and an effective storage capacity of 1,193,850 $m^3$. The tailing storage facility design states that the stability of the dam should be protected due to the increased risk during the highest flood of the Yadan River. The tailing storage facility consists of a sedimentation pond, a recycle pond and an overflow pond, and the tailings is used for brick making. The Independent Technical Consultant noted a tailing use agreement which was signed by Yixiang Graphite and an Independent Third Party on January 3, 2015. The agreement stipulates our Beishan Mine, beneficiation and processing activities need to provide a minimum of 300,000 tonnes of tailings per annum. Similar agreements were signed with two other companies in July and August 2021. Some of the tailings are also stored temporarily at the secondary tailing storage facility, located 3 km to the east of the current tailing storage facility. The secondary tailing storage facility has a designed capacity of 900,000 $m^3$. The Independent Technical Consultant sighted an environmental impact assessment report and associated government approval.

According to the Independent Technical Consultant, a potential risk to the environment from waste rock and tailings storage facility is acid rock drainage created when reducing sulfide minerals are exposed to air, precipitation and bacteria and, through an oxidation reaction, produce sulfuric acid, during mining, transportation, processing, waste rock discharge, and tailings storage, etc. Acid rock drainage has the potential to introduce acidity and dissolved metals into water, which can be harmful to surface and groundwater. The Independent Technical Consultant confirms that the pollutants in the leachate are mainly conventional pollution factors and the concentration of heavy metals is low. However, it did not sight any evidence of any leaching or acid rock draining during its site visit.

The table below sets out the details of the waste production by us during the Track Record Period.

| Category | Waste Production For the year ended December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| Waste rock (tonnes/annum) | 561 | 719 | 952 |
| Tailing waste (tonnes/annum) | 388,600 | 346,600 | 459,400 |

## Water management

The nearest surface water body to our Beishan Mine site and processing plant is the Yadan River and its tributary, which is a water source of our Beishan Mine for production. The potential negative impact of our Beishan Mine on surface water and groundwater is mainly due to the arbitrary discharge of untreated production and domestic wastewater. In addition, mining activities may also cause changes in groundwater levels. The main wastewater pollution sources of our Beishan Mine include mine water, processing wastewater, return water from tailings storage facility, waste rock leachate, wastewater from maintenance workshop, industrial site rainwater, domestic sewage, etc.

The Independent Technical Consultant recommends the implementation of a sustainable water supply management plan to minimize the impact on natural systems through the management of water use, avoid the depletion of aquifers, and reduce the impact on water users. Alternative water sources can be provided if the development affects the surrounding community's access to water. The EIA for the mine site proposes to collect the mine water in the settling pond and then discharge outside within the limit of standards. The Independent Technical Consultant noted that the mine water is collected and re-used for dust suppression. The EIA for the beneficiation plant and spherical graphite processing plant requires all production wastewater to be discharged to the tailing storage facility. Our production wastewater from the plants is collected and discharged to the tailing storage facility. The Independent Technical Consultant also recommends that surface drains be installed around the open pit and adequate stormwater diversion facilities be established at the plant to separate surface runoff from contaminated areas and clean areas. Further, the Independent Technical Consultant recommends implementing a monitoring program to assess the quality of surface water and groundwater within the area (including upstream and downstream areas, especially Yadan River and its tributary). Measures such as ground hardening, cofferdam, water-collecting ditch, leachate collection pool and accident pool in the processing plant area, temporary storage of hazardous waste, topsoil dump and tailings were recommended by the Independent Technical Consultant to mitigate the contamination risk of surface water and groundwater. The Independent Technical Consultant observed that as at the Latest Practicable Date, we have already planned a plant optimization program which will start with the sedimentation pond, and then gradually improve other facilities, including the stormwater diversion facilities. We will commission qualified parties to conduct water quality monitoring every year.

During the Track Record Period, our Directors confirm that no substantial sewage was produced as waste water generated from the mining, beneficiation and processing was collected at the sedimentation pond, where the water was recycled and reused in mining and production processes and the remaining waste was discharged to the tailing storage facilities.

### Air quality and noise

The dust emission sources are mainly from open pit mining, loading and unloading, waste rock dump, tailings, storage facility, grinding, drilling, pilling, screening, drying, packaging and movement of vehicles and mobile equipment. It is noted by the Independent Technical Consultant that dust management measures for the mine site and plants proposed in the EIA reports mainly comprise wet drilling, watering of roads and stockpiles, greening on site and using dust remover for the process of grinding, screening and drying. The Independent Technical Consultant did not observe obvious fugitive dust emissions in the open pit area during the site visit and the fleet includes a water truck for dust suppression. The EIA states the fumes from the boiler during the graphite drying process need to be treated by a cyclone dust collector and then discharged. The EIA also proposes installation of a waste treatment facility to treat the exhaust gases from the coating surface treatment and charring processes which release smoke, dust, bituminous fumes and benzopyrene. The Company has installed dust collectors and waste treatment facility.

The main sources of noise are from the operation of rock drill, explosion, pump, crane, crusher, ball mill, dryer, loader and vehicles. The Independent Technical Consultant stated its opinion that the following noise prevention measures are feasible to implement: enclosure of high noise equipment; selection of low noise equipment; use of vibration damping facilities; time and speed limit on transportations; greening and optimizing the layout. The Company has put in measures as per the Independent Technical Consultant's opinion.

The table below sets out a comparison of the air pollutant emissions by us and the statutory permitted level as at December 31, 2021.

| Category | Pollutant emissions | Statutory permitted level |
|---|---|---|
| Dust Pollutant | 0.15–0.317 mg/m$^3$ | 1.0 mg/m$^3$ |

The table below sets out a comparison of the noise pollutant emission by us and the statutory permitted level as at December 31, 2021.

| Category | Pollutant emissions | Statutory permitted level |
|---|---|---|
| Daytime noise level | 56.8–57.5 dB(A) | 60 dB(A) |
| Nighttime noise level | 45.9–49.5 dB(A) | 50 dB(A) |

### Hazardous materials management

Hazardous materials are corrosive, reactive, explosive, toxic, flammable and potentially biologically infectious, which poses a potential risk to human and/or environmental health. The hazardous materials will be generated mainly by our mining operations including hydrocarbons (i.e. fuels, waste oils and lubricants), chemical and oil containers, batteries, medical waste, and paint. During its site visit, the Independent Technical Consultant did not observe any evidence of any significant hydrocarbon spillage in the open pit area. However, there was no separate facility for storage of hazardous wastes on site. The Independent Technical Consultant recommends that we collect the waste oil generated and hand it over to a qualified contractor for disposal. The Independent Technical Consultant also recommends the management of the collected waste oil, fuel tanks, acid storage tanks and mineral processing chemicals includes measures such as hardening the ground and setting up secondary containment facilities to reduce the risk of pollution caused by leakage. Our Directors confirm that there is currently no waste oil generated at the mine site, and if there is, we will commission a qualified contractor to dispose of it.

**Land rehabilitation**

Under the relevant PRC laws and regulations, we are required to undertake measures to restore a mine site to its original state within a prescribed time frame if our mining activities result in damage to arable land, grassland or forestry land. The rehabilitated land must satisfy rehabilitation standards in accordance with the relevant law from time to time, and cannot be used unless it has been examined and approved by the relevant PRC land authorities. Failure to comply with this requirement or failure to restore the mine site to its original state within the prescribed timeframe will result in the imposition of fines on our Company, rehabilitation fees and/or rejection of applications for land use rights or rejection of applications for new mining license or renewal, alteration or cancellation of mining license by the local bureau of land and resources.

Land rehabilitation generally involves: (i) the removal of building structures, equipment and machinery, and other physical remnants of mining; (ii) restoration of land features in disturbed areas and dump sites; (iii) contouring, covering and revegetation of disturbed areas. While this site closure planning process is not specified in the PRC national requirements for mine closure, the implementation of this process for a PRC mining project will facilitate achieving compliance with these PRC national legislative requirements and demonstrate conformance to internationally recognized industry management practice. To confine with the internationally recognized industry practice for managing site closure, there is being put in place a geological environment protection and rehabilitation plan which sets out our proposed site closure and rehabilitation measures, including but not limited to: (i) greening; (ii) stockpiling topsoil for reuse in rehabilitation; and (iii) rehabilitation monitoring of the area of geological disaster, land disturbance, water environment, soil and new plants. The plan describes the proposed treatment measures, schedule, monitoring, cost estimation, etc. Such plan also stated that the total cost for the geological environment protection and land reclamation is estimated to be approximately RMB4.8 million, which comprises geological environment protection of approximately RMB2.9 million and land reclamation of approximately RMB1.9 million. As at December 31, 2021, we made provision of approximately RMB2.4 million for mine closure and rehabilitation of affected environment based on the progress of extraction in our Beishan Mine. According to the Independent Technical Consultant, under the PRC legal requirements, we are required to establish a mine geological environment treatment and restoration fund account. The Independent Technical Consultant noted that we entered into an agreement for the aforementioned fund account which was signed by our Company, Luobei County Natural Resources Bureau and China Postal Savings Bank Luobei Branch dated December 2019, with approximately RMB0.3 million in land reclamation fees. The Independent Technical Consultant is of the view that our proposed approach to land rehabilitation is generally in line with the relevant recognized PRC industry practices.

**Environmental Findings and Supervision Notice**

The announcement of Ministry of Ecology and Environment of the People's Republic of China (中華人民共和國生態環境部) dated December 16, 2021 ("**Findings Announcement**") stated a number of findings ("**Findings**") identified on certain entities in the graphite park in Yanjun Farm, Luobei County, Heilongjiang ("**Graphite Park**"), where our production plants are situated.

These Findings include: (a) failure to establish volatile organic compounds ("**VOCs**") treatment facilities; (b) failure to install effective wind and dust suppression measures, resulting in graphite dust scattering in the production workshop and factory area and graphite ore materials are stacked in the open air; (c) dumping graphite tailing waste randomly in pits and rivers around the village nearby, contravening the "Laws on the Prevention and Control of Environmental Pollution by Solid Waste" (固體廢物污染環境防治法); (d) eight entities in the Graphite Park have built 17 coal-fired boilers below 10 steam tons per hour, all of which have not been equipped with desulfurization and denitrification devices, as well as long-term excessive emissions of exhaust gases; (e) commencing construction before approval, or establishing large-scale construction with only approval for small-scale construction in contravention of "Environmental Impact Assessment Law" (環境影響評價法); (f) failure to perform energy-saving review procedures in accordance with the requirements of the "Energy Conservation Review Law for Fixed Asset Investment Projects" (固定資產投資項目節能審查法); (g) illegal occupation of land within the general land use plan of Luobei County and outside the plan, including forest land, wetlands, and grassland, causing damages to the surrounding ecology; (h) by-passing the approval requirement by merely signing compensation agreements and temporary land lease agreements with the local villages and farms, where tailing ponds are illegally built to discharge graphite waste without fulfilling the approval procedures for land and forestry; and (i) Yanjun Farm Industrial Park has not prepared planning EIA report and Luobei County Graphite Industrial Park's planning EIA report has not been approved up to the date of inspection.

On April 14, 2022, our PRC Legal Advisers conducted interviews ("**Findings Interviews**") with the Ministry of Ecology and Environment of Luobei of Hegang City (鶴崗市蘿北生態環境局) and Luobei County Natural Resources Bureau (蘿北縣自然資源局) in relation to the Findings.

With respect to Finding (a), as advised by our PRC Legal Advisers, the Ministry of Ecology and Environment of Luobei of Hegang City confirmed, among others, that: (i) there was no regulatory precedent for the construction of VOCs treatment facilities in the graphite industry. When the inspection team inspected, because Yixiang Graphite was not in operation due to severely cold weather, it was unable to determine whether Yixiang Graphite had produced VOCs; (ii) all beneficiation entities in the Graphite Park (including Yixiang Graphite, but not Yixiang New Energy which did not engage in beneficiation) was required to build VOCs treatment facilities according to Supervision Notice; and (iii) the VOCs treatment facilities could become operational once established in which there were no other prior requirements or procedures for acceptance and approval and there was no legal obstacle to the construction of supporting VOCs treatment facilities; (iv) Yixiang Graphite previously completed the relevant EIA procedures for the atmospheric environment control measures; and (v) the non-establishment of VOCs treatment facilities by Yixiang Graphite did not constitute a non-compliance, and Yixiang Graphite would not be investigated or penalized accordingly, and did not require to re-apply its pollutant discharge permit. Our Directors confirm that it has engaged a qualified environmental construction service provider to install the VOCs treatment facilities, which was completed in May 2022.

With respect to Findings (b) — (e), as advised by our PRC Legal Advisers, the Ministry of Ecology and Environment of Luobei of Hegang City confirmed that: (i) Yixiang Graphite and Yixiang New Energy did not commit any non-compliance relating to such findings; (ii) Yixiang Graphite and Yixiang New Energy were not subject to any investigation or penalty; and (iii) no disputes, lawsuits, or complaints were filed against Yixiang Graphite and Yixiang New Energy.

With respect to Finding (f), please see "— Energy Saving Review" in this section.

With respect to Findings (g) — (h), as advised by our PRC Legal Advisers, Luobei County Natural Resources Bureau confirmed that Yixiang Graphite and Yixiang New Energy did not contravene such findings; and the use of the lands by Yixiang Graphite and Yixiang New Energy was deemed in compliance with applicable laws and regulations.

With respect to Finding (i), as advised by our PRC Legal Advisers, the Ministry of Ecology and Environment of Luobei of Hegang City confirmed as at April 14, 2022 that this finding was applicable to the governing bodies of the Graphite Park only and it would not have adverse impact on Yixiang Graphite and Yixiang New Energy. Our Directors confirm that the current operation and production of beneficiation and processing plants of our Group were not adversely affected accordingly.

Subsequent to the Findings Announcement, the Supervision Notice was issued by Ministry of Ecology and Environment of Luobei of Hegang City (鶴崗市蘿北生態環境局) on March 28, 2022 ("**Supervision Notice**"), which sets out a number of follow-up works ("**Follow-up works**") required to be carried out by certain entities in the Graphite Park, including: (a) VOCs treatment works shall be constructed in accordance with the "Air Pollution Prevention and Control Law" (大氣污染防治法); (b) enhancement of graphite ore storage facilities shall be carried out in accordance with the "Law on the Prevention and Control of Air Pollution" (大氣污染防治法); (c) demolition and renovation of coal-fired boilers; (d) comprehensive cleaning of tailings sand outside the tailings pond; and (e) all EIA procedures shall be completed according to the "Environmental Impact Assessment Law" (環境影響評價法), involving those commencing construction before approval, or establishing large-scale construction with only approval for small-scale construction.

With respect to Follow-up work (a), our Directors confirm that, as abovementioned, the Company has engaged a qualified environmental construction service provider to install the VOCs treatment facility, which was completed in May 2022.

With respect to Follow-up work (b), as advised by our PRC Legal Advisers, the Ministry of Ecology and Environment of Luobei of Hegang City confirmed that it only applied to Yixiang Graphite, which had built a graphite ore stacking yard in accordance with the EIA requirements. The Supervision Notice required all graphite entities to improve graphite ore storage facilities in accordance with new standards, including, adjusting the entry door size, enhancing the dust suppression net and installation of water sprayers in the graphite ore stacking yard, in order to further minimize the dust pollution impact and Yixiang Graphite was allowed to continue operation while conducting the enhancement. The Ministry of Ecology and Environment of Luobei of Hegang City confirmed that, as at April 14, 2022, Yixiang Graphite would not be investigated or penalized by such accordingly. Our Directors confirm that the enhancement works were completed in May 2022.

With respect to Follow-up works (c) to (e), as advised by our PRC Legal Advisers, the Ministry of Ecology and Environment of Luobei of Hegang City confirmed that it did not apply to Yixiang Graphite and Yixiang New Energy, and accordingly, no follow-up actions needed to be taken by us.

As advised by our PRC Legal Advisers, the aforesaid authorities are the competent administrative authorities of Yixiang Graphite and Yixiang New Energy, and the risk of the confirmations from the aforesaid authorities being revoked by higher authorities is remote. Considering that no penalties would be imposed on our Group, our Directors confirm that the above incidents do not have material adverse effect on the business, results of operations and financial conditions of our Group.

**Social aspects**

The surrounding land around our Beishan Mine generally comprises forest and farmland. The Independent Technical Consultant noted that the environmental impact assessment reports do not report any natural reserves or potential cultural heritage sites within our Beishan Mine. The EIA provided public participation survey for the mine site and processing plant construction. The survey results showed full support for our Beishan Mine, beneficiation and processing construction. The EIA also state the local residents believe our business and operation will improve the development of local economy. Our Directors confirm that, in relation to local community concern relevant to environmental pollution, during the Track Record Period and up to the Latest Practicable Date, we did not receive any historical or current non-compliance notices and/or other documented regulatory directives in relation to the development of our Beishan Mine and our processing operations. Our Directors also confirm that, to the best of their knowledge, they are not aware of any concerns of local governments and communities in relation to the mining activities at our Beishan Mine which are relevant and material to our business operations. The Company will implement annual public consultation to ensure the social responsibility requirements are met.

**Resource consumption**

We consume electricity, fuel and water during our daily operations of our Beishan Mine, beneficiation and processing. We believe reducing resource consumption is beneficial to environmental protection and the improvement of work efficiency. We aim to strictly comply with relevant provisions of the Law of the People's Republic of China on Conserving Energy (《中華人民共和國節約能源法》), the Water Law of the People's Republic of China (《中華人民共和國水法》), and the Regulation on the Administration of Water Sourcing Permission and Levy of Water Resource Fees (《取水許可和水資源費徵收管理條例》) and formulates relevant plans targeting the reduction of electricity, fuel and water consumption in mining and office activities. We have implemented the following measures which are applicable to both our Group and our third-party service providers: (a) adjusting the temperature of office air-conditioning according to real-time weather; (b) encourage the staff to leave curtains open to make full use of natural light and reduce the use of electricity; (c) encourage employees to take public transport instead of driving to/from work; (d) regular maintenance and adjustment to engines to keep vehicles operating at the proper condition to reduce fuel consumption; (e) conduct regular maintenance of pipelines and taps and inspect any possible leakage; and (f) establish a comprehensive water resource management and control system focusing on tap water used during daily office work and groundwater used for dust prevention and cooling during stone cutting.

We have implemented the following electricity, fuel and water consumption targets for each year after reaching full production capacity of our beneficiation and processing:

| Category | Annual performance target set by our Group for the year ending December 31, 2022 |
|---|---|
| Water | |
| • Water for production ($m^3$) ('000) | Approximately 1,992 (including recycled water of 1,830 $m^3$ and fresh water of 162 $m^3$) |
| Electricity | |
| • Total use of energy (kilowatt) ('000) | Approximately 55,166 |
| Fuel | |
| • Diesel (litres) ('000) | Approximately 1,131 |
| • Coal (tonnes) ('000) | Approximately 7 |

**Energy Saving Review**

On November 10, 2021, Luobei County Development and Reform Bureau (蘿北縣發展和改革局) ("**Bureau**") issued a notice to Yixiang Graphite ("**Notice 1**") informing Yixiang Graphite that pursuant to the Bureau's recent review and inspection of projects in the region under its supervision, it had discovered that Yixiang Graphite had yet to carry out energy saving review for its beneficiation plant project. According to a news article published by China Business Network (第一財經) on December 16, 2021, that the Central Supervision Office of Ecological and Environmental Protection (中央生態環境保護督察辦公室) discovered through inspection that five enterprises located in the graphite park in Luobei County, including Yixiang New Energy, have yet to carry out energy saving review procedures for their new production lines as required under the Energy Saving Review Measures for Fixed Asset Investment Projects (固定資產投資專案節能審查辦法). According to the news article, relevant departments sent energy saving review notices to these enterprises requesting them to carry out energy saving reviews. On January 7, 2022, the Bureau issued another notice to Yixiang New Energy ("**Notice 2**", together with the Notice 1, "**Notices**") informing Yixiang New Energy that pursuant to the Bureau's recent review and inspection of projects in the region under its supervision, it had discovered that Yixiang New Energy had yet to carry out energy saving review for its processing plant project. According to the Notices, Yixiang Graphite and Yixiang New Energy needed to submit formal written reports and related materials to the Bureau on or before January 31, 2022 and January 30, 2022, respectively. As at the Latest Practicable Date, both energy saving reviews for the above projects of Yixiang Graphite and Yixiang New Energy have been completed.

The PRC Legal Advisers conducted an interview with the Bureau on February 15, 2022 and obtained confirmation from the Bureau that (i) there were no violations of laws and regulations in respect of energy saving review by Yixiang Graphite and Yixiang New Energy since their establishment; (ii) no investigations have been conducted and no administrative penalties have been imposed on Yixiang Graphite and Yixiang New Energy in relation to their delay in having energy saving reviews; and (iii) none of Yixiang Graphite and Yixiang New Energy has any disputes with or is involved in any controversies with the Bureau in respect of energy saving review. According to a confirmation letter issued by the Bureau on February 23, 2022 ("**Confirmation**"), (i) the Notices were practical arrangements to resolve certain historical issues relating to enterprises under the supervision of the Bureau collectively and were not aimed at Yixiang Graphite and Yixiang New Energy as regards their compliance or any violations of laws and regulations in respect of energy saving review; (ii) Yixiang Graphite and Yixiang New Energy had submitted formal written reports and had fully complied with the requirements set out in the Notices in a timely manner and the delay in completing the energy saving review procedures by Yixiang Graphite and Yixiang New Energy does not constitute non-compliance; (iii) the above projects of Yixiang Graphite and Yixiang New Energy were in normal operation and no administrative penalties had been imposed on Yixiang Graphite and Yixiang New Energy due to violations of laws and regulations in respect of energy saving review; (iv) there were no potential or existing investigations and administrative penalties on Yixiang Graphite and Yixiang New Energy; and (v) none of Yixiang Graphite and Yixiang New Energy had any disputes or litigation with or was involved in any controversies with the Bureau in respect of energy saving review. As advised by the PRC Legal Advisers, the Bureau is the competent authority to provide the Confirmation and the risk of the Confirmation from the aforesaid authority being revoked by higher authorities is remote.

Our Directors confirm that as at the Latest Practicable Date, save as disclosed in this document, we have complied with all the pollutant emission requirements in the EIA reports and environmental approvals prescribed by relevant regulatory bodies and government authorities. We will apply to update the requirements in the EIA as and when necessary to accommodate our actual pollutant emission and waste production in accordance with the applicable laws and regulations.

As at the Latest Practicable Date, Yixiang New Energy obtained (i) necessary approvals and licenses for exploiting Beishan Mine, including but not limited to "operation license", "Mining License" and "Safety Production License"; and (ii) the confirmation letters issued by the Development and Reform Bureau, the Market Supervision and Administration Bureau, the Natural Resources Bureau, the Ecology and Environment Bureau, the Emergency Management Bureau, the Health Bureau and the Housing and Urban-Rural Development Bureau of Luobei County acknowledging that, during the Track Record Period and up to the respective issue dates of the confirmation letters, Yixiang New Energy has not been subject to any administrative punishment for violating relevant PRC laws and regulations. Based on the above, our PRC Legal Advisers advised that (i) Yixiang New Energy completed and obtained all the necessary approval, review, filing, registration and license in material respects required for exploiting our Beishan Mine; and (ii) Yixiang New Energy was not subject to any administrative punishment by the above authorities for violating relevant PRC laws and regulations in the operation of Beishan Mine.

The table below sets out details of environmental protection measures recommended by the Independent Technical Consultant, the latest implementation status and expected timeframe of full implementation.

| Environmental protection measures recommended by the Independent Technical Consultant | The latest implementation status | Expected timeframe of full implementation |
|---|---|---|
| Annual site ecological assessment should be made by qualified professionals | Our Directors confirm that an ecological assessment was conducted by an independent assessor. | Completed |
| Implementation of a sustainable water supply management plan to minimize the impact on natural systems through the management of water use, avoid the depletion of aquifers, and reduce the impact on water users | As the mine is entering into the shape of a depressed open pit, the main source of gushing water will be the atmospheric precipitation, and the most depressed part of the pit shall excavate a pit for water collection. To make full use of water resources, the size of the catchment pit is increased when excavated to save water, without affecting the productivity of the mine.<br><br>To reuse water resources, a drainage pump is arranged in the water puddle to discharge water out of the mine. At the same time, the mine is drained by two 80QWN50-93-25 submersible pumps, and water pumped out is discharged to storage pond on the south side of the quarry via a pipe for storage. The water collected in the storage pond is used for dust reduction created by the mining process and road transportation and for watering of plants. | Completed |
| Surface drains around the open pit should be installed | Our mine has been installed with drainage facilities and drainage pumps at low points of the open pit | Completed |

| Environmental protection measures recommended by the Independent Technical Consultant | The latest implementation status | Expected timeframe of full implementation |
|---|---|---|
| Establishment of stormwater diversion facilities at the plant to separate surface runoff from contaminated areas and clean areas | We have re-assessed the storm water diversion systems and our Directors are of the view that there are sufficient facilities in place to divert storm water to the tailing storage area, where it will be reused for production after sedimentation | Completed |
| A monitoring program to assess the quality of surface water and ground water within the area (including upstream and downstream areas, especially Yadan River and its tributary) | We have commissioned qualified professionals to conduct assessments | Completed |
| A plant optimization program, starting with the sedimentation pond, then other facilities | We have completed the enhancement of the sedimentation pond and other facilities | Completed |
| Measures to mitigate the contamination risk of surface water and ground water, i.e., ground hardening, cofferdam, water-collecting ditch, leachate collection pool and accident pool in the processing plant area, and temporary storage of hazardous waste, topsoil dump and tailings storage facility | We have equipped the site with facilities to (i) mitigate the contamination risk via ground hardening; (ii) a leachate collection pool; (iii) accident pools in the beneficiation site; (iv) sedimentation ponds to treat leachate and related accidents; and (v) a tailing pond to treat production waste | Completed |

| Environmental protection measures recommended by the Independent Technical Consultant | The latest implementation status | Expected timeframe of full implementation |
|---|---|---|
| Noise prevention measures including enclosure of high noise equipment, selection of low noise equipment, use of vibration damping facilities, time and speed limit on transportations, as well as greening and optimizing the layout | Our Directors confirm that we prioritize the purchase of low noise equipment, and that our high noise equipment has already been installed within the stations that form our beneficiation equipment. We have implemented time and speed limits on transportations, as well as greening and optimizing of our layout. We have re-assessed our usage of vibration damping facilities, and our Directors are of the view that there are sufficient facilities in place. | Completed |
| Measures of separate facility for storage of hazardous wastes on site, disposal by a qualified contractor, hardening the ground and setting up secondary containment facilities to reduce the risk of pollution caused by leakage | We have established a hazardous waste storage room to manage the collected waste, and have commissioned a qualified contractor to dispose, if any, waste oil generated | Completed |
| Setting up of a mine geological environmental treatment and land restoration fund account | We have deposited land reclamation fees of approximately RMB0.3 million to our mine geological environmental treatment and land restoration fund account and entered into an agreement for the aforementioned fund account which was signed by our Company, Luobei County Natural Resources Bureau and China Postal Savings Bank Luobei Branch in December 2019 | Completed |

The Directors confirm that the amount of approximately RMB0.3 million has been deposited in the Group's mine geological environmental treatment and land restoration fund account as designated by the Luobei Natural Resources Bureau, and the Directors consider such amount as sufficient, as no further queries nor payment requests have been made by the aforesaid government authority.

## Social Responsibility

The Group believes that its staff members are fundamental to enterprise, and it strives to create a safe and healthy working environment to attract talents. The Group also attaches great importance to upholding employees' rights and interests. Our Directors confirm that we have been in compliance with laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, non-discrimination, and other matters of benefits and welfare.

### *Occupational Health and Safety*

The PRC government imposes significant regulatory requirements on graphite mines with respect to employee safety. We regard occupational health and safety as one of our most important responsibilities. We have implemented a number of measures to ensure compliance with the stringent regulatory requirements which we are subject to. Our Directors confirm that our safety procedures are in line with the PRC industry standard practices and PRC safety regulations.

As at December 31, 2021, we had a total of 112 employees, 7 of which were staff responsible for occupational health and safety work and responsible for periodic inspections and assessment of the implementation of our safety standards in order to ensure that our entire mining operation is in compliance with the applicable PRC laws and regulations. Our Directors confirm that during the three years ended December 31, 2019, 2020 and 2021, we had conducted over 100 internal inspections per year, covering electricity usage safety, fire safety, facility and equipment safety, maintenance and welding safety, tailing storage safety, mining vehicles, crane and chemicals safety.

In addition to the safety systems and procedures we put in place, we organize and conduct training sessions for employees on accident prevention and management. First-aid kits are provided in all workplaces. Employees are provided with annual physical examinations to ensure the well-being of their health. The Group has established arrangements to minimize potential accidents when employees travel to or from their workplaces when typhoon and rainstorm warnings are in effect. Our Directors confirm that we have passed all periodic and other safety inspections by the relevant authorities, and our Beishan Mine has not been shut down by the PRC government. Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, our Group had no accidents, claims or complaints which materially and adversely affected our operation (including our right to mine in our Beishan Mine).

Our Group has responded to the COVID-19 pandemic with a range of measures to safeguard the health of our employees. Employees were encouraged to telecommute during the pandemic's most severe period to reduce the risk of cross-infection, and were regularly provided with masks and hand sanitizers. Hand sanitizers are also made available in our offices, and employees are reminded of the need for preventative personal hygiene.

**Employment**

Our Group has established rules and procedures of recruitment, job promotion, compensation, benefits, rest periods, dismissal, etc, to protect its employees' rights. Our Directors confirm that our Group also constantly reviews and improves its policies to ensure that employees' rights are upheld. During recruitment and job promotion, our Group follows the principle of "selection on merit", taking into account the performance, work experience and capability of the applicant or employee. Our Group advocates a diverse and equal workforce culture by ensuring that applicants and employees are not discriminated against on the basis of gender, age, race, family status or physical disability. The Group strictly prohibits any forms of unfair or unreasonable dismissal, and sets out the terms of dismissal of employees. Our Group determines employees' compensation packages on the basis of work performance and the market standard of remuneration. Our Group also provides employee benefits where applicable, such as overtime payment and holiday working allowances. Employees are entitled to statutory holidays, annual leave, sick leave and maternity leave. Unpaid leave, paternity leave, marriage leave and casual leave are provided depending on individual circumstances.

**Development and training**

Our Group believes that retaining talent and promoting teamwork are key to its long-term development, and is committed to enhancing the professional knowledge and skills of its employees. Our Group regularly participates in training seminars on topics such as financing, compliance and corruption prevention. Our Group provides all employees with orientation training, including an introduction to corporate culture and on-the-job training, which enable them to quickly integrate into our Group and adapt to their jobs. Further on-the-job training, health and safety training, in-house experience sharing and other activities are arranged for employees to broaden their professional horizons. To encourage development, our Group conducts employee assessments at the end of each year. Depending on their performance and responsibilities, our Group provides employees with promotion and training opportunities.

**Labor standards**

Our Directors confirm that our Group does not employ children and prohibits any form of forced labor within its operations. Our Directors confirm that our Group has complied in full with the laws and regulations relating to child and forced labor. Our Group sets out policies regarding employee working hours and overtime expenses to prevent occurrence of forced work without compensation. As an additional measure to avoid violating labor laws and regulations, our Group inspects all applicants' identity certificates during the recruitment process. Our Directors confirm that if child labor or forced labor business is discovered, our Group shall seek legal advice and take corrective measures immediately.

**Supply chain management**

Our Group's supply chain primarily includes unprocessed graphite supplies and utilities provider. Our Group prescribes transparent procurement procedures for selecting suitable suppliers in a fair, impartial and open manner. Our Group's procedures ensure fair competition when procuring, including objective selection criteria. These procedures protect the interests of both our Group and the supplier. Our Group's procurement considerations including but not limited to product or service quality, pricing and delivery time, aim to reduce procurement risk and enhance procurement efficiency. Our Group has measures to ensure that the products and services provided meet its standards. Our Group also monitors the environmental and social performance of its suppliers to ensure that its requirements are met, and to reduce the environmental and social risks caused by procurement.

**Products responsibility**

Our Group is committed to upholding and enhancing the quality of its products for its customers. Our Group is committed to reducing the health and safety risks associated with its products in order to protect customers. Our Group regularly conducts inspection on its machinery and equipment employed in its mining, beneficiation and processing operations to ensure that they are safe and in good working order. Our Group has also established procedures for managing product defects. During the Track Record Period, our Directors confirm that our Group has not received any complaints regarding material product defects. Our Group regards customer privacy as a matter of prime importance, and provides employees with guidance to prevent them from disclosing customer information. If any leak of customer information is found, our Group will rectify it promptly and administer punishment to responsible employees corresponding to the severity of the incident. Employees will be held legally responsible in serious circumstances. During the Track Record Period, our Directors confirm that our Group did not experience any incidents of customer information leakage, nor did it receive any complaints about improper use of customer information that had a significant impact on our Group. Our Group forbids any form of false or misleading description in its marketing processes. We believe this ensures that accurate and comprehensive information is provided to customers during sales of our graphite products.

**Corruption prevention**

The Group strives to be ethical in its business operations, and does not tolerate any form of corruption, such as bribery, extortion, fraud or money laundering. Our Directors confirm that our Group complies with laws and regulations regarding bribery, extortion, fraud and money laundering. Our Directors confirm that during the Track Record Period, our Group received no allegations against it or its employees regarding bribery, extortion, fraud or money laundering. Our Directors confirm that there also were no whistleblowing disclosures received relating to bribery or corruption. Our Group requires all employees to comply with professional ethics, and prohibits any form of corruption. Employees who are found to have committed corruption will be discharged from their duties and required to indemnify the losses caused. If their acts are found to be in violation of any regulatory requirement, the employee will be held accountable for his/her judicial responsibility. Our Group further strengthens the awareness of employees and new recruits by conducting periodic anti-corruption training.

**Community engagement**

Our Group appreciates the importance of giving back to the community and fulfilling its corporate social responsibilities. When developing its business, our Group inherently considers its potential for making a positive impact on the community. Our Group is constantly striving to understand the impact of its business on the communities in which its operates, and explores opportunities to contribute to them with a view of improving lives and enhancing our Group's brand image.

Upon [REDACTED], our Directors confirm that they will closely monitor and ensure strict compliance with the Corporate Governance Code and Corporate Governance Report as set out in Appendix 14 of the Listing Rules, the Environmental, Social and Governance Reporting Guide as set out in Appendix 27 of the Listing Rules and all relevant rules and regulations in relation to environmental, social and governance aspects.

***Climate Related Issues***

Responding to the increasing global focus on climate change, we have identified certain climate change risks which could adversely affect our business, results of operation and financial condition through studying governmental policies and benchmarking our practices against industry peers. The potential climate change risks can be categorized into transition risk and physical risks. In regard to transition risks, in particular the evolving environmental and climate regulatory requirements that could increase our environmental protection and compliance expenses, we intend to carry out further environmental and climate due diligence to ensure our business comply with the requirements. Furthermore, we intend to set climate change as an important topic and to communicate with our shareholders and relevant stakeholders during the course of low-carbon economy transformation. We also plan to acquire more environmentally friendly appliances, equipment and machinery in line with the evolving environmental and climate standards. In regard to physical risks, such as the increase of extreme weather events which may disrupt our mining, beneficiation and processing operations, damage our facility and machinery or affect our supply chain, we intend to enhance our practices of disaster drills to mitigate potential losses.

## LEGAL PROCEEDINGS AND REGULATORY COMPLIANCE

As all of our operations are in the PRC, we are required to conduct our business in compliance with the relevant PRC laws and regulations. A summary of the material PRC laws and regulations applicable to our operations in the PRC is set out in "Regulatory Overview and JORC code" in this document.

As advised by our PRC Legal Advisers and as confirmed by our Directors, during the Track Record Period and as at the Latest Practicable Date, save as disclosed in this document, we (i) obtained all the material approvals, consents, certificates, licenses and permits to conduct our operations in the PRC; and (ii) complied with all applicable laws and regulations in the PRC in all material aspects.

To the best knowledge of our Directors, as at the Latest Practicable Date, save as disclosed below, no member of our Group was a party to any litigation, arbitration or administrative proceedings, and our Directors were not aware of any pending or threatened litigation, arbitration or administrative proceedings against our Group that would have a material adverse effect on our results of operations and financial conditions.

## NON-COMPLIANCE INCIDENTS

During the Track Record Period, we have experienced the following major non-compliance incidents, which are systemic in nature:

| Non-compliance incidents | Reasons for non-compliance | Legal consequences and potential maximum penalties | Rectification actions taken and preventive measures to be taken | Enhanced internal control measures to prevent recurrence |
|---|---|---|---|---|
| **1. Non-compliance relating to the incomplete environmental protection inspection and acceptance of construction project** | | | | |
| (a) Yixiang Graphite failed to complete the completion inspection and acceptance of the environmental protection facilities of its beneficiation plant expansion project. | Our Directors confirm that above non-compliance incidents were unintentional and due to negligence and the lack of professional opinion on the applicable laws. | Pursuant to Regulations on Environmental Protection of Construction Projects* (建設項目環境保護管理條例), if the required supporting environmental protection facilities are not built or inspected and accepted, or they are put into operation before passing the inspection and acceptance, or any fraudulence occurs during the inspection and acceptance process, the environmental protection administrative department at or above the county level may order rectification within a time limit and impose a fine in the amount between RMB200,000 and RMB1 million. If rectification is not made within the time limit, the department may impose a fine in the amount between RMB1 million and RMB2 million. A fine in the amount between RMB50,000 and RMB200,000 may be imposed on responsible employees. If severe pollution is caused to the environment or ecological environment, the facilities may be ordered to cease production or operation or even shut down. | • On March 25, 2021, Yixiang Graphite passed the review of Ministry of Ecology and Environment of Hegang City in relation to the environmental impact on beneficiation plant expansion project. Our Directors confirm that Yixiang Graphite completed the procedures for environmental protection inspection and acceptance in September 2021, as it obtained the acceptance opinions of environmental protection inspection and completed the publicity on the website of National Environmental Protection Acceptance Information System for Completed Construction Projects in October 2021.<br><br>• On December 16, 2020, we received the confirmation letter from Baoquanling Branch of Ministry of Ecology and Environment of Hegang City, confirming: (a) between January 1, 2018 and August 2020, Yixiang Graphite has no environmental pollution accident, illegal act, and third party complaint or report related to environmental protection; (b) there is no administrative fine relating to environmental protection was imposed on Yixiang Graphite during the period between January 1, 2018 and August 2020; (c) the bureau does not have any potential or current lawsuits or disputes with Yixiang Graphite regarding environmental protection.<br><br>• On January 6, 2021, we received a confirmation letter from Ministry of Ecology and Environment of Luobei, Hegang City, confirming: (a) between August 2020 to the date of the confirmation, Yixiang Graphite has no environmental pollution accident, illegal act, and third party complaint or report related to environmental protection; (b) no administrative fine relating to environmental protection was imposed on Yixiang Graphite during the period between August 2020 to the date of the confirmation; (c) the bureau does not have any potential or current lawsuits or disputes with Yixiang Graphite regarding environmental protection. | • In order to prevent the recurrence of non-compliance incident and to ensure ongoing compliance with applicable laws and regulations in the future, our Group has designed, implemented and/or enhanced several internal control measures, the details of which are set out in the paragraphs under the heading "Internal Control and Risk Management — Key internal control measures implemented by our Group" in this section |

| Non-compliance incidents | Reasons for non-compliance | Legal consequences and potential maximum penalties | Rectification actions taken and preventive measures to be taken | Enhanced internal control measures to prevent recurrence |
|---|---|---|---|---|
| | | | • According to our PRC Legal Advisors, pursuant to relevant laws and regulations as well as the abovementioned facts, the possibility of Yixiang Graphite receiving penalties from environmental protection administrative departments for commencing production before completing the environmental protection inspection and acceptance of the supporting environmental protection facilities of our beneficiation plant is remote. Different government authorities were consulted due to a transfer of authority between the government authorities. Baoquanling Branch of Ministry of Ecology and Environment of Hegang City was originally the administrative authority in respect of pollutant emission permit and environmental protection before August 2020. Pursuant to an agreement entered into between Baoquanling Branch of Ministry of Ecology and Environment of Hegang City and Ministry of Ecology and Environment of Luobei of Hegang City, Baoquanling Branch of Ministry of Ecology and Environment of Hegang City transferred the administrative responsibilities and other administrative roles in the field of ecological environment protection to Ministry of Ecology and Environment of Luobei of Hegang City since August 2020. Therefore, Ministry of Ecology and Environment of Luobei of Hegang City is now the administrative authority of Yixiang Graphite and Yixiang New Energy in respect of pollutant emission permit and environmental protection.<br><br>• Pursuant to the Deed of Indemnity, we have obtained from the Controlling Shareholders an indemnity to indemnify our Group against any claims, fines and other liabilities arising from such non-compliance. | |
| (b) Yixiang Graphite did not complete the environmental assessment procedures of its tailing storage facility. | Our Directors confirm that the relevant non-compliance incident was unintentional. The Company inquired the relevant authority on environmental assessment, and it was given the understanding that the Company can dispose tailings on the site and complete the environmental assessment procedures subsequently. | Pursuant to the Environmental Assessment Law of the People's Republic of China* (中華人民共和國環境影響評價法), if the construction unit commences construction prior to submission of the environmental impact report or report form of the construction project for approval according to the law, or fails to apply for a re-approval or a re-examination of the environmental impact report in accordance with Article 24 thereof, the competent ecological environment department at or above the county level shall order suspension of the construction, and, according to the circumstances of the violation and the harmful consequences, shall impose a fine of 1%–5% of the total investment amount of the construction project, and may order restoration to the original state; administrative sanctions shall be given to the persons in charge and other persons who are directly responsible for the construction unit in accordance with the law.<br><br>While Hegang City People's Government has on 19 December 2021 announced that it would investigate into the non-compliance and intended to impose a fine of RMB182,400 against Yixiang Graphite (the "**Announcement**"), there has been no actual investigation or enforcement action taken as at the Latest Practicable Date. | • On January 27, 2022, Yixiang Graphite obtained the approval of Ministry of Ecology and Environment of Luobei county in relation to the EIA reports on tailing sand storage project. On 17 February 2022, our PRC Legal Advisors had two interview with the Ministry of Ecology and Environment of Hegang City and the Ministry of Ecology and Environment of Luobei County in relation to our usage of the tailing storage facility. As advised by our PRC Legal Advisors, the Ministry of Ecology and Environment of Hegang City and Luobei County confirmed that (i) Yixiang Graphite is a corporate subject to its jurisdiction; (ii) Yixiang Graphite actively rectified the situation in a timely manner and it has not imposed any administrative penalty against Yixiang Graphite, nor has it initiated any investigation against Yixiang Graphite in the Announcement; and (iii) Yixiang Graphite can temporarily continue to use the tailing storage facility for tailings disposal purpose and after the acceptable conditions for inspection are met according to the actual usage situation, the inspection can be carried out.<br><br>• According to our PRC Legal Advisors, pursuant to relevant laws and regulations as well as the abovementioned facts, the possibility of Yixiang Graphite receiving new penalties from environmental protection administrative departments for use of our tailing storage facility before completing the environmental assessment procedure and having material adverse impact on our Group is remote in addition to the proposed fine announced in the Announcement.<br><br>• Pursuant to the Deed of Indemnity, we have obtained from the Controlling Shareholders an indemnity to indemnify our Group against any claims, fines and other liabilities arising from such non-compliance. | • In order to prevent the recurrence of non-compliance incident and to ensure ongoing compliance with applicable laws and regulations in the future, our Group has designed, implemented and/or enhanced several internal control measures, the details of which are set out in the paragraphs under the heading "Internal Control and Risk Management — Key internal control measures implemented by our Group" in this section |

| Non-compliance incidents | Reasons for non-compliance | Legal consequences and potential maximum penalties | Rectification actions taken and preventive measures to be taken | Enhanced internal control measures to prevent recurrence |
|---|---|---|---|---|
| **2. Structures without valid construction permit and the real estate ownership certificates** | | | | |
| We have not (i) conducted inspection upon completion of the construction for the Structures; (ii) registered stated-owned land use rights and obtain real estate ownership certificate for the Structure; and (iii) obtained construction land use planning permit, construction permit and construction project planning permit prior to constructing the Structure (which has been resolved). For details, please see "Properties — Owned properties — Properties with defective titles". | Please see "Properties — Owned properties — Properties with defective titles". | Please see "Properties — Owned properties — Properties with defective titles". | Please see "Properties — Owned properties — Properties with defective titles". | • In order to prevent the recurrence of non-compliance incident and to ensure ongoing compliance with applicable laws and regulations in the future, our Group has designed, implemented and/or enhanced several internal control measures, the details of which are set out in the paragraphs under the heading "Internal Control and Risk Management — Key internal control measures implemented by our Group" in this section |
| **3. Non-payment of social insurance and housing provident fund** | | | | |
| For each year during the Track Record Period, Yixiang Graphite and Yixiang New Energy have not made full social insurance and housing fund contributions for all employees as required by relevant PRC laws and regulations and such outstanding amounts were approximately RMB3.2 million, RMB43,200 and RMB127,000 for the years ended December 31, 2019, 2020 and 2021, respectively. | Such non-compliance incidents happened mainly because our employees of relevant PRC subsidiaries responsible for such matters at the material time were not fully aware of the regulatory requirements of the areas in which our operations located. | According to relevant PRC laws and regulations, (a) in respect of unpaid social insurance contributions, the relevant government department is entitled to require us to make up the outstanding contributions within a specified period and pay an overdue fee equal to 0.05% of the amount of the outstanding contributions for each day of delay; and if we fail to make such payment within the specified period, we may be subject to a fine ranging from one to three times of the amount of the outstanding contributions; and (b) in respect of unpaid housing fund contributions, the relevant government department is entitled to require us to pay the outstanding housing fund contributions within a specified period; and if we fail to make such payment within the specified period, an application may be made to the PRC courts for compulsory enforcement.<br><br>As at the Latest Practicable Date, no administrative penalties have been imposed by relevant regulatory authorities regarding the outstanding social insurance and housing fund contributions, and we have not been ordered to settle any shortfall in contributions. | • The Group received confirmation letters from Heilongjiang Yanjun Farm Social Insurance Affairs Administration on August 4, 2021, confirming: (a) Yixiang Graphite and Yixiang New Energy have each made social insurance contribution for their employees in accordance with the requirements of the administration; (b) as at the date of the confirmation letters, Yixiang Graphite and Yixiang New Energy did not have any records of social insurance violations or penalties, nor did the administration receive any complaints regarding social insurance and labor protection matters; (c) the administration will not, in principle, require Yixiang Graphite and Yixiang New Energy to make up the social insurance contributions or impose penalties on Yixiang Graphite and Yixiang New Energy.<br><br>• The Group received confirmation letters from Luobei Administrative Department of Hegang City Housing Fund Management Center on August 3, 2021, confirming: (a) Yixiang Graphite and Yixiang New Energy have each made housing fund contributions for their employees in accordance with the requirements of the center; (b) the center will not require Yixiang Graphite and Yixiang New Energy to make up the housing fund contributions, or levy late payment, or impose other administrative penalties on Yixiang Graphite and Yixiang New Energy; (c) as at the date of the confirmation letters, the center did not receive any complaints regarding housing fund matters of Yixiang Graphite and Yixiang New Energy, nor had they been penalized by the center. | • In order to prevent the recurrence of non-compliance incident and to ensure ongoing compliance with applicable laws and regulations in the future, our Group has designed, implemented and/or enhanced several internal control measures, the details of which are set out in the paragraphs under the heading "Internal Control and Risk Management — Key internal control measures implemented by our Group" in this section |

| Non-compliance incidents | Reasons for non-compliance | Legal consequences and potential maximum penalties | Rectification actions taken and preventive measures to be taken | Enhanced internal control measures to prevent recurrence |
|---|---|---|---|---|
| | | | • In the case of social insurance, according to the "Urgent Notice on Implementing the Spirit of the Executive Meeting of the State Council to Effectively Stabilize the Collection of Social Insurance Premiums" issued on September 21, 2018, administrative and law enforcement authorities are prohibited from centrally clearing past social insurance arrears of enterprises.<br><br>• According to our PRC Legal Advisors, pursuant to relevant laws and regulations as well as the abovementioned facts, the possibility that we will be required by competent authorities to make full recovery and top-up payments and suffer material administrative penalties for failing to make full social insurance and housing fund contributions for the employees during the Track Record Period is remote.<br><br>• Since July 2021, Yixiang Graphite and Yixiang New Energy have commenced making adequate payments of social insurance and housing fund for employees who had signed labor contracts. | |

With respect to the non-payment of social insurance and housing provident fund, as at the Latest Practicable Date, our Directors confirm that (i) we had not been subject to any administrative actions, fines or penalties due to such non-compliance, (ii) we had not received any notification from the relevant PRC authorities requiring us to pay for or otherwise make up the shortfalls or any overdue charges with respect to social insurance contribution or housing provident fund contribution, and (iii) we were not aware of any employee complaints filed against us nor were we involved in any material labor disputes with our employees with respect to social insurance or housing provident fund contributions. Considering relevant regulatory policies and the facts stated above and the confirmations we have received from Heilongjiang Yanjun Farm Social Insurance Affairs Administration and Luobei Administrative Department of Hegang City Housing Fund Management Center, our PRC Legal Advisers are of the view that the likelihood that Yixiang Graphite and Yixiang New Energy will be subject to centralized collection of the historical shortfalls (of social insurance and housing provident fund) and any material penalties due to the failure to make full social insurance or housing provident fund contributions for employees of Yixiang Graphite and Yixiang New Energy are remote. On such basis, our Directors confirm no provision has been made for the shortfall of the social insurance and housing provident fund contributions, and such non-compliance will not have a material adverse effect on our business, results of operations and financial condition.

Each of our Directors has confirmed that the non-compliance incidents did not involve any fraud or dishonesty. Having considered the relevant facts and circumstances, in particular, the financial condition and/or business operations of our Group as a whole have not been subject to any material adverse effect (in particular, as confirmed by our Directors and our PRC Legal Advisers, our Group's non-compliance incidents were isolated events relating to different laws and regulations and our business activities had not been disrupted to any material extent), our rectification and enhanced internal control measures adopted to prevent recurrence, our Directors are of the view that the non-compliance incidents would not materially adversely affect our Directors' suitability to act as directors of a [REDACTED] under Rules 3.08 and 3.09 of the Listing Rules or our suitability for [REDACTED] under Rule 8.04 of the Listing Rules. Based on the independent due diligence conducted by the [REDACTED], nothing has come to its attention that would lead it to cast doubts on the views of our Directors above.

## INTERNAL CONTROL AND RISK MANAGEMENT

### Key internal control measures implemented by our Group

In order to prevent the recurrence of non-compliance incidents and to ensure ongoing compliance with applicable laws and regulations in the future, our Group has designed, implemented and/or enhanced several internal control measures which include the following:

- We established a compliance committee on [●] to monitor and oversee the compliance-related issues of our Group. The primary duties of the Compliance Committee are to ensure compliance with regulatory matters as well as the adequacy and effectiveness of regulatory compliance procedures and system. The members of the Compliance Committee, individually or as a whole, have unrestricted access to advice given by professional advisers of our Group. The committee is required to meet quarterly to discuss, among others, existing and potential compliance issues, formulate solutions to such compliance issues, and report to the Board if necessary. The compliance committee comprises two independent non-executive directors and one executive director, namely, Mr. Liu Zezheng, Mr. Chiu G Kiu Bernard and Mr. Lei. The roles of the Compliance Committee include, but not limited to, the following:

  i. to identify, address and rectify any potential and non-compliance issues regarding or involving any member or employee of our Group;

  ii. to liaise with relevant government authorities and statutory bodies to ensure proper compliance of our Group;

  iii. to handle all the complaints or suggestions from the employees of our Group;

  iv. to ensure compliance with our Company's internal control procedure manual, and make relevant compliance-related recommendations to our Board from time to time;

  v. to make recommendations on review measures to our Board to improve the health and safety of workers of our Group;

  vi. to make recommendations on review measures to our Board to monitor the procedures and systems of our Group;

  vii. to ensure compliance with the requirements of the publication of financial information of our Group in accordance with the Listing Rules;

  viii. to develop, review and monitor the codes of conduct applicable to employees and Directors;

  ix. to ensure that key employees have been trained on the details of our Company's internal control procedure manual and the relevant safety policies;

  x. to review our Company's compliance with the CG Code and the Environmental, Social and Governance ("**ESG**") Reporting Guide set out in the Listing Rules;

xi. to review the annual corporate governance report and ESG report for our Board's consideration and approval for disclosure;

xii. to prepare and submit a summary report every quarter to our Board on the overall compliance performance and corporate governance practice of our Group; and

xiii. together with our company secretary, to ensure continuous training is provided to our Directors and senior management after [REDACTED] on their continuous duties and obligations under the Listing Rules.

- We will appoint Mr. Lei Wai Hoi as the compliance officer of our Company who is responsible for reviewing regulatory requirements both in Hong Kong and the PRC upon [REDACTED]. The compliance officer will, with the support of the company secretary of our Company and other external professional advisers including a qualified PRC law firm, a qualified Hong Kong law firm, and the compliance advisor, conduct regular review and make recommendation to our Board in respect of our Group's policies and practices on corporate governance, review and monitor our Group's policies and practices on compliance with any requirement, direction and regulation that may be prescribed by our Board or imposed by the Listing Rules, other applicable laws regulations, rules and codes, and ensure that consistent procedures are applied;

- We have appointed Lego Corporate Finance Limited as our compliance advisor upon [REDACTED] to advise our Group on compliance matters relating to the Listing Rules;

- We will appoint a qualified PRC law firm upon [REDACTED] as our Group's external PRC legal advisor to advise us on compliance with the applicable PRC laws and regulations and, if necessary, provide us with the relevant training, from time to time;

- We will appoint a qualified Hong Kong law firm upon [REDACTED] as our Group's external Hong Kong legal advisor to advise us on compliance with the Listing Rules and the applicable Hong Kong laws and regulations and, if necessary, provide us with the relevant training, from time to time;

- We have arranged training sessions for our Directors and senior management as to the responsibilities of Directors and compliance with the Listing Rules, conducted by our legal advisers as to Hong Kong laws in May 2021;

- We have put in place a stringent payment and credit control system to monitory and mitigate the credit risks posed to us. For details, please see " — Our customers — Payment terms and credit control" in this section;

- We will organize compliance training sessions for our Directors and senior management members to be held periodically so as to enhance compliance awareness and knowledge. The training sessions will cover topics such as changes and/or updates to the relevant rules and regulations for our operations and compliance with the Listing Rules;

- We will appoint an independent internal control consultant to undertake review of the internal control system of our Group annually upon [REDACTED].

The Internal Control Consultant has reviewed and provided recommendations to our internal control system for preventing the recurrence of the above-mentioned non-compliance incidents, and our Group has implemented all such recommendations. The scope of review includes environment and safety compliance management, licensing management and human resources and payroll management. Our Directors considered that key steps taken and to be taken by our Group in response to each of the non-compliance incidents mentioned above and for enhancement of our internal control and risk management measures are disclosed above. The Internal Control Consultant has performed a follow-up review in this connection, of which upon completion, our Group did not have significant deficiencies in our internal control system.

After considering the nature and reasons for our historical non-compliance incidents, the remedial actions taken by our Group and our business nature and operation scale, our Directors are satisfied that our internal control procedures are adequate and effective for the purpose of Listing Rules, and consider that the non-compliance incidents do not have any material impact on: (i) the suitability of our Directors under the Listing Rules; and (ii) our suitability for [REDACTED] under the Listing Rules.

## MARKET AND COMPETITION

Most of the PRC flake graphite supply from Shandong and Heilongjiang provinces. In the case of Shandong, it is home to most of China's graphite processing plants. However, many of the mines in Shandong are typically deep and, consequently, water inflows are a problem. Furthermore, the average carbon content is low at between two per cent and three per cent. The graphite is associated with clays and processing is costly and environmentally damaging because mines use acids in the process. So far as Heilongjiang Province is concerned, many mine owners there transport their ore about 2,000 km to the processing plants in Shandong. According to the F&S Report, there were over 120 market participants in PRC flake graphite concentrate industry in 2021. The flake graphite concentrate sales revenue of our Group was ranked fifth in 2021 with approximately RMB97.7 million, accounting for a market share of approximately 4.4% of total flake graphite concentrate industry by sales revenue. Moreover, spherical graphite industry in the PRC was concentrated with top ten companies accounting for a total market share of 70.0% by sales revenue in 2021. There were over 60 market participants in PRC spherical graphite industry in 2021. Our Group ranked sixth in 2021 with a market share of approximately 4.1% by sales revenue. In addition to rising costs of production, the Chinese industry faces an additional economic impost due to the winter closures: having to buy before the ice takes control ramps up warehousing and insurance costs. The average selling prices of flake graphite concentrate and spherical graphite may vary by different specification and generally influenced by factors, such as, production costs, market demands and macro economy. From 2018, many Chinese spherical graphite companies began to expand the spherical production capacity, which resulted in the decrease in the average selling price of spherical graphite in 2019 and 2020. Going forward, with the recovery of economy and continuously increasing demand from lithium-ion batteries industry, the demand of graphite would increase, which in turn would drive the average selling price of flake graphite concentrate and spherical graphite. Considering the rise in global demand for lithium-ion batteries, and the market move that many of Heilongjiang's graphite were actually processed in Shandong, we believe that our business model in operating an integrated graphite production company in Heilongjiang remains a strong advantage.

## RESPONDING TO THE COVID-19 OUTBREAK

Since December 2019, there has been an outbreak of COVID-19 in the PRC, Hong Kong and other countries. The World Health Organization declared the outbreak of COVID-19 as a pandemic on March 11, 2020. As a result of this outbreak, there were lockdowns at workplaces and places of commerce in Heilongjiang Province, including our Beishan Mine. However, the closure of our Beishan Mine and plants due to restrictions under the COVID-19 outbreak coincided with our seasonal shutdown period (i.e. the months of January to March, due to severe cold weather).

Our Directors confirm that our Beishan Mine and plants have resumed its normal operation since April 2020, thus the disruption caused by the COVID-19 outbreak on our operations were not considered to be severe by our Directors. Our Directors further confirm that, as at the Latest Practicable Date, no employee of our Group was infected with COVID-19. Our Directors also confirm that there was no cancellation of these confirmed purchase orders nor was there any no other actual and/or expected loss of these orders during the Track Record Period up to the Latest Practicable Date as a result of the COVID-19 outbreak. We maintain active and continuous dialogues with our customers on their status of resumption of business and if the situation of delay in collection of our products from our customers continues, we will negotiate with our customers accordingly. To the best knowledge, information and belief of our Directors, most of our suppliers and third party service providers has resumed their operations since April 2020. Our Directors also confirm that there was no actual or foreseeable disruption on the supply of raw materials or utility supplies from our suppliers and services by our third party service providers up to the Latest Practicable Date.

Therefore, there has not been a material adverse financial or operational impact that was directly caused by the COVID-19 outbreak. Yet, there was a drop in the overall market price for spherical graphite and flake graphite concentrate during the months of the COVID-19 outbreak. Leveraging on our cost-effective methods of beneficiation and processing, and the synergies of our vertical integration, we managed to provide discounts to customers struggling during the COVID-19 outbreak for the purposes of maintaining a positive business relationship. As a result, our sales volume increased significantly in the year ended December 31, 2020 and our revenue for the year ended December 31, 2021 increased to approximately RMB198.4 million.

Nevertheless, we have implemented measures aiming at preventing the spread of COVID-19 in our Beishan Mine and our facilities, such as providing face masks and sanitizer to our employees and requiring them to undergo mandatory temperature checks or a daily basis. All employees are required to wear masks when they are on duty. In case if any of our employees and/or employees of our third-party service providers contracted or is suspected to have contracted with COVID-19, we are required to report to the relevant PRC government authorities and such employee would be taken to hospital for treatment.

## OUR CONTROLLING SHAREHOLDERS

As at the Latest Practicable Date, Mr. Zhao, one of our founders, chairperson of the Board, executive Director and chief executive officer, through his wholly-owned offshore holding company, Sandy Mining Limited, directly held [REDACTED] Share, representing the entire issued share capital of our Company. Immediately upon completion of the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming that the [REDACTED] is not exercised and without taking into account the Shares which may be issued upon exercise of any options granted or to be granted under the Share Option Scheme), Sandy Mining Limited will directly hold [REDACTED] Shares, representing [REDACTED]% of the total issued share capital of our Company.

Thus, Sandy Mining Limited will continue to control more than 30% of the voting power at general meetings of our Company immediately following completion of the [REDACTED], the Loan Consideration Capitalization and [REDACTED] (assuming that the [REDACTED] is not exercised). Therefore, each of Sandy Mining Limited and Mr. Zhao will be our Controlling Shareholders for the purpose of the Listing Rules.

## COMPETING INTERESTS

Our Group did not have any business dealings with companies associated with or controlled by our Controlling Shareholders and there was no overlapping of business between our Group and our Controlling Shareholders.

None of our Controlling Shareholders, our Directors or their respective close associates has interests in any business, apart from the business operated by members of our Group, that competes, or is likely to compete, directly or indirectly, with the business of our Group, and would require disclosure pursuant to Rule 8.10 of the Listing Rules.

## INDEPENDENCE FROM OUR CONTROLLING SHAREHOLDERS

Having considered the following factors, our Directors are satisfied that we are capable of carrying out our business independent of our Controlling Shareholders and their respective close associates after the [REDACTED].

### Management independence

Our Board comprises two executive Directors and four independent non-executive Directors. Our Directors and members of the senior management possess relevant management and/or industry-related experience to act as Directors or senior management of our Company. For more details, please see "Directors and Senior Management". As at the Latest Practicable Date, no executive Director has any business which competes or is likely to compete, either directly or indirectly, with our business.

Each of our Directors is aware of his/her fiduciary duties as a Director which require, among others, that he/she must act for the benefit and in the best interests of our Company and not allow any conflict between his/her duties as a Director and his/her personal interests. In the event that there is a potential conflict of interest arising out of any transaction to be entered into between our Company and our Directors or their respective close associates, the interested Director(s) shall abstain from voting on any Board resolutions approving any contract or arrangement or any other proposal in which he/she or any of his/her close associates have a material interest and shall not be counted in the quorum present at the relevant Board meeting. Our Group has established our own management, finance, human resources, administration, procurement, sales and marketing and quality control departments which are responsible for the daily operations of our Group. In addition, we believe that our independent non-executive Directors can bring independent judgment to the decision-making process of our Board. For details, please see "Directors and Senior Management".

Although our controlling shareholder, Mr. Zhao, will maintain a controlling interest in our Company upon completion of the [REDACTED], the day-to-day management and daily operations of our Group will be the responsibility of all our experienced senior management team. We have the capabilities and personnel to perform all essential administrative functions, including financial and accounting, human resources, business operations and management and technical support on a standalone basis.

Based on the above, our Directors are satisfied that the Board as a whole, together with our senior management team, are able to perform the managerial role in our Group independently.

**Operational independence**

Although our Controlling Shareholders will retain a controlling interest in our Company after [REDACTED], we have full rights to make all decisions regarding, and carry out, our business operations independently. We have established our own organizational structure and each department is assigned to specific areas of responsibilities. We are also in possession of all necessary relevant licenses, approvals and certificates to carry on our business and we have sufficient operational capacity in terms of capital equipment and employees to operate and manage our business independently. We do not rely on our Controlling Shareholders or their close associates for our operations. We have independent access to our customers and suppliers and an independent management team (including our Directors and senior management) to handle our daily operations. We have also established a set of internal control procedures to facilitate and maintain the independent operation of our business.

Based on the above, our Directors are satisfied that there is no operational dependence by us on our Controlling Shareholders and our Group is able to operate independently from our Controlling Shareholders after [REDACTED].

**Financial independence**

Our Group has our own internal control, accounting and financial management system and function, independent treasury functions for cash receipts and payment and our Group makes financial decisions according to our own business needs.

During the Track Record Period and up to the Latest Practicable Date, we financed our operations through a combination of bank borrowings or financing, internally generated funds and advances from our Controlling Shareholders and related parties. We expect that, upon completion of the [REDACTED], our operations will be financed mainly by the [REDACTED] from the [REDACTED], internally generated funds and borrowings or financing from financial institutions.

As at April 30, 2022, being the most recent practicable date for the preparation of the indebtedness statement in this document, the amounts due to Shareholders and amounts due to related parties amounted to, in aggregate, approximately RMB73.1 million and nil, respectively. On May 27, 2021, the amounts previously due to Mr. Zhao Ming and Mr. Zhao Changshan by our Group had been novated to Mr. Zhao and the then total amount due to Mr. Zhao was expected to be settled by way of capitalization. For details, please see "History, Reorganization and Corporate Structure — Reorganization — Loan Consideration Capitalization". Therefore, it is expected that no amounts will be due to the Shareholders or related parties upon [REDACTED].

Our own accounting department is capable of discharging the treasury functions for cash receipts and payments, accounting, reporting and internal control independently of our Controlling Shareholders and their close associates.

Our Directors confirm that there were no other pledges and guarantees provided by our Controlling Shareholders and their respective close associates regarding our Group's borrowings which have not been waived, fully released or discharged as at April 30, 2022, being the most recent practicable date for the preparation of the indebtedness statement in this document.

Based on the above, our Directors are satisfied that we are able to maintain financial independence from our Controlling Shareholders and their respective close associates.

## CORPORATE GOVERNANCE MEASURES

Our Company [has adopted] the Corporate Governance Code as set out in Appendix 14 to the Listing Rules and will comply with the code provisions therein. The Corporate Governance Code sets out principles of good corporate governance in relation to, among other things, directors, the chairman and chief executive officer, board composition, the appointment, re-election and removal of directors, the responsibilities and remuneration of directors and communications with shareholders.

Our Company is also required to comply with the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules, which provides, among other things, prohibitions on directors' dealings in securities and protection of minority shareholders' rights.

Our Directors believe that there are adequate corporate governance measures in place to manage potential conflicts of interest between our Controlling Shareholders and our Group and to safeguard the interests of our Shareholders taken as a whole for the following reasons:

- a Director with material interests shall make full disclosure in respect of matters that conflict or potentially conflict with our interest and absent himself/herself from the board meetings on matters in which such Director or any of his/her close associates have a material interest, unless the attendance or participation of such Director at such meeting of the Board is specifically requested by a majority of the independent non-executive Directors;

- we are committed that our Board should include a balanced composition of executive and non-executive Directors (including independent non-executive Directors) that can facilitate the exercise of independent judgment. We have appointed four independent non-executive Directors and we believe our independent non-executive Directors possess sufficient experience and they are free of any business and/or other relationship which could interfere in any material manner with the exercise of their independent judgment and will be able to provide an impartial and external opinion to protect the interests of our [REDACTED]. For further details of our independent non-executive Directors, please see "Directors and Senior Management — Directors — Independent non-executive Directors";

- in the event that any potential conflict of interest arises, i.e. where a Director has an interest in a company that will enter into an agreement with our Group, the Director(s) with an interest in the relevant transaction(s) shall be excluded from our Board deliberation process and abstain from voting and shall not be counted towards the quorum in respect of the relevant resolution(s) at such Board meeting;

- in the event any potential conflict of interest arises at the shareholders' level, our Controlling Shareholders shall abstain from voting in the Shareholders' meeting of our Company with respect to the relevant resolution(s);

- in the event that our independent non-executive Directors are requested to review any conflicts of interests circumstances between our Group on the one hand and our Controlling Shareholders and/or our Directors on the other, our Controlling Shareholders and/or our Directors shall provide our independent non-executive Directors with all necessary information and our Company shall disclose the decisions of our independent non-executive Directors (including why business opportunities referred to our Company by our Controlling Shareholders were not taken up) either through our Company's annual report or by way of announcements;

- pursuant to the Corporate Governance Code set out in Appendix 14 to the Listing Rules, our Directors, including our independent non-executive Directors, will be able to seek independent professional advice from external parties in appropriate circumstances at our Company's costs;

- any proposed transaction between us and connected persons will be subject to Chapter 14A of the Listing Rules including, where applicable, the announcement, reporting and independent shareholders' approval requirements of such rules; and

- we have appointed Lego Corporate Finance Limited as our compliance advisor, which will provide advice and guidance to us in respect of compliance with the applicable laws and the Listing Rules, including various requirements relating to the directors' duties and corporate governance.

## DIRECTORS

Upon the [REDACTED], our Board will consist of six Directors, comprising two executive Directors and four independent non-executive Directors. Our Board is responsible and has general powers for the management and conduct of our business, while our senior management is responsible for the day-to-day management of our business.

The following table sets out certain information about our Directors:

| Name | Age | Position(s) | Roles and responsibilities | Date of joining our Group | Date of appointment as Director | Relationships with other Directors and senior management |
|---|---|---|---|---|---|---|
| Mr. Zhao Liang (趙亮) | 43 | Chairman, Executive Director, Chief Executive Officer, chairperson of the nomination committee, a member of the remuneration committee of the Board | Overall management, decision-making and strategy planning of our Group | June 2006 | August 2020 | Nil |
| Mr. Lei Wai Hoi (李偉海) | 36 | Executive Director, chief financial officer and a member of the compliance committee of the Board | Overseeing the overall financial management as well as corporate governance matters of our Group | March 2021 | May 2021 | Nil |
| Mr. Chiu G Kiu Bernard (趙之翹) | 42 | Independent non-executive Director, chairperson of the audit committee of the Board and a member of each of the nomination committee, remuneration committee and compliance committee of our Board | Supervising and providing independent judgment to our Board | [●] | [●] | Nil |
| Mr. Shen Shifu (申士富) | 55 | Independent non-executive Director, and a member of each of the audit committee, remuneration committee and nomination committee of our Board | Supervising and providing independent judgment to our Board | [●] | [●] | Nil |
| Mr. Liu Zezheng (劉澤政) | 41 | Independent non-executive Director, chairperson of each of the remuneration committee and compliance committee of the Board and a member of each of the audit committee and nomination committee of the Board | Supervising and providing independent judgment to our Board | [●] | [●] | Nil |
| Ms. Zhao Jingran (趙婧冉) | 33 | Independent non-executive Director and a member of each of the audit committee, nomination committee and remuneration committee of the Board | Supervising and providing independent judgement to our Board | [●] | [●] | Nil |

### Executive Directors

**Mr. Zhao Liang (趙亮)**, aged 43, is an executive Director, chairman of the Board and chief executive officer of our Company. He is primarily responsible for the overall management, decision-making and strategy planning of our Group.

Mr. Zhao is one of our founders and has approximately 20 years of experience in the graphite mining industry. Prior to founding our Group, Mr. Zhao was the deputy general manager of Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) from June 2002 to May 2004. He founded and served as deputy general manager of Jixi Lishu Yixiang Graphite Factory* (雞西市梨樹區溢祥石墨廠) in February 2006 which was dissolved in July 2015. Mr. Zhao then founded our Group in June 2006 and has held directorship roles in our principal operating subsidiaries, namely Yixiang Graphite and Yixiang New Energy since April 2019 and April 2011, respectively. He also served as the general manager of Yixiang Graphite from June 2006 to May 2019 and since April 2021. He has been a Hegang City Deputy of the National People's Congress (鶴崗市人大代表) since January 2017.

Mr. Zhao joined the Heilongjiang Province Graphite Industry Association* (黑龍江省石墨產業協會) in March 2019, and was an executive council member as at the Latest Practicable Date. As at the Latest Practicable Date, Mr. Zhao was also a vice chairman of each of the China Graphite Industry Development Alliance* (中國石墨產業發展聯盟), the Graphite and Graphite Materials Committee of China Non-Metallic Minerals Industry Association* (中國非金屬礦業協會石墨及石墨材料專業委員會) and the Hegang Graphite Industry Development Alliance* (鶴崗市石墨產業發展聯盟).

Mr. Zhao obtained a college degree in agricultural management and development from Northeast Agricultural University (東北農業大學) after completing online courses in December 2006.

Mr. Zhao was a director, legal representative or manager of the following companies incorporated in the PRC when they were dissolved, or within 12 months before they were dissolved, details of which are set out below:

| | Name of Company | Nature of business prior to dissolution | Date of dissolution | Means of dissolution [Note] |
|---|---|---|---|---|
| 1. | Jixi Lishu Yixiang Graphite Factory* (雞西市梨樹區溢祥石墨廠) | Graphite flakes processing and trading | July 8, 2015 | Dissolved by deregistration |
| 2. | Shanghai Zihua International Trade Company Limited* (上海滋華國際貿易有限公司) | Dormant | June 13, 2018 | Dissolved by deregistration |
| 3. | Beijing Yixiang Mobaojia International Trade Company Limited* (北京市溢祥墨寶佳國際貿易有限公司) | Dormant | July 25, 2019 | Dissolved by deregistration |
| 4. | Jixi Yixiang Graphite Company Limited* (雞西市溢祥石墨有限公司) | Dormant | April 16, 2020 (License revoked on August 13, 2008) | Dissolved by revocation of license followed by deregistration |
| 5. | Heilongjiang Yixiang Graphene Technology Company Limited* (黑龍江溢祥稀碳科技有限公司) | Dormant | June 24, 2020 | Dissolved by deregistration |

*Note:* According to Article 180 of the Company Law of the PRC, a company shall be dissolved for the following reasons: (i) expiry of the term of operation stipulated in the articles of association of the company or occurrence of an event which triggers the dissolution as provided in the articles of association of the company; (ii) a resolution on dissolution has been passed by the board of shareholders or a shareholders' general meeting; (iii) where the dissolution is required by a merger or division; (iv) the business license is revoked or the company is ordered to be closed down; (v) a dissolution of the company is ordered by a people's court in accordance with the provisions of Article 182.

To the best knowledge, information and belief of Mr. Zhao, he confirmed that (i) the above companies were solvent immediately prior to dissolution; (ii) there was no wrongful act on his part leading to the dissolution of the above companies; (iii) he is not aware of any actual or potential claim that has been or will be made against him as a result of the dissolution of the above companies; and (iv) the deregistration of the above companies has not resulted in any liability or obligation imposed against him. Based on the above, the [REDACTED] considers that the above incident would not affect the suitability of Mr. Zhao to be our executive Director under Rules 3.08 and 3.09 of the Listing Rules or acting as the director of our subsidiaries or the suitability of [REDACTED] of our Company under Rule 8.04 of the Listing Rules.

**Mr. Lei Wai Hoi (李偉海)**, aged 36, is an executive Director and the chief financial officer of our Group. Mr. Lei joined our Group in March 2021 and is responsible for overseeing the overall financial management as well as corporate governance matters of our Group. Mr. Lei has over 11 years of experience in the accounting and compliance profession.

Mr. Lei was employed by PricewaterhouseCoopers from October 2009 to July 2017 with his last position as a manager.

Prior to joining our Group, Mr. Lei served as the financial controller and company secretary of WT Group Holdings Limited ("**WT Group**"), a company listed on the Main Board (Stock Code: 8422) from July 2017 to March 2021 and the director of Healthy Luck Holdings Limited, a directly wholly-owned subsidiary of WT Group incorporated in the BVI from May 2019 to March 2021. Mr. Lei also served as a director of Million Sea Development Limited, an indirectly wholly-owned subsidiary of WT Group incorporated in Hong Kong, from May 2019 to March 2021, where he was responsible for its daily operation.

Mr. Lei obtained a bachelor's degree in business administration (majoring in accounting) from the Hong Kong Baptist University in November 2009. Mr. Lei was admitted as a member of the Hong Kong Institute of Certified Public Accountants in January 2013.

**Independent non-executive Directors**

**Mr. Chiu G Kiu Bernard (趙之翹)**, aged 42, is an independent non-executive Director. He is primarily responsible for supervising and providing independent judgment to our Board.

Mr. Chiu has over 18 years of experience in the accounting and finance field. He began his career as auditor of KPMG in August 2003 and was later promoted to deputy manager of the audit department in March 2007 before finally leaving KPMG in May 2008. He then served as senior associate in the assurance department of BDO McCabe Lo Limited from September 2008 to July 2009. From October 2009 to September 2010, he worked as finance manager for NT Pharma (HK) Limited and then he joined Pfizer Corporation Hong Kong Limited as senior accountant in November 2010 and worked there until July 2012. From July 2012 to September 2016, he served as accounting manager of CGN New Energy Holdings Co., Ltd and later joined ORG International Holdings Limited where he served as senior finance manager until September 2017. From September 2017 to February 2018, he worked as the financial controller of China Life Science Service Limited. Since February 2018, he has been working as deputy chief financial officer of Carry Wealth Holdings Limited (stock code: 643), a company listed on the Main Board, principally engaged in the manufacture and trade of garment products.

Mr. Chiu has been serving as a director of Carry Wealth Limited (近旺有限公司), Hillwealth International Limited (領溢國際有限公司), Mass Wealth Investments Limited (尚豪投資有限公司), Win Sonic Investments Limited (永聲投資有限公司) and Dragon Insight Investments Limited (穎揚投資有限公司) since January 1, 2018. Mr. Chiu has also been serving as the group finance director of Cosmo Supply Limited since May 2022.

Mr. Chiu graduated in October 2003 with a bachelor of commerce degree in accounting and finance from The University of New South Wales. He is also a member of CPA Australia and a member of the Hong Kong Institute of Certified Public Accountants.

**Mr. Shen Shifu (申士富)**, aged 55, is an independent non-executive Director. He is primarily responsible for supervising and providing independent judgment to our Board.

Mr. Shen has over 18 years of experience in the mineral and mining industries.

He joined Qingdao Changcheng Jiaozhou Building Materials Group Company Limited* (青島膠州長城建材集團公司) in August 2002 and worked as senior engineer until July 2005. Since August 2004 and until the Latest Practicable Date, he has been working as a chief expert of the Mineral Processing Research and Design Institute of BGRIMM Technology Group Co., Ltd. ("**BGRIMM Group**") (北京礦冶科技集團有限公司選礦研究設計所). He has been serving as an independent non-executive director of Zhaojin Mining Industry Company Limited (Stock code: 1818), a company listed on the Main Board since February 2016. Mr. Shen has been serving as an independent non-executive director of Huaiji Dengyun Auto-Parts Holding Co. Ltd., a company listed on the Shenzhen Stock Exchange (SZSE: 2715), since March 2021.

Mr. Shen was an academic foregoer of China Inorganic Chemical Industry Society (中國無機化工學會) from October 2008 to October 2012, and has been an expert committee member of China Non-metallic Mineral Industry Association Professional Committee of Graphite (中國非金屬礦工業協會石墨專業委員會) and a professor committee member of China Nonferrous Metals Society Technical Experts Working Committee (中國有色金屬學會技術專家工作委員會) since August 2014 and October 2018, respectively.

Mr. Shen has undertaken over 40 enterprise commissions (including the beneficiation of various kinds of minerals, the comprehensive utilization of tailings, and the harmless disposal of hazardous waste and comprehensive utilization of mineral material).

Mr. Shen graduated from Shandong Institute of Building Materials* (山東建築材料工業學院) (currently known as University of Jinan (濟南大學)) with a bachelor of Silicate Engineering in July 1988, and later obtained a doctorate degree in Mineral Processing Engineering from the Northeastern University (東北大學) in September 2004. He was awarded the title of qualified senior engineer during his employment at Qingdao LuBi Cement Production Co., Ltd. in November 2000, and by the Professional Skills and Occupational Assessment Committee of BGRIMM Group (北京礦冶科技集團有限公司專業技術職務評審委員會) in December 2019.

**Mr. Liu Zezheng (劉澤政)**, aged 41, is an independent non-executive Director. He is primarily responsible for supervising and providing independent judgment to our Board.

Mr. Liu has over 14 years of experience in the legal industry. From February 2008 to November 2011, Mr. Liu served as a lawyer at Beijing Guangsheng & Partners Law Offices* (北京市廣盛律師事務所). He then joined Beijing Qunke Law Offices* (北京群科律師事務所) and served as a lawyer until December 2018. Since January 2019, he has been serving as a lawyer of Beijing Qingshan Law Offices* (北京市青山律師事務所). Mr. Liu obtained the practicing certificate for lawyers issued by the Beijing Municipal Bureau of Justice* (北京市司法局) in July 2008.

Mr. Liu graduated from Inner Mongolia University (內蒙古大學), majoring in law in July 2004.

**Ms. Zhao Jingran (趙婧冉)**, aged 33, is an independent non-executive Director. She is primarily responsible for supervising and providing independent judgement to our Board.

Ms. Zhao has taken up various roles at The Hong Kong Polytechnic University since 2015. In particular, she has been serving as an assistant professor since July 2015 and a visiting lecturer at the Institute of Advanced Executive Education since July 2021. Ms. Zhao taught management accounting and has been teaching business analytics in accounting and finance and contemporary issues in accounting research since 2019. A number of Ms. Zhao's academic papers have been published. Ms. Zhao was awarded the 2020 JIAR Best Paper Award and has been awarded the Faculty Award for Outstanding Achievement (Teaching) in 2019/2020.

Ms. Zhao obtained her bachelor's degree in business administration from Georgia College & State University in May 2010. She also obtained a Ph.D. degree in accounting from Emory University in June 2015.

**Other disclosure pursuant to Rule 13.51(2) of the Listing Rules**

Save as disclosed above and in "Appendix VI — Statutory and General Information — C. Further Information about our Directors and Substantial Shareholders" and to the best of the knowledge, information and belief of our Directors, having made all reasonable enquiries, each of our Directors confirms that (i) he/she did not hold any other positions or short positions in the Shares, underlying Shares, debentures of our Company and/or any associated corporation (with the meaning of Part XV of the SFO) as at the Latest Practicable Date; (ii) he/she had no other relationship with any Directors, senior management and/or substantial or Controlling Shareholders of our Company as at the Latest Practicable Date; (iii) he/she did not hold any directorships in any public companies the securities of which are listed on any securities market in Hong Kong and/or overseas in the three years immediately preceding the date of this document; and (iv) there are no other matters concerning our Directors' appointments that need to be bought to the attention of our Shareholders and the Stock Exchange or shall be disclosed pursuant to Rule 13.51(2) of the Listing Rules.

Save as disclosed in this document, none of our Directors has any interests in a business apart from our Group's business which competes or is likely to compete, directly or indirectly, with our Group's business and would require disclosure under Rule 8.10 of the Listing Rules.

## SENIOR MANAGEMENT

In addition to our Directors, our Group has the following senior management members to be responsible for the day-to-day management and operation of our business. The following table sets out certain information relating to members of our senior management team:

| Name | Age | Position | Roles and responsibilities | Date of Joining our Group | Relationships with other Directors and senior management |
|---|---|---|---|---|---|
| Mr. Lei Wai Hoi (李偉海) | 36 | Chief financial officer | overseeing the overall financial management and corporate governance matters of our Group | March 2021 | Nil |
| Mr. Wang Guilu (王貴路) | 54 | General manager | overall management of the sales and marketing activities of our Group | June 2006 | Nil |
| Mr. Gai Wenping (蓋文平) | 55 | Executive deputy general manager | overall management of human resources and procurement affairs of our Group | June 2006 | Nil |
| Mr. Ren Yu (任羽) | 47 | Deputy general manager | overall management of the production of our Group | June 2006 | Nil |
| Mr. Wu Enming (吳恩明) | 52 | Deputy general manager | overall management of the production of our Group | May 2007 | Nil |
| Ms. Xu Xia (徐霞) | 49 | Finance director | overall management of the financial and internal control matters in our Group | January 2021 | Nil |

**Mr. Lei Wai Hoi (李偉海)** is the chief financial officer of our Company. See "— Executive Directors" in this section.

**Mr. Wang Guilu (王貴路)**, aged 54, is a general manager and sales manager of our Company. Mr. Wang is responsible for the overall management of the sales and marketing activities of our Group.

Mr. Wang has over 16 years of working experience. Mr. Wang joined Yixiang Graphite in June 2006 with his latest position as deputy general manager and sales manager. He has been working in Yixiang New Energy since April 2014 with his latest position as general manager and sales manager.

Mr. Wang graduated from Hulan Normal College (呼蘭師範專科學校) in July 1988, majoring in history. He obtained the qualification of First Grade Middle School Teacher (中學一級教師) in September 2002 issued by the Personnel Department of Heilongjiang Province. Mr. Wang completed a training course for chief executive officers at Tsinghua University Education Training Management Office (清華大學教育培訓管理處) in October 2012.

**Mr. Gai Wenping (蓋文平)**, aged 55, is an executive deputy general manager of our Company. He is responsible for the overall management of human resources and procurement affairs of our Group.

Mr. Gai joined our Group in June 2006 as sales manager of Yixiang Graphite and served as such until December 2012. He rejoined Yixiang Graphite as production factory director in March 2013 and was promoted to the position of deputy general manager in February 2016.

Mr. Gai graduated from Jixi Coal Mine Mechanics Manufacturing and Technical Institute* (雞西煤礦機械製造技工學校) in riveting in September 1987.

Mr. Gai graduated from Jixi Coal Mine Mechanics Manufacturing and Technical Institute* (雞西煤礦機械製造技工學校) in senior riveting in September 2002.

Mr. Gai obtained the professional qualification certificate for level 4/intermediate level skills (四級/中級技能職業資格證書) the professional qualification certificate for level 3/advanced level skills (三級/高級技能職業資格證書) from the Ministry of Human Resources and Social Security of the PRC (中國人力資源和社會保障部) in June 2002 and March 2003, respectively.

**Mr. Ren Yu (任羽)**, aged 47, is a deputy general manager of our Company. He is responsible for the overall management of the production of our Group.

Mr. Ren has extensive experience in accounting and financial management. He joined the procurement department of Yixiang Graphite in June 2006 and was transferred to the position of finance manager in the finance department of Yixiang Graphite. From April 2014 to December 2020, he worked in the finance department of Yixiang New Energy as finance director prior to the promotion effective in January 2021 to his current position.

Mr. Ren obtained a diploma in architecture from the labor department of Jixi city in July 1995 and later graduated from the CPC Central Party School in Heilongjiang Province with a bachelor's degree in finance and accounting in July 2007.

**Mr. Wu Enming (吳恩明)**, aged 52, is a deputy general manager of our Company. He is responsible for the overall management of the production of our Group.

From May 2007 to April 2011, he joined Yixiang Graphite and served as equipment officer. Since May 2011, he has been working as factory director of Yixiang New Energy, where his responsibilities included production management, technical transformation and the development of new products.

Mr. Wu graduated with a bachelor's degree in mechanical maintenance from Jixi City Labor Bureau Technical School* (雞西市勞動局技工學校) in July 1993. In July 2006, he completed advanced level of fitter training at Jixi Mining Advanced Technical School* (雞西礦業高級技工學校).

**Ms. Xu Xia (徐霞)**, aged 49, is the finance director of our Company. She is responsible for the overall management of the financial and internal control matters in our Group.

Prior to 2005, Ms. Xu served as financial supervisor in various companies.

Ms. Xu later served as a financial manager at the financial department of Shenzhen Xinsanli Automatic Equipment Co., Ltd.* (深圳市三力自動化設備有限公司) from November 2005 to December 2014. Ms. Xu then served as a financial manager of Huizhou Chuangyingyuan Electronic Technology Co., Ltd.* (惠州市創盈源電子科技有限公司) from September 2015 to December 2020 before joining our Group in January 2021.

Ms. Xu graduated from Xiangtan University (湘潭大學) in June 1994 majoring in administrative management. She obtained the qualification as an intermediate accountant in May 2001 conferred by the MOF and obtained the certificate of accounting professional in June 2005 from the Shenzhen Finance Bureau (深圳市財政局).

Save as disclosed above, none of our senior management members holds any position as director in any other listed companies in the last three years immediately preceding the date of this document.

## COMPANY SECRETARY

**Ms. Mak Po Man Cherie (麥寶文)** has been the company secretary of our Company since May 31, 2021. Ms. Mak Po Man Cherie is the vice president of SWCS Corporate Services Group (Hong Kong) Limited. She has worked for various professional firms and listed companies in Hong Kong, with over 15 years of experience in the fields of auditing, accounting, corporate finance, compliance and company secretarial. Ms. Mak has been the vice president of SWCS Corporate Services Group (Hong Kong) Limited since October 2019 and was the assistant vice president from August 2018 to September 2019. Ms. Mak obtained a master of corporate governance degree from the Hong Kong Polytechnic University in 2017. She has been admitted as an associate member of The Hong Kong Institute of Chartered Secretaries and The Chartered Governance Institute (formerly known as The Institute of Chartered Secretaries and Administrators in the United Kingdom) in 2017, a member of the Hong Kong Institute of Certified Public Accountants in 2003, and a fellow member of the Association of Chartered Certified Accountants in 2006.

## BOARD COMMITTEES

We have established the following committees within our Board of Directors, namely, an audit committee, a remuneration committee, a nomination committee and a compliance committee. The committees operate in accordance with the terms of reference adopted by our Board.

### Audit committee

We have established an audit committee with written terms of reference in compliance with Rules 3.21 and 3.22 of the Listing Rules and the Paragraph C.3 of the Corporate Governance Code as set forth in Appendix 14 to the Listing Rules. The audit committee consists of four members, namely, Mr. Chiu G Kiu Bernard, Mr. Shen Shifu, Mr. Liu Zezheng and Ms. Zhao Jingran. Mr. Chiu G Kiu Bernard, the independent non-executive Director with appropriate accounting and financial management expertise, is the chairperson of the committee. The primary duties of the audit committee are to make recommendations to our Board on the appointment, re-appointment and removal of external auditors; review the financial statements; provide material advice in respect of our financial reporting process; oversee our internal control and risk management systems and audit process; and provide advice and comment to our Board on matters related to corporate governance.

### Remuneration committee

We have established a remuneration committee with written terms of reference in compliance with Rules 3.25 and 3.26 of the Listing Rules and the Paragraph B.1 of the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The remuneration committee consists of five members, four independent non-executive Directors and one executive Director namely, Mr. Liu Zezheng, Mr. Zhao Liang, Mr. Shen Shifu, Mr. Chiu G Kiu Bernard and Ms. Zhao Jingran. Mr. Liu Zezheng is the chairperson of the committee. The primary duties of the remuneration committee are to make recommendations to the Board regarding our policy and structure for the remuneration of our Directors and senior management and on the establishment of a formal and transparent procedure for developing remuneration policies, and to make recommendations to the Board on the remuneration packages of our Directors and senior management and on the employee benefit arrangement.

### Nomination committee

We have established a nomination committee with written terms of reference in compliance with the Paragraph A.5 of the Corporate Governance Code as set forth in Appendix 14 to the Listing Rules. The nomination committee consists of five members, four independent non-executive Directors and one executive Director namely, Mr. Zhao, Mr. Chiu G Kiu Bernard, Mr. Shen Shifu, Mr. Liu Zezheng and Ms. Zhao Jingran. Mr. Zhao is the chairperson of the committee. The primary duties of the nomination committee are to make recommendations to review the structure, size and composition (including the skills, knowledge and experience) of our Board; and review and make recommendations to the Board on appointment of Directors and the management of the Board succession.

### Compliance Committee

We have established a compliance committee with written terms of reference. The compliance committee consists of three members, two independent non-executive Directors and one executive Director namely, Mr. Liu Zezheng, Mr. Chiu G Kiu Bernard and Mr. Lei Wai Hoi. Mr. Liu is the chairperson of the committee. The primary duties of the compliance committee are to ensure compliance with regulatory matters as well as the adequacy and effectiveness of regulatory compliance procedures and system.

## CODE PROVISION A.2.1 OF THE CORPORATE GOVERNANCE CODE

Our Directors recognize the importance of good corporate governance in management and internal procedures to promote and ensure accountability.

Mr. Zhao is our executive Director, chairman of the Board and the Chief Executive Officer of our Company. With extensive experience in the graphite mining industry, Mr. Zhao is responsible for the overall management, decision-making and strategy planning of our Group and is instrumental to our Group's growth and business expansion since the establishment of our Group. Since Mr. Zhao is the key reason for our Group's establishment, considering that (a) the day-to-day responsibilities of the chief executive officer have been assumed by Mr. Zhao, who is also the chairperson of our Company; and (b) Mr. Zhao is the chairperson of our Group and has extensive experience in our business operation and management in general, there is no separation of the roles of the chairperson and the chief executive officer of our Company, and so our Board considers that vesting the roles of chairman and the Chief Executive Officer in the same person, Mr. Zhao, would not create any potential harm to the interest of our Group and it is, on the contrary, beneficial to the management of our Group. In addition, the operation of the senior management and our Board, which are comprised of experienced individuals, effectively checks and balances the power and authority of Mr. Zhao. Our Board currently comprises two executive Directors (including Mr. Zhao) and four independent non-executive Directors and therefore has a fairly strong independence element in its composition.

The Board works efficiently and performs it responsibilities with all key and appropriate issues discussed in a timely manner. In addition, as all major decisions are made in consultation with members of the Board and relevant Board committees, and there are four independent non-executive Directors on the Board offering independent perspective, the Board is therefore of the view that there are adequate safeguards in place to ensure sufficient balance of powers within the Board. Nevertheless, the Board shall review the structure and composition of the Board from time to time in light of prevailing circumstances, to maintain a high standard of corporate governance practices of our Company.

Save as disclosed above, we will comply with the requirements under all code provisions of the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. Our Directors will review our corporate governance policies and compliance with the Corporate Governance Code each financial year and comply with the "comply" or "explain" principle in our corporate governance report which will be included in our annual reports upon the [REDACTED].

## BOARD DIVERSITY POLICY

In order to enhance the effectiveness of our Board and to maintain the high standard of corporate governance, we have adopted the board diversity policy which sets out the objective and approach to achieve and maintain diversity of our Board. Pursuant to the board diversity policy, we seek to achieve Board diversity through the consideration of a number of factors when selecting the candidates to our Board, including but not limited to gender, skills, age, professional experience, knowledge, cultural, education background, ethnicity and length of service. The ultimate decision of appointment will be based on merit and the contribution which the selected candidates will bring to our Board.

Our Directors have a balanced mix of knowledge and skills, including overall management and strategic development, accounting and financial management, sales and marketing, graphite mining, mineral processing and law. They obtained degrees in various majors including economic, engineering, arts, finance and accounting and law. We have four independent non-executive Directors with different industry backgrounds, representing four-sixths of the Board. Taking into account our existing business model and specific needs as well as the different background of our Directors, the composition of our Board satisfies our board diversity policy.

Our nomination committee is responsible for ensuring the diversity of our Board members and compliance with relevant codes governing board diversity under the Corporate Governance Code as set forth in Appendix 14 of the Listing Rules. We will continue to apply the principle of appointments based on merits with reference to our Board diversity policy as a whole and are committed to provide career development opportunities for female staff. Under our Board diversity policy, our Company intends to promote gender diversity when recruiting staff at mid to senior level so that our Company will have a pipeline of female members at senior management level and also potential successors to the Board. Under our Board diversity policy, we also plan to offer all-rounded trainings to female employees whom we consider to have suitable experience, relevant skills and knowledge of our operation and business, including but not limited to, business operation, management, accounting and finance, legal and compliance and research and development. Our Directors are of the view that such strategy will offer opportunities for our Board to identify capable female employees to be nominated as members of the Board in the future with the aim to providing our Board with a pipeline of female candidates to achieve gender diversity in our Board in the long run. Moreover, our nomination committee is delegated by our Board to take opportunity to increase the proportion of female members over time when selecting and making recommendation on suitable candidates for Board appointments so as to achieve an appropriate balance of gender diversity with reference to stakeholders' expectation and international and local recommended best practices. Our nomination committee will aim to recommend at least one female Director candidate to the Board for its consideration at least once per year.

Our nomination committee will review the board diversity policy and our diversity profile (including gender balance) from time to time to ensure its continued effectiveness. We will also disclose in our corporate governance report about the implementation of the board diversity policy on an annual basis.

We are also committed to adopting similar approach to promote diversity, including but not limited to gender diversity, at all other levels of our Company from the Board downwards to enhance the effectiveness of our corporate governance as a whole.

## COMPLIANCE ADVISOR

In accordance with Rule 3A.19 of the Listing Rules, our Company has appointed Lego Corporate Finance Limited as our compliance advisor commencing from the [REDACTED], who will have access to all relevant records and information relating to our Company that it may reasonably require to properly perform its duties. Pursuant to Rule 3A.23 of the Listing Rules, our Company must consult with and, if necessary, seek advice from the compliance advisor on a timely basis in the following circumstances:

- before the publication of any regulatory announcement, circular or financial report;
- where a transaction, which might be notifiable or connected transaction, is contemplated, including share issues and share repurchases;
- where we propose to use proceeds of the [REDACTED] in a manner different from that detailed in this document;
- where our business activities, developments or results deviate from any forecast, estimate or other information in this document; and
- where the Stock Exchange makes an inquiry of our Company under Rule 13.10 regarding unusual movements in the [REDACTED] or [REDACTED] of our Shares.

The term of the appointment will commence on the [REDACTED] and end on the date on which we comply with Rule 13.46 of the Listing Rules in respect of our financial results for the first full financial year commencing after the [REDACTED], and such appointment may be subject to mutual agreement.

## REMUNERATION AND COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT

Our Directors and senior management receive compensation from our Group in the form of wages, salaries, bonuses, contributions to pension schemes, allowances and benefits in kind.

The aggregate remuneration (including salaries, bonuses, contributions to pension schemes, other social security costs and other employee benefits) received by our Directors were approximately RMB0.7 million, RMB0.7 million and RMB1.5 million for the years ended December 31, 2021, respectively.

The aggregate amount of salaries, bonuses, contribution to pension schemes, other social security costs and other employee benefits paid to our Company's five highest (not including one of which is our executive Director) paid individuals were approximately RMB2.5 million, RMB2.5 million and RMB2.2 million for the three years ended December 31, 2019, 2020 and 2021, respectively.

Pursuant to the arrangements currently in force, the aggregate amount of remuneration (excluding discretionary bonus) payable to and the benefits in kind receivable by our Directors for the year ending December 31, 2022 is estimated to be approximately RMB2.4 million.

The independent non-executive Directors receive fees from our Company. All Directors receive reimbursements from our Company for expenses which are necessary and reasonably incurred for providing services to our Company or executing matters in relation to the operations of our Company and are paid out of the funds of our Company by way of fees for their services as directors, such sums (if any) as our Directors may from time to time determine (not exceeding in aggregate an annual sum excluding other amounts payable (e.g. expenses as remuneration for employment) or such larger amount as our Company may by ordinary resolution determine). Save as disclosed above, our Directors are not entitled to receive any other special benefits from our Company. The compensation of our Directors is determined by the Board which, following the [REDACTED], will receive recommendation from the Remuneration Committee which will take into account applicable laws, regulations and rules.

No remuneration was paid by our Group to our Directors or the five highest paid individuals as an inducement to join or upon joining us or as a compensation for loss of office during the Track Record Period. Further, none of our Directors had waived any remuneration during the same period.

Save as disclosed above, no other payments have been made or are payable during the Track Record Period by our Group to our Directors or senior management.

## SHARE OPTION SCHEME

We have conditionally adopted the Share Option Scheme on [●]. For details of the Share Option Scheme, please see "Statutory and General Information — D. Other information — 1. Share Option Scheme" in Appendix VI to this document.

# SUBSTANTIAL SHAREHOLDERS

So far as our Directors are aware, immediately following the completion of the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming that the [REDACTED] is not exercised and without taking into account the Shares which may be issued upon exercise of any options granted or to be granted under the Share Option Scheme), each of the following persons will have an interest or short position in Shares or the underlying Shares of our Company which would be required to be disclosed to our Company and the Stock Exchange pursuant to the provisions of Divisions 2 and 3 of Part XV of the SFO or will be, directly or indirectly, interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of our Company:

| **Name** | **Nature of Interest** | **Shares held as at the Latest Practicable Date**[1] | | **Shares held immediately after the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming the [REDACTED] is not exercised)**[1] | |
|---|---|---|---|---|---|
| | | *Number* | *Approximate percentage* | *Number* | *Approximate percentage* |
| Mr. Zhao Liang[2] | Interest in controlled corporations | 1 | 100% | [REDACTED] | [REDACTED] |
| Sandy Mining Limited | Beneficial owner | 1 | 100% | [REDACTED] | [REDACTED] |

*Notes:*

(1) All interests stated are long positions.

(2) Sandy Mining Limited is wholly-owned by Mr. Zhao Liang. Accordingly, Mr. Zhao Liang is deemed to be interested in all the Shares held by Sandy Mining Limited by virtue of the SFO.

Save as disclosed above, our Directors are not aware of any person who will, immediately following the completion of the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming that the [REDACTED] is not exercised and without taking into account the Shares which may be issued upon exercise of any options granted or to be granted under the Share Option Scheme), have an interest or short positions in Shares or the underlying Shares which will be required to be disclosed to our Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of SFO or will be, directly or indirectly, interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of our Company or any of our subsidiaries.

## AUTHORIZED AND ISSUED SHARE CAPITAL

The following is a description of the authorized and issued share capital of our Company in issue as at the date of this document and to be issued as fully paid or credited as fully paid immediately prior to and following the completion of the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming the [REDACTED] is not exercised and no Shares are to be issued upon the exercise of any options which may be granted under the Share Option Scheme):

## AUTHORIZED SHARE CAPITAL

| | | Nominal Value *(HK$)* |
|---|---|---|
| 2,000,000,000 | Shares of par value HK$0.001 each | 2,000,000.000 |

## ISSUED AND TO BE ISSUED, FULLY PAID OR CREDITED TO BE FULLY PAID UPON COMPLETION OF THE [REDACTED], THE LOAN CONSIDERATION CAPITALIZATION AND THE [REDACTED]

Assuming the [REDACTED] is not exercised, the issued share capital of our Company immediately following the completion of the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED] will be as follows:

Issued and to be issued, fully paid or credited as fully paid:

| | | Nominal Value *(HK$)* |
|---|---|---|
| 1 | Share in issue at the date of this document | 0.001 |
| [REDACTED] | Share to be issued pursuant to the Loan Consideration Capitalization | [REDACTED] |
| [REDACTED] | Shares to be issued pursuant to the [REDACTED] | [REDACTED] |
| [REDACTED] | Shares to be issued pursuant to the [REDACTED] | [REDACTED] |
| [REDACTED] | Shares in total | [REDACTED] |

## ASSUMPTIONS

The above table assumes that the [REDACTED] has become unconditional and the issue of Shares pursuant thereto is made as described herein. The above table does not take into account any Shares which (i) may be allotted and issued pursuant to the exercise of the [REDACTED], (ii) may be issued upon exercise of any options granted or to be granted under the Share Option Scheme, or (iii) may be allotted and issued or repurchased by our Company under the general mandate for the allotment and issuance of Shares or the general mandate for repurchase of Shares granted to our Directors as referred to below or otherwise.

## MINIMUM PUBLIC FLOAT

According to Rule 8.08 of the Listing Rules, at the time of the [REDACTED] and at all times thereafter, at least 25% of the total issued share capital of our Company shall be held by the [REDACTED] (as defined in the Listing Rules).

## RANKING

The [REDACTED] of our Company will rank equally with all of the Shares currently in issue or to be issued and, in particular, will qualify for all dividends or other distributions declared, made or paid on the Shares in respect of a record date which falls after the date of this document except for the entitlement under the [REDACTED].

## SHARE OPTION SCHEME

Our Company [has conditionally adopted] the Share Option Scheme. For further details of the principal terms of the Share Option Scheme, please see "Statutory and General Information — D. Other Information — 1. Share Option Scheme" in Appendix VI to this document.

## CIRCUMSTANCES UNDER WHICH GENERAL MEETING AND CLASS MEETING ARE REQUIRED

Pursuant to the Companies Act and the terms of the Articles of Association, our Company may from time to time by ordinary resolution of shareholders (i) increase its authorized share capital; (ii) consolidate or divide all or any of its share capital into shares of larger or smaller amount than its existing shares; (iii) divide its unissued shares into several classes and attached thereto respectively any preferential, deferred, qualified or special rights, privileges or conditions; (iv) subdivide its shares into shares of smaller amount; and (v) cancel any shares which have not been taken. In addition, our Company may subject to the provisions of the Companies Act reduce its share capital by its shareholders passing a special resolution. For details, please see "Summary of the Constitution of the Company and Cayman Islands Company Law" in Appendix V to this document.

Pursuant to the terms of the Articles of Association, all or any of the special rights attached to any class of shares may, subject to the provisions of the Companies Act, be varied or abrogated either with the consent in writing of the holders of not less than three-forth in nominal value of the issued shares of that class or with the sanction of a special resolution passed at a separate general meeting of the holders of the shares of that class. For details, please see "Summary of the Constitution of the Company and Cayman Islands Company Law — 2. Articles of Association (a) Variation of rights of existing shares or classes of shares" in Appendix V to this document.

Further, our Company will also hold general meetings from time to time as may be required under the Articles, a summary of which is set out in "Summary of the Constitution of the Company and Cayman Islands Company Law" in Appendix V to this document.

## GENERAL MANDATE TO ISSUE SHARES

Subject to the conditions stated in "Structure and Conditions of the [REDACTED] — Conditions of the [REDACTED]", our Directors have been granted a general unconditional mandate to allot, issue and deal with Shares or securities convertible into Shares or options, warranties or similar rights to subscribe for Shares of such convertible securities and to make or grant offers, agreements or options which would or might require the exercise of such powers, provided that the aggregate number of Shares allotted or agreed to be allotted by the Directors other than pursuant to:

(i) the exercise of any subscription rights, warrants which may be issued by our Company from time to time;

(ii) any scrip dividend scheme or similar arrangement providing for the allotment of Shares in lieu of the whole or part of a dividend on Shares in accordance with our Articles of Association;

(iii) a specific authority granted by the Shareholders in general meeting,

shall not exceed the aggregate of:

(i) 20% of the total number of our Shares in issue upon completion of the [REDACTED]; and

(ii) the total number of the Shares repurchased by our Company (if any) under the general mandate to repurchase Shares referred to in "— General Mandate to Repurchase Shares" in this section.

This general mandate to issue Shares will expire at the earliest of:

(i) the conclusion of our Company's next annual general meeting; or

(ii) on the date by which our Company is required by any applicable law of the Cayman Islands or the Articles of Association to hold our next annual general meeting; or

(iii) when the authority given to our Directors is renewed, varied or revoked by an ordinary resolution of our Shareholders at a general meeting.

For further details of this general mandate, please see "Statutory and General Information — A. Further Information about Our Group — 4. Resolutions in writing of the then sole shareholder of our Company passed on [●]" in Appendix VI to this document.

## GENERAL MANDATE TO REPURCHASE SHARES

Subject to the conditions stated in "Structure and Conditions of the [REDACTED] — Conditions of the [REDACTED]", our Directors have been granted a general unconditional mandate to exercise all powers of our Company to repurchase the Shares with a total number of not more than 10% of our Shares in issue immediately following the completion of the [REDACTED] (excluding any Shares which may be issued pursuant to the exercise of the [REDACTED]).

This mandate only relates to repurchases made on the Stock Exchange, or any other stock exchange on which the securities of our Company may be [REDACTED] (and recognized by the SFC and the Stock Exchange for this purpose), and otherwise in accordance with the rules and regulations of the SFC, the Stock Exchange, the Cayman Companies Act and all other applicable laws. Further information required by the Stock Exchange to be included in this document regarding the repurchase of Shares is set out in the paragraph headed "Statutory and General Information — A. Further Information about Our Group — 4. Resolutions in writing of the then sole shareholder of our Company passed on [●]" in Appendix VI to this document.

This general mandate to repurchase Shares will expire at the earliest of:

(i) the conclusion of our Company's next annual general meeting; or

(ii) on the date by which our Company is required by any applicable law of the Cayman Islands or the Articles of Association to hold our next annual general meeting; or

(iii) when the authority given to our Directors is renewed, varied or revoked by any ordinary resolution of our Shareholders at a general meeting.

For further details of this general mandate, please see "Statutory and General Information — A. Further Information about Our Group — 4. Resolutions in writing of the then sole shareholder of our Company passed on [●]" in Appendix VI to this document.

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and notes included in "Accountant's Report" as set out in Appendix I to this document. The financial information as set out in the Accountant's Report incorporates the financial statements of our Company during the Track Record Period. You should read the whole Accountant's Report as set out in Appendix I to this document and not rely merely on the information in this section. For the purpose of this section, unless the context otherwise requires, references to 2019, 2020 and 2021 refer to our financial years ended December 31 of such years.*

*The following discussion and analysis contains forward-looking statements that involve risks and uncertainties. These statements are based on assumptions and analysis made by us in light of our experience and perception of historical trends, current conditions and expected future developments, as well as other factors we believe are appropriate under the circumstances. You should not place undue reliance on any such statements. Our actual future results and timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors," "Forward-Looking Statements" and elsewhere in this document.*

## OVERVIEW

We are engaged in the production and sales of flake graphite concentrate and spherical graphite in the PRC. Our origins trace back to 2006 when we began our operations with Yixiang Graphite in the beneficiation and sales of flake graphite concentrate (primarily with a carbon content between 94% and 96.8%) and we expanded with Yixiang New Energy in the processing and sales of spherical graphite (primarily with a carbon content above 99%) in 2012. Due to the high carbon content of our flake graphite concentrate, which we believe was attributable to our beneficiation capabilities, they are suitable to be used as heat-resistant materials as well as further value-added applications, such as to be manufactured into spherical graphite and used as anode material in lithium-ion batteries for electronic devices and NEVs. As by-products of processing our spherical graphite, we sell micro graphite powder and high purity graphite powder, and as a by-product of our mining operations, we also sell unprocessed marble. During the year ended December 31, 2021, we sold approximately 37,300 tonnes of flake graphite concentrate and approximately 13,800 tonnes of spherical graphite and its by-products.

Our Group experienced moderate business growth during the Track Record Period, generating a total revenue of approximately RMB123.7 million, RMB168.7 million and RMB198.4 million, with a net profit generated of approximately RMB24.5 million, RMB37.9 million and RMB53.3 million, for the three years ended December 31, 2019, 2020 and 2021 respectively.

## BASIS OF PRESENTATION

Our Company was incorporated in the Cayman Islands as an exempted company with limited liability on August 3, 2020. We have not been involved in any other business prior to the Reorganization and do not meet the definition of a business. The Reorganization is merely a recapitalization of our Group's business operations with no change in management of such business and the ultimate owners of our Group's business operations remain the same. The historical financial information of our Company has been prepared in accordance with principal accounting policies as set out below which are in accordance with HKFRSs issued by the HKICPA are set out in note 2.1 to the Accountant's Report contained in Appendix I to this document.

## FACTORS AFFECTING OUR RESULTS OF OPERATIONS

Our financial condition, results of operations and the year-to-year comparability of our financial results are principally affected by the following factors:

### Sales volume and average selling price

The sales volume of our graphite products has a substantial effect on our results of operations. Our sales volume largely depends upon our customer and market demand, our extraction, beneficiation and processing volume as well as changes in the PRC economy and market conditions. Our sales volume is mainly affected by the production plan of our processing facilities, which is generally prepared based on various factors, including but not limited to: (i) the delivery dates and volumes of our products stipulated in purchase orders from our customers; (ii) historical sales demand; and (iii) our production design capacity.

The pricing of our products has a direct impact on our results of operations and financial condition. We normally set the prices of our products based on monthly analyzes of market demands and we take into account a variety of factors, including but not limited to, our production costs and the product specifications required by our customers. During the Track Record Period, we experienced promising growth in our sales volume and revenue generated by our flake graphite concentrate and spherical graphite, whilst the average selling prices had been in a general decline between 2019 and 2020; and recorded an overall increase for our flake graphite concentrate and remained stable for our spherical graphite in 2021. The average selling price is considered to have a crucial impact on our results of operations.

For illustration purpose only, the following table illustrates the sensitivity analysis of hypothetical fluctuation in our average selling prices on gross profit, assuming all other factors are held constant, for the years indicated:

| Percentage changes in average selling price | Increase/(Decrease) in gross profit For the year ended December 31, 2019 | 2020 | 2021 |
|---|---|---|---|
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| +15% | 18,560 | 25,312 | 29,755 |
| +30% | 37,121 | 50,625 | 59,510 |
| –15% | (18,560) | (25,312) | (29,755) |
| –30% | (37,121) | (50,625) | (59,510) |

The following table illustrates the sensitivity analysis of fluctuation in the price of our major products on gross profit, assuming all other factors held constant for the years indicated:

| Percentage change in the price of each of its major products | Change | Increase/(Decrease) in gross profit 2019 | 2020 | 2021 |
|---|---|---|---|---|
| | | *RMB'000* | *RMB'000* | *RMB'000* |
| **194** | +15% | 3,972 | 4,243 | 7,088 |
| | +30% | 7,944 | 8,486 | 14,176 |
| | –15% | (3,972) | (4,243) | (7,088) |
| | –30% | (7,944) | (8,486) | (14,176) |
| **195** | +15% | 2,121 | 5,329 | 6,271 |
| | +30% | 4,242 | 10,658 | 12,542 |
| | –15% | (2,121) | (5,329) | (6,271) |
| | –30% | (4,242) | (10,658) | (12,542) |
| **196** | +15% | 1,195 | 1,533 | 583 |
| | +30% | 2,390 | 3,065 | 1,167 |
| | –15% | (1,195) | (1,533) | (583) |
| | –30% | (2,390) | (3,065) | (1,167) |
| **SG-10** | +15% | 7,068 | 9,589 | 7,176 |
| | +30% | 14,137 | 19,178 | 14,353 |
| | –15% | (7,068) | (9,589) | (7,176) |
| | –30% | (14,137) | (19,178) | (14,353) |
| **Other model** | +15% | 1,500 | 786 | 6,366 |
| | +30% | 2,999 | 1,571 | 12,733 |
| | –15% | (1,500) | (786) | (6,366) |
| | –30% | (2,999) | (1,571) | (12,733) |
| **Micro graphite powder** | +15% | 1,065 | 943 | 1,206 |
| | +30% | 2,131 | 1,885 | 2,413 |
| | –15% | (1,065) | (943) | (1,206) |
| | –30% | (2,131) | (1,885) | (2,413) |

**Extraction costs**

Our Group adopts the open-pit mining method at our Beishan Mine. Such mining method is considered to result in lower operating costs and improve the efficiency of our operations as compared to underground mining methods. The extraction costs of unprocessed graphite mined from our Beishan Mine account for a noticeable portion of our cost of sales. The following table illustrates the extraction costs (including the capitalized amount) incurred for the three years ended December 31, 2019, 2020 and 2021:

| | For the year ended December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Depreciation | 1,778 | 3,552 | 1,607 |
| Blasting services | 1,590 | 2,287 | 2,460 |
| Fuel costs | 1,911 | 1,668 | 1,805 |
| Employees salaries and benefits | 1,130 | 830 | 1,145 |
| Machinery expenses | 1,173 | 661 | 1,198 |
| Amortization of mining rights | 813 | 1,837 | 1,108 |
| Raw materials | 250 | 242 | 1,043 |
| Repairs and maintenance | 338 | 19 | 85 |
| Mining project management and administrative expenses | 1,102 | — | — |
| Others(1) | 718 | 291 | 529 |
| **Total** | **10,803** | **11,387** | **10,980** |
| Portion capitalized(2) | 7,040 | 1,656 | 3,504 |
| Portion accounted for as cost of sales for the extraction of graphite(3) | 3,763 | 5,606 | 5,195 |
| Portion accounted for as cost of sales for the extraction of marble(3) | — | 4,125 | 2,281 |
| **Total** | **10,803** | **11,387** | **10,980** |

*Note:*

1. Others include expenses in relation to workplace safety expenses, insurance on mining equipment, consumables and delivery of the dump truck.

2. The portion capitalized accounted for the amount to be capitalized as mining structures under our property, plant and equipment, which would be depreciated using the units of production method based on the total proved and probable reserves of the mine as the depletion base and recognized as depreciation under extraction costs in future. Mining structures primarily include the cost incurred to carry out waterproof engineering, construct on-site utilities systems and other miscellaneous infrastructure on the mining site, and the capitalization of the portion of costs incurred for mine extraction that is allocated to the stripping activities. Stripping activities exposed the Group to usable ore that can be used to produce inventory and improved access to further quantities of material that will be mined in future periods. To the extent the benefit is improved access to ore, the Group recognized these costs as mining structures under property, plant and equipment. The capitalization of extraction costs is made by using an allocation basis that is based on volume of waste extracted compared with expected volume of total extraction from the ore, for a given volume of ore production.

3. The cost of sales for the extraction of graphite and marble were allocated on the basis of the respective portions of graphite and marble extracted as measured in volume and were apportioned accordingly.

Major components of our extraction costs directly relate to our production volume. Variations in our production volume may significantly affect our production costs, which in turn, may affect our cost of sales. Additional capital expenditure may increase our depreciation and amortization, which may in turn also increase our production costs and cost of sales.

There is no assurance that future increase in our extraction costs will be offset by increase in our future selling prices, if any. If the growth of our unit costs outpaces the growth of our unit selling price, there may be a material and adverse impact on our gross margins, results of operations and financial condition.

For illustration purpose only, the following table illustrates the sensitivity analysis of hypothetical fluctuation in our extraction costs (after portion capitalized) on gross profit, assuming all other factors remained constant, for the years indicated:

| **Percentage changes in extraction costs** | **Increase/(Decrease) in gross profit For the year ended December 31,** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| +15% | 564.5 | 1,459.7 | 1,121.4 |
| +30% | 1,128.9 | 2,919.3 | 2,242.8 |
| –15% | 564.5 | 1,459.7 | 1,121.4 |
| –30% | 1,128.9 | 2,919.3 | 2,242.8 |

**PRC government policies and regulations**

The mining industry in the PRC is subject to various laws, regulations and control measures from central, provincial and local authorities. Please see "Regulatory Overview and the JORC Code" in this document for a summary of the significant laws and regulations that our Group is subject to. The PRC government has full discretion and authority to grant, renew and terminate our Group's mining and production licenses and permits which are crucial for our business operations. There is no guarantee that the legal framework under which foreign-invested companies in the PRC operate may differ in various aspects from that under which domestic PRC companies operate. Any failure to obtain or renew the licenses and permits requisite for our business operations, or any substantial changes to the legal framework under which our principal PRC operating subsidiary operates could materially and adversely affect our business and results of operations.

**Economic viability**

An analysis on the various economics effects that may result from the implementation of our operations has been conducted by the Independent Technical Consultant. The analysis was based on capital and operating costs and production, beneficiation and mining schedules. A base case scenario of our operation over the life of mine (January 1, 2022 to 2024) on an annual basis was constructed. The base case is based on the mining, beneficiation and spherical graphite processing schedules as outlined in Table 6-5, Table 8-13 and Table 8-17 set forth in the Independent Technical Report. It envisages an integrated operation, from mining, beneficiation to spherical graphite processing. It does not include the proposed new beneficiation and spherical graphite processing plants at Beishan. This resulted in forecast sales prices (as below) and a discount rate of 10% be adopted by the Independent Technical Consultant. The discount rate was based on the considerations of the real, risk free long-term interest rate (2.59% for the five-year PRC Government bond yield), mining project risk (2% to 4%) and country risk (2% to 4%).

It is important to note that the purpose of Independent Technical Consultant's techno-economic analysis is to demonstrate the potential to provide a positive net present value and hence the economic viability of our operation in support of the declaration of the ore reserve. The techno-economic analysis is not a financial valuation and the derived NPVs are not intended to represent the market value (i.e. the cash equivalent value that may be obtained were the project placed up for sale through a structured process) or likely profitability of our operation.

For illustrative purpose, SRK's discounted cashflow analysis shows that our operations after tax (25% corporate income tax) net present value ("**NPV**") at a discount rate of 10% returned a positive NPV of RMB923 million as at 31 December 2021. A straight-line depreciation method was used; any financing costs, capital raising expenses or company debts have not been considered and a 100% equity has been assumed in this analysis.

The following sensitivity analysis (after tax), as below, has also been undertaken by the Independent Technical Consultant with respect to the flake graphite recovery, capital and operating costs and sales prices of flake graphite concentrate and spherical graphite:

| Variance | Flake graphite recovery | Operating expenses | Capital expenditure | Flake graphite sales price | Spherical graphite sales price |
|---|---|---|---|---|---|
| 25% | 1,173 | 651 | 908 | 1,123 | 1,164 |
| 20% | 1,123 | 706 | 911 | 1,083 | 1,115 |
| 15% | 1,073 | 760 | 914 | 1,043 | 1,067 |
| 10% | 1,023 | 814 | 917 | 1,003 | 1,019 |
| 5% | 973 | 868 | 920 | 963 | 971 |
| 0.0% | 923 | 923 | 923 | 923 | 923 |
| –5% | 872 | 977 | 926 | 882 | 874 |
| –10% | 822 | 1,031 | 929 | 842 | 826 |
| –15% | 772 | 1,085 | 931 | 802 | 778 |
| –20% | 722 | 1,139 | 934 | 762 | 730 |
| –25% | 672 | 1,194 | 937 | 722 | 682 |

The results reveal the following changes:

- A 1% increase in flake graphite recovery will result in a positive 1.09% change in NPV.
- A 1% increase in operating cost will result in a negative 1.18% change in NPV.
- A 1% increase in capital cost will result in a negative 0.06% change in NPV.
- A 1% increase in flake graphite concentrate sales price will result in a positive 0.87% change in NPV.
- A 1% increase in spherical graphite sales price will result in a positive 1.04% change in NPV.

Of these parameters, operating cost is the most sensitive parameter, followed by flake graphite recovery. For details, please see "Appendix III — Independent Technical Report — 9.3 Economic viability analysis".

## SIGNIFICANT ACCOUNTING POLICIES, JUDGMENTS AND ESTIMATES

### New standards and amendments to existing standards not yet adopted by our Group

The following are standards and amendments to existing standards that have been published and are relevant but not mandatory for the Track Record Period, and have not been early adopted by our Group.

| | | **Effective for annual periods beginning on or after** |
|---|---|---|
| Amendments to HKFRS 3 | Reference to the Conceptual Framework | 1 January 2022 |
| Amendments to HKFRS 10 and HKAS 28 | Sales or Contributions of Assets between an Investor and its Associate or Joint Venture | To be determined |
| HKFRS 17 and Amendments to HKFRS 17 | Insurance Contracts | 1 January 2023 |
| Amendments to HKAS 1 | Classification of Liabilities as Current or Non-current | 1 January 2023 |
| Amendments to HKAS 1 and HKFRS Practice Statement 2 | Disclosure of Accounting Policies | 1 January 2023 |
| Amendments to HKAS 8 | Definition of Accounting Estimates | 1 January 2023 |
| Amendments to HKAS 12 | Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction | 1 January 2023 |
| Amendments to HKAS 16 | Property, Plant and Equipment — Proceeds before Intended Use | 1 January 2022 |
| Amendments to HKAS 37 | Onerous Contracts — Cost of Fulfilling a Contract | 1 January 2022 |

| | | Effective for annual periods beginning on or after |
|---|---|---|
| Annual Improvements to HKFRSs 2018–2020 Cycle | Amendments to HKFRS 1, HKFRS 9, HKFRS 16 and HKAS 41 | 1 January 2022 |
| Amendments to Accounting Guideline 5 | Merger Accounting for Common Control Combinations (Revised) | 1 January 2022 |
| Hong Kong Interpretation 5 (2020) | Presentation of Financial Statements — Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause | 1 January 2023 |

Our Group will adopt the above new or revised standards, amendments and interpretations to existing standards as and when they become effective. Our Board has performed preliminary assessment and these standards are not expected to have a material impact on our Group's financial position and results of operations upon adopting these standards, amendments and interpretations to existing standards.

**Revenue recognition**

Revenue is measured at the fair value of the consideration received or receivable for the sales of goods in the ordinary course of our Group's activities.

If contracts involve the sale of multiple elements, the transaction price will be allocated to each performance obligation based on their relative stand-alone selling prices. If the stand-alone selling prices are not directly observable, they are estimated based on expected cost plus a margin or adjusted market assessment approach, depending on the availability of observable information.

Revenue is recognized when or as the control of the good is transferred to the customer.

Depending on the terms of the contract and the laws that apply to the contract, control of the good may be transferred over time or at a point in time.

Control of the good is transferred over time if our Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates or enhances an asset that the customer controls as our Group performs; or
- does not create an asset with an alternative use to our Group and our Group has an enforceable right to payment for performance completed to date.

If the control of the goods transfers over time, revenue is recognized over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognized at a point in time when the customer obtains control of the goods or service. Specific criteria where revenue is recognized are described below.

*Sales and distribution of goods*

We principally manufacture and sell graphite products. Sales are recognized when control of the products has transferred to our customer, being when the products are delivered to the customer, and there is no unfulfiled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or we have objective evidence that all criteria for acceptance have been satisfied.

Revenue from these sales is recognized based on the price specified in the contract, net of value-added tax, rebates and returns. Revenue is only recognized to the extent that it is highly probable that a significant reversal will not occur. No element of financing is deemed present as the sales are made on cash or with a credit term of not more than 90 days. A receivable (financial asset) is recognized when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before payment is due.

**Property, plant and equipment**

Property, plant and equipment, other than construction in progress, are stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the assets' carrying amounts or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the asset will flow to our Group and the cost of the asset can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are expensed in the consolidated statements of comprehensive income during the financial period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives or, in the case of leasehold improvements and certain plant and machines, the shorter lease term as follows:

| | |
|---|---|
| Plant and buildings | 20 years |
| Machinery and equipment | 3–10 years |
| Motor vehicles | 4–5 years |
| Furniture and fixtures | 3–5 years |

Depreciation on mining structures is provided to write off the cost of the mining structures using the units of production method based on the total proved and probable reserves of the mine as the depletion base.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

CIP is stated at cost less impairment losses. Cost comprises direct costs of construction as well as borrowing costs capitalized during the periods of construction and installation. Capitalization of these costs ceases and the CIP is transferred to the appropriate class of property, plant and equipment when substantially all the activities necessary to prepare the assets for their intended use are completed. No depreciation is provided for in respect of CIP until it is completed and ready for its intended use.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss.

**Intangible assets — Mining rights**

Mining rights are stated at cost less accumulated amortization and accumulated impairment losses and are amortized on the units of production method based on the total proven and probable reserves of the mine.

| | **Year ended December 31,** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Opening net carrying amount | 13,034 | 20,562 | 27,013 |
| Additions | 8,341 | 8,288 | — |
| Amortization | (813) | (1,837) | (1,108) |
| Closing net carrying amount | 20,562 | 27,013 | 25,905 |
| Gross carrying amount | 21,375 | 29,663 | 29,663 |
| Accumulated amortization | (813) | (2,650) | (3,758) |
| Net carrying amount | 20,562 | 27,013 | 25,905 |

The opening net carrying amount of approximately RMB13.0 million in 2019 was brought forward from the opening net carrying amount of approximately RMB9.9 million in 2018, which includes the prospecting right obtained by Yixiang New Energy in 2015 and exploration fees incurred by our Group between 2015 and 2017 and the payment of approximately RMB3.1 million for the mineral rights of marble ores in our Beishan Mine.

On May 25, 2015, Yixiang New Energy entered into the prospecting right transfer agreement with Department of Land and Resources of Heilongjiang Province of the PRC, pursuant to which Department of Land and Resources of Heilongjiang Province of the PRC transferred the prospecting right to Yixiang New Energy at a consideration of approximately RMB5.1 million. On December 1, 2015, Yixiang New Energy further obtained the permit for mineral resources exploration issued by the Ministry of Land and Resources of the PRC with prospecting right over an exploration area of 6.06 square kilometers located in Luobei County, Hegang City, Heilongjiang Province, PRC. In order to explore the geological conditions, topographic conditions and resource reserves related to our Beishan Mine, Yixiang New Energy then engaged Harbin Ruifa Mineral Exploration Company Limited, a qualified third-party exploration company, to conduct exploration work between 2015 and 2017 at a total consideration of approximately RMB4.8 million. In the course of exploration, it was discovered that in addition to graphite, there were also marble ores in the area. Yixiang New Energy was required to pay to the Department of Land and Resources of Heilongjiang Province of the PRC a fee of approximately RMB3.1 million in 2018 for the mineral rights of marble ores in the mine. Therefore, together with the additions in the amount of approximately RMB3.1 million, the gross carrying amount of our Group's mining rights was approximately RMB13.0 million as at December 31, 2018.

In 2019, Yixiang New Energy was required to pay to Yunshan Forestry of Luobei County and the Heilongjiang Province a total amount of approximately RMB8.3 million as consideration for changing the land use of the mine from "forest" to "commercial" use. Such consideration related to the occupied forest land was divided into two parts, which included the fee for relevant forest vegetation restoration of approximately RMB5.7 million in the first phase of Yixiang New Energy's development project of the mine, and a consideration of approximately RMB2.6 million paid to Yunshan Forestry of Luobei County pursuant to the agreement entered into between Yixiang New Energy and Yunshan Forestry of Luobei County. The assessment of consideration was based on the number of forest trees used and the area of the forest land occupied, with Yixiang New Energy occupying approximately 14,778 trees and 9.6 hectares of state-owned forest land. The gross carrying amount was approximately RMB21.4 million as at December 31, 2019 with such additions in the amount of approximately RMB8.3 million. There was an amortization of approximately RMB0.8 million for the year ended December 31, 2019.

In the second phase of the Yixiang New Energy's development project of the mine in 2020, Yixiang New Energy paid a sum of approximately RMB2.6 million pursuant to the agreement entered into between Yixiang New Energy and Yunshan Forestry of Luobei County, which was determined based on the number of forest trees used and the occupied area of the forest land, with Yixiang New Energy occupying approximately 16,773 trees and 9.4 hectares of state-owned forest land. Together with the fee of approximately RMB5.7 million paid to Heilongjiang Province, the additions in the amount of approximately RMB8.3 million were recorded for 2020, thereby increasing the gross carrying amount of our mining rights to approximately RMB29.7 million as at December 31, 2020. There was an amortization of approximately RMB1.8 million for the year ended December 31, 2020.

We recorded an amortization of approximately RMB1.1 million for the year ended December 31, 2021 as compared to approximately RMB1.8 million in 2020, the decrease of which was mainly due to the decrease of unprocessed marble being extracted in 2021. The net carrying amount of our mining rights decreased to approximately RMB25.9 million, and the gross carrying amount remained at approximately RMB29.7 million.

Impairment of mining rights that are subject to amortization is tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We considered that there is no impairment indicator on the mining rights as at each of the year end date and, as such, no impairment assessment has been performed.

**Other Intangible assets**

Our other intangible assets primarily comprise of patents held by us. Our other intangible assets decreased from approximately RMB63,000 as at December 31, 2019 to RMB35,000 as at December 31, 2021 primarily due to amortization charge in the same period. We amortize other intangible assets using the straight-line method over the expected useful life of respective intangible asset ranged from two to 20 years.

**Current and deferred income tax**

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

*Current income tax*

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the consolidated statements of financial position date in the places where our Company and its subsidiaries operate and generate taxable income. Our Board periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

*Deferred income tax*

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax bases of investments in foreign operations where our company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

**Inventories**

Raw materials, work in progress and finished goods are stated at the lower of cost and net realizable value. Cost comprises direct materials, direct labor and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. Costs are assigned to individual items of inventory on the basis of weighted average costs. Costs of purchased inventory are determined after deducting rebates and discounts. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

**Trade and other receivables**

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. They are generally due for settlement within 90 days and therefore all classified as current. Trade and other receivables are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at fair value. Our Group holds the trade and other receivables with the objective of collecting the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method.

**Research and development expenses**

Costs associated with the enhancement of production process are recognized as an expense as incurred. Only development costs that are directly attributable to the design and testing of identifiable and unique production process controlled by the Group are recognised as intangible assets where the capitalization criteria stated under HKAS 38 are met.

Research expenditure and development expenditure that do not meet the capitalisation criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

## RESULTS OF OPERATIONS

The following table sets forth the consolidated statements of comprehensive income for the years indicated:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Revenue | 123,736 | 168,749 | 198,365 |
| Cost of sales | (64,309) | (85,502) | (105,322) |
| Gross profit | 59,427 | 83,247 | 93,043 |
| Other income and other gains, net | 663 | 300 | 8,033 |
| Selling and distribution expenses | (14,299) | (9,393) | (10,138) |
| General and administrative expenses | (9,019) | (18,770) | (19,738) |
| Research and development expenses | (4,820) | (5,830) | (8,118) |
| Reversal of/(provision for) impairment of financial assets | 194 | (349) | (1,463) |
| **Operating profit** | 32,146 | 49,205 | 61,619 |
| Finance income | 12 | 18 | 54 |
| Finance costs | (435) | (778) | (834) |
| Finance costs, net | (423) | (760) | (780) |
| **Profit before income tax** | 31,723 | 48,445 | 60,839 |
| Income tax expense | (7,174) | (10,586) | (7,514) |
| **Profit for the year** | 24,549 | 37,859 | 53,325 |
| **Profit attributable to:** | | | |
| Owner of the Company | 24,549 | 36,884 | 53,325 |
| Non-controlling interests | — | 975 | — |
| **Profit for the year** | **24,549** | **37,859** | **53,325** |
| **Non-HKFRSs information[1]:** | | | |
| Net profit for the financial year | 24,549 | 37,859 | 53,325 |
| Add: [REDACTED] | — | [REDACTED] | [REDACTED] |
| Adjusted profit for the financial year | **24,549** | **[REDACTED]** | **[REDACTED]** |

*Note:*

1. Adjusted profit for the year is derived by excluding the [REDACTED]. The term of adjusted profit is not defined under HKFRSs. The adjusted profit for the year was presented because our Directors believe that it is a useful supplement to the consolidated statements of comprehensive income as it reflects our profitability from our operations without taking into consideration of the [REDACTED]. However, the adjusted profit for the year should not be considered in isolation or construed as an alternative to gross profit or profit for the year prepared in accordance with HKFRSs, and shall be used for illustrative purpose only. Potential [REDACTED] should be aware that the adjusted profit for the year presented in this document may not be comparable to similarly titled measures reported by other companies due to differences in the components of the calculation.

## PRINCIPAL INCOME STATEMENT COMPONENTS

### Revenue

During the Track Record Period, we generated our revenue primarily from (i) the sale of flake graphite concentrate; (ii) the sale of spherical graphite and its by-products; and (iii) the sale of unprocessed marble. We only began generating revenue from the sale of unprocessed marble in the year ended December 31, 2020, after obtaining the mining rights to our Beishan Mine in the year ended December 31, 2019. The following table sets forth the revenue generated from each business segment for the years indicated:

| | For the year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* |
| Sale of flake graphite concentrate | 57,374 | 46.4 | 85,709 | 50.8 | 97,672 | 49.2 |
| Sale of spherical graphite and its by-products | 66,362 | 53.6 | 76,159 | 45.1 | 98,509 | 49.7 |
| Sale of unprocessed marble | — | — | 6,881 | 4.1 | 2,184 | 1.1 |
| **Total** | **123,736** | **100.0** | **168,749** | **100.0** | **198,365** | **100.0** |

For the years ended December 31, 2019, 2020 and 2021, we sold (i) approximately 18,400 tonnes, 34,100 tonnes and 37,300 tonnes of flake graphite concentrate; (ii) approximately 8,300 tonnes, 10,400 tonnes and 13,800 tonnes of spherical graphite and its by-products; and (iii) nil, approximately 675,200 tonnes and 341,700 tonnes of unprocessed marble, respectively. All of our revenue during the Track Record Period were generated from customers located in the PRC.

#### *Revenue generated from the sale of flake graphite concentrate*

The sale of our processed flake graphite concentrate accounted for approximately 46.4%, 50.8% and 49.2% of our total revenue for the three years ended December 31, 2019, 2020 and 2021, respectively. We have been selling flake graphite concentrate since our business was founded in 2006, with a focus on those with a carbon content between 94% and 96.8%. For the three years ended December 31, 2019, 2020 and 2021, sales from our flake graphite concentrate, mainly included types, "194" (indicating a carbon content of 94% or from 94% to less than 95%), "195" (indicating a carbon content of 95% or from 95% to less than 96%) and "196" (indicating a carbon content of 96% or from

96% to 96.8%) generated a revenue of approximately RMB48.6 million, RMB74.0 million and RMB92.9 million, respectively. The following table summarizes the revenue generated by, the sales volume and the average selling prices of our flake graphite concentrate during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| **Type** | **Revenue** | **Sales volume** | **Average selling price** | **Revenue** | **Sales volume** | **Average selling price** | **Revenue** | **Sales volume** | **Average selling price** |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* |
| 194 | 26,479 | 8,396 | 3,154 | 28,288 | 11,132 | 2,541 | 47,254 | 18,094 | 2,612 |
| 195 | 14,139 | 4,007 | 3,529 | 35,525 | 13,837 | 2,567 | 41,806 | 15,803 | 2,645 |
| 196 | 7,968 | 2,002 | 3,980 | 10,218 | 3,671 | 2,783 | 3,889 | 1,339 | 2,904 |
| Others(1) | 8,788 | 3,996 | 2,199 | 11,678 | 5,494 | 2,126 | 4,723 | 2,022 | 2,336 |
| **Total** | **57,374** | **18,401** | | **85,709** | **34,134** | | **97,672** | **37,258** | |

*Note:*

(1) Others primarily include flake graphite concentrates of other carbon content specifications.

Our revenue generated from the sale of flake graphite concentrate is determined by our average selling price and sale volume. Our Directors believe that the selling price of our flake graphite concentrate is generally influenced by factors such as production costs and product specifications required by our customers. For instance, there is a general increase in the average selling price of each type of our flake graphite concentrate by the percentage of carbon content due to the extra processes involved. Our Directors believe that, due to the standardized nature of such flake graphite concentrate, our products may be price sensitive and easily replicated by competitors. Hence, our advantage on selling flake graphite concentrate primarily lies with effective cost structure through an integrated supply chain, which was improved after obtaining the mining rights to our Beishan Mine. Another key to our success in generating revenue from the sales of flake graphite concentrate is our ability to secure new customers, or secure more orders from existing customers. This is considered to be a major contributory factor to the general increase in our revenue generated from the sales of flake graphite concentrate during the Track Record Period.

Across all the three main types of flake graphite concentrate during the Track Record Period, there had been a general increasing trend for sales volume and revenue generated, whilst there was a decline for the average selling prices between 2019 and 2020. The decrease in the average selling prices of such three key types between the years ended December 31, 2019 and 2020 was mainly due to our Directors decided to provide discounts to existing customers who might be facing difficulties during the COVID-19 outbreak, and further discounts were given to two newly engaged major customers during the same year.

### *Revenue generated from the sale of spherical graphite and by-products*

The sale of our spherical graphite generated represented approximately 53.6%, 45.1% and 49.7% of our total revenue for the three years ended December 31, 2019, 2020 and 2021, respectively. We have been selling spherical graphite since September 2012, all of which with a carbon content between 95% and 99.5%. Model numbers of our spherical graphite (i.e. SG-10 being the spherical graphite with a radius of 10 μm) are designated according to the size of the spherical graphite processed, with other model numbers designated according to the density, purity or shape of the spherical graphite. Within the SG-10 model, there may be many variances based on the density and purity which would have an effect on its selling price. Owing to such a wide and diverse of variances within one model, the revenue generated by the sale of our SG-10 spherical graphite accounted for approximately 71.0%, 83.9% and 48.6% of our revenue from the sale of spherical graphite and by-products for the three years ended December 31, 2019, 2020 and 2021. As by-products of processing our spherical graphite, we also produce and sell micro graphite powder and high-purity graphite powder. The following table summarizes the revenue generated, the sales volume and the average selling prices of our spherical graphite and its by-products during the Track Record Period:

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* |
| **Spherical graphite** | | | | | | | | | |
| *SG-10* | 47,122 | 2,343 | 20,112 | 63,926 | 3,479 | 18,375 | 47,842 | 3,059 | 15,638 |
| *Other models* | 9,998 | 645 | 15,501 | 5,237 | 444 | 11,795 | 42,443 | 3,002 | 14,138 |
| **Subtotal** | **57,120** | **2,988** | | **69,163** | **3,923** | | **90,285** | **6,061** | |
| **Micro graphite powder** | 7,103 | 5,049 | 1,407 | 6,284 | 6,296 | 998 | 8,043 | 7,733 | 1,040 |
| **High-purity graphite powder** | 2,139 | 282 | 7,585 | 712 | 134 | 5,313 | 181 | 48 | 3,771 |
| **Total** | **66,362** | **8,319** | | **76,159** | **10,353** | | **98,509** | **13,842** | |

Our revenue generated from the sale of spherical graphite is determined by factors such as production costs and our average selling price and sales volume. The selling price of our spherical graphite is generally influenced by the product specifications, as orders for our spherical graphite products are often made upon request by customers, with designated specifications and tailored instructions. The average selling price of our SG-10 products was lowered in the year ended December 31, 2020 as compared to 2019 as we aim to maintain customer relationships during the COVID-19 outbreak. The decrease in the average selling price of our SG-10 products for the year ended December 31, 2021 as compared to the corresponding period in 2020 was primarily attributable to a decreased sales of a high-density version of the model from approximately 14% of SG-10 high density model in 2020 to 11% of SG-10 high density model in 2021, as SG-10 lower density model had lower average selling price at approximately RMB15,200 per tonne and our adoption of our market competitive pricing strategy.

### Cost of sales

Our cost of sales consisted of primarily (i) raw materials and consumables; (ii) electricity fees; (iii) extraction costs; (iv) direct labor costs; (v) depreciation; (vi) maintenance fees; (vii) subcontractor fees; and (viii) outsourcing charges. During the Track Record Period, our cost of sales accounted for approximately RMB64.3 million, RMB85.5 million and RMB105.3 million, representing approximately 52.0%, 50.7% and 53.1% of our total revenue for the respective years. The following table summarizes our cost of sales by nature during the Track Record Period:

| | For the year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* |
| Raw materials and consumables | 25,217 | 39.2 | 40,872 | 47.8 | 49,854 | 47.3 |
| Electricity fees | 21,588 | 33.6 | 22,464 | 26.3 | 23,031 | 21.9 |
| Extraction costs | 3,763 | 5.9 | 9,731 | 11.4 | 7,476 | 7.1 |
| Direct labor costs | 6,815 | 10.6 | 5,600 | 6.5 | 4,784 | 4.5 |
| Depreciation | 4,114 | 6.4 | 4,636 | 5.4 | 8,350 | 7.9 |
| Maintenance fees | 1,170 | 1.8 | 1,075 | 1.3 | 267 | 0.3 |
| Subcontractor fees | — | — | 164 | 0.2 | 6,497 | 6.2 |
| Outsourcing charges | — | — | — | — | 3,070 | 2.9 |
| Others[1] | 1,642 | 2.5 | 960 | 1.1 | 1,993 | 1.9 |
| **Total** | **64,309** | **100.0** | **85,502** | **100.0** | **105,322** | **100.0** |

*Note:*

1. Others include taxes and miscellaneous expenses.

### *Extraction costs*

The following table illustrates the extraction costs (including the capitalized amount) incurred for the three years ended December 31, 2019, 2020 and 2021:

| | For the year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Depreciation | 1,778 | 3,552 | 1,607 |
| Blasting services | 1,590 | 2,287 | 2,460 |
| Fuel costs | 1,911 | 1,668 | 1,805 |
| Employees salaries and benefits | 1,130 | 830 | 1,145 |
| Machinery expenses | 1,173 | 661 | 1,198 |
| Amortization of mining rights | 813 | 1,837 | 1,108 |
| Raw materials | 250 | 242 | 1,043 |
| Repairs and maintenance | 338 | 19 | 85 |
| Mining project management and administrative expenses | 1,102 | — | — |
| Others[(1)] | 718 | 291 | 529 |
| **Total** | **10,803** | **11,387** | **10,980** |
| Portion capitalized[(2)] | 7,040 | 1,656 | 3,504 |
| Portion accounted for as cost of sales for the extraction of graphite[(3)] | 3,763 | 5,606 | 5,195 |
| Portion accounted for as cost of sales for the extraction of marble[(3)] | — | 4,125 | 2,281 |
| **Total** | **10,803** | **11,387** | **10,980** |

*Note:*

1. Others include expenses in relation to workplace safety expenses, insurance on mining equipment, consumables and delivery of the dump truck.

2. The portion capitalized accounted for the amount to be capitalized as mining structures under our property, plant and equipment, which would be depreciated using the units of production method based on the total proved and probable reserves of the mine as the depletion base and recognized as depreciation under extraction costs in future. Mining structures primarily include the cost incurred to carry out waterproof engineering, construct on-site utilities systems and other miscellaneous infrastructure on the mining site, and the capitalization of the portion of costs incurred for mine extraction that is allocated to the stripping activities. Stripping activities exposed the Group to usable ore that can be used to produce inventory and improved access to further quantities of material that will be mined in future periods. To the extent the benefit is improved access to ore, the Group recognized these costs as mining structures under property, plant and equipment. The capitalization of extraction costs is made by using an allocation basis that is based on volume of waste extracted compared with expected volume of total extraction from the ore, for a given volume of ore production.

3. The cost of sales for the extraction of graphite and marble was allocated on the basis of the respective portions of graphite and marble extracted as measured in volume and were apportioned accordingly.

Below is a table setting out a comparison between the costs of unprocessed graphite procured from third party suppliers and extracted from our Beishan Mine:

| | For the year ended December 31 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Tonnes | Costs | Costs per tonne | Tonnes | Costs | Costs per tonne | Tonnes | Costs | Costs per tonne |
| | | *(RMB'000)* | *(RMB)* | | *(RMB'000)* | *(RMB)* | | *(RMB'000)* | *(RMB)* |
| **Unprocessed graphite purchased from suppliers** | 171,000 | 10,773 | 63 | 189,500 | 14,213 | 75 | 254,200 | 19,065 | 75 |
| **Unprocessed graphite extracted from our Beishan Mine** | 255,500 | 3,763 | 14.7 | 211,200 | 5,606 | 26.5 | 258,300 | 5,195 | 20.1 |

Our sourcing of unprocessed graphite includes procurement from third party suppliers and extraction from our Beishan Mine. For the three years ended December 31, 2019, 2020 and 2021, we purchased approximately 171,000 tonnes, 189,500 tonnes and 254,200 tonnes unprocessed graphite from our suppliers, for approximately RMB10.8 million, RMB14.2 million and RMB19.1 million, respectively. The unit costs for unprocessed graphite procured from our suppliers accounted for approximately RMB63, RMB75 and RMB75 per tonne. On the other hand, we extracted approximately 255,500 tonnes, 211,200 tonnes and 258,300 tonnes unprocessed graphite from our Beishan Mine, at the extraction costs of approximately RMB3.8 million, RMB5.6 million and RMB5.2 million, thus approximately RMB14.7 per tonne, RMB26.5 per tonne and RMB20.1 per tonne for the three years ended December 31, 2019, 2020 and 2021, respectively. These extraction costs are based on the portion accounted for as cost of sales for the extraction of graphite from our total extraction costs, which includes costs of depreciation, blasting services, fuel costs, employee salaries and benefits, machinery expenses, raw materials, repair and maintenance and other costs and amortization costs of our mining rights. For the three years ended December 31, 2019, 2020 and 2021, the operating cash cost of extracting unprocessed graphite from our Beishan Mine amounted to approximately RMB8.2 million, RMB3.8 million and RMB6.4 million, respectively, representing approximately RMB32.1, RMB17.9 and RMB25.0 per tonne, respectively, which was calculated based on the portion accounted for as cost of sales for the extraction of graphite from our total extraction costs plus the portion capitalized and deducting the depreciation attributable to the extraction of graphite and amortization of mining rights.

In the hypothetical case that there is a disruption in extraction of our Beishan Mine and we are required to source all the unprocessed graphite at approximately 258,300 tonnes from procurement of third party suppliers, our Directors expect that: (i) we would incur an additional procurement costs for sourcing additional unprocessed graphite from our suppliers of approximately RMB19.4 million; (ii) we would incur an additional transportation costs for delivery of unprocessed graphite from the mines of suppliers to our site of approximately RMB9.8 million per annum; (iii) there would be a decrease of revenue generated from the sales of unprocessed marble for approximately RMB2.2 million per annum; (iv) there would be no incurrence of extraction costs for our mining operation for approximately RMB7.5 million; and (v) taking into account the above adjustments, our gross profit margin is estimated to decrease to approximately 35.3% for the year ended December 31, 2021. The above estimation is based on (i) historical financial data of 2021; and (ii) half of volume is procured from existing suppliers and remaining half from other suppliers in Heilongjiang Province, the PRC. Our Group's liquidity in terms of cash generated from our operating activities is also estimated to be adversely affected as a result of decrease in overall profitability attributable to the decrease of our gross profit margin. Please see "Risk Factor — Failure to obtain, retain and renew governmental approvals, permits and licenses required for our operations could materially and adversely affect our business, financial condition and results of operations".

### *Unit cost by product*

A unit cost is a total expenditure incurred by our Group to produce, store, and sell one unit (one tonne) of our graphite products. During the Track Record Period, our unit cost for flake graphite concentrate and spherical graphite generally recorded a decreasing trend between 2019 and 2020 and remained stable in 2021.

*Flake graphite concentrate*

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Cost of sales | Sales volume | Average unit cost | Cost of sales | Sales volume | Average unit cost | Cost of sales | Sales volume | Average unit cost |
| | *(RMB'000)* | *(Tonnes)* | *(RMB'000/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB'000/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB'000/ tonne)* |
| **Flake graphite concentrate** | | | | | | | | | |
| *194* | 12,747 | 8,396 | 1.5 | 12,510 | 11,132 | 1.1 | 21,730 | 18,094 | 1.2 |
| *195* | 6,198 | 4,007 | 1.5 | 16,584 | 13,837 | 1.2 | 19,449 | 15,803 | 1.2 |
| *196* | 3,426 | 2,002 | 1.7 | 5,024 | 3,671 | 1.4 | 2,003 | 1,339 | 1.5 |
| *Others* | 6,631 | 3,996 | 1.7 | 6,086 | 5,494 | 1.1 | 2,530 | 2,022 | 1.3 |
| **Total** | **29,002** | **18,401** | | **40,204** | **34,134** | | **45,712** | **37,258** | |

*Spherical graphite*

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Cost of sales | Sales volume | Average unit cost | Cost of sales | Sales volume | Average unit cost | Cost of sales | Sales volume | Average unit cost |
| | *(RMB'000)* | *(Tonnes)* | *(RMB'000/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB'000/ tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB'000/ tonne)* |
| **Spherical graphite** | | | | | | | | | |
| *SG-10* | 22,446 | 2,343 | 9.6 | 31,809 | 3,479 | 9.1 | 29,627 | 3,059 | 9.7 |
| *Other models* | 5,892 | 645 | 9.1 | 3,251 | 444 | 7.3 | 21,332 | 3,002 | 7.1 |
| **Subtotal** | 28,338 | 2,988 | | 35,060 | 3,923 | | 50,959 | 6,061 | |
| **Micro graphite powder** | 5,376 | 5,049 | 1.1 | 5,489 | 6,296 | 0.9 | 6,167 | 7,733 | 0.8 |
| **High-purity graphite powder** | 1,593 | 282 | 5.7 | 624 | 134 | 4.7 | 203 | 48 | 4.2 |
| **Total** | **35,307** | **8,319** | | **41,173** | **10,353** | | **57,329** | **13,842** | |

**Gross profit and gross profit margin**

For the three years ended December 31, 2019, 2020 and 2021, our gross profit amounted to approximately RMB59.4 million, RMB83.2 million and RMB93.0 million, representing a gross profit margin of approximately 48.0%, 49.3% and 46.9%, respectively. The following table summarizes our gross profit and gross profit margin breakdown by business segment during the Track Record Period:

| | For the year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| | Gross profit *(RMB'000)* | Gross profit margin *(%)* | Gross profit *(RMB'000)* | Gross profit margin *(%)* | Gross profit *(RMB'000)* | Gross profit margin *(%)* |
| Sale of flake graphite concentrate | 28,372 | 49.5 | 45,505 | 53.1 | 51,960 | 53.2 |
| Sale of spherical graphite and its by-products | 31,055 | 46.8 | 34,986 | 45.9 | 41,180 | 41.8 |
| Sale of unprocessed marble | — | — | 2,756 | 40.1 | (97) | (4.4) |
| **Gross profit/gross profit margin** | **59,427** | **48.0** | **83,247** | **49.3** | **93,043** | **46.9** |

**Other income and other gains, net**

Our other income and other gains, net mainly consisted of government grants and gains/(losses) on disposal of property, plant and equipment. The following table summarizes our other income and other gains during the Track Record Period:

| | For the year ended December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| **Other income** | | | |
| Government grants | 500 | 630 | 7,858 |
| Others | 68 | 5 | 163 |
| **Other gains/(losses), net** | | | |
| Gains/(losses) on disposal of property, plant and equipment, net | 95 | (335) | 12 |
| **Total** | **663** | **300** | **8,033** |

**Selling and distribution expenses**

Our selling and distribution expenses during the Track Record Period mainly consisted of (i) transportation fees; (ii) employees salaries and benefits; (iii) sales agency fees; (iv) marketing fees; (v) rental expenses; and (vi) outsourcing charges.

For the three years ended December 31, 2019, 2020 and 2021, our selling and distribution expenses accounted for approximately RMB14.3 million, RMB9.4 million and RMB10.1 million, representing approximately 11.6%, 5.6% and 5.1% of our total revenue for the respective years. The following table summarizes our selling and distribution expenses by nature during the Track Record Period:

| | **For the year ended December 31,** | | | | | |
|---|---|---|---|---|---|---|
| | **2019** | | **2020** | | **2021** | |
| | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* |
| Transportation fees | 6,253 | 43.7 | 8,032 | 85.5 | 7,905 | 78.0 |
| Employee salaries and benefits | 1,341 | 9.4 | 1,257 | 13.4 | 847 | 8.4 |
| Marketing fees | 3,719 | 26.0 | 4 | 0.0 | — | — |
| Rental expenses | 2,000 | 14.0 | — | — | — | — |
| Sales agency fees | 903 | 6.3 | — | — | — | — |
| Outsourcing charges | — | — | — | — | 1,230 | 12.1 |
| Others[(1)] | 83 | 0.6 | 100 | 1.1 | 156 | 1.5 |
| **Total** | **14,299** | **100.0** | **9,393** | **100.0** | **10,138** | **100.0** |

*Note:*

1. Others mainly include travelling and utilities expenses

Our transportation fees represented those expenses involved in the transport of unprocessed graphite to our production sites, and the delivery of our finished products from our site to a location designated by our customers; our marketing fees mainly represented advertisement and sponsoring of industry events; and our sales agency fees represented expenses incurred when we engaged third-party customer relationship service providers during the Track Record Period. For details, please see "Business — Our business model — sales and marketing" and "Business — Inventory management — Logistics".

### General and administrative expenses

Our general and administrative expenses during the Track Record Period mainly consisted of (i) employees salaries and benefits; (ii) depreciation; (iii) professional fees; and (iv) [REDACTED].

For the three years ended December 31, 2019, 2020 and 2021, our general and administrative expenses accounted for approximately RMB9.0 million, RMB18.8 million and RMB19.7 million, representing approximately 7.3%, 11.1% and 10.0% of our total revenue for the respective years. The following table summarizes our general and administrative expenses by nature during the Track Record Period:

| | For the year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* |
| [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Employee salaries and benefits | 3,546 | 39.3 | 5,479 | 29.2 | 5,959 | 30.2 |
| Outsourcing charges | — | — | — | — | 411 | 2.1 |
| Professional fees | 1,281 | 14.2 | 2,145 | 11.4 | 2,007 | 10.2 |
| Depreciation | 1,113 | 12.3 | 1,105 | 5.9 | 1,092 | 5.5 |
| Travel and entertainment expenses | 767 | 8.5 | 789 | 4.2 | 703 | 3.6 |
| Office and maintenance expenses | 1,307 | 14.5 | 339 | 1.8 | 893 | 4.5 |
| Others[1] | 1,005 | 11.2 | 699 | 3.7 | 1,792 | 9.0 |
| **Total** | **[REDACTED]** | **[REDACTED]** | **[REDACTED]** | **[REDACTED]** | **[REDACTED]** | **[REDACTED]** |

*Note:*

1. Others include repair, utilities and miscellaneous expenses.

### Research and development expenses

Our research and development expenses during the Track Record Period mainly consisted of raw materials, electricity, employees salaries and benefits, molding fees and others. For the three years ended December 31, 2019, 2020 and 2021, our research and development expenses accounted for approximately RMB4.8 million, RMB5.8 million and RMB8.1 million, representing approximately 3.9%, 3.5% and 4.1% of our total revenue for the respective years. For details of our research and development efforts, please see "Business — Research and development". The following table summarizes our research and development expenses by nature, during the Track Record Period:

| | For the year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* | *(RMB'000)* | *(%)* |
| Raw materials | 1,214 | 25.2 | 2,564 | 44.0 | 2,703 | 33.3 |
| Electricity | 1,211 | 25.1 | 1,883 | 32.3 | 3,222 | 39.7 |
| Employee salaries and benefits | 1,041 | 21.6 | 853 | 14.6 | 1,622 | 20.0 |
| Molding fees | 1,201 | 24.9 | — | — | — | — |
| Others[1] | 153 | 3.2 | 530 | 9.1 | 571 | 7.0 |
| **Total** | **4,820** | **100.0** | **5,830** | **100.0** | **8,118** | **100.0** |

*Note:*

1. Others mainly include depreciation of machinery and equipment used for research and development purposes.

### Finance costs, net

Our finance costs, net, mainly consisted of interest income and interest expenses. The following table summarizes our finance costs, net, during the Track Record Period:

| | For the year ended December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| **Finance income** | | | |
| Interest income | 12 | 18 | 54 |
| **Finance costs** | | | |
| Interest expenses on borrowings | (189) | (427) | (652) |
| Interest expenses on bills arrangement | (233) | (208) | (69) |
| Interest elements of lease liabilities | (13) | (36) | — |
| Interest elements of provision for reclamation and mine closure | — | (107) | (113) |
| **Finance costs, net** | **(423)** | **(760)** | **(780)** |

**Income tax expense**

Our income tax expense during the Track Record Period consisted of current income tax and deferred income tax of our Group. The following table summarizes our income tax expense during the Track Record Period:

| | For the year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Current income tax | | | |
| — PRC corporate income tax | 5,798 | 9,913 | 6,630 |
| Deferred income tax | | | |
| — Reversal of temporary differences | 1,376 | 673 | 1,133 |
| — Impact of change in tax rate | — | — | (249) |
| **Income tax expense** | **7,174** | **10,586** | **7,514** |
| **Effective tax rate (%)** | **22.6** | **21.9** | **12.4** |

Under the relevant rules and regulations of the Cayman Islands, we are not subject to any income tax in the Cayman Islands. No Hong Kong profits tax has been provided for Track Record Period since there was no tax assessable profit generated from Hong Kong. Taxation on profits outside Hong Kong has been calculated on the estimated assessable profit for the year at the rates of taxation prevailing in the regions/countries in which our Group operates. PRC Corporate Income Tax has been provided for at the rate of 25% for the Track Record Period on the estimated assessable profit for the year. According to the Enterprise Income Tax Law of the PRC, starting from January 1, 2008, a withholding tax of 10% will be levied on the immediate holding companies outside the PRC when their PRC subsidiaries declare dividend out of profit earned after January 1, 2008. We recorded an effective tax rate at 22.6% in 2019 and 21.9% in 2020. It was decreased to 12.4% in 2021. Decrease in effective tax rate was due to the fact that the major operating subsidiaries of the Group, namely Yixiang New Energy and Yixiang Graphite, became eligible for the tax concession granted by the PRC government as a high-tech enterprise since 2020 and 2021 respectively, such that their corporate income tax rate changed from 25% to 15%.

## YEAR-ON-YEAR COMPARISON OF RESULTS OF OPERATIONS

### Year ended December 31, 2019 compared to Year ended December 31, 2020

***Revenue***

*Revenue generated from the sale of flake graphite concentrate*

Our revenue generated from the sale of flake graphite concentrate increased by approximately RMB28.3 million, or approximately 49.3%, from approximately RMB57.4 million for the year ended December 31, 2019 to approximately RMB85.7 million for the year ended December 31, 2020. Such increase was mainly attributable to a sharp increase in the sales of our 195 flake graphite concentrate, mainly caused by the engagement of customers and the discounts given to long-term customers during the COVID-19 outbreak in order to maintain positive relationships with customers.

*Revenue generated from the sale of spherical graphite and by-products*

Our revenue generated from the sales of spherical graphite and by-products increased by approximately RMB9.8 million or 14.8%, from approximately RMB66.4 million for the year ended December 31, 2019 to approximately RMB76.2 million for the year ended December 31, 2020, primarily due to the increase of sales of our SG-10 spherical graphite model, generating an increase in revenue of approximately RMB16.8 million, as a result of our Company's decision to reduce the selling price of such products in order to (i) maintain a positive relationship with our long-term customers, especially if they were experiencing difficulties during the COVID-19 outbreak; (ii) attract a larger customer base; and (iii) capture our market share for the year.

*Revenue generated from the sales of unprocessed marble*

As we only began the extraction of unprocessed marble in the year ended December 31, 2019 after obtaining the mining rights to our Beishan Mine, the sale of our unprocessed marble generated a revenue of approximately RMB6.9 million for the year ended December 31, 2020, accounting for approximately 4.1% of our total revenue for the same year. We did not sell unprocessed marble in 2019 because most of the unprocessed marble that was extracted in the year ended December 31, 2019 was utilized to build some basic infrastructure to support our operations (such as roads, pavements and the reinforcement of the tailings pond).

***Cost of Sales***

Our cost of sales increased by approximately RMB21.2 million, or approximately 33.0%, from approximately RMB64.3 million for the year ended December 31, 2019 to approximately RMB85.5 million for the year ended December 31, 2020. Such increase was due to (i) the increase in raw materials and consumables consumed of approximately RMB15.7 million, which was in line with our substantial increase in revenue during the year; (ii) the increase in extraction costs by approximately RMB6.0 million as the total volume of the materials moved, including unprocessed graphite, unprocessed marble and waste material, extracted from our Beishan Mine increased in 2020; and (iii) there was also a decrease in direct labor cost by approximately 17.8% as we reduced the number of staff that were deemed redundant to the production processes, and we replaced some of our staff members with lower-skilled workers at a reduced salary cost.

***Extraction Costs***

Our extraction costs slightly increased from approximately RMB10.8 million in 2019 to RMB11.4 million in 2020. Such increase was mainly caused by: (a) an increase in depreciation of approximately RMB1.8 million as a result of the full year depreciation impact on mining equipment many of which were acquired in the second quarter of 2019 and the addition of certain mining equipment in 2020, and (b) increase in the amortization of mining rights by approximately RMB1.0 million. The aforesaid increase was offset by (a) decrease of salaries of approximately RMB0.3 million as a result of reduction of number of mining staff which are considered redundant; (b) decrease of machineries expenses of approximately RMB0.5 million as a result of less tools and parts supplement to the mining equipment in 2020; (c) decrease of mining project management and administrative expenses of approximately RMB1.1 million in 2020 which primarily consisted of expenses for pre-production phase of our Beishan Mine, including preparation of the mine condition and evaluation plans, safety inspection and emergency plans required prior to the extraction of our Beishan Mine and one premium insurance for dump trucks for the first year of mining operation, which were incurred on non-recurring basis in 2019.

***Unit Costs***

*Flake graphite concentrate*

For the year ended December 31, 2019, our average unit costs ranged from approximately RMB1,500 to RMB1,700 per tonne. For the year ended December 31, 2020, our average unit cost decreased to a range of approximately RMB1,100 to approximately RMB1,400 per tonne mainly contributed by (i) the growth in sales; and (ii) the benefits of economies of scale as our utilization rate of our beneficiation plant increased by the year.

*Spherical graphite*

Our average unit costs ranged from approximately RMB9,100 to approximately RMB9,600 per tonne for the year ended December 31, 2019. The average unit cost decreased to the range from approximately RMB7,300 to approximately RMB9,100 per tonne for the year ended December 31, 2020 due to the better synergies of a vertical integration such as better control of our raw materials and more effective cost structure with our Beishan Mine in 2020. With respective to the average unit costs for micro graphite powder and high-purity graphite powder, we recorded the average unit costs in a decreasing trend for the two years ended December 31, 2019 and 2020, primarily attributable to overall decrease in costs of unprocessed graphite extracted from our Beishan Mine as compared to the costs of unprocessed graphite procured from our third party suppliers after obtaining the mining rights to our Beishan Mine.

***Gross profit and gross profit margin***

Our gross profit from the sale of flake graphite concentrate increased from approximately RMB28.4 million for the year ended December 31, 2019 to approximately RMB45.5 million for the year ended December 31, 2020 due to (i) the sharp increase in sales of our flake graphite concentrate; and (ii) the benefits of economies of scale as our utilization rate of our beneficiation plant increased in the year. Accordingly, our gross profit margin from the sale of flake graphite concentrate increased from approximately 49.5% for the year ended December 31, 2019 to approximately 53.1% for the year ended December 31, 2020.

Our gross profit from the sale of spherical graphite and its by-products increased from approximately RMB31.1 million for the year ended December 31, 2019 to approximately RMB35.0 million for the year ended December 31, 2020, mainly because of the increase in sales volume as a result of the lowered average selling price of our products sold, which was partially due to the decrease in unit cost of unprocessed graphite procured since the commencement of our vertical integration. Our gross profit margin decreased slightly from 46.8% to approximately 45.9% for the year ended December 31, 2020, which was primarily due to the decision to lower our average selling price of our products to maintain our market share and relationship with customers, and our spherical graphite processing plant's temporary suspension in June 2020 and the suspension of its purification station in November and December 2020.

As we only began the extraction of unprocessed marble in 2019 after obtaining the mining rights to our Beishan Mine, the gross profit from the sale of unprocessed marble amounted to approximately RMB2.8 million for the year ended December 31, 2020, representing a gross profit margin of approximately 40.1%.

***Other income and other gains, net***

Our other income and other gains, net decreased from approximately RMB0.7 million for the year ended December 31, 2019 to approximately RMB0.3 million for the year ended December 31, 2020, which was primarily attributable to the disposal of five of our motor trucks, resulting in a loss of approximately RMB0.3 million. This was offset by another technology subsidy granted from the Heilongjiang Provincial Government to Yixiang New Energy for developing small-size spherical graphite with a high tap density.

***Selling and distribution expenses***

Our selling and distribution expenses decreased by approximately RMB4.9 million or 34.3% for the year ended December 31, 2019 to approximately RMB9.4 million for the year ended December 31, 2020. This was mainly due to an overhaul of cost control measures being implemented, following the COVID-19 outbreak, including in particular: (i) the decrease in rental expenses from approximately RMB2.0 million to nil as we did not renew the lease of Beijing office space in order to save costs; (ii) the decrease in marketing fees from approximately RMB3.7 million to approximately RMB4,000, as we did not sponsor seminars in order to save costs; and (iii) the decrease in sales agency fees by approximately RMB0.9 million, as we discontinued our engagement with the customer relationship service providers in the year ended December 31, 2019, having considered they had not been proven most effective given our Group has been gradually building our own sales team, and has established a stable rapport with customers. We also incurred transportation fees of approximately RMB8.0 million, as we had entered into a fixed-term services transportation agreement for the delivery of our products with a third-party transportation services company during the year.

***General and administrative expenses***

Our general and administrative expenses increased by approximately RMB9.8 million, or by approximately 108.9%, from approximately RMB9.0 million for the year ended December 31, 2019 to approximately RMB18.8 million for the year ended December 31, 2020, mainly due to (i) the increase in employee salaries and benefits from approximately RMB3.5 million to approximately RMB5.5 million as there had been salary increases for management level staff for their contribution to the [REDACTED] application and there had been an increase in the number of staff members hired; (ii) the [REDACTED] incurred of approximately RMB8.2 million; and (iii) the increase in professional fees from approximately RMB1.3 million to approximately RMB2.1 million, of which approximately RMB1.0 million was used for mine exploration and environmental monitoring (as required by the Independent Technical Consultant), approximately RMB0.2 million was used on real estate mapping for Yixiang New Energy (which was necessary to obtain the buildings license), approximately RMB0.4 million was used for the construction completion inspection, mapping, and environmental inspection in relation to our beneficiation facility, and approximately RMB0.4 million was used for fire safety inspections.

***Research and development expenses***

Our research and development expenses increased by approximately RMB1.0 million or approximately 20.8% from approximately RMB4.8 million for the year ended December 31, 2019 to approximately RMB5.8 million for the year ended December 31, 2020 mainly due to an increased use of raw materials for testing purposes.

***Finance costs, net***

Our finance costs, net, increased from approximately RMB0.4 million for the year ended December 31, 2019 to approximately RMB0.8 million for the year ended December 31, 2020, primarily due to an increase in total borrowings of approximately RMB2.3 million.

***Income tax expense***

Yixiang New Energy was subject to a tax rate of 15% for the years ended December 31, 2020 as it was eligible to a tax concession as a high-tech enterprise in such corresponding periods. The effective tax rate remained stable at approximately 22.6% and 21.9% for the two years ended December 31, 2019 and 2020, respectively.

**Year ended December 31, 2020 compared to Year ended December 31, 2021**

***Revenue***

*Revenue generated from the sale of flake graphite concentrate*

Our revenue generated from the sale of flake graphite concentrate increased by approximately RMB12.0 million, or approximately 14.0%, from approximately RMB85.7 million for the year ended December 31, 2020 to approximately RMB97.7 million for the year ended December 31, 2021. Such increase was mainly attributable to the overall increase in the average selling price of flake graphite concentrate which was as a result of increase of market demand. The decrease in revenue of type 196 and other types was offset by the significant increase in our sales volume of type 194 from approximately 11,100 tonnes for the year ended December 31, 2020 to approximately 18,100 tonnes for the year ended December 31, 2021. The substantial increase in demand for type 194 from customers contributed to an increase in revenue of type 194 from approximately RMB28.3 million for the year ended December 31, 2020 to approximately RMB47.3 million for the year ended December 31, 2021. We also recorded an increase in revenue from sales of our type 195, mainly caused by an increase of sales volume from approximately 13,800 tonnes in 2020 to 15,800 tonnes in 2021 as a result of increase in market demand for our type 195 products.

*Revenue generated from the sale of spherical graphite and by-products*

Our revenue generated from the sales of spherical graphite and by-products increased by approximately RMB22.3 million or approximately 29.3%, from approximately RMB76.2 million for the year ended December 31, 2020 to approximately RMB98.5 million for the year ended December 31, 2021, primarily due to the significant increase in the sales volume of other models from approximately 400 tonnes for the year ended December 31, 2020 to approximately 3,000 tonnes for the year ended December 31, 2021. The increase was mainly attributable to the substantial increase in sales of the purchase orders in respect of SG-9 spherical graphite from one of our top five customers in 2019 and 2021.

*Revenue generated from the sales of unprocessed marble*

For the year ended December 31, 2021, our revenue generated from the sales of unprocessed marble amounted to approximately RMB2.2 million, as compared to approximately RMB6.9 million for the year ended December 31, 2020. Such decrease was primarily due to a decrease in sales price of unprocessed marble to accelerate such sales to customers in order to make available more working space for storage of other extracted materials on our site, and our customers' demand on unprocessed marble decreased due to the slowdown in the property building and construction industry in the PRC in second half of 2021.

***Cost of Sales***

Our cost of sales increased by approximately RMB19.8 million, or approximately 23.2%, from approximately RMB85.5 million for the year ended December 31, 2020 to approximately RMB105.3 million for the year ended December 31, 2021. Such increase was mainly due to (i) our engagement of third party service providers in the amount of approximately RMB6.5 million to perform purification work on spherical graphite from January to May 2021 until business suspension had ceased; (ii) the incurrence of outsourcing charges of approximately RMB3.1 million as a result of our crowdsourcing in 2021; and (iii) the increase of raw materials and consumables of approximately RMB9.0 million in line with our growth of revenue.

***Extraction Costs***

Our extraction costs slightly decreased from approximately RMB11.4 million in 2020 to RMB11.0 million in 2021. Such decrease was mainly caused by: (a) decrease of depreciation of approximately RMB1.9 million as a result of our disposal of certain mining equipment in late 2020 and relocation of certain machineries to tailing storage facilities while the functions of such were replaced by the leased machineries (i.e. Sany 550 Model excavator); and (b) decrease of amortization of mining rights by approximately RMB0.7 million. The aforesaid decrease was offset by: (a) increase of salaries of approximately RMB0.3 million as a result of overall increase of salary for our mining staff and our hiring of more skillful staff for our mining activities in 2021; (b) increase of machineries expenses of approximately RMB0.5 million as a result of our increasing lease of mining equipment for our extracting activities; and (c) increase of raw materials of approximately RMB0.8 million as a result of more materials used in the construction work of the path connecting our Beishan Mine to the main road. The increase in costs of blasting services by approximately RMB0.2 million and fuel costs by RMB0.1 million in 2021 as compared to 2020 was caused by the increased charges by blasting service provider and rising of market fuel costs.

***Unit Costs***

*Flake graphite concentrate*

The average unit costs remained relatively stable in the range of approximately RMB1,200 to approximately RMB1,500 per tonne for the year ended December 31, 2021, respectively, as compared to the range of approximately RMB1,100 to RMB1,400 per tonne for the year ended December 31, 2020.

*Spherical graphite*

The average unit costs for SG-10 increased from approximately RMB9,100 per tonne for the year ended December 31, 2020 to approximately RMB9,700 per tonne for the year ended December 31, 2021 due to the incurrence of subcontractor fees of approximately RMB6.5 million paid to graphite processing service provider for purification processing service from January to May 2021. The average unit costs for other models remained relatively stable in the range of approximately RMB7,100 to approximately RMB7,300 per tonne for the years ended December 31, 2020 and 2021. With respective to the average unit costs for micro graphite powder and high-purity graphite powder, we recorded the average unit costs in a decreasing trend for the two years ended December 31, 2020 and 2021, primarily attributable to overall decrease in costs of unprocessed graphite extracted from our Beishan Mine as compared to the costs of unprocessed graphite procured from our third party suppliers after obtaining the mining rights to our Beishan Mine.

***Gross profit and gross profit margin***

We recorded our gross profit from the sales of flake graphite concentrate of approximately RMB52.0 million and gross profit margin at approximately 53.2% for the year ended December 31, 2021, which is relatively stable as compared to 53.1% for the year ended December 31, 2020.

Our gross profit margin from the sales of spherical graphite decreased from approximately 45.9% for the year ended December 31, 2020 to approximately 41.8% in the corresponding period in 2021, which was primarily attributable to the increase in our cost of sales resulted from the incurrence of subcontractor fees paid to third party service providers of approximately RMB6.5 million for purification processing service in 2021.

Our gross profit margin for the sale of unprocessed marble decreased from approximately 40.1% for the year ended December 31, 2020 to approximately -4.4% in the corresponding period in 2021, due to the lowering of sales price of unprocessed marble to accelerate such sales to customers in order to make available more working space for placing of other extracted materials on our site, and our customers' demand on unprocessed marble decreased due to the slowdown in the property building and construction industry in the PRC in the second half of 2021.

***Other income and other gains, net***

Our other income and other gains, net increased from approximately RMB0.3 million for the year ended December 31, 2020 to approximately RMB8.0 million for the year ended December 31, 2021, which was primarily attributed to the (i) one-off government tax grant of approximately RMB5.0 million to our Group's effort in achieving a target level of taxation contribution for the past years; and (ii) government grant for Group's effort in research and development of approximately RMB2.5 million.

***Selling and distribution expenses***

We recorded our selling and distribution expenses at approximately RMB9.4 million for the year ended December 31, 2020 as compared to approximately RMB10.1 million for the year ended December 31, 2021, representing an increase of approximately RMB0.7 million or 7.4%. Such increase was mainly attributable to incurrence of outsourcing costs of approximately RMB1.2 million as a result of crowdsourcing of workforce for administrative and sales support in line with our business growth for the year ended December 31, 2021.

***General and administrative expenses***

Our general and administrative expenses increased by approximately RMB0.9 million, or by approximately 4.8%, from approximately RMB18.8 million for the year ended December 31, 2020 to approximately RMB19.7 million for the year ended December 31, 2021, mainly due to the increase of staff cost, other miscellaneous expenses and office and maintenance expenses in line with our business growth.

***Research and development expenses***

Our research and development expenses increased by approximately RMB2.3 million from approximately RMB5.8 million for the year ended December 31, 2020 to approximately RMB8.1 million for the year ended December 31, 2021, due to our continuous efforts to strengthen our research and development activities to improve our beneficiation and processing methods.

***Finance costs, net***

Our finance costs, net, remained stable at approximately RMB0.8 million for the year ended December 31, 2021.

***Income tax expense***

Yixiang New Energy was subject to a tax rate of 15% for the years ended December 31, 2021 and Yixiang Graphite was subject to a tax rate of 15% for the year ended December 31, 2021, as they were eligible to a tax concession as a high-tech enterprise in such corresponding periods. As a result, the effective tax rate decreased from approximately 21.9% in 2020 to 12.4% in 2021.

## LIQUIDITY AND CAPITAL RESOURCES

We require a substantial amount of capital to fund our working capital requirements and business expansion. Our operation and growth have been primarily been financed by cash generated from our operations.

### Cash flow

As at December 31, 2019, 2020 and 2021, we had cash and cash equivalents of approximately RMB1.9 million, RMB10.0 million and RMB33.9 million, respectively. The following table sets out our cash flow for the years indicated:

| | **For the year ended December 31,** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| **Net cash generated from operating activities** | 11,244 | 24,544 | 75,698 |
| **Net cash used in investing activities** | (27,646) | (20,717) | (29,122) |
| **Net cash generated from/(used in) financing activities** | 13,129 | 4,319 | (22,649) |
| Net (decrease)/increase in cash and cash equivalents | (3,273) | 8,146 | 23,927 |
| Cash and cash equivalents at the beginning of the year | 5,134 | 1,861 | 10,007 |
| **Cash and cash equivalents at end of the year** | **1,861** | **10,007** | **33,934** |

*Cash flow generated from operating activities*

We derive our cash inflow from operating activities principally from the receipt of payments from the sales of our flake graphite concentrate and spherical graphite. Our cash outflow from operating activities is principally for the purchases of raw materials, and parts and components for the beneficiation of flake graphite concentrate and processing of spherical graphite.

For the year ended December 31, 2021, we had net cash generated from operating activities of approximately RMB75.7 million, which was primarily contributed by an operating profit before working capital changes of approximately RMB76.0 million, with cash inflow primarily from (i) the decrease of trade and bills receivables of approximately RMB10.8 million, as a result of our efforts on recovering outstanding payments from customers; and (ii) the decrease in inventories of approximately RMB7.1 million, offset by cash outflow primarily from a decrease in contract liabilities of approximately RMB4.4 million, and a decrease in trade payables of approximately RMB2.4 million. The increase of our net cash generated from operating activities from approximately RMB24.5 million in 2020 to RMB75.7 million in 2021 was primarily due to: (i) the increase in our profit before tax mainly attributable to the increase in our graphite product sales; (ii) our effort to recover account receivables from our customers, of which approximately RMB159.3 million, or approximately 99.0% of our trade and bills receivables as at December 31, 2020 were settled in 2021 and approximately RMB49.8 million of our sales (which accounted for approximately 25.1% of our total sales) for the year ended December 31, 2021 were settled in the same year.

For the year ended December 31, 2020, we had net cash generated from operating activities of approximately RMB24.5 million, which was primarily contributed by an operating profit before working capital changes of approximately RMB59.6 million, with cash inflow from (i) a decrease in inventories of approximately RMB9.4 million; (ii) an increase in contract liabilities of approximately RMB9.3 million; (iii) an increase in trade payables of approximately RMB4.8 million, offset by cash outflow primarily from an increase in trade and bills receivables of approximately RMB47.6 million.

For the year ended December 31, 2019, we had net cash generated from operating activities of approximately RMB11.2 million, which was primarily contributed by an operating profit before working capital changes of approximately RMB38.7 million, offset primarily by cash outflow from (i) a decrease in accruals and other payables of approximately RMB7.4 million; (ii) an increase in inventories of approximately RMB5.7 million; and (iii) a decrease in trade payables of approximately RMB3.8 million.

*Cash flow used in investing activities*

Our cash outflow for investing activities primarily consisted of payments for the purchase of property, plant and equipment and the purchase of mining rights. Our cash inflow for investing activities primarily consisted of proceeds from the disposal of property plant and equipment.

For the year ended December 31, 2021, our net cash used in investing activities amounted to approximately RMB29.1 million, which was primarily contributed by the purchase of property, plant and equipment of approximately RMB26.5 million.

For the year ended December 31, 2020, our net cash used in investing activities amounted to approximately RMB20.7 million, which was primarily contributed by (i) purchase of property, plant and equipment of approximately RMB13.9 million; and (ii) addition of mining rights of approximately RMB8.3 million, which was offset primarily by proceeds from disposal of property, plant and equipment of approximately RMB1.4 million.

For the year ended December 31, 2019, our net cash used in investing activities amounted to approximately RMB27.6 million, which was primarily contributed by (i) purchase of property, plant and equipment of approximately RMB19.8 million; and (ii) addition of mining rights of approximately RMB8.3 million, which was offset primarily by proceeds from disposal of property, plant and equipment of approximately RMB0.5 million.

*Cash flow generated from/used in financing activities*

Our cash inflow/outflow from financing activities primarily consisted of proceeds from bank and other borrowings and advances from related parties.

For the year ended December 31, 2021, our net cash used in financing activities amounted to approximately RMB22.6 million, which was primarily contributed by (i) repayments of bank and other borrowings of approximately RMB11.5 million; (ii) repayments to related parties of approximately RMB6.0 million; and (iii) payments of acquisition of non-controlling interests pursuant to Reorganization of approximately RMB4.9 million, which was offset by the receipt of proceeds from bank borrowings of approximately RMB3.0 million.

For the year ended December 31, 2020, our net cash generated from financing activities amounted to approximately RMB4.3 million, which was primarily contributed by (i) proceeds from bank and other borrowings of approximately RMB18.5 million; and (ii) advances from related parties of approximately RMB9.7 million, which was offset primarily by (i) repayments of bank and other borrowings of RMB16.2 million; and (ii) repayments to related parties of approximately RMB9.6 million.

For the year ended December 31, 2019, we had net cash generated from financing activities of approximately RMB13.1 million, which was primarily contributed by (i) proceeds from bank and other borrowings of approximately RMB12.5 million; and (ii) advances from related parties of approximately RMB31.4 million, which was offset primarily by repayments to related parties of approximately RMB28.8 million.

**Current assets and liabilities**

The following table sets out details of our current assets and liabilities as at the dates indicated:

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | **2019** | **2020** | **2021** | **2022** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| | | | | *(Unaudited)* |
| **Current assets** | | | | |
| Inventories | 35,423 | 25,992 | 18,874 | 26,287 |
| Trade and bills receivables | 113,632 | 160,863 | 148,645 | 99,713 |
| Deposits, prepayments and other receivables | 180 | 4,566 | 7,533 | 12,094 |
| Cash and cash equivalents | 1,861 | 10,007 | 33,934 | 72,122 |
| | 151,096 | 201,428 | 208,986 | 210,216 |
| **Current liabilities** | | | | |
| Trade payables | 16,160 | 20,965 | 18,608 | 23,958 |
| Accruals and other payables | 12,595 | 19,754 | 18,498 | 14,800 |
| Amounts due to related parties and non-controlling interests | 77,696 | 82,749 | 73,127 | 73,127 |
| Borrowings | 16,156 | 18,500 | 10,000 | 10,000 |
| Contract liabilities | 443 | 9,758 | 5,310 | 5,282 |
| Lease liabilities | 680 | 1,169 | 1,143 | 1,111 |
| Current tax liabilities | 4,204 | 2,671 | 744 | 1,075 |
| | 127,934 | 155,566 | 127,430 | 129,353 |
| **Net current assets** | **23,162** | **45,862** | **81,556** | **80,863** |

As at December 31, 2019, 2020 and 2021, we had net current assets of approximately RMB23.2 million, RMB45.9 million and RMB81.6 million, respectively. As at April 30, 2022, we had net current assets of approximately RMB80.9 million.

Our net current assets increased from approximately RMB23.2 million as at December 31, 2019 to approximately RMB45.9 million as at December 31, 2020, primarily due to (i) the increase in trade and bills receivables of RMB47.2 million as a result of our increase in revenue; (ii) increase in cash and cash equivalents of approximately RMB8.1 million; and (iii) increase in deposits, prepayments and other receivables of approximately RMB4.4 million mainly as a result of the deferred [REDACTED] and prepayment of raw materials. This was offset by primarily (i) an increase in trade payables of approximately RMB4.8 million; (ii) an increase of accruals and other payables of approximately RMB7.2 million; (iii) an increase of amounts due to related parties and non-controlling interests of approximately RMB5.1 million; and (iv) a decrease in inventories of approximately RMB9.4 million.

Our net current assets further increased to approximately RMB81.6 million as at December 31, 2021, primarily due to (i) an increase in cash and cash equivalents of approximately RMB23.9 million; (ii) a decrease in amounts due to related parties and non-controlling interests of approximately RMB9.6 million; (iii) a decrease in trade payables of approximately RMB2.4 million; and (iv) a decrease in accruals and other payables of approximately RMB1.3 million, mitigated by (i) a decrease in trade and bills receivables of approximately RMB12.3 million; and (ii) a decrease in inventories of approximately RMB7.1 million.

Our Directors confirm that the Group's revenue and costs and expenses were settled by the Group directly with the relevant customers and suppliers during the Track Record Period, and no costs and expenses relating to the Group's operations were borne by related parties or other third parties without being recharged to the Group during the Track Record Period.

**Working capital sufficiency**

During the Track Record Period, we relied on cash inflows generated from operating activities (being approximately RMB75.7 million for the year ended December 31, 2021). Our Directors confirm that, taking into consideration the financial resources presently available to us, which are primarily our internal resources (i.e. cash inflows to be generated from our operating activities, which were approximately RMB75.7 million as at December 31, 2021, and our cash and bank balances on hand, which were approximately RMB33.9 million as at December 31, 2021), our available banking facilities and the estimated [REDACTED] from the [REDACTED] of approximately [REDACTED] million, assuming an [REDACTED] of HK$[REDACTED] per Share being the mid-point of the estimated [REDACTED] range, we have sufficient working capital for at least 125% of our present requirements for at least the next 12 months commencing from the date of this document. Our Directors are not aware of any other factors that would have a material impact on our Group's liquidity. Details of the funds necessary to meet our existing operations and to fund our future plans are set out in "Future Plans and [REDACTED]" in this document.

## CERTAIN ITEMS OF CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

### Inventories

Our inventories primarily consist of raw materials, which principally included unprocessed graphite, work in progress, finished goods (i.e. flake graphite concentrate, spherical graphite and its by-products and unprocessed marble), and parts and components. The following table sets out the breakdown of our inventories as at the dates indicated:

| | As at December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Raw materials | 1,065 | 4,030 | 6,820 |
| Work in progress | 7,982 | 8,044 | 5,739 |
| Finished goods | 27,012 | 14,224 | 6,315 |
| | 36,059 | 26,298 | 18,874 |
| Less: provision for inventories | (636) | (306) | (—) |
| **Total** | **35,423** | **25,992** | **18,874** |

Our inventories decreased by approximately 26.6% from approximately RMB35.4 million as at December 31, 2019 to approximately RMB26.0 million as at December 31, 2020. Such decrease was primarily due to a decrease in our finished goods that resulted from a surge in our overall sales and we also experienced a temporary suspension of our spherical graphite processing plant's purification station from November 2020 to May 2021 for purposes of repairs and enhancements, which slowed down our production when approaching the end of the year. Our inventories decreased to approximately RMB18.9 million as at December 31, 2021 mainly due to the decrease of finished goods resulted from our overall sales in the year of 2021.

The following table sets forth our average inventory turnover days for the years indicated:

| | For the year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Average inventory turnover days[1] | 184.8 | 131.4 | 77.7 |

*Note:*

1. Average inventory turnover days are equal to the average of the opening and closing balances of inventory of the relevant year divided by cost of sales for the relevant year and multiplied by 365 days for 2019, 366 days for 2020, and 365 days for the year ended December 31, 2021.

For the years ended December 31, 2019, 2020 and 2021, our inventory turnover days were 184.8 days, 131.4 days and 77.7 days, respectively. The average inventory turnover days decreased for the year ended December 31, 2020 due to the increase in sales volume during the year. The average inventory turnover days decreased to 77.7 days for the year ended December 31, 2021 due to the low level of inventory that resulted from the aforesaid surge in our overall sales in 2020, which continued in 2021.

We closely monitor our inventory level. Physical inventory count on inventory would be conducted at least once a year. Our Group makes provision for slow moving inventories based on assessing the needs and reasonableness of provision for slowing moving inventories at each year end. The identification of slow-moving inventories requires the use of judgments and key assumptions which take into consideration of historical sales pattern, aging and expectation of future sales orders. Where the expectation is different from the original estimate, such difference will impact the carrying value of inventories and provision for inventories.

As at the Latest Practicable Date, approximately RMB16.1 million, or approximately 85.2% of inventories as at December 31, 2021 were sold or consumed.

**Trade and bills receivables**

As at December 31, 2019, 2020 and 2021, our total trade and bills receivables amounted to approximately RMB113.6 million, RMB160.9 million and RMB148.6 million, of which our bills receivables amounted to approximately RMB61.8 million, RMB85.5 million and RMB98.2 million, respectively. The increase in such amounts during the Track Record Period was largely in line with our revenue growth. As at December 31, 2021, we recorded a decrease in our trade receivables, as a result of our payment collection efforts of outstanding fees from our customers during 2021. The table below sets out a breakdown of our trade and bills receivables for the dates indicated:

| | **As at December 31,** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Trade receivables | 55,114 | 79,065 | 55,539 |
| Bills receivables | 61,825 | 85,454 | 98,225 |
| Trade and bills receivables | 116,939 | 164,519 | 153,764 |
| Less: loss allowance[1] | (3,307) | (3,656) | (5,119) |
| **Total** | **113,632** | **160,863** | **148,645** |

*Note:*

1. Amounts charged to the allowance account are generally written off when there is no expectation of recovery.

The following table sets forth our average turnover days of our trade and bills receivables for the years indicated:

| | For the year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Average turnover days of our trade and bills receivables(1) | 331.6 | 297.7 | 284.8 |

(1) Average trade and bills receivables turnover days are equal to the average of the opening and closing balances of trade and bills receivables of the relevant year divided by sales for the relevant year and multiplied by 365 days for 2019, 366 days for 2020, and 365 days for 2021.

During the Track Record Period, most of our customers was given a credit period of up to 90 days. In terms of payment, most of our trade receivables were settled by bills issued by financial institutions or telegraphic transfer. Such bills normally have a maturity period between 180 and 365 days after the receiving date. According to Frost & Sullivan, this payment practice has been an on-going industry practice.

For the years ended December 31, 2019, 2020 and 2021 our turnover days of our trade and bills receivables were 331.6 days, 297.7 days and 284.8 days, respectively. The general decrease in such turnover days during the Track Record Period was mainly due to our effort to recover trade receivables from our customers during the Track Record Period. We allowed longer credit periods to our customers during the Track Record Period, primarily because (i) a large part of our receivables due from customers comprised of bills receivables to be settled by banks and financial institutions by their respective maturity dates ranging from within 90 days to 365 days and the risk of non-recovery is considered to be relatively low; and (ii) we adopt strategies in market penetration by allowing longer credit periods to customers. To the best knowledge of our Directors, these customers have stable business operations and are financially sound. Additionally, our Directors believed that in order to grow our business and build up our customer base in the Track Record Period, a relatively longer credit periods was acceptable and was therefore allowed. As a result, we experienced an increase in our revenue during the Track Record Period, with our revenue amounted to approximately RMB123.7 million, RMB168.7 million and RMB198.4 million for the three years ended December 31, 2019, 2020 and 2021.

The following table sets out the aging analysis of our trade receivables based on due date:

| | As at December 31, | | | Subsequent settlement up to the Latest Practicable Date | Percentage of subsequent settlement up to the Latest Practicable Date |
|---|---|---|---|---|---|
| | **2019** | **2020** | **2021** | | |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(%)* |
| Current | 32,918 | 36,850 | 15,695 | 14,371 | 91.6 |
| Past due: | | | | | |
| Within 90 days | 16,117 | 28,988 | 26,291 | 23,945 | 91.1 |
| 91–180 days | 1,805 | 5,203 | 6,363 | 3,337 | 52.4 |
| 181–270 days | 1,433 | 2,677 | 2,012 | 982 | 48.8 |
| 271–365 days | 35 | 864 | 375 | 47 | 12.5 |
| Over 1 year | 2,806 | 4,483 | 4,803 | 859 | 17.9 |
| | **55,114** | **79,065** | **55,539** | **43,541** | **78.4** |

As at 31 December 2019, 2020 and 2021, the ageing analysis of our bills receivables, based on maturity date, is as follows:

| | As at December 31, | | | Subsequent settlement up to the Latest Practicable Date | Percentage of subsequent settlement up to the Latest Practicable Date |
|---|---|---|---|---|---|
| | **2019** | **2020** | **2021** | | |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(%)* |
| Within 90 days | 16,713 | 30,029 | 52,695 | 52,695 | 100.0 |
| 91–180 days | 31,897 | 43,149 | 40,830 | 30,558 | 74.8 |
| 181–270 days | 10,915 | 9,050 | 2,601 | — | — |
| 271–365 days | 2,300 | 3,226 | 2,100 | — | — |
| | **61,825** | **85,454** | **98,225** | **83,253** | **84.8** |

As at the Latest Practicable Date, approximately RMB43.5 million, or approximately 78.4% of our trade receivables as at December 31, 2021 were settled, and approximately RMB83.3 million, or approximately 84.8% of our bills receivables as at December 31, 2021 were settled. Bills receivables with maturity date within 90 days as at December 31, 2021 were fully settled up to the Latest Practicable Date, and bills receivables with other maturity dates beyond 90 days would normally be settled by the financial institutions on the respective maturity dates applicable to such bills receivables.

According to the F&S Report, as a matter of industry practice, the credit period in the sale of graphite industry is generally 90 days and the turnover days of trade receivables and bills receivables generally range from 180 to 365 days. It is customary for graphite companies to extend credit terms to their customers in the PRC and our Directors are of the view that our credit terms to our customers and turnover days of trade and bills receivables are in line with the industry practice. For trade receivables which are past due for 90 days, we generally decide to extend their credit periods. In making such decision, we take into account (i) whether such customer has a proven record of credibility for settling outstanding amounts due to us, and (ii) whether such customer maintains stable business operations and is financially sound, to the best knowledge of our Directors. Such decision is reached after careful consideration and assessment by our Directors in accordance with our internal credit control procedures. If we decide to extend their credit period, we issue payment reminders to these customers. For trade receivables which are past due for over 365 days from the date of receiving our formal invoice, we normally proceed with debt recovery actions unless there is commercial justification not to do so.

Most of our trade receivables were settled by bills issued by financial institutions or telegraphic transfers. Approximately 59.7%, 46.6% and 28.3% of the trade receivables of our Group were within the relevant credit periods set by our Group or the maturity date for the years ended December 31, 2019, 2020 and 2021, respectively. The trade receivables of our Group that exceeded their relevant credit periods during the Track Record Period accounted for approximately 40.3%, 53.4% and 71.7% of the total trade receivables of our Group for the years ended December 31, 2019, 2020 and 2021, respectively.

All of the bills receivables of our Group were settled on or before their respective maturity dates during the Track Record Period. To the best knowledge of our Directors, there were no outstanding bills receivables that exceeded their relevant maturity dates during the Track Record Period as these bills receivables were settled by banks and financial institutions. In view of the bills issued by banks and financial institutions are payable by such banks and financial institutions instead of our customers, the recoverability of such balances are enhanced and our Directors consider the risk of non-recovery to be relatively low.

Our Directors confirm that there was no material disagreement or dispute between our Group and our customers, which could adversely affect our financial condition, in respect of the trade receivables and bills receivables that remained to be collected as at the Latest Practicable Date.

We endorsed certain bills receivables of approximately RMB7.5 million, RMB15.5 million and RMB16.4 million to our creditors as at December 31, 2019, 2020 and 2021, respectively. For the year ended December 31, 2021, the proceeds of the endorsement transactions are included in trade payables of approximately RMB9.7 million and accruals and other payables of approximately RMB6.7 million until the related bills receivables are collected or we settle any losses suffered by the creditors. In the event of default, we are obliged to pay the creditors the amount in default. We are therefore exposed to the risks of credit losses and late payment in respect of its endorsed bills receivables. In order to minimize the credit risk that may potentially arise due to the prolonged receivables turnover days and the reliance on bank bills, our Group has implemented internal control measures to monitor the outstanding receivables of our customers. For details, please see "Business — Our suppliers — Payment terms and credit control".

For provision/impairments, we made general provisions recognizing expected credit losses, we also made specific provisions/impairment on long-aged accounts receivables which we had launched legal proceedings to recover such amounts, whilst we are entitled to monetary recovery according to the relevant court decisions, such customers simply were unable to pay. Hence, provisions were made accordingly. As provided in the Accountant's Report, impairment was made for trade and bills receivables which amounted to approximately RMB3.3 million, RMB3.7 million and RMB5.1 million as at December 31, 2019, 2020 and 2021, respectively. To the best knowledge of our Directors, this would not have material impact on the financial conditions of the Group, as our Group had not experienced any major disruption of business due to material delay or default of payment by our customers. Save for such impairment allowances, our Directors consider that we had no other impairment allowance made during the Track Record Period and sufficient provision/impairments have been made. There are no recoverability issue for trade receivables because: (i) approximately 78.4% of the trade receivable as at December 31, 2021 were settled and approximately 84.8% of our bills receivables as at December 31, 2021 were settled, as at the Latest Practicable Date; and (ii) to the best knowledge of our Directors, they are not aware of any financial difficulties on customers with outstanding trade and bills receivables to settle our invoices other than those customers with provision being made against them. Trade receivables have been grouped based on shared credit risk characteristics and the days past due to measure the expected credit losses. The customers of spherical graphite and its by-products, and unprocessed marble are mainly customers with long business relationship with us, and we do not experience any historical loss from this group of customers for all the historical outstanding balances, including those aged more than one year. As such, taking into account of the forward-looking factors, the historical loss rate for those trade receivables balance is immaterial and no loss allowance has been provided on the trade receivables from them as at December 31, 2019 and 2021. For details, please see note 3 of the Accountant's Report in Appendix I to this document.

Our Group also has internal control policies in place to monitor the settlement of trade receivables. The responsibility of collecting accounts receivables lies mainly with our sales staff. In general, our customers should begin to make payment upon receiving an invoice from us. If we receive a bank's acceptance bill, records shall be kept by the finance team and confirmed by the sales supervisor. Sales staff shall check, at the end of each month, that the records between the sales department and the finance department are consistent, then report to the general manager. The sales staff must also check and confirm with our customers once to twice a year to ensure that the balances of the accounts of both parties are accurate. Our finance team closely review the trade and bills receivables balances and any overdue balances on an ongoing basis, and assessments are made by our general manager on the collectability of overdue balances. Any impairment allowance for trade receivables and bills receivables are subject to our general manager's approval. Furthermore, we have adopted prudent credit control procedures, including (i) having our finance team meet regularly with our general manager and sales team for status updates of our trade and bills receivables, such as, aging conditions and collectability analysis; and (ii) having our senior management and sales team decide on credit periods to be extended to such customers or to proceed with debt recovery action depending on a number of factors, such as credit history and our historical business relationship with such customer. For customers who had not made purchases from us for a substantial period of time, or have repeatedly failed to pay, we would instruct our lawyers to issue letters of demand to such. In the event that certain amounts could not be received from long outstanding trade and bills receivables, we would commence litigation against such customers for liquidated damages as recovery. These internal credit control procedures have been adopted to minimize our credit risk. Our Directors believe the industry-wide long trade receivable turnover days do not have material adverse effect on our liquidity and cash management.

**Deposits, prepayments and other receivables**

Our deposits, prepayments and other receivables mainly comprised (i) prepayments for property, plant and equipment; (ii) deferred professional service fees in relation to the [REDACTED]; and (iii) prepayments for raw materials. The following table sets out a summary of our deposits, prepayments and other receivables as at the dates indicated:

| | As at December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Deferred [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Prepayments for raw materials | — | 1,596 | 1,848 |
| Prepayments for property, plant and equipment | 3,039 | 244 | 162 |
| Prepaid [REDACTED] | — | 138 | 905 |
| Deposits | 20 | 57 | 20 |
| Other prepayments | 100 | — | 876 |
| Other receivables | 60 | 37 | 81 |
| | [REDACTED] | [REDACTED] | [REDACTED] |
| Less: non-current portion | (3,039) | (244) | (1,038) |
| | [REDACTED] | [REDACTED] | [REDACTED] |

Our deposits, prepayments and other receivables increased from approximately RMB[REDACTED] as at December 31, 2019 to approximately RMB[REDACTED] as at December 31, 2020, primarily due to (i) an increase in deferred [REDACTED] of approximately RMB2.7 million; and (ii) prepayments for raw materials of approximately RMB1.6 million, mitigated by the decrease in prepayments for property, plant and equipment of approximately RMB2.8 million. Such amounts were further increased to approximately RMB8.6 million as at December 31, 2021, primarily due to (i) an increase in prepaid [REDACTED] by approximately RMB0.8 million; (ii) an increase in prepayments for raw materials by approximately RMB0.3 million; (iii) an increase of deferred [REDACTED] by approximately RMB1.9 million; and (iv) an increase of other prepayments of approximately RMB0.9 million mainly as a result of our prepayment for the leased lands in 2021.

**Trade payables**

Our trade payables mainly comprised the amounts payable to: (i) our suppliers for the supply of electricity and the purchase of materials and supplies; and (ii) our third party service providers. The credit period taken for trade purchase is generally between 0 to 180 days. The following table sets out a summary of our trade payables as at the dates indicated:

| | As at December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| **Trade payables** | **16,160** | **20,965** | **18,608** |

The portion of trade payables that represented endorsement of bills receivables were approximately RMB5.0 million, RMB8.5 million and RMB9.7 million as at December 31, 2019, 2020 and 2021, respectively.

Our trade payables increased from approximately RMB16.2 million as at December 31, 2019 to approximately RMB21.0 million as at December 31, 2020, primarily due to the increased purchase of raw materials in anticipation of an increasing demand in the following year. Such trade payables then decreased to approximately RMB18.6 million as at December 31, 2021, primarily due to that we accelerated payment settlement with some of our suppliers in order to maintain good business relationships with them, considering the level of cash available for our business operations.

The following table sets forth our average turnover days of our trade payables for the years indicated:

| | Year ended December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Average turnover days of our trade payables(1) | 101.0 | 91.4 | 67.0 |

(1) Average trade payables turnover days are equal to the average of the opening and closing balances of trade payables of the relevant year divided by total purchase transactions for the relevant year and multiplied by 365 days for 2019, 366 days for 2020, and 365 days for 2021.

For the years ended December 31, 2019, 2020 and 2021, our average turnover days of our trade payables were approximately 101.0 days, 91.4 days and 67.0 days, respectively. The average turnover days of our trade payables during the Track Record Period decreased, mainly because of our acceleration on our payment to some of our suppliers to maintain positive business relationship with them while considering the increased level of our cash available for our business operation in the corresponding periods.

As at the Latest Practicable Date, approximately RMB14.6 million, or approximately 78.2% of our trade payables as at December 31, 2021 were settled.

The following table sets out the aging analysis of our trade payables as at the dates indicated:

| | As at December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Up to 90 days | 11,242 | 17,054 | 13,596 |
| 91–180 days | 4,234 | 1,600 | 3,385 |
| 181–365 days | 684 | 2,066 | 1,589 |
| Over 1 year | — | 245 | 38 |
| | **16,160** | **20,965** | **18,608** |

**Accruals and other payables**

The following table sets out a summary of our accruals and other payables as at the dates indicated.

| | As at December 31, | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| Accrued construction cost | 3,845 | 7,752 | 8,151 |
| Accrued [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Other tax payables | 2,385 | 3,309 | 2,846 |
| Accrued staff expense | 2,701 | 2,423 | 1,633 |
| Rental expense | 2,000 | — | — |
| Others | 1,664 | 1,646 | 2,664 |
| | **[REDACTED]** | **[REDACTED]** | **[REDACTED]** |

Our accrued staff expense remained stable at approximately RMB2.7 million as at December 31, 2019 and approximately RMB2.4 million as at December 31, 2020. Such expense decreased to approximately RMB1.6 million as at December 31, 2021, primarily due to a portion of labor costs was allocated to other payables as result of crowdsourcing arrangements in 2021.

Our accrued construction cost increased from approximately RMB3.8 million as at December 31, 2019 to approximately RMB7.8 million as at December 31, 2020, primarily due to increased purchase of machinery and the construction of the administrative and research and development department building. Such cost increased to approximately RMB8.2 million as at December 31, 2021, primarily due to the purchase of equipment and installation for the upgrade of our beneficiation plant completed in 2021.

Our other tax payables increased from approximately RMB2.4 million as at December 31, 2019 to approximately RMB3.3 million as at December 31, 2020, which was in line with our revenue growth. We recorded other tax payables of approximately RMB2.8 million as December 31, 2021.

Our other payables, which mainly comprised accrued transportation fees, mining project management fee and maintenance fee, remained relatively stable at approximately RMB1.7 million as at both December 31, 2019 and 2020. We recorded our other payables at approximately RMB2.7 million as at December 31, 2021.

## INDEBTEDNESS

### Bank loans and other borrowings

Our bank loans and other borrowings primarily consisted of bank loans and bills arrangement. Certain motor vehicles with carrying amounts of approximately RMB4.2 million as at December 31, 2019 were pledged as security for our Group's other borrowings. As at December 31, 2019, other borrowings of approximately RMB2.2 million were secured by the guarantee provided by a shareholder of our Group and Independent Third Parties. As at December 31, 2020 and 2021 and April 30, 2022, bank loans of RMB10.0 million were secured by the guarantee provided by an Independent Third Party. The remaining bank loans of RMB4.0 million as at December 31, 2020 were unsecured.

The following table sets out a summary of our bank loans and other borrowings:

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | **2019** | **2020** | **2021** | **2022** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* *(Unaudited)* |
| Bank borrowings | | | | |
| — Bank loans | — | 14,000 | 10,000 | 10,000 |
| — Bills arrangement | 14,000 | 4,500 | — | — |
| Other borrowings | 2,156 | — | — | — |
| | **16,156** | **18,500** | **10,000** | **10,000** |

Our Group's bank borrowings are repayable based on the scheduled repayment dates as follows:

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| | | | | *(Unaudited)* |
| Within 1 year | **16,156** | **18,500** | **10,000** | **10,000** |

During the Track Record Period, we primarily used our bank loans and other borrowings for our general working capital, purchase of parts and components and raw materials.

The following sets forth the weighted effective interest rates as at the indicated dates:

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 |
| Bank borrowings | | | | |
| — Bank loans | 4.87% | 4.79% | 4.85% | 4.89% |
| — Bills arrangement | 3.67% | 2.59% | N/A | N/A |
| Other borrowings | 8.00% | N/A | N/A | N/A |

Bank advances for discounted bills with recourse have been accounted for as collateralised bank advances. The discounted bank's acceptance bills and the related proceeds of the same amount are included in our Group's trade and bills receivables and borrowings respectively at the end of the year end dates.

**Banking facilities**

As at December 31, 2019, 2020 and 2021 and April 30, 2022, our Group had available and utilized banking facilities of approximately RMB2.2 million, RMB14.0 million, RMB10.0 million and RMB10.0 million, respectively. As at the Latest Practicable Date, the Group obtained a banking facility, pursuant to which a facility of RMB20.0 million was granted to the Group for one year from the date of the facility letter, with terms and conditions being negotiated and agreed with the bank from time to time upon drawdown. As at the Latest Practicable Date, no drawdown was made by the Group. Our Directors confirm that our Group did not experience any difficulty in obtaining credit facilities or withdrawal of facilities during the Track Record Period. To the best knowledge and belief of our Directors, our Group will not have difficulties in obtaining new banking facilities or renewing banking facilities after the [REDACTED].

**Amounts due to Shareholders, other related parties and non-controlling interests**

The following table sets out a summary of our amounts due to Shareholders and other related parties during the Track Record Period:

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | **2019** | **2020** | **2021** | **2022** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* |
| | | | | *(Unaudited)* |
| Amounts due to Shareholders | | | | |
| — Mr. Zhao Liang | 42,645 | 42,957 | 73,127 | 73,127 |
| — Mr. Zhao Changshan | 26,092 | 26,092 | — | — |
| — Mr. Zhao Ming | 8,759 | 8,759 | — | — |
| Amounts due to other related parties | | | | |
| — Mr. Zhao Changhai | 200 | — | — | — |
| Amount due to non-controlling interests | — | 4,941 | — | — |
| | **77,696** | **82,749** | **73,127** | **73,127** |

During the Track Record Period, we had amounts due to Shareholders, other related parties and non-controlling interests which consisted of funds to support operations (such as the purchase of raw materials and capital expenditure for machinery). As at the Latest Practicable Date, there were no amounts due to Mr. Zhao Changshan and Mr. Zhao Ming by the Group. The amounts due from Yixiang Graphite to Mr. Zhao Changshan and Mr. Zhao Ming, in the aggregate sum of approximately RMB34.9 million as at May 27, 2021, were assigned by Mr. Zhao Changshan and Mr. Zhao Ming to Mr. Zhao pursuant to a tripartite loan assignment agreement on the same date. As a result, the Group owed an amount of approximately RMB73.1 million to Mr. Zhao, which shall be settled by way of capitalization by allotting and issuing 1 Share credited as fully paid to be allotted and issued to Sandy Mining, an entity designated by Mr. Zhao, as full and final settlement of the consideration payable to Mr. Zhao. The Loan Consideration Capitalization will take place immediately prior to the [REDACTED]. For further information, please see "History, Reorganization and Corporate Structure — Reorganization — Loan Consideration Capitalization".

**Loan Consideration Capitalization**

As a result of certain loan assignment agreements, Mr. Zhao assigned the WFOE loans due from Yixiang Graphite and Yixiang New Energy to Mr. Zhao in the aggregate amount of approximately RMB73.1 million.

Pursuant to a deed for loan novation dated May 27, 2021, the Company is substituted in place of the WFOE in the aforementioned loan assignment agreements and shall pay the consideration in the aggregate amount of approximately RMB73.1 million for such assignments of the loans due from Yixiang Graphite and Yixiang New Energy to Mr. Zhao, respectively. Mr. Zhao, Sandy Mining Limited, the WFOE, Yixiang Graphite, Yixiang New Energy and the Company entered into a loan consideration capitalization deed dated May 27, 2021, whereby the Company agrees to settle such consideration by way of capitalization by allotting and issuing 1 Share credited as fully paid to be allotted and issued to Sandy Mining, an entity designated by Mr. Zhao, as full and final settlement of the consideration payable to Mr. Zhao.

For the amount due to non-controlling interests, Ms. Song Meixin, it was settled in April 2021.

**Lease liabilities**

The table sets out below details of our lease liabilities as at the dates indicated.

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | **2019** | **2020** | **2021** | **2022** |
| | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* | *(RMB'000)* *(Unaudited)* |
| Current | 680 | 1,169 | 1,143 | 1,111 |
| Non-current | 164 | 976 | 383 | 144 |
| | 844 | 2,145 | 1,526 | 1,255 |

During the Track Record Period, we entered into leases primarily for offices, a warehouse and equipment. Our lease liabilities increased from approximately RMB0.8 million as at December 31, 2019 to approximately RMB2.1 million as at December 31, 2020. Our lease liabilities decreased from approximately RMB2.1 million as at December 31, 2020 to approximately RMB1.5 million as at December 31, 2021, mainly as a result of our settlement of lease liabilities. As at April 30, 2022, we recorded our lease liabilities at approximately RMB1.3 million.

**Contingent liabilities**

As at December 31, 2019, 2020 and 2021 and April 30, 2022, being the latest practicable date for the determining our indebtedness, our Directors confirm that we had no contingent liabilities. We are currently not a party to any litigation that is likely to have a material adverse effect on our business, results of operations or financial condition.

### Disclaimer

Save as disclosed above, to the best knowledge of our Directors, our Group did not have any outstanding loan capital issued or agreed to be issued, bank overdrafts, loans or other similar indebtedness, liabilities under acceptances or acceptable credits, debentures, mortgages, charges, finance leases, hire purchases commitments, guarantees or other material contingent liabilities as at April 30, 2022, being the latest practicable date for determining our indebtedness.

### Material indebtedness change

Save as disclosed above, our Directors confirm that, up to the Latest Practicable Date, there was no material change in indebtedness and contingent liabilities of our Group since April 30, 2022, being the latest practicable date for determining our indebtedness. Our Directors further confirm that our Group does not have any plans to raise any material debt financing shortly after the [REDACTED].

## RELATED PARTY TRANSACTIONS AND BALANCE WITH NON-CONTROLLING INTERESTS

For details, please see note 25 of the Accountant's Report in Appendix I to this document.

## [REDACTED]

Our Directors are of the view that the financial results of our Group for the year ending December 31, 2022 are expected to be adversely affected by, among others, our [REDACTED], the nature of which is non-recurring. Our total [REDACTED], primarily consisting of fees paid or payable to professional parties and [REDACTED] fees and commission, are estimated to be approximately [REDACTED] million (or approximately HK$[REDACTED] million, based on the mid-point of the indicative [REDACTED] range of [REDACTED] per [REDACTED] and [REDACTED] [REDACTED] and assuming the [REDACTED] is not exercised). The [REDACTED] we incurred in the Track Record Period and expect to incur would consist of (i) [REDACTED] related expenses of approximately [REDACTED] million (including but not limited to commission and fees); and (ii) [REDACTED] related expenses of approximately [REDACTED] million (including fees and expenses of legal advisers and reporting accountants of approximately [REDACTED] million and other fees and expenses of approximately [REDACTED] million). Among the estimated aggregate amount of our [REDACTED], (i) approximately [REDACTED] million is directly attributable to the issue of the [REDACTED] and will be accounted for as a deduction from equity upon the [REDACTED]; and (ii) approximately [REDACTED] million has been and is expected to be recognized as expenses in our consolidated statements of comprehensive income, of which approximately [REDACTED] million and [REDACTED] million has been recognized for the two years ended December 31, 2020 and 2021, respectively, and the remaining of approximately [REDACTED] million is expected to be recognized by our Group for the year ending December 31, 2022. The total estimated amount of [REDACTED] (including [REDACTED] commission) accounted for approximately [REDACTED] of our gross [REDACTED] from the [REDACTED] assuming the [REDACTED] is fixed at HK$[REDACTED] per Share (being the mid-point of the indicative [REDACTED] range stated in this document and assuming that the [REDACTED] is not exercised).

## FINANCIAL RATIOS

| | Year ended December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| Net profit margin(1) | 19.8% | 22.4% | 26.9% |
| Return on equity(2)(9) | 22.2% | 24.8% | 26.4% |
| Return on assets(3)(9) | 10.1% | 11.9% | 16.0% |
| Interest coverage(4) *(times)* | 73.9 | 63.3 | 73.9 |

| | As at December 31, | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| Current ratio(5) *(times)* | 1.2 | 1.3 | 1.6 |
| Quick ratio(6) *(times)* | 0.9 | 1.1 | 1.5 |
| Debt-to-equity ratio(7) | 83.0% | 61.4% | 24.4% |
| Gearing ratio(8) | 84.7% | 68.1% | 41.2% |

*Notes:*

1. Net profit margin equals to profit for the year divided by revenue for the year, multiplied by 100%.

2. Return on equity equals to profit attributable to owner for the year divided by total equity attributable to equity shareholders as at the year end date, multiplied by 100%.

3. Return on assets equals to profit attributable to owner for the year divided by total assets as at the year end date, multiplied by 100%.

4. Interest coverage ratio equals to profit for the year netting off the interest and income tax expense for the year divided by interest for the year. Interest is defined to include all finance costs of our Group for the year.

5. Current ratio equals to total current assets divided by total current liabilities as at the year end date.

6. Quick ratio equals to total current assets less inventories divided by total current liabilities as at the year end date.

7. Debt-to-equity ratio equals to net debt divided by total equity as at the year end date. Net debt is defined to include all, borrowings and debts of our Group as at year end date, which included amounts due to related parties and non-controlling interests, net of cash and cash equivalents.

8. Gearing ratio equals to total debt divided by total equity as at the year end date. Total debt of our Group refers to all borrowings and debts of our Group as at year end date, which included amounts due to related parties and non-controlling interests.

### Net profit margin

Our net profit increased approximately from 19.8% for the year ended December 31, 2019 to approximately 22.4% for the year ended December 31, 2020, then to approximately 26.9% for the year ended December 31, 2021, mainly due to the reasons and analysis of our results of operations in "— Results of operations" in this section.

### Return on equity

Our return on equity increased from approximately 22.2% for the year ended December 31, 2019 to approximately 24.8% for the year ended December 31, 2020 as our net profit increased by approximately 54.2% due to the increase in revenue and our total equity only increased by approximately 34.2% during the same year. Our return on equity increased to approximately 26.4% for the year ended December 31, 2021 as our net profit increased by approximately 40.9% due to the increase in revenue and our total equity only increased by approximately 35.9% during the same year.

### Return on assets

Our return on assets increased from approximately 10.1% for the year ended December 31, 2019 to approximately 11.9% for the year ended December 31, 2020 as our net profit increased by approximately 54.2% and our total assets increased by approximately 26.8% during the same year, primarily due to the increase in our revenue. Our return on assets increased to approximately 16.0% for the year ended December 31, 2021, as our net profit increased by approximately 40.9% and our total asset increased by approximately 8.1% during the same year, primarily due to the increase in our revenue.

### Interest coverage

Our interest coverage decreased from approximately 73.9 times for the year ended December 31, 2019, to approximately 63.3 times for the year ended December 31, 2020, due to the increase of interest expenses in line with increase of our borrowing in 2020. Our interest coverage increased to 73.9 times as at December 31, 2021 due to the increase of profit before tax and interest in 2021 in line with growth of revenue.

### Current ratio

Our current ratio remained relatively stable at approximately 1.2 times and 1.3 times as at December 31, 2019 and 2020, respectively. As at December 31, 2021, our current ratio increased to 1.6 times due to the decrease of our current liabilities as a result of the decrease of our borrowings and amounts due to related parties and non-controlling interests.

### Quick ratio

Our quick ratio remained relatively stable at approximately 0.9 times and 1.1 times as at December 31, 2019 and 2020, respectively. As at December 31, 2021, we recorded our quick ratio at 1.5 times due to the decrease of our current liabilities as a result of the decrease of our borrowings and amounts due to related parties and non-controlling interests.

**Debt-to-equity ratio**

Our debt-to-equity ratio decreased from approximately 83.0% as at December 31, 2019 to approximately 61.4% as at December 31, 2020, due to the increase in our total equity as a result of (i) the profit during the Track Record Period; and (ii) the increase in share premium and decrease in other reserves as a result of the Reorganization. As at December 31, 2021, our debt-to-equity ratio decreased to 24.4% primarily due to (i) increase in our total equity; (ii) decrease in the amounts due to related parties and non-controlling interests and decrease in borrowings; and (iii) increase in cash and cash equivalents as at December 31, 2021.

**Gearing ratio**

Our gearing ratio decreased from approximately 84.7% as at December 31, 2019 to approximately 68.1% as at December 31, 2020, primarily due to the increase in our total equity as a result of (i) the profit during the Track Record Period; and (ii) the increase in share premium and decrease in other reserves as a result of the Reorganization. As at December 31, 2021, our gearing ratio decreased to 41.2% primarily due to the increase in our total equity and decrease in the amounts due to related parties and non-controlling interests and decrease in borrowings as at December 31, 2021.

## QUALITATIVE AND QUANTITATIVE DISCLOSURE ABOUT MARKET RISK

We are exposed to various types of market risks in the ordinary course of business, including interest rate risk, credit risk and liquidity risk. We have not used any derivatives or other instruments for hedging purposes.

**Interest Rate Risk**

Our interest rate risk arises from bank and other borrowings. Most our Group's assets and liabilities are either interest-free or subject to interest at fixed rates which expose our Group to fair value interest rate risk. As at December 31, 2019, 2020 and 2021, our Group's borrowings at several rates were denominated in RMB. We believe that our Group's exposure to fair value interest rate risk as at December 31, 2019, 2020 and 2021 is not material.

Cash flow interest rate risk is the risk that changes in market interest rates will impact cash flows arising from variable rate financial instruments. Our Group is not exposed to significant cash flow interest rate risk as most of our Group's assets and liabilities is either interest-free or subject to interest at fixed rates.

**Credit Risk**

As at December 31, 2019, 2020 and 2021, our maximum exposure to credit risk which will cause a financial loss due to failure to discharge an obligation by the counterparties is arising from the carrying amounts of the respective recognized financial assets as stated in the consolidated statements of financial position. In order to minimize the credit risk, we generally provide a credit period of not more than three months to our customers. Our sales team is responsible for management of our customer database, which contains information such as credit period determination of other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, we review the recoverable amount of each individual trade debt at the beginning and end of the reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, our Directors consider that our Group's credit risk is significantly reduced.

### Liquidity Risk

In the management of the liquidity risk, we monitor and maintain a level of cash and cash equivalents deemed adequate by management to finance our operations and mitigate the effects of fluctuations in cash flows. The management monitors the utilization of bank borrowings and ensures compliance with loan covenants. As at the Latest Practicable Date, the Group obtained a bank facility, pursuant to which a facility of RMB20.0 million was granted to the Group for one year from the date of the facility letter, with terms and conditions being negotiated and agreed with the bank from time to time upon drawdown. As at the Latest Practicable Date, no drawdown was made by the Group.

## OFF-BALANCE SHEET ARRANGEMENTS

As at the Latest Practicable Date, we did not have any material off-balance sheet arrangements.

## CAPITAL COMMITMENTS

The following table sets forth our capital commitments (mostly for the purchase of machinery and equipment) as at the dates indicated:

| | As at December 31, | | | As at April 30, |
|---|---|---|---|---|
| | **2019** | **2020** | **2021** | **2022** |
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| | | | | *(Unaudited)* |
| Commitments for the: | | | | |
| — Acquisition of plant and equipment | — | 3,400 | — | 3,462 |

## DIVIDENDS

We did not declare any dividends during the Track Record Period. After completion of the [REDACTED], the declaration of dividends shall be subject to the discretion of our Directors. Any declaration of final dividend by our Company shall also be subject to the approval of our Shareholders in a Shareholders' meeting. Any declaration and payment as well as the amount of dividend will be subject to our constitutional documents, PRC laws and the Cayman Companies Act. Under applicable PRC laws, our subsidiary in the PRC may only distribute after-tax profits after it has made allocations or allowances for recovery of accumulated losses and allocations of the statutory reserves. Any distributable profits that are not distributed in any given year will be retained and available for distribution in subsequent years. To the extent profits are distributed as dividends, such portion of profits will not be available to be reinvested in our operations.

## DISTRIBUTABLE RESERVES

As at December 31, 2021, our Company did not have distributable reserves.

## PROPERTY INTERESTS AND PROPERTY VALUATION

Roma Appraisals Limited, an independent property valuer, has valued our selective property interests and is of the opinion that the fair value of such property interests as at April 30, 2022 was approximately RMB40.8 million. The full text of the valuation report and the valuation certificate are set out in Appendix IV to this document.

A reconciliation between the net book value of our selective property interests in our consolidated financial statements as at December 31, 2021 and the market value of our selective property interests as at April 30, 2022 as required under Rule 5.07 of the Listing Rules is set forth below:

| | *RMB'000* |
|---|---|
| Net book value of property interests as at December 31, 2021 | 26,445 |
| Movements during the four months ended April 30, 2022 | (627) |
| Net book value of property interests as at April 30, 2022 | 25,818 |
| Valuation surplus | 14,982 |
| Valuation as at April 30, 2022 | 40,800 |

## UNAUDITED [REDACTED] FINANCIAL INFORMATION

Please refer to Appendix II to this document for the unaudited [REDACTED] adjusted consolidated net tangible assets.

## NO MATERIAL ADVERSE CHANGE

Our Directors confirm that there has been no material adverse change in our financial conditions or trading position since December 31, 2021 (being the date on which our latest audited consolidated financial results were prepared in the Accountant's Report as set out in Appendix I to this document) and up to the date of this document.

## DISCLOSURE UNDER RULES 13.13 TO 13.19 OF THE LISTING RULES

Our Directors confirm that, as at the Latest Practicable Date, except as otherwise disclosed in this document, there were no circumstances which would give rise to the disclosure requirements under Rules 13.13 to 13.19 of the Listing Rules had the Shares been listed on the Stock Exchange on that date.

## CAPITAL EXPENDITURES

As at December 31, 2019, 2020 and 2021, our capital expenditures amounted to approximately RMB32.5 million, RMB31.3 million and RMB30.7 million, which mainly represented construction in progress or purchases in machinery and equipment.

## ESTIMATED CAPITAL COSTS AND OPERATING COSTS

### Capital costs

The following table summarizes our estimated capital costs, based on actual costs associated with our mining, beneficiation and processing operations as well as a series of indicative prices received from our suppliers, as reviewed by the Independent Technical Consultant:

| | **2022** *(RMB million)* | **2023** *(RMB million)* | **2024** *(RMB million)* | **2025** *(RMB million)* |
|---|---|---|---|---|
| Mining equipment | 0.8 | | | |
| Current spherical graphite plant expansion | 3.1 | | | |
| New beneficiation plant | 39.5 | 54.7 | 13.8 | |
| New spherical graphite processing plant | | | 57.8 | 35.4 |
| Sustaining capital | 5.1 | 5.7 | 5.9 | 6.1 |
| **Total** | **48.5** | **60.4** | **77.5** | **41.5** |

### Operating costs

We have prepared the following operating cost estimate that has been developed for our Beishan graphite mine, a beneficiation plant and a spherical graphite processing plant by the Company's financial information, with key activities accounted for including mining, flake graphite beneficiation and spherical graphite processing, general and administrative expenses, and government levies and resource tax. The estimated operating costs are based on the following items:

- Historical operation records
- The third-party Luobei County Yunshan Graphite Mining Co., Ltd's graphite ore contract
- Contracts with consumable providers
- VAT of 13% levied for the sale of the products
- City maintenance and construction levy of 1% of the net amount of VAT generated by our operations
- Education levy of 5% of the net amount of VAT generated by our operations
- Resource tax of 12% of sales revenue of graphite ore and 6% sales revenue of marble ore

The following tables set forth the estimated operating cash cost up to the year ending December 31, 2041 as extracted from Appendix III to this document:

| Operating Cash Cost | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mining | RMB million | 8.2 | 6.0 | 8.3 | 10.7 | 9.8 | 9.6 | 9.4 | 9.4 | 9.4 | 9.4 | 9.3 | 9.1 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 6.4 | 5.9 | 5.5 | 5.2 | 1.9 |
| Less: marble by-product revenue | RMB million | – | –6.9 | –2.2 | –0.8 | –0.4 | –0.2 | –0.1 | –0.1 | –0.1 | –0.2 | –0.5 | –0.9 | –1.2 | –0.8 | –0.7 | –0.6 | –0.5 | –0.3 | – | – | – | – | – |
| Net mining cost | RMB million | 8.2 | –0.9 | 6.1 | 9.9 | 9.4 | 9.4 | 9.3 | 9.3 | 9.3 | 9.2 | 8.8 | 8.3 | 7.6 | 7.9 | 8.0 | 8.1 | 8.2 | 8.4 | 6.4 | 5.9 | 5.5 | 5.2 | 1.9 |
| Flake graphite beneficiation cost | RMB million | 53.3 | 61.2 | 65.7 | 59.2 | 53.1 | 53.8 | 53.6 | 53.1 | 52.5 | 52.3 | 51.3 | 49.4 | 48.8 | 48.5 | 48.5 | 48.2 | 47.3 | 43.3 | 46.2 | 45.9 | 45.9 | 48.0 | 12.6 |
| Spherical graphite processing | RMB million | 31.5 | 36.4 | 52.9 | 49.8 | 52.9 | 56.6 | 56.6 | 56.7 | 56.8 | 56.8 | 57.0 | 57.3 | 57.4 | 57.5 | 57.5 | 57.5 | 57.7 | 58.4 | 57.9 | 57.9 | 57.9 | 57.5 | 52.6 |
| Less: micro graphite powder by-product revenue | RMB million | –7.1 | –6.3 | –8.0 | –10.4 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 |
| Less: high-purity graphite powder revenue | RMB million | –2.1 | –0.7 | –0.2 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 |
| Net spherical graphite processing cost | RMB million | 22.3 | 29.4 | 44.7 | 38.6 | 41.1 | 44.7 | 44.8 | 44.8 | 44.9 | 45.0 | 45.1 | 45.5 | 45.6 | 45.6 | 45.6 | 45.7 | 45.8 | 46.6 | 46.0 | 46.1 | 46.1 | 45.7 | 40.7 |
| Total | RMB million | 83.8 | 89.7 | 116.5 | 107.7 | 103.6 | 107.9 | 107.7 | 107.3 | 106.7 | 106.4 | 105.2 | 103.1 | 101.9 | 102.0 | 102.1 | 101.9 | 101.3 | 98.2 | 98.6 | 97.9 | 97.5 | 98.9 | 55.2 |

| Operating Cash Unit Cost | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Materials moved | RMB/t materials moved | 8.2 | 3.5 | 5.2 | 6.0 | 6.5 | 6.8 | 6.8 | 6.8 | 6.8 | 6.8 | 6.9 | 6.9 | 7.0 | 7.0 | 7.1 | 7.1 | 7.1 | 7.1 | 8.4 | 9.0 | 9.6 | 10.2 | 10.3 |
| Graphite ore | RMB/t graphite ore | 27.3 | –4.5 | 20.3 | 27.0 | 18.8 | 18.8 | 18.6 | 18.6 | 18.5 | 18.3 | 17.6 | 16.5 | 15.1 | 15.7 | 16.1 | 16.2 | 16.3 | 16.7 | 12.7 | 11.8 | 11.1 | 10.5 | 10.3 |
| Flake graphite concentrate | RMB/t concentrate | 1,994 | 1,576 | 1,496 | 1,342 | 1,161 | 1,180 | 1,179 | 1,182 | 1,185 | 1,185 | 1,184 | 1,185 | 1,174 | 1,182 | 1,186 | 1,189 | 1,197 | 1,228 | 1,164 | 1,155 | 1,147 | 1,129 | 921 |
| Spherical graphite | RMB/t spherical graphite | 14,265 | 10,406 | 10,175 | 10,507 | 10,212 | 10,881 | 10,884 | 10,905 | 10,929 | 10,936 | 10,962 | 11,020 | 11,107 | 11,036 | 11,047 | 11,066 | 11,112 | 11,331 | 11,052 | 11,033 | 11,010 | 10,898 | 9,466 |

Operating costs are dependent on the production rates and schedules of the mining, beneficiation and spherical graphite processing activities and their associated feed ore grades, recoveries, yields and the proportion of the fixed and variable costs.

The Beishan Mine is currently at the construction stage, with a substantial amount of overburden to be stripped. From 2023, the mine is targeted to reach its designed annual graphite ore production rate of 0.5 Mt. The operating costs for our mining activities ranged from approximately RMB8.2 million in 2019 to RMB8.3 million in 2021. In 2022, the operating costs for mining activities are expected to reach RMB10.7 million when the total materials moved peaks at 1.78 Mt. With less total materials moved, the operating costs for mining activities will decrease steadily till the end of mine life.

The revenue generated from sales of marble extracted reached the highest level at approximately RMB6.9 million in 2020 and RMB2.2 million 2021 according to the mining schedule, which comprised a larger proportion of unprocessed marble. As our extraction went deeper into our Beishan Mine, the volume of unprocessed marble to be extracted is estimated to decline from 2022.

The net mining operating costs recorded a decrease in 2020 when there was revenue generated from our sales of unprocessed marble, and it increased to RMB9.9 million in 2022 as less unprocessed marble is made available for sales, which is estimated to decrease steadily thereafter in line with the decrease of the operating costs for our mining activities for the aforesaid reasons.

The flake graphite concentrate beneficiation operating costs increased from approximately RMB53.3 million 2019 to RMB65.7 million in 2021 due to increase of production during the period. In 2023, all graphite ores are expected to be sourced from the Beishan Mine, which will bring down the operating cost. The feed ore grades are expected to reach 11.18% TGC in 2023 and gradually decrease to 9.78% TGC in 2040. The amount of flake graphite concentrate output will decrease from 53.82 kt in 2023 to 47.10 kt in 2040, which in turn less flake graphite concentrate will be produced.

The spherical graphite processing costs increased from approximately RMB31.5 million 2019 to RMB52.9 million in 2021 due to increase of production and the inclusion of subcontractor charges in 2021. From 2022 onwards, it is estimated to remain stable at the range between approximately RMB49.8 million to RMB57.5 million till 2040 as the production rate and other production parameters are assumed to be the same.

The revenue generated from sales of micro graphite powder remained stable at the range of approximately RMB6.3 million and RMB8.0 million between 2019 and 2021 due to increasing demand of the graphite products. It is estimated to remain stable at the level between approximately RMB10.4 million to RMB10.9 million from 2022 to 2040, assuming there will be a similar by-product yield in the remaining life of mine.

The revenue generated from sales of high-purity graphite powder decreased from approximately RMB2.1 million in 2019 to RMB0.2 million in 2021 due to the overall improvement of our processing yield, leading to the decrease of by-products made during the production during the Track Record Period and the purification activities be subcontracted to third parties, leading to the decrease of production of high-purity graphite powder in 2021. It is estimated to increase and remain stable at approximately RMB0.9 million from 2022 to 2040 assuming there will be a similar by-product yield in the remaining mine life.

The net spherical graphite processing costs increased in line with the increase of spherical graphite processing costs from 2019 and 2021. It is estimated to continue to be consistent with fluctuation of the spherical graphite processing costs from 2022 onwards.

The operating unit costs for materials extracted from our Beishan Mine decreased from approximately RMB8.2 per tonne in 2019 to RMB5.2 per tonne in 2021 during the ramp-up period. It is estimated that the operating unit costs will range from RMB6.0 per tonne in 2022 to RMB7.1 per tonne in 2036. From 2037, the operating unit cost will increase as the amount of materials moved will decrease significantly while the fixed cost such as labor is expected in the similar order of magnitude.

During the construction period, the operating unit costs for graphite ore extracted decreased from approximately RMB27.3 per tonne in 2019 to RMB20.3 per tonne in 2021 mainly attributable to the allocation of extraction costs to the unprocessed marble sold during the corresponding period. It is estimated to decrease steadily from approximately RMB27.0 per tonne in 2022 to RMB10.3 per tonne in 2041 as the strip ratio decreases.

The operating costs for flake graphite concentrate decreased from approximately RMB1,994 per tonne in 2019 to RMB1,496 per tonne in 2021 due to the inclusion of the graphite ore from Beishan Mine in our production from 2019 and the benefits of economies of scale with the increasing production during the period. From 2023, the flake graphite concentrate unit cost remains in a similar order of the magnitude (RMB1,161 per tonne in 2023 to RMB1,129 per tonne in 2040) as the production rate and other production parameters remain stable.

The operating costs for spherical graphite decreased from approximately RMB14,265 per tonne in 2019 to RMB10,175 per tonne in 2021 due to the inclusion of the graphite ore from Beishan Mine in our production from 2019 and the benefits of economies of scale with the increasing production during the period. From 2023, it is estimated to remains in a similar order of magnitude (RMB10,212 per tonne in 2023 to RMB10,898 per tonne in 2040) when the production rate and other production parameters remains stable.

## Estimated operating cash cost by categories

| Operating Cash Cost | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Workforce employment | RMB million | 8.2 | 7.0 | 8.5 | 8.6 | 8.8 | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 5.0 |
| Consumables | RMB million | 24.3 | 30.9 | 40.4 | 35.3 | 27.8 | 28.7 | 28.7 | 28.5 | 28.4 | 28.3 | 27.9 | 27.3 | 27.1 | 27.1 | 27.1 | 27.0 | 26.9 | 25.9 | 26.3 | 26.2 | 26.1 | 26.6 | 18.4 |
| Fuel, electricity, water and other services | RMB million | 29.1 | 32.9 | 45.0 | 39.2 | 40.6 | 43.2 | 43.0 | 42.8 | 42.5 | 42.4 | 41.7 | 40.6 | 39.9 | 39.9 | 39.5 | 40.0 | 39.5 | 37.8 | 37.4 | 36.9 | 36.6 | 37.3 | 22.5 |
| On and off-site administration | RMB million | 7.6 | 8.5 | 10.5 | 13.3 | 14.5 | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 14.5 | 14.5 | 14.4 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 5.9 |
| Environmental protection and monitoring | RMB million | 0.3 | 1.0 | 1.0 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.5 |
| Transportation of workforce | RMB million | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Product marketing and transport subtotal | RMB million | 14.3 | 9.4 | 10.1 | 9.9 | 10.4 | 11.0 | 11.0 | 11.0 | 10.9 | 10.9 | 10.7 | 10.5 | 10.4 | 10.4 | 10.4 | 10.3 | 10.3 | 9.8 | 10.1 | 10.1 | 10.1 | 10.3 | 2.9 |
| Contingency allowances | RMB million | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | RMB million | 83.8 | 89.7 | 116.5 | 107.7 | 103.6 | 107.9 | 107.7 | 107.3 | 106.7 | 106.4 | 105.2 | 103.1 | 101.9 | 102.0 | 102.1 | 101.9 | 101.3 | 98.2 | 98.6 | 97.9 | 97.5 | 98.9 | 55.2 |

The operating costs for workforce employment recorded a decrease from approximately RMB8.2 million in 2019 to RMB7.0 million in 2020 due to the reduction of the number of staff that were deemed redundant to the production processes and the replacement of some staff members with lower-skilled workers at a reduced salary cost. It was increased back to approximately RMB8.5 million in 2021 and is estimated to remain stable at that level from 2022 to 2040 as the number of staff is expected in a similar level as the production rate remains at a similar level during this period.

The operating costs for consumables experienced an increase from approximately RMB24.3 million in 2019 to RMB40.4 in 2021 due to the increase of production of both flake graphite concentrate and spherical graphite. It is estimated to decrease to approximately RMB35.3 million in 2022 and remained stable at the range of approximately RMB36.0 million to RMB43.0 million till 2040, corresponding to the feed ore grades, recoveries and yields detailed in the production schedules in the independent Technical Report.

The operating costs for fuel, electricity, water and other services increased from approximately RMB29.1 million in 2019 to RMB45.0 million in 2021 due to the increase of production of both flake graphite concentrate and spherical graphite. It is estimated to remain stable between approximately RMB36.0 million and RMB43.0 million from 2022 to 2040 corresponding to the feed ore grades, recoveries and yields detailed in the production schedules in the independent Technical Report.

The operating costs for on and off-site administration increased from approximately RMB7.6 million in 2019 to RMB10.5 million in 2021 due to the increase of professional fee during the period. It is estimated to increase to approximately RMB13.3 million in 2022 and remain stable at approximately RMB14.5 million till 2040 as similar level of on and off-site administration is required during this period.

The operating costs for environmental protection and monitoring increased from approximately RMB0.3 million in 2019 to RMB1.0 million in 2021 due to increase of the environment protection activities on our production plant, tailing storage and our Beishan Mine with increasing production. It is estimated to increase to approximately RMB1.4 million in 2022 and a similar level of budget is allocated to environmental protection and monitoring thereafter.

The operating costs for product marketing and transport decreased from approximately RMB14.3 million in 2019 to RMB10.1 million in 2021 due to decrease of marketing fees and the rental expense of the offices in Beijing in 2019. It is estimated to remain stable between approximately RMB10.0 million and RMB11.0 million from 2022 to 2040.

The operating costs for transportation of workforce and contingency allowances are assumed to be nil.

The overall decrease of the above items in 2041 is expected as a result of entering into the ramp-down period.

In preparing the above operating cost estimate, the following principal assumptions have been adopted:

(a) Our Group will be able to continue its operation in substantially the same manner as our Group has been operating during the Track Record Period, and our Group will be able to continue operating without disruptions adversely affecting such in any way.

(b) There will be no significant changes in our relationship with major customer and suppliers;

(c) Our Group will be able to retain key staff in the management and the main operational departments.

(d) Our Group will not be materially affected by any risk factors set out in "Risk Factors".

(e) There will be no material change in the existing legislation or regulations, political, legal, fiscal or economic conditions in places in which any member of our Group carries on or will carry on our business.

(f) There will be no material change in the bases or rates of taxation in places in which any member of our Group operates or will operate or is incorporated.

(g) There will be no material changes in the funding required for implementing our business strategies as described in "Business — Our Business Strategies".

(h) The [REDACTED] will be completed in accordance with and as described in "Structure and Conditions of the [REDACTED]".

The above tables are estimates only and are subject to change. Our future actual capital costs and operating costs any differ materially from the above forecasted operating costs as a result of numerous factors, including the factors described in "Risk Factors" of this document. In addition to "Risk Factors" of this document, please also refer to "Forward-looking statements" of this document for the risk of placing undue reliance on any forward-looking information.

## RECENT DEVELOPMENT AND MATERIAL ADVERSE CHANGE

Please see "Summary — Recent development and material adverse change".

## FUTURE PLANS

Please see "Business — Our business strategies" for a detailed description of our future plans.

## [REDACTED]

We estimate that the net [REDACTED] of the [REDACTED] which we will receive, assuming an [REDACTED] of HK$[REDACTED] per [REDACTED] (being the mid-point of the [REDACTED] range stated in this document), will be approximately HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million), after deduction of [REDACTED] and [REDACTED] and estimated expenses payable by us in connection with the [REDACTED] and assuming that the [REDACTED] is not exercised.

In the event the [REDACTED] is exercised in full and assuming an [REDACTED] of HK$[REDACTED] per [REDACTED] (being the mid-point of the [REDACTED] range stated in this document), we will receive additional [REDACTED] of approximately HK$[REDACTED] million.

If the [REDACTED] is fixed at HK$[REDACTED] per [REDACTED] (being the high end of the [REDACTED] range stated in this document) and assuming that the [REDACTED] is not exercised, we will receive additional [REDACTED] of approximately HK$[REDACTED] million.

If the [REDACTED] is fixed at HK$[REDACTED] per [REDACTED] (being the low end of the [REDACTED] range stated in this document) and assuming that the [REDACTED] is not exercised, the [REDACTED] we receive will be reduced by approximately HK$[REDACTED] million.

We intend to use the entire [REDACTED] of the [REDACTED] for the purposes and in the amounts set out below assuming that the [REDACTED] is not exercised and the [REDACTED] is fixed at HK$[REDACTED] per [REDACTED] (being the mid-point of the [REDACTED] range stated in this document) of approximately HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) for constructing a new beneficiation plant. We intend to allocate:

- approximately [REDACTED]% of the [REDACTED] from the [REDACTED], or HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) for land acquisition costs;

- approximately [REDACTED]% of the [REDACTED] from the [REDACTED], or HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) to for construction costs; and

- approximately [REDACTED]% of the [REDACTED] from the [REDACTED], or HK$[REDACTED] million (equivalent to approximately RMB[REDACTED] million) for purchasing and installing machinery and equipment.

In the event that the [REDACTED] is fixed below or above the mid-point of the [REDACTED] range, the [REDACTED] allocated to the above purposes will be adjusted on a pro rata basis. Any additional [REDACTED] received from the exercise of the [REDACTED] will be allocated to the above purposes on a pro rata basis.

To the extent that the [REDACTED] are not immediately applied to the above purposes and to the extent permitted by applicable law and regulations, such [REDACTED] will only be held in short-term demand deposits with licensed banks or authorized financial institutions.

In the event of any material change in our use of [REDACTED] of the [REDACTED] from the purposes described above or in our allocation of the [REDACTED] among the purposes described above, a formal announcement will be made.

## REASONS FOR [REDACTED]

Our Directors consider that equity fund raising via the [REDACTED] to be the most appropriate means of fundraising (other than funding solely by internal resources and debt financing), and is considered to be beneficial to our Company and its Shareholders as a whole for the reasons below:

1. **We have a genuine need for funding for expanding our business operation** — Banking facilities and our cash level cannot satisfy the funding needs for expansion of our business. Our Group's internal resources is only sufficient for our current scale of operations before the implementation of our business strategies and future plans as set out in this document, and we are not able to further increase our reliance on debt financing to finance our expansion plan.

2. **The [REDACTED] will allow us to diversify financing sources for future funding needs** — Our Directors believe that our Group may face difficulty in obtaining banking facilities to implement the future plan of such fundraising amount without guarantees or other form of securities provided by the Controlling Shareholders in favorable terms. As our Group is subject to various financing requirements when seeking borrowings and other facilitates from banks, there is no assurance that our Group could be able to secure sufficient long-term debt financing continuously to finance the future expansion plan. Our Group may be required to provide substantial amount of or additional collateral, guarantees or other form of securities from the Controlling Shareholders, which could affect its flexibility in carrying out the existing business. After the [REDACTED], our Group shall gain access to fundraising means in the capital market. For instance, our Company can conduct secondary fundraising activities by way of issuance of equity and/or debt securities, so as to obtain further funding for future expansion plans. This shall provide another source of funding in addition to debt financing and allow more flexibility in addressing the cost issues when formulating our development plans. Our Directors believe that a [REDACTED] status could also help enhancing our Group's creditworthiness to banks in order to facilitate its future financing needs, enable our Group to have more flexibility through relying on a combination of equity financing and debt financing instead of relying solely on bank borrowings and enable our Group to have access to wider range of financing sources in the capital market as and when necessary and achieve its expansion plans as efficiently as possible without less exposure to uncertain financial risks in case of any tightening of credit control or change in market condition.

3. **A [REDACTED] status would improve our corporate image, enhance our competitiveness and strengthen internal control** — Our Directors believe that a [REDACTED] status could improve our corporate image and reinforce our brand awareness which in turn raise our ability in soliciting new business and bargaining power. Our customers will have growing confidence on the quality of our services and reliability of our Group after the [REDACTED]. Our Directors believe that a [REDACTED] status can facilitate the establishment and development of business relationships with our customers. Moreover, with a [REDACTED] status, we expect that we can be more capable of negotiating more favorable terms with our customers, suppliers and third-party service providers, due to the improved corporate profile and brand image.

In light of the above, our Directors consider the [REDACTED] would provide us an important capital base to achieve our business objective and pursue long-term development.

[REDACTED]

# [REDACTED]

[REDACTED]

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*The following is the text of a report set out on pages [I-1] to [I-3], received from the Company's reporting accountant, PricewaterhouseCoopers, Certified Public Accountants, Hong Kong, for the purpose of incorporation in this document. It is prepared and addressed to the directors of the Company and to the Sponsor pursuant to the requirements of HKSIR 200 Accountants' Reports on Historical Financial Information in Investment Circulars issued by the Hong Kong Institute of Certified Public Accountants.*

***[Letterhead of PricewaterhouseCoopers Hong Kong]*** ***[DRAFT]***

**ACCOUNTANT'S REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF CHINA GRAPHITE GROUP LIMITED AND LEGO CORPORATE FINANCE LIMITED**

**Introduction**

We report on the historical financial information of China Graphite Group Limited (the "**Company**") and its subsidiaries (together, the "**Group**") set out on pages I-4 to [I-59], which comprises the consolidated statements of financial position as at 31 December 2019, 2020 and 2021, the company statements of financial position as at 31 December 2020 and 2021, and the consolidated statements of comprehensive income, the consolidated statements of changes in equity and the consolidated statements of cash flows for each of the years ended 31 December 2019, 2020 and 2021 (the "**Track Record Period**") and a summary of significant accounting policies and other explanatory information (together, the "**Historical Financial Information**"). The Historical Financial Information set out on pages I-4 to [I-59] forms an integral part of this report, which has been prepared for inclusion in the document of the Company dated *[date]* (the "**Document**") in connection with the [REDACTED] of [REDACTED] of the Company on the Main Board of The Stock Exchange of Hong Kong Limited.

**Directors' responsibility for the Historical Financial Information**

The directors of the Company are responsible for the preparation of Historical Financial Information that gives a true and fair view in accordance with the basis of presentation and preparation set out in Notes 1.3 and 2.1 to the Historical Financial Information, and for such internal control as the directors determine is necessary to enable the preparation of Historical Financial Information that is free from material misstatement, whether due to fraud or error.

**Reporting accountant's responsibility**

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200, *Accountants' Reports on Historical Financial Information in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants ("**HKICPA**"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountant's judgment, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountant considers internal control relevant to the entity's preparation of Historical Financial Information that gives a true and fair view in accordance with the basis of presentation and preparation set out in Notes 1.3 and 2.1 to the Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

**Opinion**

In our opinion, the Historical Financial Information gives, for the purposes of the accountant's report, a true and fair view of the financial position of the Company as at 31 December 2020 and 2021 and the consolidated financial position of the Group as at 31 December 2019, 2020 and 2021 and of its consolidated financial performance and its consolidated cash flows for the Track Record Period in accordance with the basis of presentation and preparation set out in Notes 1.3 and 2.1 to the Historical Financial Information.

## REPORT ON MATTERS UNDER THE RULES GOVERNING THE LISTING OF SECURITIES ON THE STOCK EXCHANGE OF HONG KONG LIMITED (THE "LISTING RULES") AND THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

### Adjustments

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements as defined on page I-4 have been made.

### Dividends

We refer to Note 28 to the Historical Financial Information which states that no dividends have been paid by the Company in respect of the Track Record Period.

### No statutory financial statements for the Company

No statutory financial statements have been prepared for the Company since its date of incorporation.

**[PricewaterhouseCoopers]**
*Certified Public Accountants*
Hong Kong

[Date]

## I HISTORICAL FINANCIAL INFORMATION OF THE GROUP

### Preparation of Historical Financial Information

Set out below is the Historical Financial Information which forms an integral part of this accountant's report.

The financial statements of the Group for the Track Record Period, on which the Historical Financial Information is based, were audited by PricewaterhouseCoopers in accordance with Hong Kong Standards on Auditing issued by the HKICPA ("**Underlying Financial Statements**").

The Historical Financial Information is presented in Renminbi ("**RMB**") and all values are rounded to the nearest thousand (RMB'000) except when otherwise indicated.

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

| | | Year ended 31 December | | |
|---|---|---|---|---|
| | | **2019** | **2020** | **2021** |
| | *Notes* | *RMB'000* | *RMB'000* | *RMB'000* |
| Revenue | *5* | 123,736 | 168,749 | 198,365 |
| Cost of sales | *7* | (64,309) | (85,502) | (105,322) |
| Gross profit | | 59,427 | 83,247 | 93,043 |
| Other income and other gains, net | *6* | 663 | 300 | 8,033 |
| Selling and distribution expenses | *7* | (14,299) | (9,393) | (10,138) |
| General and administrative expenses | *7* | (9,019) | (18,770) | (19,738) |
| Research and development expenses | *7* | (4,820) | (5,830) | (8,118) |
| Reversal of/(provision for) impairment of financial assets | *17* | 194 | (349) | (1,463) |
| **Operating profit** | | 32,146 | 49,205 | 61,619 |
| Finance income | *9* | 12 | 18 | 54 |
| Finance costs | *9* | (435) | (778) | (834) |
| Finance costs, net | | (423) | (760) | (780) |
| **Profit before income tax** | | 31,723 | 48,445 | 60,839 |
| Income tax expense | *10* | (7,174) | (10,586) | (7,514) |
| **Profit and total comprehensive income for the year** | | 24,549 | 37,859 | 53,325 |

| | | Year ended 31 December | | |
|---|---|---|---|---|
| | | 2019 | 2020 | 2021 |
| | *Notes* | *RMB'000* | *RMB'000* | *RMB'000* |
| **Profit and total comprehensive income attributable to:** | | | | |
| Owner of the Company | | 24,549 | 36,884 | 53,325 |
| Non-controlling interests | | — | 975 | — |
| **Profit and total comprehensive income for the year** | | 24,549 | 37,859 | 53,325 |
| Earnings per share for profit attributable to owner of the Company | | | | |
| — Basic and diluted *(Note)* | *11* | 24,549 | 36,884 | 53,325 |

*Note:* The earnings per share presented above has not been taken into account the proposed [REDACTED] pursuant to the resolutions in writing of the shareholder passed on [●] because the proposed [REDACTED] has not become effective as at the date of this report.

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

| | | As at 31 December | | |
|---|---|---|---|---|
| | | 2019 | 2020 | 2021 |
| | *Notes* | *RMB'000* | *RMB'000* | *RMB'000* |
| **Assets** | | | | |
| **Non-current assets** | | | | |
| Property, plant and equipment | *12* | 60,546 | 71,864 | 87,908 |
| Right-of-use assets | *13* | 5,799 | 7,608 | 9,933 |
| Mining rights | *14* | 20,562 | 27,013 | 25,905 |
| Other intangible assets | | 63 | 55 | 35 |
| Deferred income tax assets | *23* | 2,506 | 779 | 271 |
| Prepayments | *18* | 3,039 | 244 | 1,038 |
| | | 92,515 | 107,563 | 125,090 |
| **Current assets** | | | | |
| Inventories | *16* | 35,423 | 25,992 | 18,874 |
| Trade and bills receivables | *17* | 113,632 | 160,863 | 148,645 |
| Deposits, prepayments and other receivables | *18* | 180 | 4,566 | 7,533 |
| Cash and cash equivalents | *19* | 1,861 | 10,007 | 33,934 |
| | | 151,096 | 201,428 | 208,986 |
| **Total assets** | | 243,611 | 308,991 | 334,076 |
| **Equity** | | | | |
| **Capital and reserves attributable to owner of the Company** | | | | |
| Share capital *(Note)* | *24(a)* | — | — | — |
| Share premium | *24(b)* | — | 158,693 | 158,693 |
| Other reserves | *24(b)* | 13,339 | (143,469) | (142,469) |
| Retained earnings | *24(b)* | 97,452 | 133,449 | 185,774 |
| Total equity | | 110,791 | 148,673 | 201,998 |

*Note:* Share capital of the Company is less than RMB1,000 and rounded as nil.

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

| | | As at 31 December | | |
|---|---|---|---|---|
| | | **2019** | **2020** | **2021** |
| | *Notes* | *RMB'000* | *RMB'000* | *RMB'000* |
| **Liabilities** | | | | |
| **Non-current liabilities** | | | | |
| Lease liabilities | *13* | 164 | 976 | 383 |
| Provision for reclamation and mine closure | | 2,206 | 2,314 | 2,427 |
| Deferred income tax liabilities | *23* | 2,516 | 1,462 | 1,838 |
| | | 4,886 | 4,752 | 4,648 |
| **Current liabilities** | | | | |
| Trade payables | *20* | 16,160 | 20,965 | 18,608 |
| Accruals and other payables | *21* | 12,595 | 19,754 | 18,498 |
| Amounts due to related parties and non-controlling interests | *25* | 77,696 | 82,749 | 73,127 |
| Borrowings | *22* | 16,156 | 18,500 | 10,000 |
| Contract liabilities | *5(e)* | 443 | 9,758 | 5,310 |
| Lease liabilities | *13* | 680 | 1,169 | 1,143 |
| Current tax liabilities | | 4,204 | 2,671 | 744 |
| | | 127,934 | 155,566 | 127,430 |
| **Total liabilities** | | 132,820 | 160,318 | 132,078 |
| **Total equity and liabilities** | | 243,611 | 308,991 | 334,076 |

## STATEMENT OF FINANCIAL POSITION OF THE COMPANY

| | | As at 31 December | |
|---|---|---|---|
| | | **2020** | **2021** |
| | *Notes* | *RMB'000* | *RMB'000* |
| **Assets** | | | |
| **Non-current asset** | | | |
| Investment in a subsidiary | | 159,038 | 159,038 |
| **Current asset** | | | |
| Prepaid [REDACTED] | *18* | 2,876 | 5,584 |
| **Total assets** | | 161,914 | 164,622 |
| **Equity** | | | |
| **Equity attributable to owner of the Company** | | | |
| Share capital *(Note)* | *24* | — | — |
| Share premium | | 158,693 | 158,693 |
| Other reserves | | (8,011) | (15,655) |
| **Total equity** | | 150,682 | 143,038 |
| **Liabilities** | | | |
| **Current liabilities** | | | |
| Accrued expenses | *21* | 4,624 | 3,879 |
| Amounts due to subsidiaries | | 2,625 | 12,371 |
| Amount due to a shareholder | *25(a)* | 3,983 | 5,334 |
| | | 11,232 | 21,584 |
| **Total liabilities** | | 11,232 | 21,584 |
| **Total equity and liabilities** | | 161,914 | 164,622 |

*Note:* Less than RMB1,000 and rounded as nil.

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

| | Share capital | Share premium | Statutory reserve | Other reserves | Retained earnings | Non-controlling interests | Total |
|---|---|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| **Balance at 1 January 2019** | — | — | 2,670 | 10,000 | 73,572 | — | 86,242 |
| **Comprehensive income** | | | | | | | |
| Profit for the year | — | — | — | — | 24,549 | — | 24,549 |
| Total comprehensive income | — | — | — | — | 24,549 | — | 24,549 |
| **Transaction with owner** | | | | | | | |
| Appropriation to statutory reserve | — | — | 669 | — | (669) | — | — |
| | — | — | 669 | — | (669) | — | — |
| **Balance at 31 December 2019 and 1 January 2020** | — | — | 3,339 | 10,000 | 97,452 | — | 110,791 |
| **Comprehensive income** | | | | | | | |
| Profit for the year | — | — | — | — | 36,884 | 975 | 37,859 |
| Total comprehensive income | — | — | — | — | 36,884 | 975 | 37,859 |
| **Transactions with owner** | | | | | | | |
| Capital injection of non-controlling interests *(Note 1.2(b))* | — | — | — | — | — | 4,941 | 4,941 |
| Reorganization *(Note)* | — | 158,693 | — | (158,670) | 975 | (5,916) | (4,918) |
| Appropriation to statutory reserve | — | — | 1,441 | — | (1,441) | — | — |
| Appropriation to other reserve | — | — | — | 421 | (421) | — | — |
| | — | 158,693 | 1,441 | (158,249) | (887) | (975) | 23 |
| **Balance at 31 December 2020 and 1 January 2021** | — | 158,693 | 4,780 | (148,249) | 133,449 | — | 148,673 |
| **Comprehensive income** | | | | | | | |
| Profit for the year | — | — | — | — | 53,325 | — | 53,325 |
| Total comprehensive income | — | — | — | — | 53,325 | — | 53,325 |
| **Transactions with owner** | | | | | | | |
| Appropriation to statutory reserve | — | — | 483 | — | (483) | — | — |
| Appropriation to other reserve | — | — | — | 517 | (517) | — | — |
| | — | — | 483 | 517 | (1,000) | — | — |
| **Balance at 31 December 2021** | — | 158,693 | 5,263 | (147,732) | 185,774 | — | 201,998 |

*Note:*

Pursuant to the reorganization stated in Note 1.2, RMB158,693,000 was transferred from other reserves to share premium upon the completion of reorganization (Notes 1.2(g) and 1.2(h)). Non-controlling interests amounted to RMB5,916,000 and other reserves amounted to RMB23,000 were derecognized upon the acquisition of non-controlling interests (Notes 1.2(g) and (h)).

## CONSOLIDATED STATEMENTS OF CASH FLOWS

| | | Year ended 31 December | | |
|---|---|---|---|---|
| | | 2019 | 2020 | 2021 |
| | *Notes* | *RMB'000* | *RMB'000* | *RMB'000* |
| **Cash flow from operating activities** | | | | |
| Cash generated from operations | *26(a)* | 20,157 | 35,966 | 84,255 |
| Income tax paid | | (8,913) | (11,422) | (8,557) |
| **Net cash generated from operating activities** | | 11,244 | 24,544 | 75,698 |
| **Cash flows from investing activities** | | | | |
| Purchase of property, plant and equipment | | (19,772) | (13,857) | (26,487) |
| Purchase of land use rights | | — | — | (2,731) |
| Purchase of intangible assets | | (63) | — | — |
| Addition of mining rights | | (8,341) | (8,288) | — |
| Proceeds from disposal of property, plant and equipment | *26(b)* | 518 | 1,410 | 42 |
| Interest received | | 12 | 18 | 54 |
| **Net cash used in investing activities** | | (27,646) | (20,717) | (29,122) |
| **Cash flows from financing activities** | | | | |
| Proceeds from bank and other borrowings | | 12,540 | 18,500 | 3,000 |
| Repayments of bank and other borrowings | | (639) | (16,156) | (11,500) |
| Interest paid | | (435) | (671) | (721) |
| Repayments of principal elements of lease liabilities | | (959) | (841) | (1,120) |
| Payment of [REDACTED] | | [REDACTED] | [REDACTED] | [REDACTED] |
| Advances from related parties | | 31,424 | 9,681 | 1,351 |
| Repayments to related parties | | (28,802) | (9,569) | (6,032) |
| Capital injection from non-controlling interests | | — | 4,941 | — |
| Acquisition of non-controlling interests pursuant to Reorganization | *1.2(g) and (h)* | — | — | (4,941) |
| **Net cash generated from/(used in) financing activities** | *26(c)* | [REDACTED] | [REDACTED] | [REDACTED] |
| Net (decrease)/increase in cash and cash equivalents | | (3,273) | 8,146 | 23,927 |
| Cash and cash equivalents at the beginning of the year | | 5,134 | 1,861 | 10,007 |
| **Cash and cash equivalents at end of the year** | *19* | 1,861 | 10,007 | 33,934 |

## II NOTES TO THE HISTORICAL FINANCIAL INFORMATION

### 1. General information, reorganization and basis of presentation

#### *1.1 General information*

The Company was incorporated in the Cayman Islands on 3 August 2020 as an exempted company with limited liability under the Companies Act (Cap. 22, Law 3 of 1961 as consolidated and revised) of the Cayman Islands. The address of the Company's registered office is 71 Fort Street, PO Box 500, George Town, Grand Cayman, KY1-1106, Cayman Islands.

The Company is an investment holding company and its subsidiaries are principally engaged in the manufacturing and sale of graphite products (the "**[REDACTED] Business**"). During the Track Record Period, the [REDACTED] Business was carried out through the subsidiaries of the Company. The ultimate holding company of the Company is Sandy Mining Limited, a company incorporated in the British Virgin Islands. The ultimate controlling party of the Group is Mr. Zhao Liang ("**Mr. Zhao**").

#### *1.2 Reorganization*

Prior to the incorporation of the Company and the completion of the reorganization as described below, the [REDACTED] Business was operated under the control of the controlling shareholder, Mr. Zhao, throughout the Track Record Period.

In preparation for the [REDACTED], the Group underwent a group reorganization (the "**Reorganization**"), pursuant to which the companies engaged in the [REDACTED] Business were transferred to the Company. The Reorganization involved the followings:

(a) On 11 June 2020, Sandy Mining Limited ("**Sandy Mining**") was incorporated under the laws of the British Virgin Islands ("**BVI**"). On 2 July 2020, 1 share of Sandy Mining was issued and allotted, credited as fully paid, to Mr. Zhao Liang.

(b) As part of the Reorganization, on 27 July 2020, Heilongjiang Baoquanling Agricultural Reclamation Yixiang Graphite Co., Ltd. ("**Yixiang Graphite**") and Heilongjiang Baoquanling Agricultural Reclamation Yixiang New Energy Materials Co., Ltd. ("**Yixiang New Energy**") increased their respective registered share capital by 263,158 shares. Upon the completion, each of Yixiang Graphite and Yixiang New Energy had 5,263,158 shares in the registered share capital. On the same day, an investor, Ms. Song Meixin invested in both companies through the acquisition of 263,158 shares in each of Yixiang Graphite and Yixiang New Energy at a consideration of RMB4,941,000, representing 5% equity interests in each of Yixiang Graphite and Yixiang New Energy.

(c) On 3 August 2020, the Company was incorporated under the laws of the Cayman Islands. On the same day, 1 share was issued and allotted, credited as fully paid, to Sandy Mining.

(d) On 21 August 2020, Noah Energy Limited ("**Noah Energy**") was incorporated under the laws of the BVI. On 28 August 2020, 50,000 shares was issued and allotted, credited as fully paid, to the Company.

(e) On 28 August 2020, China Graphite Holdings Group (HK) Limited ("**China Graphite HK**") was incorporated in Hong Kong. On the same date, 10,000 shares of China Graphite HK was issued and allotted to Mr. Zhao Liang, which was subsequently transferred to Noah Energy on 29 September 2020.

(f) On 26 November 2020, a wholly foreign-owned enterprise, Beijing Yixiang Olefinic Carbon Technology Co., Ltd. ("**Beijing Yixiang**"), was established in the People's Republic of China ("**PRC**") with a registered share capital of RMB10,000,000 with its entire equity interest held by China Graphite HK.

(g) On 14 December 2020, Mr. Zhao Liang, Mr. Zhao Changshan and Ms. Song Meixin, shareholders of Yixiang Graphite, entered into equity interest transfer agreements with Beijing Yixiang in relation to the transfer of their respective 57%, 38% and 5% equity interests in Yixiang Graphite to Beijing Yixiang for considerations of RMB1, RMB1 and RMB4,677,447 respectively. The transfer was completed on 30 December 2020.

(h) On 14 December 2020, Mr. Zhao Liang, Mr. Zhao Changshan and Ms. Song Meixin, shareholders of Yixiang New Energy, entered into equity interest transfer agreements with Beijing Yixiang in relation to the transfer of their respective 63.65%, 31.35% and 5% equity interests in Yixiang New Energy to Beijing Yixiang for considerations of RMB1, RMB1 and RMB263,158 respectively. The transfer was completed on 28 December 2020.

Upon completion of the Reorganization and as at the date of this report, the Company had direct or indirect interests in the following subsidiaries:

| Name of company | Place and date of incorporation | Issued and paid-up share capital | Principal activities and place of operation | Effective interest held as at 31 December 2019 | 2020 | 2021 | As at the date of this report | Name of statutory auditors 31 December 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Directly owned:** | | | | | | | | | | |
| Noah Energy | BVI, 21 August 2020 | US$50,000 | Investment holding, BVI | N/A | 100% | 100% | 100% | N/A | *Note a* | *Note a* |
| **Indirectly owned:** | | | | | | | | | | |
| China Graphite HK | Hong Kong, 28 August 2020 | HK$10,000 | Investment holding, Hong Kong | N/A | 100% | 100% | 100% | N/A | *Note b* | *Note b* |
| Beijing Yixiang* | PRC, 26 November 2020 | RMB10,000,000 | Investment holding, PRC | N/A | 100% | 100% | 100% | N/A | *Note b* | *[Note b]* |
| Yixiang Graphite* | PRC, 26 June 2006 | RMB5,000,000 | Manufacturing and sale of graphite products, PRC | 100% | 100% | 100% | 100% | *Note c* | *Note e* | *Note f* |
| Yixiang New Energy* | PRC, 20 April 2011 | RMB5,000,000 | Manufacturing and sale of graphite products, PRC | 100% | 100% | 100% | 100% | *Note d* | *Note e* | *Note f* |

*Note:*

(a) No audited statutory financial statements have been issued for this entity as there are no statutory requirements in the place of incorporation.

(b) No audited financial statements have been issued for this entity since it was newly incorporated in 2020 and statutory audits for the year ended 31 December 2021 have not yet been completed.

(c) Luobei Hexin Accounting Firm (General Partnership)* ("蘿北合信會計師事務所(普通合夥)")

(d) Heilongjiang Hong Di Accounting Firm (General Partnership)* ("黑龍江洪棣會計師事務所(普通合夥)")

(e) Beijing Yongkun Certified Public Accountants (General Partnership)* ("北京永坤會計師事務所(普通合夥)")

(f) Beijing Yilinao Certified Public Accountants (General Partnership)* ("北京義林奧會計師事務所(普通合夥)")

* *For identification purpose only. The English names of these subsidiaries and the statutory auditors represent the best effort by the Company's management to translate the Chinese names, as these subsidiaries and statutory auditors do not have an official English name.*

### *1.3 Basis of presentation*

Immediately prior to and after the Reorganization, the [REDACTED] Business was controlled by Mr. Zhao, and was conducted through Yixiang Graphite and Yixiang New Energy. Pursuant to the Reorganization, the [REDACTED] Business was transferred to and held by the Company. The Company has not been involved in any other business prior to the Reorganization and does not meet the definition of a business. The Reorganization is merely a recapitalization of the [REDACTED] Business with no change in management and the ultimate owners of the [REDACTED] Business remain the same. Accordingly, the Group resulting from the Reorganization is regarded as a continuation of the [REDACTED] Business under the control of Mr. Zhao and, for the purpose of this report, the Historical Financial Information has been prepared and presented as a continuation of the consolidated financial statements of the [REDACTED] Business from their respective dates of incorporation, or since the dates when they first came under the control of Mr. Zhao, whichever is a shorter period, with the assets and liabilities of the Group recognized and measured at the carrying amounts of the [REDACTED] Business under the consolidated financial statements under Mr. Zhao's control for all periods presented.

**2. Summary of significant accounting policies**

This note provides a list of significant accounting policies adopted in the preparation of the Historical Financial Information. These policies have been consistently applied to all the years presented, unless otherwise stated. The Historical Financial Information is for the Group consisting of the Company and the companies now comprising the Group.

***2.1 Basis of preparation***

*(i) Compliance with HKFRS*

The Historical Financial Information of the Company has been prepared in accordance with principal accounting policies as set out below which are in accordance with Hong Kong Financial Reporting Standards ("**HKFRS**") issued by the HKICPA are set out below.

*(ii) Historical cost convention*

The Historical Financial Information has been prepared on a historical cost basis.

*(iii) New standards and amendments to existing standards not yet adopted by the Group*

The following are standards and amendments to existing standards that have been published and are relevant but not mandatory for the Track Record Period, and have not been early adopted by the Group.

| | | **Effective for annual periods beginning on or after** |
|---|---|---|
| Amendments to HKFRS 3 | Reference to the Conceptual Framework | 1 January 2022 |
| Amendments to HKFRS 10 and HKAS 28 | Sales or Contributions of Assets between an Investor and its Associate or Joint Venture | To be determined |
| HKFRS 17 and Amendments to HKFRS 17 | Insurance Contracts | 1 January 2023 |
| Amendments to HKAS 1 | Classification of Liabilities as Current or Non-current | 1 January 2023 |
| Amendments to HKAS 1 and HKFRS Practice Statement 2 | Disclosure of Accounting Policies | 1 January 2023 |
| Amendments to HKAS 8 | Definition of Accounting Estimates | 1 January 2023 |
| Amendments to HKAS 12 | Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction | 1 January 2023 |
| Amendments to HKAS 16 | Property, Plant and Equipment — Proceeds before Intended Use | 1 January 2022 |
| Amendments to HKAS 37 | Onerous Contracts — Cost of Fulfilling a Contract | 1 January 2022 |
| Annual Improvements to HKFRSs 2018–2020 Cycle | Amendments to HKFRS 1, HKFRS 9, HKFRS 16 and HKAS 41 | 1 January 2022 |
| Amendments to Accounting Guideline 5 | Merger Accounting for Common Control Combinations (Revised) | 1 January 2022 |
| Hong Kong Interpretation 5 (2020) | Presentation of Financial Statements — Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause | 1 January 2023 |

The Group will adopt the above new or revised standards, amendments and interpretations to existing standards as and when they become effective. Management has performed preliminary assessment and does not anticipate any significant impact on the Group's financial position and results of operations upon adopting these standards, amendments and interpretations to existing standards.

### 2.2 *Principles of consolidation and equity accounting*

*(i) Subsidiaries*

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity where the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The acquisition method of accounting is used to account for business combinations by the Group.

Inter-company transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of comprehensive income, statement of changes in equity and statement of financial position respectively.

*(ii) Changes in ownership interests*

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognized in a separate reserve within equity attributable to owners of the Company.

When the Group ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognized in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss or transferred to another category of equity as specified/ permitted by applicable HKFRSs.

If the ownership interest in a joint venture or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognized in other comprehensive income are reclassified to profit or loss where appropriate.

### 2.3 *Business combinations*

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred
- liabilities incurred to the former owners of the acquired business
- equity interests issued by the Group
- fair value of any asset or liability resulting from a contingent consideration arrangement, and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

Acquisition-related costs are expensed as incurred.

The excess of the

- consideration transferred,
- amount of any non-controlling interest in the acquired entity, and
- acquisition-date fair value of any previous equity interest in the acquired entity

Over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognized directly in profit or loss as a bargain purchase.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions. Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognized in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognized in profit or loss.

***2.4 Separate financial statements***

Investments in subsidiaries are accounted for at cost less impairment. Cost includes direct attributable costs of investment. The results of subsidiaries are accounted for by the company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

***2.5 Segment reporting***

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Executive Directors of the Company that make strategic decisions.

***2.6 Foreign currency translation***

*(a) Functional and presentation currency*

Items included in the consolidated financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "**functional currency**"). The consolidated financial statements are presented in RMB which is the Company's functional currency and the Group's presentation currency.

*(b) Transactions and balances*

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the consolidated statements of comprehensive income, within finance costs. All other foreign exchange gains and losses are presented in the consolidated statements of comprehensive income on a net basis within other income and other gains, net.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as available-for-sale financial assets are recognized in other comprehensive income.

*(c) Group companies*

The results and financial position of all the group entities (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;

(ii) income and expenses for each statement of comprehensive income presented are translated at average exchange rates (unless this average rate is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and

(iii) all resulting exchange differences are recognized in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other financial instruments designated as hedges of such investments, are recognized in other comprehensive income. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

*(d) Disposal of foreign operation and partial disposal*

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a joint venture that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the currency translation differences accumulated in equity in respect of that operation attributable to the owner of the Company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated currency translation differences are re-attributed to non-controlling interests and are not recognized in profit or loss. For all other partial disposals (that is, reductions in the Group's ownership interest in associates or joint ventures that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange difference is reclassified to profit or loss.

### *2.7 Property, plant and equipment*

Property, plant and equipment, other than construction in progress ("**CIP**"), are stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the assets' carrying amounts or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are expensed in the consolidated statements of comprehensive income during the financial period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives or, in the case of leasehold improvements and certain plant and machines, the shorter lease term as follows:

| | |
|---|---|
| Plant and buildings | 20 years |
| Machinery and equipment | 3–10 years |
| Motor vehicles | 4–5 years |
| Furniture and fixtures | 3–5 years |

Depreciation on mining structures is provided to write off the cost of the mining structures using the units of production method based on the total proved and probable reserves of the mine as the depletion base.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

CIP is stated at cost less impairment losses. Cost comprises direct costs of construction as well as borrowing costs capitalized during the periods of construction and installation. Capitalization of these costs ceases and the CIP is transferred to the appropriate class of property, plant and equipment when substantially all the activities necessary to prepare the assets for their intended use are completed. No depreciation is provided for in respect of CIP until it is completed and ready for its intended use.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss.

### *2.8 Intangible assets*

*Mining rights*

Mining rights are stated at cost less accumulated amortization and accumulated impairment losses and are amortized on the units of production method based on the total proven and probable reserves of the mine.

*Other intangible assets*

Other intangible assets are stated at cost less accumulated amortization and accumulated impairment losses and are amortized using the straight-line method over the expected useful life of respective intangible asset ranged from 2 to 20 years.

***2.9 Impairment of non-financial assets***

Goodwill and intangible assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

***2.10 Financial assets***

*(a) Classification*

The Group classifies its financial assets as those to be measured at amortized cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

*(b) Recognition and measurement*

Regular way purchases and sales of financial assets are recognized on the trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

*(c) Measurement*

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset.

Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset.

Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in "other income and other gains, net" together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the profit or loss.

*(d) Impairment*

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, the Group applies the simplified approach permitted by HKFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

### *2.11 Offsetting financial instruments*

Financial assets and liabilities are offset and the net amount reported in the consolidated statements of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future assets and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the company or the counterparty.

### *2.12 Inventories*

Raw materials, work in progress and finished goods are stated at the lower of cost and net realizable value. Cost comprises direct materials, direct labor and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. Costs are assigned to individual items of inventory on the basis of weighted average costs. Costs of purchased inventory are determined after deducting rebates and discounts. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

### *2.13 Trade and other receivables*

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. They are generally due for settlement within 90 days and therefore all classified as current.

Trade and other receivables are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at fair value. The Group holds the trade and other receivables with the objective of collecting the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method.

### *2.14 Cash and cash equivalents*

For the purpose of presentation in the consolidated statements of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

### *2.15 Share capital*

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

### *2.16 Trade and other payables*

These amounts represent liabilities for goods and services provided to the Group prior to the end of financial year which are unpaid. Trade and other payables are presented as current liabilities unless payment is not due within 12 months after the reporting period. They are recognized initially at their fair value and subsequently measured at amortized cost using the effective interest method.

### *2.17 Borrowings*

Borrowings are initially recognized at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortized over the period of the facility to which it relates.

Borrowings are removed from the consolidated statements of financial position when the obligation specified in the contract is discharged, canceled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss as other income or finance costs.

Where the terms of a financial liability are renegotiated and the entity issues equity instruments to a creditor to extinguish all or part of the liability (debt for equity swap), a gain or loss is recognized in profit or loss, which is measured as the difference between the carrying amount of the financial liability and the fair value of the equity instruments issued.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Other borrowing costs are expensed in the period in which they are incurred.

### *2.18 Current and deferred income tax*

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

*Current income tax*

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the consolidated statements of financial position date in the places where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

*Deferred income tax*

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax bases of investments in foreign operations where the company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

*Offsetting*

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

***2.19 Employee benefits***

*(a) Short-term obligations*

Short-term employee benefits are employee benefits (other than termination benefits) that are expected to be settled within twelve months after the end of the annual reporting period in which the employees render the related service. Short-term employee benefits are recognized in the year when the employees render the related service.

Employee entitlements to annual leave are recognized when they accrue to employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the consolidated statements of financial position date.

Employee entitlements to sick leave and maternity leave are not recognized until the time of leave.

*(b) Post-employment obligations*

The Group operates various pension schemes.

The Group participates in a mandatory provident fund scheme and another defined contribution plan for its staff in Hong Kong. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expenses when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

The Group also participated in a central pension scheme operated by the local municipal government in Mainland China. Contributions are made by the Group on a monthly basis to the retirement plan based on a percentage of the relevant income of the relevant employees. The Group has no further obligations for the actual payment of pensions beyond its contributions.

Contributions made are recognized as employee benefits expenses when they are due and are not reduced by contribution forfeited by those relevant employees who leave the scheme prior to vesting fully in the contributions. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

*(c) Bonus plan*

The Group recognizes a liability and an expense for bonuses, based on performance and takes into consideration the profit attributable to the Company's shareholders. The Group recognizes a provision where contractually obliged or where there is a past practice that has created a constructive obligation.

### *2.20 Provisions*

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognized for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognized as interest expense.

### *2.21 Provisions for reclamation and mine closure*

Provisions for the Group's obligations for reclamation and mine closure are based on estimates of required expenditure at the mines in accordance with the rules and regulations in the People's Republic of China. The obligation generally arises when the asset is installed or the ground environment is disturbed at the mining operation's location. The Group estimates its liabilities for reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash expenditure to perform the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The present value of the estimated cost is recognized in cost of sales in the period of relevant ground environment being disturbed.

### *2.22 Revenue recognition*

Revenue is measured at the fair value of the consideration received or receivable for the sales of goods in the ordinary course of the Group's activities.

If contracts involve the sale of multiple elements, the transaction price will be allocated to each performance obligation based on their relative stand-alone selling prices. If the stand-alone selling prices are not directly observable, they are estimated based on expected cost plus a margin or adjusted market assessment approach, depending on the availability of observable information.

Revenue is recognized when or as the control of the good is transferred to the customer.

Depending on the terms of the contract and the laws that apply to the contract, control of the good may be transferred over time or at a point in time.

Control of the good is transferred over time if the Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates or enhances an asset that the customer controls as the Group performs; or
- does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

If control of the goods transfers over time, revenue is recognized over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognized at a point in time when the customer obtains control of the goods. Specific criteria where revenue is recognized are described below.

*Sales and distribution of goods*

The Group manufactures and sells graphite products. Sales are recognized when control of the products has transferred to its customer, being when the products are delivered to the customer, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has objective evidence that all criteria for acceptance have been satisfied.

Revenue from these sales is recognized based on the price specified in the contract, net of value-added tax, rebates and returns. Revenue is only recognized to the extent that it is highly probable that a significant reversal will not occur. No element of financing is deemed present as the sales are made on cash or with a credit term of not more than 90 days. A receivable (financial asset) is recognized when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before payment is due.

***2.23 Leases***

Leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Contracts may contain both lease and non-lease components.

Assets and liabilities arising from leases are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

— fixed payments (including in-substance fixed payments), less any lease incentives receivable;

— variable lease payments that are based on an index or a rate;

— amounts expected to be payable by the lessee under residual value guarantees;

— the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and

— payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions. To determine the incremental borrowing rate, the Group, where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

***2.24 Government grants***

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognized in the profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

***2.25 Interest income***

Interest income on financial assets at amortized cost calculated using the effective interest method is recognized in profit or loss as part of other income. Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes. Any other interest income is included in other income.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

***2.26 Research and development expenses***

Costs associated with the enhancement of production process are recognised as an expense as incurred. Only development costs that are directly attributable to the design and testing of identifiable and unique production process controlled by the Group are recognised as intangible assets where the capitalisation criteria stated under HKAS 38 are met.

Research expenditure and development expenditure that do not meet the capitalisation criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

***2.27 Related parties***

For the purpose of these consolidated financial statements, related party includes a person and entity as defined below:

(1) A person or a close member of that person's family is related to the Company if that person:

(i) has control or joint control of the Company;

(ii) has significant influence over the Company; or

(iii) is a member of the key management personnel of the Company or of a parent of the Company.

(2) An entity is related to the company if any of the following conditions applies:

(i) the entity and the Company are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(ii) one entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) both entities are joint ventures of the same third party.

(iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) the entity is a post-employment benefit plan for the benefit of employees of either the Company or an entity related to the Company. If the reporting entity is itself such a plan, the sponsoring employers are also related to the Company.

(vi) the entity is controlled or jointly controlled by a person identified in (1).

(vii) a person identified in (1)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

***2.28 Earnings per share***

*Basic earnings per share*

Basic earnings per share is calculated by dividing:

- the profit attributable to owners of the Company, excluding any costs of servicing equity other than ordinary shares

- by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year and excluding treasury shares.

*Diluted earnings per share*

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account:

- the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and

- the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

***2.29 Dividend***

No dividend has been paid or declared by the Company or the companies now comprising the Group during each of the years ended 31 December 2019, 2020 and 2021.

**3 Financial risk management**

***3.1 Financial risk factors***

The Group's activities expose it to a variety of financial risks factors: foreign exchange risk, credit risk, liquidity risk, cash flow and fair value interest rate risk. The Company's overall risk management procedures focus on the unpredictability of financial markets and seek to minimize potential adverse effects on the Group's financial performance.

*(a) Foreign exchange risk*

The Group operates in the PRC with most of the transactions denominated in RMB.

The exposure to foreign exchange risk is not material to the Group.

*(b) Credit risk*

The Group is exposed to credit risk in relation to its trade and bills receivables, deposits, other receivables, and cash and cash equivalents. The Group's maximum exposure to credit risk is the carrying amounts of these financial assets.

Receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant.

(i) Impairment allowance policies for trade and bills receivables

The Group applies the HKFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade and bills receivables.

For bills receivables, bills are issued by counterparties at reputable banks and finance institutions and the credit risk is considered to be low. Those counterparties do not have defaults in the past. Therefore, expected credit loss rate is assessed to be close to zero and no provision was made as at each of the end of reporting period.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due.

The expected loss rates are based on the payment profiles of customers and the corresponding historical credit losses experienced. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has maintained a defined credit policy with tightened risk profile and applied prudent policies to manage its credit risk with its trade receivables that includes an ageing analysis of trade receivables is prepared on a regular basis and is closely monitored to minimize any credit risk associated with receivables.

Trade receivables are written off where there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group.

Impairment losses on trade receivables are presented as ''reversal of/(provision for) impairment of financial assets''. Subsequent recoveries of amounts previously written off are credited against the same line item.

The customers of sale of spherical graphite and its by-products, and unprocessed marble are mainly customers with long business relationship with the Group, and the Group did not experience any historical loss from this group of customers for all the historical outstanding balances, including those aged more than 1 year. Taking into account the forward-looking factors, the historical loss rate for these trade receivables balances is immaterial as at 31 December 2019.

The following table presents the gross carrying amount and the lifetime expected credit loss in respect of individually assessed trade receivables as at 31 December 2019, 2020 and 2021:

| | As at 31 December | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Gross carrying amount | 1,678 | 1,617 | 4,338 |
| Lifetime expected credit loss | (1,678) | (1,617) | (4,338) |
| Net carrying amount | — | — | — |

The following table presents the gross carrying amount and provision for impairment loss in respect of collectively assessed trade receivables by invoice date as at 31 December 2019, 2020 and 2021:

Sale of flake graphite concentrate

| | Expected credit loss rate | Gross carrying amount — trade receivables | Loss allowance | Net carrying amount |
|---|---|---|---|---|
| | | *RMB'000* | *RMB'000* | *RMB'000* |
| **As at 31 December 2019** | | | | |
| Up to 90 days | 3.4% | 23,771 | (820) | 22,951 |
| 91–180 days | 8.4% | 2,980 | (249) | 2,731 |
| 181–270 days | 15.2% | 946 | (144) | 802 |
| 271–365 days | 19.9% | 775 | (154) | 621 |
| Over 1 year | 32.8% | 799 | (262) | 537 |
| | | 29,271 | (1,629) | 27,642 |
| **As at 31 December 2020** | | | | |
| Up to 90 days | 1.5% | 31,569 | (487) | 31,082 |
| 91–180 days | 4.4% | 7,637 | (334) | 7,303 |
| 181–270 days | 9.9% | 2,940 | (291) | 2,649 |
| 271–365 days | 16.6% | 755 | (125) | 630 |
| Over 1 year | 25.3% | 3,171 | (801) | 2,370 |
| | | 46,072 | (2,038) | 44,034 |

| | Expected credit loss rate | Gross carrying amount — trade receivables *RMB'000* | Loss allowance *RMB'000* | Net carrying amount *RMB'000* |
|---|---|---|---|---|
| **As at 31 December 2021** | | | | |
| Up to 90 days | 1.3% | 9,289 | (118) | 9,171 |
| 91–180 days | 3.4% | 6,844 | (233) | 6,611 |
| 181–270 days | 8.0% | 2,344 | (188) | 2,156 |
| 271–365 days | 14.8% | 2 | — | 2 |
| Over 1 year | 27.3% | 888 | (242) | 646 |
| | | 19,367 | (781) | 18,586 |

Sale of spherical graphite and its by-products, and unprocessed marble

| | Expected credit loss rate | Gross carrying amount — trade receivables *RMB'000* | Loss allowance *RMB'000* | Net carrying amount *RMB'000* |
|---|---|---|---|---|
| **As at 31 December 2019** | | | | |
| Up to 90 days | 0.0% | 23,183 | — | 23,183 |
| 91–180 days | 0.0% | 607 | — | 607 |
| 181–270 days | 0.0% | 47 | — | 47 |
| 271–365 days | 0.0% | — | — | — |
| Over 1 year | 0.0% | 328 | — | 328 |
| | | 24,165 | — | 24,165 |
| **As at 31 December 2020** | | | | |
| Up to 90 days | 0.0% | 26,059 | (1) | 26,058 |
| 91–180 days | 0.0% | 5,088 | — | 5,088 |
| 181–270 days | 0.1% | 226 | — | 226 |
| 271–365 days | 0.6% | — | — | — |
| Over 1 year | 1.1% | 3 | — | 3 |
| | | 31,376 | (1) | 31,375 |
| **As at 31 December 2021** | | | | |
| Up to 90 days | 0.0% | 27,333 | — | 27,333 |
| 91–180 days | 0.0% | 4,403 | — | 4,403 |
| 181–270 days | 0.1% | 98 | — | 98 |
| 271–365 days | 0.4% | — | — | — |
| Over 1 year | 1.2% | — | — | — |
| | | 31,834 | — | 31,834 |

(ii) Other financial assets at amortized cost

The Group applies a general approach on other financial assets at amortized cost.

The credit risk on cash and cash and cash equivalents are limited because cash are placed in banks with sound credit ratings.

For deposits, other receivables and bills receivables, management makes periodic collective assessments as well as individual assessment on the recoverability with no significant credit risk identified.

*(c) Liquidity risk*

The liquidity of the Group is adequately managed and monitored by maintaining sufficient cash balance to meet its financial commitments. Accordingly, the directors are of the opinion that the Group does not have significant liquidity risk.

The contractual maturity for the Group's financial liabilities at the date of statement of financial position is as follows. The following tables show the remaining contractual maturities at the end of the reporting period of the Group's financial liabilities based on contractual undiscounted cash flows and the earliest date the Group can be required to pay. Balances due within 12 months equal their carrying balances (including both interest and principal) as the impact of discounting is not significant.

| | On demand/ less than 1 year | Between 1 and 2 years | Between 2 and 5 years | Over 5 years | Total |
|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| **31 December 2019** | | | | | |
| Trade payables | 16,160 | — | — | — | 16,160 |
| Accruals and other payables | 7,509 | — | — | — | 7,509 |
| Amounts due to related parties | 77,696 | — | — | — | 77,696 |
| Borrowings | 16,411 | — | — | — | 16,411 |
| Lease liabilities | 819 | 183 | — | — | 1,002 |
| | 118,595 | 183 | — | — | 118,778 |
| **31 December 2020** | | | | | |
| Trade payables | 20,965 | — | — | — | 20,965 |
| Accruals and other payables | 14,022 | — | — | — | 14,022 |
| Amounts due to related parties and non-controlling interests | 82,749 | — | — | — | 82,749 |
| Borrowings | 18,827 | — | — | — | 18,827 |
| Lease liabilities | 1,214 | 1,006 | — | — | 2,220 |
| | 137,777 | 1,006 | — | — | 138,783 |

| | On demand/ less than 1 year | Between 1 and 2 years | Between 2 and 5 years | Over 5 years | Total |
|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| **31 December 2021** | | | | | |
| Trade payables | 18,608 | — | — | — | 18,608 |
| Accruals and other payables | 14,019 | — | — | — | 14,019 |
| Amounts due to related parties | 73,127 | — | — | — | 73,127 |
| Borrowings | 10,220 | — | — | — | 10,220 |
| Lease liabilities | 1,217 | 413 | — | — | 1,630 |
| | 117,191 | 413 | — | — | 117,604 |

*(d) Interest rate risk*

The Group's interest rate risk arises from bank and other borrowings. Most of the Group's assets and liabilities are either interest-free or subject to interest at fixed rates which expose the Group to fair value interest rate risk. As at 31 December 2019, 2020 and 2021, the Group's borrowings at several rates were denominated in RMB. The Group's exposure to fair value interest rate risk as at 31 December 2019, 2020 and 2021 is not material.

Cash flow interest rate risk is the risk that changes in market interest rates will impact cash flows arising from variable rate financial instruments. The Group is not exposed to significant cash flow interest rate risk as most of the Group's assets and liabilities are either interest-free or subject to interest at fixed rates.

***3.2 Fair value estimation***

The carrying values less loss allowance for trade and bills receivables, deposits, other receivables and cash and cash equivalents, and trade payables, accruals and other payables, amounts due to related parties and non-controlling interests and borrowings are assumed to approximate their fair values. The fair value of financial assets and liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Company for similar financial instruments, unless the effect of discounting is insignificant.

***3.3 Capital risk management***

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for the owner to procure adequate financial resumes from the owner. The Group's overall strategy remains consistent during the years ended 31 December 2019, 2020 and 2021.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends proposed or paid to the owner or issue new shares.

The capital structure of the Group consists of shareholders' equity and total borrowings. Capital is managed so as to maximize the return to shareholders while maintaining a capital base to allow the Group to operate effectively in the marketplace and sustain future development of the business. The Group monitors capital on the basis of gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including borrowings and amounts due to related parties and non-controlling interests as shown in the consolidated statements of financial position and excluding lease liabilities) less cash and cash equivalents. Total capital is calculated as "equity" as shown in the consolidated statements of financial position plus net debt.

The debt-to-capital ratios during Track Record Period were as follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Total borrowings | | | |
| — Borrowings | 16,156 | 18,500 | 10,000 |
| — Amounts due to related parties and non-controlling interests | 77,696 | 82,749 | 73,127 |
| Less: Cash and cash equivalents | (1,861) | (10,007) | (33,934) |
| Net debt | 91,991 | 91,242 | 49,193 |
| Total equity | 110,791 | 148,673 | 201,998 |
| Total capital | 202,782 | 239,915 | 251,191 |
| Debt-to-capital ratio | 45.4% | 38.0% | 19.6% |

## 4 Critical accounting estimates and judgments

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group's management makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

### *4.1 Provision for slow moving inventories*

The Group makes provision for slow moving inventories based on assessing the needs and reasonableness of provision for slow moving inventories at each period end. The identification of slow moving inventories requires the use of judgments and key assumptions which take into consideration of historical sales pattern, ageing and expectation of future sales orders. Where the expectation is different from the original estimate, such difference will impact the carrying value of inventories and provision for inventories.

### *4.2 Impairment of trade receivables*

The loss allowances for trade receivables are based on assumptions about risk of default and expected loss rates. The Group uses judgment in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions as well as forward-looking estimates at the end of each reporting period.

### *4.3 Amortization of mining rights and depreciation of mining structures*

Mining rights and mining structures are amortized and depreciated over the estimated total proven and probable reserves of the mines using units of production method. The Group assesses on an annual basis the estimated reserve of the mine. However, the remaining license period of the mining rights held by the Group is shorter than the estimated useful lives of the mine estimated by the Group. Management is of the opinion that the Group is able to renew the license of the mining rights from the relevant authority continuously and at minimal charges. If the expectation differs from the original estimate, such differences will impact the amortization charged in the period in which such estimate is changed.

Engineering estimates of the Group's mine reserves involved subjective judgments by engineers in developing such information and reserves are estimated in accordance with national standards set by relevant PRC authorities. Estimates of proven and probable reserves involved subjective judgments and assumptions are required for a range of geological, technical and economic factors, so the proven and probable reserves are only approximate values. The recent production and technology documents shall be considered for the estimates of proven and probable reserves which will be updated regularly, the inherent inaccuracy of technical estimating exists. If the past estimates change significantly, the amortization and depreciation shall be adjusted during future periods.

### *4.4 Obligation for reclamation and mine closure*

The estimation of the liabilities for final reclamation and mine closure involves the estimates of the amount and timing for the future cash spending as well as the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liability. The Group considers the factors including development plan of the mines, the geological structure of the mining regions and reserve volume to determine the scope, amount and timing of reclamation and mine closure works to be performed. Determination of the effect of these factors involves judgments from the Group and the estimated liabilities may turn out to be different from the actual expenditure to be incurred. The discount rate used by the Group may also be altered to reflect the changes in the market assessments of the time value of money and the risks specific to the liability, such as change of the borrowing rate and inflation rate in the market. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation will be recognized at the appropriate discount rate.

## 5 Revenue and segment information

The Group operates as two segments. The two operating segments are reported in a manner consistent with the internal reporting provided to the Chief Operation Decision-Maker ("**CODM**"). The CODM, who is responsible for allocating resources and assessing performance of the operating segment, has been identified as the executive directors that make strategic decisions.

The CODM considered the nature of the Group's business and determined that the Group has two reportable operating segments as follows:

— Sale of flake graphite concentrate

— Sale of spherical graphite and its by-products, and unprocessed marble

The accounting policies of the reportable segments are the same as the Group's accounting policies. Performance is measured based on segment results that is used by the CODM for the purposes of resources allocation and assessment of segment performance. Income tax expense is not allocated to reportable segments. The Group derived revenue from the sales of goods at a point in time.

The revenue, profit or loss, assets and liabilities of the Group are allocated based on the operations of the segments.

Reportable segment results is profit before income tax, excluding unallocated other income and other gains, net, finance costs, net, amortization of land-use rights that are used by all segments and other corporate expenses (mainly including staff costs, professional fees, [REDACTED] and other general administrative expenses) of the head office.

Reportable segment assets exclude unallocated deferred income tax assets, cash and cash equivalents and other corporate assets (mainly including land-use rights that are used by all segments).

Reportable segment liabilities exclude unallocated deferred income tax liabilities, current tax liabilities, bank borrowings, amounts due to related parties and non-controlling interests and other corporate liabilities (mainly including accrued charges of the head office).

There are no unsatisfied nor partially unsatisfied performance obligation that has an original expected duration of one year or more.

*(a)* The segment information provided to the executive directors for the reportable segments for the year ended 31 December 2019 is as follows:

| | Sale of flake graphite concentrate *RMB'000* | Sale of spherical graphite and its by-products, and unprocessed marble *RMB'000* | Total *RMB'000* |
|---|---|---|---|
| Segment revenue | 86,054 | 76,178 | 162,232 |
| Intersegment revenue | (28,680) | (9,816) | (38,496) |
| Revenue from external customers | 57,374 | 66,362 | 123,736 |
| Segment results | 28,805 | 10,427 | 39,232 |
| Elimination of intersegment profits | | | (2,793) |
| Unallocated amounts: | | | |
| Other income and other gains, net | | | 663 |
| Depreciation of right-of-use assets | | | (63) |
| Corporate expenses | | | (4,893) |
| Finance costs, net | | | (423) |
| Profit before income tax | | | 31,723 |
| Income tax expense | | | (7,174) |
| Profit for the year | | | 24,549 |
| Depreciation of property, plant and equipment | (2,645) | (3,106) | (5,751) |
| Depreciation of right-of-use assets | — | (248) | (248) |
| Amortization of mining rights | — | (813) | (813) |
| Reversal of impairment of financial assets | 107 | 87 | 194 |
| Capital expenditures | 3,638 | 28,904 | 32,542 |

Reportable segment assets and liabilities are reconciled to total assets and total liabilities of the Group as at 31 December 2019 as follows:

| | Sale of flake graphite concentrate *RMB'000* | Sale of spherical graphite and its by-products, and unprocessed marble *RMB'000* | Total *RMB'000* |
|---|---|---|---|
| **Assets** | | | |
| Reportable segment assets | 89,000 | 159,768 | 248,768 |
| Intersegment elimination | | | (10,022) |
| Unallocated assets | | | 4,865 |
| Total assets per consolidated statements of financial position | | | 243,611 |
| **Liabilities** | | | |
| Reportable segment liabilities | 16,902 | 31,502 | 48,404 |
| Unallocated liabilities | | | 84,416 |
| Total liabilities per consolidated statements of financial position | | | 132,820 |

*(b)* The segment information provided to the executive directors for the reportable segments for the year ended 31 December 2020 is as follows:

| | Sale of flake graphite concentrate *RMB'000* | Sale of spherical graphite and its by-products, and unprocessed marble *RMB'000* | Total *RMB'000* |
|---|---|---|---|
| Segment revenue | 113,051 | 89,922 | 202,973 |
| Intersegment revenue | (27,342) | (6,882) | (34,224) |
| Revenue from external customers | 85,709 | 83,040 | 168,749 |
| Segment results | 40,157 | 15,898 | 56,055 |
| Elimination of intersegment loss | | | 5,128 |
| Unallocated amounts: | | | |
| Other income and other gains, net | | | 300 |
| Depreciation of right-of-use assets | | | (63) |
| Corporate expenses | | | (4,001) |
| [REDACTED] | | | [REDACTED] |
| Finance costs, net | | | (760) |
| Profit before income tax | | | 48,445 |
| Income tax expense | | | (10,586) |
| Profit for the year | | | 37,859 |
| Depreciation of property, plant and equipment | (2,592) | (4,904) | (7,496) |
| Depreciation of right-of-use assets | — | (270) | (270) |
| Amortization of mining rights | — | (1,837) | (1,837) |
| (Provision for)/reversal of impairment of financial assets | (388) | 39 | (349) |
| Capital expenditures | 12,585 | 18,751 | 31,336 |

Reportable segment assets and liabilities are reconciled to total assets and total liabilities of the Group as at 31 December 2020 as follows:

| | Sale of flake graphite concentrate *RMB'000* | Sale of spherical graphite and its by-products, and unprocessed marble *RMB'000* | Total *RMB'000* |
|---|---|---|---|
| **Assets** | | | |
| Reportable segment assets | 123,221 | 184,715 | 307,936 |
| Intersegment elimination | | | (4,895) |
| Unallocated assets | | | 5,950 |
| Total assets per consolidated statements of financial position | | | 308,991 |
| **Liabilities** | | | |
| Reportable segment liabilities | 26,699 | 28,113 | 54,812 |
| Unallocated liabilities | | | 105,506 |
| Total liabilities per consolidated statements of financial position | | | 160,318 |

*(c)* The segment information provided to the executive directors for the reportable segments for the year ended 31 December 2021 is as follows:

| | Sale of flake graphite concentrate *RMB'000* | Sale of spherical graphite and its by-products, and unprocessed marble *RMB'000* | Total *RMB'000* |
|---|---|---|---|
| Segment revenue | 128,747 | 108,074 | 236,821 |
| Intersegment revenue | (31,075) | (7,381) | (38,456) |
| Revenue from external customers | 97,672 | 100,693 | 198,365 |
| Segment results | 44,414 | 18,245 | 62,659 |
| Elimination of intersegment loss | | | 3,204 |
| Unallocated amounts: | | | |
| Other income and other gains, net | | | 8,033 |
| Depreciation of right-of-use assets | | | (63) |
| Corporate expenses | | | (5,333) |
| [REDACTED] | | | [REDACTED] |
| Finance costs, net | | | (780) |
| Profit before income tax | | | 60,839 |
| Income tax expense | | | (7,514) |
| Profit for the year | | | 53,325 |
| Depreciation of property, plant and equipment | (5,503) | (5,390) | (10,893) |
| Depreciation of right-of-use assets | (258) | (586) | (844) |
| Amortization of mining rights | — | (1,108) | (1,108) |
| Provision for impairment of financial assets | (1,460) | (3) | (1,463) |
| Capital expenditures | 19,286 | 11,393 | 30,679 |

Reportable segment assets and liabilities are reconciled to total assets and total liabilities of the Group as at 31 December 2021 as follows:

| | Sale of flake graphite concentrate *RMB'000* | Sale of spherical graphite and its by-products, and unprocessed marble *RMB'000* | Total *RMB'000* |
|---|---|---|---|
| **Assets** | | | |
| Reportable segment assets | 153,907 | 172,591 | 326,498 |
| Intersegment elimination | | | (1,691) |
| Unallocated assets | | | 9,269 |
| Total assets per consolidated statements of financial position | | | 334,076 |
| **Liabilities** | | | |
| Reportable segment liabilities | 31,751 | 10,738 | 42,489 |
| Unallocated liabilities | | | 89,589 |
| Total liabilities per consolidated statements of financial position | | | 132,078 |

***(d) Other segment information***

The Group is domiciled in the PRC. All of its revenue from external customers are from customers located in the PRC.

During Track Record Period, revenue from 1, 1 and 2 customers respectively, individually contributed over 10% of the Group's revenue. The revenue from the customer during the years are as follows:

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Customer A | N/A* | N/A* | 40,523 |
| Customer B | 46,943 | 63,926 | 39,956 |

* Revenue from the customer is less than 10% of the total revenue of the Group for the respective years.

All of the Group's activities are carried out in the PRC and all of the Group's assets and liabilities are substantially located in the PRC. Accordingly, no analysis by geographical basis is presented.

***(e) Assets and liabilities related to contracts with customers***

The Group has recognized RMB670,000, RMB443,000, RMB9,758,000 and RMB5,310,000 receipts in advance from customers for the sale of graphite products as contract liabilities as at 1 January 2019, 31 December 2019, 2020 and 2021. For the years ended 31 December 2019, 2020 and 2021, RMB670,000, RMB443,000 and RMB9,758,000 of revenue recognized, respectively, relates to carried-forward contract liabilities.

**6 Other income and other gains, net**

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Other income** | | | |
| Government grants *(Note)* | 500 | 630 | 7,858 |
| Others | 68 | 5 | 163 |
| **Other gains/(losses), net** | | | |
| Gains/(losses) on disposal of property, plant and equipment, net | 95 | (335) | 12 |
| | 663 | 300 | 8,033 |

*Note:* The amount mainly represents the Group's entitlement to corporate income tax refund and government grants in relation to research and development. For the years ended 31 December 2019, 2020 and 2021, the Group has complied with all conditions attached to the government grants.

## 7 Expenses by nature

| | Year ended 31 December | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Raw materials used | | | |
| — in production | 34,668 | 24,752 | 38,987 |
| — for research and development | 1,214 | 2,564 | 2,703 |
| Changes in inventories of finished goods and work in progress | (8,396) | 18,388 | 12,979 |
| Blasting expense | 384 | 1,752 | 1,560 |
| Subcontracting and processing charges | — | 164 | 6,497 |
| Provision for/(reversal of) impairment of inventories | 290 | (330) | (306) |
| Transportation fees | 6,253 | 8,032 | 7,905 |
| Auditor's remuneration | — | 30 | 50 |
| Depreciation of property, plant and equipment *(Note 12)* | 5,751 | 7,496 | 10,893 |
| Depreciation of right-of-use assets *(Note 13)* | 311 | 333 | 907 |
| Amortization of mining rights | 813 | 1,837 | 1,108 |
| Amortization of other intangible assets | — | 8 | 20 |
| Employee benefit expenses (including directors' emoluments) *(Note 8)* | 13,016 | 13,826 | 13,938 |
| Outsourcing charges | — | — | 4,711 |
| Sales agency fees | 903 | — | — |
| Marketing expenses | 3,719 | 4 | — |
| Short-term operating lease rentals in respect of office premises and machineries | 2,000 | — | 760 |
| Utilities expenses | 22,799 | 24,347 | 26,270 |
| Professional fees | 1,281 | 2,145 | 2,007 |
| Repair and maintenance expense | 2,567 | 1,957 | 862 |
| [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Exchange (gains)/losses | — | (203) | 76 |
| Resource tax and other miscellaneous tax | 2,035 | 2,220 | 1,936 |
| Others | 2,839 | 1,959 | 2,572 |
| Total cost of sales, selling and distribution expenses, general and administrative expenses and research and development expenses (excluding reversal of/provision for impairment of financial assets) | [REDACTED] | [REDACTED] | [REDACTED] |

## 8 Employee benefit expenses

| | Year ended 31 December | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Wages, salaries, bonuses and allowances | 13,227 | 13,695 | 12,838 |
| Pension costs — defined contribution plans | 278 | 37 | 888 |
| Other employee benefits | 556 | 497 | 631 |
| | 14,061 | 14,229 | 14,357 |
| Capitalized as property, plant and equipment | (1,045) | (403) | (419) |
| | 13,016 | 13,826 | 13,938 |

*(a) Five highest paid individuals*

The five individuals during the Track Record Period whose emoluments were the highest in the Group include 1, 1 and 2 directors for the years ended 31 December 2019, 2020 and 2021, respectively, whose emoluments are reflected in the analysis presented in Note (b) below. The emoluments payable to the remaining 4, 4 and 3 individuals for the years ended 31 December 2019, 2020 and 2021 are as follows:

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Basic salaries, housing allowances, share options, other allowances and benefits in kind | 2,310 | 2,476 | 2,196 |
| Contribution to pension scheme — defined contribution plans | 5 | — | — |
| Discretionary bonuses | 144 | — | — |
| Inducement fee to join or upon joining the Group | — | — | — |
| Compensation for loss of office | — | — | — |
| | 2,459 | 2,476 | 2,196 |

| | Number of individuals Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Emoluments bands | | | |
| HK$1 to HK$1,000,000 | 4 | 4 | 3 |

*(b) Directors' and chief executive's emoluments*

The remuneration of every director and the chief executive for the year ended 31 December 2019 is set out below:

| Name | Fees | Salary | Discretionary bonuses | Allowance and benefits in kind | Employer's contribution to a retirement benefit scheme | Other emoluments paid or receivable in respect of director's other services in connection with the management of the affairs of the Company or its subsidiary undertaking | Total |
|---|---|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| *Executive Director* | | | | | | | |
| Zhao Liang | — | 701 | — | — | — | — | 701 |
| Total | — | 701 | — | — | — | — | 701 |

The remuneration of every director and the chief executive for the year ended 31 December 2020 is set out below:

| Name | Fees | Salary | Discretionary bonuses | Allowance and benefits in kind | Employer's contribution to a retirement benefit scheme | Other emoluments paid or receivable in respect of director's other services in connection with the management of the affairs of the Company or its subsidiary undertaking | Total |
|---|---|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| *Executive Director* | | | | | | | |
| Zhao Liang | — | 720 | — | — | — | — | 720 |
| Total | — | 720 | — | — | — | — | 720 |

The remuneration of every director and the chief executive for the year ended 31 December 2021 is set out below:

| Name | Fees | Salary | Discretionary bonuses | Allowance and benefits in kind | Employer's contribution to a retirement benefit scheme | Other emoluments paid or receivable in respect of director's other services in connection with the management of the affairs of the Company or its subsidiary undertaking | Total |
|---|---|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| *Executive Directors* | | | | | | | |
| Zhao Liang | — | 840 | — | — | — | — | 840 |
| Lei Wai Hoi *(Note (i))* | — | 622 | — | — | 12 | — | 634 |
| Total | — | 1,462 | — | — | 12 | — | 1,474 |

*Note:*

(i) Appointed on 31 May 2021.

***(c) Pension costs — defined contribution retirement plans***

The Group provides a mandatory provident fund scheme (the "**MPF Scheme**") for its staff in Hong Kong under the requirement of the Hong Kong Mandatory Provident Fund Scheme Ordinance ("**MPF Scheme Ordinance**"). Under the current MPF scheme, the Group's contributions are calculated at 5% of the employees' relevant income as defined in the MPF Scheme Ordinance up to a maximum of HK$1,500 per employee per month. The employees also contribute a corresponding amount to the MPF Scheme if their relevant income is more than HK$7,100 per month. All benefits derived from the mandatory contribution must be preserved until the employee reaches the retirement age of 65 subject to certain exceptions. The assets of the MPF scheme are held separately from those of the Group in independently administered funds.

As stipulated by the rules and regulations in PRC, the Group contributes to state-sponsored retirement plan for its employees in PRC. The employees contribute up to 8% of their basic salaries, while the Group contributes to retirement plans approximately at 16% to 20% of the basic salaries of its employees in PRC and has no further obligations for the actual payment of pensions or post retirement benefits. The state-sponsored retirement plan are responsible for the entire pensions obligations payable to retired employees.

During the years ended 31 December 2019, 2020 and 2021, the Group has no forfeited contributions that were able to be utilized by the Group to reduce its contributions.

***(d) Directors' retirement benefits and termination benefits***

None of the directors received or will receive any retirement benefits and termination benefits during the Track Record Period.

***(e) Consideration provided to third parties for making available directors' services***

During the Track Record Period, the Group did not pay any consideration to any third parties for making available directors' services.

***(f) Information about loans, quasi-loans and other dealings in favor of the directors controlled bodies corporate by and connected entities with such directors***

There are no loans, quasi-loans and other dealing arrangements in favor of directors, their controlled bodies corporate and connected entities during the Track Record Period.

**9 Finance costs, net**

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Finance income** | | | |
| Interest income | 12 | 18 | 54 |
| **Finance costs** | | | |
| Interest expenses on borrowings | (189) | (427) | (652) |
| Interest expenses on bills arrangement | (233) | (208) | (69) |
| Interest elements of lease liabilities | (13) | (36) | — |
| Interest elements of provision for reclamation and mine closure | — | (107) | (113) |
| **Finance costs, net** | (423) | (760) | (780) |

**10 Income tax expense**

PRC Corporate Income Tax has been provided for at the rate of 25% for the Track Record Period on the estimated assessable profit for the year. In accordance with the Income Tax Law of the PRC, the Group's major operating subsidiary, Yixiang New Energy is subject to a tax rate of 15% for the years ended 31 December 2020 and 2021, and Yixiang Graphite is subject to a tax rate of 15% for the year ended 31 December 2021 as they are eligible for the tax concession granted by the PRC government as a high-tech enterprise in the years specified.

According to the Corporate Income Tax Law of the PRC, starting from 1 January 2008, a withholding tax of 10% will be levied on the immediate holding companies outside the PRC when their PRC subsidiaries declare dividend out of profit earned after 1 January 2008.

No Hong Kong profits tax has been provided for Track Record Period since there was no tax assessable profit generated from Hong Kong. Taxation on profits outside Hong Kong has been calculated on the estimated assessable profit for the year at the rates of taxation prevailing in the regions/countries in which the Group operates.

The amount of income tax expense in the consolidated statements of comprehensive income represents:

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Current income tax | | | |
| — PRC corporate income tax | 5,798 | 9,913 | 6,630 |
| Deferred income tax | | | |
| — Reversal of temporary differences | 1,376 | 673 | 1,133 |
| — Impact of change in tax rate | — | — | (249) |
| Income tax expense | 7,174 | 10,586 | 7,514 |

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the domestic tax rate applicable to the profit or loss before income tax expense of the entities in the respective countries as follows:

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Profit before income tax | 31,723 | 48,445 | 60,839 |
| Tax calculated at domestic tax rates applicable to the profit or loss in respective operations | 7,931 | 11,948 | 9,004 |
| Expenses not deductible for tax purposes | 130 | 148 | 592 |
| Remeasurement of deferred tax — change in tax rate | — | — | (249) |
| Research and development tax credit | (887) | (1,510) | (1,939) |
| Tax losses for which no deferred tax asset has been recognized | — | — | 106 |
| Income tax expense | 7,174 | 10,586 | 7,514 |

The weighted average applicable tax rate was 23%, 22% and 12% for the years ended 31 December 2019, 2020 and 2021, respectively.

## 11 Earnings per share

The calculation of the basic earnings per share for the year is based on the Group's profit attributable to the owner of the Company and the weighted average number of ordinary shares in issue.

In determining the weighted average number of ordinary shares in issue during the Track Record Period, the ordinary shares issued upon the incorporation of the Company were deemed to be issued on 1 January 2019 as if the Company has been incorporated by then.

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| Weighted average number of ordinary shares in issue | 1 | 1 | 1 |
| Group's profit attributable to the owner of the Company *(RMB'000)* | 24,549 | 36,884 | 53,325 |
| Basic and diluted earnings per share *(RMB'000)* | 24,549 | 36,884 | 53,325 |

The basic and diluted earnings per share for the years ended 31 December 2019, 2020 and 2021 were the same because there were no dilutive potential ordinary shares.

The earnings per share presented above has not been taken into account the proposed [REDACTED] pursuant to the resolutions in writing of the shareholder passed on [●] because the proposed [REDACTED] has not become effective as at the date of this report.

## 12 Property, plant and equipment

| | Construction in progress *RMB'000* | Plant and buildings *RMB'000* | Mining structures *RMB'000* | Machinery and equipment *RMB'000* | Motor vehicles *RMB'000* | Furniture and fixtures *RMB'000* | Total *RMB'000* |
|---|---|---|---|---|---|---|---|
| **As at 1 January 2019** | | | | | | | |
| Cost | 822 | 35,617 | — | 48,587 | 4,868 | 1,886 | 91,780 |
| Accumulated depreciation | — | (10,671) | — | (30,922) | (3,833) | (1,220) | (46,646) |
| Net book amount | 822 | 24,946 | — | 17,665 | 1,035 | 666 | 45,134 |
| **Year ended 31 December 2019** | | | | | | | |
| Opening net book amount | 822 | 24,946 | — | 17,665 | 1,035 | 666 | 45,134 |
| Additions | 14,615 | 370 | — | 1,893 | 5,459 | 61 | 22,398 |
| Transfers | (14,749) | 1,654 | 9,929 | 3,166 | — | — | — |
| Disposals | — | — | — | (13) | (410) | — | (423) |
| Depreciation | — | (1,742) | — | (3,258) | (1,231) | (332) | (6,563) |
| Closing net book amount | 688 | 25,228 | 9,929 | 19,453 | 4,853 | 395 | 60,546 |
| **As at 31 December 2019** | | | | | | | |
| Cost | 688 | 37,641 | 9,929 | 53,376 | 9,079 | 1,947 | 112,660 |
| Accumulated depreciation | — | (12,413) | — | (33,923) | (4,226) | (1,552) | (52,114) |
| Net book amount | 688 | 25,228 | 9,929 | 19,453 | 4,853 | 395 | 60,546 |
| **Year ended 31 December 2020** | | | | | | | |
| Opening net book amount | 688 | 25,228 | 9,929 | 19,453 | 4,853 | 395 | 60,546 |
| Additions | 12,406 | 4,431 | — | 2,981 | 959 | 129 | 20,906 |
| Transfers | (13,094) | 1,981 | 1,655 | 8,864 | — | 594 | — |
| Disposals | — | — | — | (530) | (1,215) | — | (1,745) |
| Depreciation | — | (2,175) | (215) | (3,780) | (1,351) | (322) | (7,843) |
| Closing net book amount | — | 29,465 | 11,369 | 26,988 | 3,246 | 796 | 71,864 |
| **As at 31 December 2020** | | | | | | | |
| Cost | — | 44,053 | 11,584 | 60,086 | 6,017 | 2,670 | 124,410 |
| Accumulated depreciation | — | (14,588) | (215) | (33,098) | (2,771) | (1,874) | (52,546) |
| Net book amount | — | 29,465 | 11,369 | 26,988 | 3,246 | 796 | 71,864 |
| **Year ended 31 December 2021** | | | | | | | |
| Opening net book amount | — | 29,465 | 11,369 | 26,988 | 3,246 | 796 | 71,864 |
| Additions | 13,021 | 7,873 | 856 | 5,220 | 371 | 106 | 27,447 |
| Transfers | (10,850) | 1,491 | 3,504 | 5,855 | — | — | — |
| Disposals | — | — | — | — | (30) | — | (30) |
| Depreciation | — | (4,763) | (255) | (4,611) | (1,432) | (312) | (11,373) |
| Closing net book amount | 2,171 | 34,066 | 15,474 | 33,452 | 2,155 | 590 | 87,908 |
| **As at 31 December 2021** | | | | | | | |
| Cost | 2,171 | 53,417 | 15,944 | 71,161 | 6,220 | 2,776 | 151,689 |
| Accumulated depreciation | — | (19,351) | (470) | (37,709) | (4,065) | (2,186) | (63,781) |
| Net book amount | 2,171 | 34,066 | 15,474 | 33,452 | 2,155 | 590 | 87,908 |

Depreciation expense has been recorded as below for the years ended 31 December 2019, 2020 and 2021.

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Cost of sales | 4,638 | 6,184 | 9,477 |
| General and administrative expenses | 1,113 | 1,105 | 1,092 |
| Research and development expenses | — | 207 | 324 |
| | 5,751 | 7,496 | 10,893 |
| Capitalised as mining structures | 812 | 347 | 480 |
| | 6,563 | 7,843 | 11,373 |

Certain motor vehicles with carrying amounts of RMB4,209,000 as at 31 December 2019 were pledged as security for the Group's other borrowings (Note 22). No assets were pledged for security as at 31 December 2020 and 2021.

## 13 Leases

This note provides information for leases where the Group is a lessee.

### *(i) Amounts recognized in the consolidated statements of financial position*

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Right-of-use assets** | | | |
| Land use rights | 2,359 | 2,945 | 5,703 |
| Properties | 1,765 | 1,645 | 1,525 |
| Equipment | 1,675 | 3,018 | 2,705 |
| | 5,799 | 7,608 | 9,933 |
| **Lease liabilities** | | | |
| Current | 680 | 1,169 | 1,143 |
| Non-current | 164 | 976 | 383 |
| | 844 | 2,145 | 1,526 |

Additions to the right-of-use assets for the years ended 31 December 2019, 2020 and 2021 were RMB1,803,000, RMB2,142,000 and RMB3,232,000 respectively.

***(ii) Amounts recognized in the consolidated statements of comprehensive income***

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Depreciation charge of right-of-use assets** | | | |
| Land-use rights | 63 | 63 | 474 |
| Properties | 120 | 120 | 120 |
| Equipment | 128 | 150 | 313 |
| | 311 | 333 | 907 |
| Interest expense (included in finance costs) | 13 | 36 | — |
| Expense relating to short-term leases (included in cost of sales and selling and distribution expenses) | 2,000 | — | 760 |

The total cash outflow for leases during the years ended 31 December 2019, 2020 and 2021 were RMB2,972,000, RMB877,000 and RMB4,611,000 respectively.

***(iii) The Group's leasing activities***

The Group leases offices, a warehouse and equipment. Rental contracts are typically made for fixed periods of 1 to 20 years. The Group held land-use rights which cover a period of 30 to 50 years. Payments associated with lease terms of 1 year or less are recognized on a straight-line basis as an expense in profit or loss.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

There is no extension option or termination option included in the leases of office and equipment of the Company.

**14 Mining rights**

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Opening net carrying amount | 13,034 | 20,562 | 27,013 |
| Additions | 8,341 | 8,288 | — |
| Amortization | (813) | (1,837) | (1,108) |
| Closing net carrying amount | 20,562 | 27,013 | 25,905 |

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Gross carrying amount | 21,375 | 29,663 | 29,663 |
| Accumulated amortization | (813) | (2,650) | (3,758) |
| Net carrying amount | 20,562 | 27,013 | 25,905 |

## 15 Financial instruments by category

The Group's financial instruments include the following:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Financial assets at amortized cost** | | | |
| Trade and bills receivables | 113,632 | 160,863 | 148,645 |
| Deposits and other receivables | 80 | 94 | 101 |
| Cash and cash equivalents | 1,861 | 10,007 | 33,934 |
| | 115,573 | 170,964 | 182,680 |

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Financial liabilities at amortized cost** | | | |
| Trade payables | 16,160 | 20,965 | 18,608 |
| Accruals and other payables | 7,509 | 14,022 | 14,019 |
| Amounts due to related parties and non-controlling interests | 77,696 | 82,749 | 73,127 |
| Borrowings | 16,156 | 18,500 | 10,000 |
| Lease liabilities | 844 | 2,145 | 1,526 |
| | 118,365 | 138,381 | 117,280 |

## 16 Inventories

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Raw materials | 1,065 | 4,030 | 6,820 |
| Work in progress | 7,982 | 8,044 | 5,739 |
| Finished goods | 27,012 | 14,224 | 6,315 |
| | 36,059 | 26,298 | 18,874 |
| Provision for inventories | (636) | (306) | — |
| Total | 35,423 | 25,992 | 18,874 |

The cost of inventories recognized as expenses and included in cost of sales in the consolidated statements of comprehensive income for the years ended 31 December 2019, 2020 and 2021 were RMB26,562,000, RMB42,810,000 and RMB51,660,000, respectively.

Provision for impairment of inventories amounted to RMB290,000 for the year ended 31 December 2019 and reversal of impairment of inventories of RMB330,000 and RMB306,000 arising from an increase in net realisable value for the years ended 31 December 2020 and 2021, were included in cost of sales in the consolidated statements of comprehensive income.

**17 Trade and bills receivables**

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Trade receivables | 55,114 | 79,065 | 55,539 |
| Bills receivables | 61,825 | 85,454 | 98,225 |
| Trade and bills receivables | 116,939 | 164,519 | 153,764 |
| Less: loss allowance | (3,307) | (3,656) | (5,119) |
| Total | 113,632 | 160,863 | 148,645 |

The Group's credit terms granted to third-party customers mainly range from 30 to 90 days.

As at 31 December 2019, 2020 and 2021, the ageing analysis of the third-party trade receivables, based on invoice date, are as follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Up to 90 days | 46,954 | 57,628 | 36,622 |
| 91–180 days | 3,587 | 12,725 | 11,247 |
| 181–270 days | 993 | 3,166 | 2,442 |
| 271–365 days | 775 | 755 | 2 |
| Over 1 year | 2,805 | 4,791 | 5,226 |
| | 55,114 | 79,065 | 55,539 |

Movements in the loss allowance of trade receivables are as follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| At the beginning of the year | (3,501) | (3,307) | (3,656) |
| Reversal of/(provision for) impairment of trade receivables | 194 | (349) | (1,463) |
| | (3,307) | (3,656) | (5,119) |

The creation and release of provision for impaired receivables have been included in the consolidated statements of comprehensive income. Amounts charged to the allowance account are generally written off when there is no expectation of recovering additional cash. The maximum exposure to credit risk at the reporting date is the carrying values of trade and bills receivables disclosed above. The Group did not hold any collateral as security.

The Group's bills receivables generally have maturity period of 6 to 12 months. As at 31 December 2019, 2020 and 2021, the ageing analysis of the bills receivables, based on the bills receiving date, are as follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Up to 90 days | 41,865 | 54,929 | 56,116 |
| 91–180 days | 14,860 | 26,245 | 39,752 |
| 181–270 days | 5,100 | 3,330 | 2,257 |
| 271–365 days | — | 950 | 100 |
| | 61,825 | 85,454 | 98,225 |

The Group transferred certain bank's acceptance bills amounting to approximately RMB14,000,000 and RMB4,500,000 with recourse in exchange for cash as at 31 December 2019 and 2020 respectively. The discounted bank's acceptance bills and the related proceeds of the same amount are included in the Group's trade and bills receivables and short-term borrowings (Note 22) respectively at the end of the reporting period. The transactions have been accounted for as collateralised bank advances. There was no collateralised bank advances arrangement as at 31 December 2021.

The Group endorsed certain of its bills receivables with full recourse to the creditors. In the event of default by the debtors, the Group is obliged to pay the creditors the amount in default. The Group is therefore exposed to the risks of credit losses and late payment in respect of its endorsed bills receivables.

The endorsement transactions do not meet the requirements for derecognition of financial assets as the Group retains substantially all of the risks and rewards of ownership of the endorsed bills receivables. As at 31 December 2019, 2020 and 2021, bills receivables and the corresponding trade and other payables of RMB7,465,000, RMB15,472,000 and RMB16,404,000, respectively, continue to be recognized in the Group's consolidated financial statements although they have been legally transferred to the creditors. The proceeds of the endorsement transactions are included in trade payables until the related bills receivables are collected or the Group settles any losses suffered by the creditors. As these bills receivables have been legally transferred to the creditors, the Group does not have the authority to determine the disposition of the bills receivables.

The carrying amounts of trade and bills receivables are denominated in RMB.

## 18 Deposits, prepayments and other receivables

***The Group***

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Deposits | 20 | 57 | 20 |
| Prepaid [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Deferred [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Prepayments for property, plant and equipment | 3,039 | 244 | 162 |
| Prepayments for raw materials | — | 1,596 | 1,848 |
| Other prepayments | 100 | — | 876 |
| Other receivables | 60 | 37 | 81 |
| | [REDACTED] | [REDACTED] | [REDACTED] |
| Less: non-current portion | (3,039) | (244) | (1,038) |
| Current portion | [REDACTED] | [REDACTED] | [REDACTED] |

As at 31 December 2019, 2020 and 2021, the carrying amounts of deposits, prepayments and other receivables approximate their fair values and are denominated in the following currencies:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| RMB | 3,219 | 2,770 | 5,457 |
| Hong Kong dollars ("**HK$**") | — | 1,918 | 3,088 |
| United Stated dollars ("**US$**") | — | 122 | 26 |
| | 3,219 | 4,810 | 8,571 |

***The Company***

| | As at 31 December | |
|---|---|---|
| | **2020** | **2021** |
| | *RMB'000* | *RMB'000* |
| Prepaid [REDACTED] | [REDACTED] | [REDACTED] |
| Deferred [REDACTED] | [REDACTED] | [REDACTED] |
| | [REDACTED] | [REDACTED] |

The deferred [REDACTED] are incurred in connection with the [REDACTED] the Company and will be deducted from equity upon [REDACTED] the Company.

**19 Cash and cash equivalents**

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Cash at banks | 1,823 | 9,987 | 33,930 |
| Cash on hand | 38 | 20 | 4 |
| | 1,861 | 10,007 | 33,934 |
| Maximum exposure to credit risk | 1,823 | 9,987 | 33,930 |

The Group's cash and cash equivalents and bank deposits are denominated in RMB.

As at 31 December 2019, 2020 and 2021, cash and cash equivalents of approximately RMB1,823,000, RMB9,987,000 and RMB33,930,000, respectively, of the Group were denominated in RMB and deposited with banks in the PRC. The conversion of the RMB denominated balance into foreign currencies is subject to the rules and regulations of foreign exchange control promulgated by the PRC government.

As at 31 December 2020 and 2021, cash and cash equivalents of approximately RMB318,000 and RMB594,000, respectively, were deposited with a bank in the PRC for mine and land reclamation purpose. The withdrawal of funds from the account is subject to the approval of the local authority. The approval procedures are administrative and the Group expected it would take a short period of time to make the funds readily available to meet its cash commitments.

**20 Trade payables**

Trade payables at the end of each reporting period comprise amounts outstanding to contract creditors and suppliers. The credit period taken for trade purchase is generally 0 to 180 days. The ageing analysis of the trade payables, based on invoice date, are as follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Up to 90 days | 11,242 | 17,054 | 13,596 |
| 91–180 days | 4,234 | 1,600 | 3,385 |
| 181–365 days | 684 | 2,066 | 1,589 |
| Over 1 year | — | 245 | 38 |
| | 16,160 | 20,965 | 18,608 |

As at 31 December 2019, 2020 and 2021, the carrying amounts of trade payables are denominated in RMB and approximate their fair values.

**21 Accruals and other payables**

***The Group***

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Accrued staff expense | 2,701 | 2,423 | 1,633 |
| Accrued construction cost | 3,845 | 7,752 | 8,151 |
| Other tax payable | 2,385 | 3,309 | 2,846 |
| Rental expense | 2,000 | — | — |
| Accrued [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Others | 1,664 | 1,646 | 2,664 |
| | [REDACTED] | [REDACTED] | [REDACTED] |

As at 31 December 2019, 2020 and 2021, the carrying amounts of accruals and other payables approximate their fair values and are denominated in the following currencies:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| RMB | 12,595 | 16,357 | 16,400 |
| HK$ | — | 3,397 | 2,050 |
| US$ | — | — | 48 |
| | 12,595 | 19,754 | 18,498 |

***The Company***

| | As at 31 December | |
|---|---|---|
| | **2020** | **2021** |
| | *RMB'000* | *RMB'000* |
| Accrued staff expense | — | 623 |
| Accrued [REDACTED] | 4,624 | 3,204 |
| Others | [REDACTED] | [REDACTED] |
| | [REDACTED] | [REDACTED] |

**22 Borrowings**

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Bank borrowings | | | |
| — Bank loans | — | 14,000 | 10,000 |
| — Bills arrangement | 14,000 | 4,500 | — |
| Other borrowings | 2,156 | — | — |
| | 16,156 | 18,500 | 10,000 |

The Group's bank borrowings are repayable based on the scheduled repayment dates as follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Within 1 year | 16,156 | 18,500 | 10,000 |

The weighted effective interest rates as at 31 December 2019, 2020 and 2021 were follows:

| | As at 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Bank borrowings | | | |
| — Bank loans | 4.87% | 4.79% | 4.85% |
| — Bills arrangement | 3.67% | 2.59% | N/A |
| Other borrowings | 8.00% | N/A | N/A |

Bank advances for discounted bills with recourse have been accounted for as collateralised bank advances. The discounted bank's acceptance bills and the related proceeds of the same amount are included in the Group's trade and bills receivables (Note 17) and borrowings respectively at the end of the reporting period.

As at 31 December 2019, other borrowings of RMB2,156,000 were secured by the pledge of certain motor vehicles with carrying amounts of RMB4,209,000 as at 31 December 2019, and the guarantee provided by a shareholder of the Group and independent third parties.

As at 31 December 2020 and 2021, bank loans of RMB10,000,000 were secured by the guarantee provided by an independent third party. The remaining bank loans of RMB4,000,000 as at 31 December 2020 were unsecured.

There were no financial covenants attached to the Group's borrowings facilities as at 31 December 2019, 2020 and 2021.

The carrying amounts of bank and other borrowings are denominated in RMB. The Group had no unused facilities as at 31 December 2019 and 2020.

On 3 August 2021, the Group has obtained a bank facility, pursuant to which a facility of RMB20,000,000 was granted to the Group for 1 year from the date of the facility letter, with terms and conditions being negotiated and agreed with the bank from time to time upon drawdown. [As at 31 December 2021 and up to the date of this report, no drawdown was made by the Group.]

**23 Deferred income tax**

As at 31 December 2019, 2020 and 2021, deferred income tax is calculated in full on temporary differences under the liability method using a principal tax rate of 16.5% for Hong Kong and 25% for PRC.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis. The analysis of deferred tax assets and deferred tax liabilities is as follows:

| | **As at 31 December** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Deferred income tax assets | 2,506 | 779 | 271 |
| Deferred income tax liabilities | (2,516) | (1,462) | (1,838) |
| | (10) | (683) | (1,567) |

The analysis of deferred tax assets and liabilities without taking into consideration the offsetting of balances within the same tax jurisdiction is as follows:

| | **As at 31 December** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Deferred income tax assets (to be recovered within 12 months) | 2,745 | 1,196 | 421 |
| Deferred income tax assets (to be recovered after more than 12 months) | 826 | 909 | 767 |
| Deferred income tax liabilities (to be settled after more than 12 months) | (3,581) | (2,788) | (2,755) |
| Total | (10) | (683) | (1,567) |

The movement on the deferred income tax assets/(liabilities) is as follows:

| | **As at 31 December** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| At the beginning of the year | 1,366 | (10) | (683) |
| Charged to the consolidated statements of comprehensive income | (1,376) | (673) | (884) |
| At the end of the year | (10) | (683) | (1,567) |

The movement in gross deferred income tax assets and liabilities during the years ended 31 December 2019, 2020 and 2021, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

**Deferred income tax assets**

| | **Provision for impairment of trade receivables** | **Decelerated tax depreciation** | **Unrealized profits** | **Others** | **Total** |
|---|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| At 1 January 2019 | 875 | 20 | 1,808 | 162 | 2,865 |
| (Charged)/credited to the consolidated statements of comprehensive income | (49) | (20) | 698 | 77 | 706 |
| At 31 December 2019 and 1 January 2020 | 826 | — | 2,506 | 239 | 3,571 |
| Credited/(charged) to the consolidated statements of comprehensive income | 83 | — | (1,727) | 178 | (1,466) |
| At 31 December 2020 and 1 January 2021 | 909 | — | 779 | 417 | 2,105 |
| Charged to the consolidated statements of comprehensive income | (142) | — | (508) | (267) | (917) |
| At 31 December 2021 | 767 | — | 271 | 150 | 1,188 |

**Deferred income tax liabilities**

| | **Accelerated tax depreciation** |
|---|---|
| | *RMB'000* |
| At 1 January 2019 | 1,499 |
| Charged to the consolidated statements of comprehensive income | 2,082 |
| At 31 December 2019 and 1 January 2020 | 3,581 |
| Credited to the consolidated statements of comprehensive income | (793) |
| At 31 December 2020 and 1 January 2021 | 2,788 |
| Credited to the consolidated statements of comprehensive income | (33) |
| At 31 December 2021 | 2,755 |

As at 31 December 2019, 2020 and 2021, the Group's subsidiaries in the PRC has unremitted earnings of RMB97,452,000, RMB138,873,000 and RMB194,206,000 respectively. The Group did not recognize deferred income tax liabilities in respect of temporary differences relating to the withholding tax on the unremitted profits of subsidiaries that would be payable on the distribution of these retained profits, as the Company controls the dividend policy of these subsidiaries and it is probable that these profits will not be distributed in the foreseeable future. Therefore, the related temporary difference will not be reversed and will not be taxable in the foreseeable future.

## 24 Share capital and reserves

### *(a) Share capital*

| | **Number of share** | *RMB'000* |
|---|---|---|
| Issued and fully paid share capital | | |
| At 31 December 2019, 31 December 2020 and 1 January 2021 | — | — |
| Initial share issued upon incorporation | 1 | —* |
| At 31 December 2021 | 1 | —* |

*Note*:* Less than RMB1,000 and rounded as nil.

Pursuant to the shareholder's written resolution dated [●] and conditional on the share premium account of the Company being credited as a result of [REDACTED] pursuant to the proposed [REDACTED] the [REDACTED], the Company issued additional [REDACTED] by way of [REDACTED] of approximately [REDACTED] standing to the credit of the Company's share premium account.

Details of issuance of shares of the Company during the Reorganization are set out in Note 1.2.

### *(b) Reserves*

*The Group*

| | **Share premium** *(Note (i))* *RMB'000* | **Statutory reserve** *(Note (ii))* *RMB'000* | **Capital reserve** *(Note (iii))* *RMB'000* | **Other reserve** *(Note (iv))* *RMB'000* | **Retained earnings** *RMB'000* | **Non-controlling interests** *RMB'000* | **Total** *RMB'000* |
|---|---|---|---|---|---|---|---|
| **Balance at 1 January 2019** | — | 2,670 | 10,000 | — | 73,572 | — | 86,242 |
| **Comprehensive income** | | | | | | | |
| Profit for the year | — | — | — | — | 24,549 | — | 24,549 |
| Total comprehensive income | — | — | — | — | 24,549 | — | 24,549 |
| **Transaction with owner** | | | | | | | |
| Appropriation to statutory reserve | — | 669 | — | — | (669) | — | — |
| | — | 669 | — | — | (669) | — | — |

| | Share premium *(Note (i))* *RMB'000* | Statutory reserve *(Note (ii))* *RMB'000* | Capital reserve *(Note (iii))* *RMB'000* | Other reserve *(Note (iv))* *RMB'000* | Retained earnings *RMB'000* | Non-controlling interests *RMB'000* | Total *RMB'000* |
|---|---|---|---|---|---|---|---|
| **Balance at 31 December 2019 and 1 January 2020** | — | 3,339 | 10,000 | — | 97,452 | — | 110,791 |
| **Comprehensive income** | | | | | | | |
| Profit for the year | — | — | — | — | 36,884 | 975 | 37,859 |
| Total comprehensive income | — | — | — | — | 36,884 | 975 | 37,859 |
| **Transactions with owner** | | | | | | | |
| Capital injection of non-controlling interests | — | — | — | — | — | 4,941 | 4,941 |
| Reorganization *(Note 1.2)* | 158,693 | — | (158,670) | — | 975 | (5,916) | (4,918) |
| Appropriation to statutory reserve | — | 1,441 | — | — | (1,441) | — | — |
| Appropriation to other reserve | — | — | — | 421 | (421) | — | — |
| | 158,693 | 1,441 | (158,670) | 421 | (887) | (975) | 23 |
| **Balance at 31 December 2020 and 1 January 2021** | 158,693 | 4,780 | (148,670) | 421 | 133,449 | — | 148,673 |
| **Comprehensive income** | | | | | | | |
| Profit for the year | — | — | — | — | 53,325 | — | 53,325 |
| Total comprehensive income | — | — | — | — | 53,325 | — | 53,325 |
| **Transactions with owner** | | | | | | | |
| Appropriation to statutory reserve | — | 483 | — | — | (483) | — | — |
| Appropriation to other reserve | — | — | — | 517 | (517) | — | — |
| | — | 483 | — | 517 | (1,000) | — | — |
| **Balance at 31 December 2021** | 158,693 | 5,263 | (148,670) | 938 | 185,774 | — | 201,998 |

*Notes:*

(i) Share premium represents the difference between the net asset value of the subsidiaries and the nominal value of Company's shares issued in exchange for the acquisition of Yixiang Graphite and Yixiang New Energy pursuant to the Reorganization.

(ii) In accordance with the relevant laws and regulations of the PRC, the PRC subsidiaries are required to appropriate 10% of its profit after tax, prepared in accordance with the accounting regulation in the PRC, to the statutory reserve fund until the statutory reserve balance reaches 50% of the registered capital. Such reserve may be used to reduce any losses incurred or for capitalization as paid-up capital.

(iii) Capital reserve represents the combined share capital of the subsidiaries comprising the Group before the completion of the Reorganization, and contributed surplus after the completion of Reorganization.

(iv) Pursuant to the relevant PRC regulations, the Group is required to transfer safety fund at fixed rates based on the production volume, to a specific reserve account. The fund could be utilized when expenses or capital expenditures on safety measures are incurred. The amount of safety fund utilized would be transferred from the specific reserve account to retained earnings.

*The Company*

| | **Share premium** | **Accumulated losses** | **Total** |
|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Balance at 3 August 2020 (date of incorporation)** | — | — | — |
| **Comprehensive loss** | | | |
| Loss for the year | — | (8,011) | (8,011) |
| Total comprehensive loss | — | (8,011) | (8,011) |
| **Transaction with the owner** | | | |
| Reorganization *(Note 1.2)* | 158,693 | — | 158,693 |
| | 158,693 | — | 158,693 |
| **Balance at 31 December 2020** | 158,693 | (8,011) | 150,682 |
| **Balance at 1 January 2021** | 158,693 | (8,011) | 150,682 |
| **Comprehensive loss** | | | |
| Loss for the year | — | (7,644) | (7,644) |
| Total comprehensive loss | — | (7,644) | (7,644) |
| **Balance at 31 December 2021** | 158,693 | (15,655) | 143,038 |

**25 Related party transactions and balance with non-controlling interests**

***(a) Balances and transactions with related parties***

For the purposes of these Historical Financial Information, parties are considered to be related to the Group if the party has the ability, directly or indirectly, to exercise significant influence over the Group in making financial and operating decisions. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or entities that are controlled or jointly controlled by a person who is a related party of the Group. Parties are also considered to be related if they are subject to common control.

The directors are of the view that the following individuals were related parties that had transactions or balances with the Group during the Track Record Period:

| **Name** | **Relationship with the Group** |
|---|---|
| Mr. Zhao Liang | Shareholder and executive director |
| Mr. Zhao Changshan | Former shareholder and close family member of Mr. Zhao Liang |
| Mr. Zhao Changhai | Close family member of Mr. Zhao Liang |
| Mr. Zhao Ming | Former shareholder and close family member of Mr. Zhao Liang |
| Ms. Zhang Yuqin | Close family member of Mr. Zhao Liang |
| Ms. Sun Yao | Close family member of Mr. Zhao Liang |

*The Group*

| | **As at 31 December** | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Non-trade balances** | | | |
| Amounts due to shareholders | | | |
| — Mr. Zhao Liang | 42,645 | 42,957 | 73,127 |
| — Mr. Zhao Changshan | 26,092 | 26,092 | — |
| — Mr. Zhao Ming | 8,759 | 8,759 | — |
| Amounts due to other related party | | | |
| — Mr. Zhao Changhai | 200 | — | — |
| | 77,696 | 77,808 | 73,127 |

[The amount due to Mr. Zhao Liang amounted to HK$73,127,000 as at 31 December 2021 would be settled by way of capitalization, and will take place immediately prior to the [REDACTED] on the [REDACTED].]

*The Company*

| | As at 31 December | |
|---|---|---|
| | **2020** | **2021** |
| | *RMB'000* | *RMB'000* |
| **Non-trade balances** | | |
| Amount due to a shareholder | | |
| — Mr. Zhao Liang | 3,983 | 5,334 |

Amounts due to related parties were unsecured, interest free and repayable on demand.

*Transactions with related parties*

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Employee benefit expenses received as employees of the Group** | | | |
| Mr. Zhao Changshan | 702 | 720 | 720 |
| Mr. Zhao Changhai | 125 | 146 | 129 |
| Ms. Zhang Yuqin | 702 | 720 | 720 |
| Ms. Sun Yao | 756 | 756 | 756 |

Terms of employment are determined and agreed between the relevant parties.

As at 31 December 2019, other borrowings of RMB1,512,000 were secured by the guarantee provided by Mr. Zhao Liang.

***(b) Balance with non-controlling interests***

As at 31 December 2020, the Group has an amount due to non-controlling interests of RMB4,941,000 which was non-trade in nature, unsecured, interest-free and repayable on demand.

***(c) Key management personnel compensation***

Key management includes directors and the senior management of the Group. The compensation paid or payable to key management for employee services is shown below:

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Wages, salaries, bonuses and allowances | 1,513 | 1,323 | 2,448 |
| Pension costs — defined contribution plans | 22 | — | 12 |
| | 1,535 | 1,323 | 2,460 |

**26 Notes to the consolidated statements of cash flows**

***(a) Reconciliation of profit before income tax to cash generated from operations:***

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| **Cash flows from operating activities** | | | |
| Profit before income tax | 31,723 | 48,445 | 60,839 |
| Adjustments for: | | | |
| Depreciation of property, plant and equipment | 5,751 | 7,496 | 10,893 |
| Depreciation of right-of-use assets | 311 | 333 | 907 |
| Amortization of mining rights | 813 | 1,837 | 1,108 |
| Amortization of other intangible assets | — | 8 | 20 |
| (Gains)/losses on disposal of property, plant and equipment, net | (95) | 335 | (12) |
| (Reversal of)/provision for impairment of financial assets | (194) | 349 | 1,463 |
| Finance costs | 435 | 778 | 834 |
| Finance income | (12) | (18) | (54) |
| Operating profit before working capital changes | 38,732 | 59,563 | 75,998 |
| **Changes in working capital** | | | |
| Trade and bills receivables | (2,230) | (47,580) | 10,755 |
| Deposits, prepayments and other receivables | 815 | (2,820) | (1,156) |
| Inventories | (5,742) | 9,431 | 7,118 |
| Trade payables | (3,805) | 4,805 | (2,357) |
| Accruals and other payables | (7,386) | 3,252 | (1,655) |
| Contract liabilities | (227) | 9,315 | (4,448) |
| **Net cash generated from operations** | 20,157 | 35,966 | 84,255 |

***(b) In the consolidated statements of cash flows, proceeds from disposal of property, plant and equipment comprise:***

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Net book amount | 423 | 1,745 | 30 |
| Gains/(losses) on disposal of property, plant and equipment, net | 95 | (335) | 12 |
| Proceeds from disposal of property, plant and equipment | 518 | 1,410 | 42 |

***(c) The reconciliation of liabilities arising from financing activities***

| | **Borrowings** | **Amounts due to related parties and non-controlling interests** | **Leases** | **Total** |
|---|---|---|---|---|
| | *RMB'000* | *RMB'000* | *RMB'000* | *RMB'000* |
| **At 1 January 2019** | 4,255 | 75,074 | — | 79,329 |
| Proceeds from bank and other borrowings | 12,540 | — | — | 12,540 |
| Repayments of bank borrowings | (639) | — | — | (639) |
| Advances from related parties | — | 31,424 | — | 31,424 |
| Repayments to related parties | — | (28,802) | — | (28,802) |
| Repayments of principal elements of lease liabilities | — | — | (959) | (959) |
| Interest paid | (422) | — | (13) | (435) |
| Non-cash items | | | | |
| Interest expense | 422 | — | 13 | 435 |
| Addition — leases | — | — | 1,803 | 1,803 |
| **At 31 December 2019 and 1 January 2020** | 16,156 | 77,696 | 844 | 94,696 |
| Proceeds from bank and other borrowings | 18,500 | — | — | 18,500 |
| Repayments of bank borrowings | (16,156) | — | — | (16,156) |
| Advances from related parties | — | 9,681 | — | 9,681 |
| Repayments to related parties | — | (9,569) | — | (9,569) |
| Repayments of principal elements of lease liabilities | — | — | (841) | (841) |
| Interest paid | (635) | — | (36) | (671) |
| Non-cash items | | | | |
| Interest expense | 635 | — | 36 | 671 |
| Addition — leases | — | — | 2,142 | 2,142 |
| Reorganization *(Notes 1.2(g) and (h))* | — | 4,941 | — | 4,941 |
| **At 31 December 2020 and 1 January 2021** | 18,500 | 82,749 | 2,145 | 103,394 |
| Proceeds from bank borrowings | 3,000 | — | — | 3,000 |
| Repayments of bank borrowings | (11,500) | — | — | (11,500) |
| Advances from related parties | — | 1,351 | — | 1,351 |
| Repayments to related parties | — | (6,032) | — | (6,032) |
| Acquisition of non-controlling interests pursuant to Reorganization | — | (4,941) | — | (4,941) |
| Repayments of principal elements of lease liabilities | — | — | (1,120) | (1,120) |
| Interest paid | (721) | — | — | (721) |
| Non-cash items | | | | |
| Interest expense | 721 | — | — | 721 |
| Addition — leases | — | — | 501 | 501 |
| **At 31 December 2021** | 10,000 | 73,127 | 1,526 | 84,653 |

**27 Commitments**

| | Year ended 31 December | | |
|---|---|---|---|
| | **2019** | **2020** | **2021** |
| | *RMB'000* | *RMB'000* | *RMB'000* |
| Commitments for the | | | |
| — Acquisition of plant and equipment | — | 3,400 | — |

**28 Dividend**

No dividend has been paid or declared by the Company since its incorporation and up to the date of this report.

**29 Contingencies**

The Group did not have any material contingent liabilities as at 31 December 2019, 2020 and 2021.

**30 Subsequent events**

Save as disclosed in Note 24 to the consolidated financial statements, there are no material subsequent events undertaken by the Company or by the Group after 31 December 2021 and up to the date of this report.

## III SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements have been prepared by the Company or any of the companies now comprising the Group in respect of any period subsequent to 31 December 2021 and up to the date of this report. No dividend or distribution has been declared or made by the Company in respect of any period subsequent to 31 December 2021.

*The information set out in this Appendix II does not form part of the Accountant's Report from PricewaterhouseCoopers, Certified Public Accountants, the reporting accountant of our Company, as set out in Appendix I to this document, and is included herein for illustrative purpose only. The unaudited [REDACTED] financial information should be read in conjunction with the sections headed "Financial Information" and "Appendix I — Accountant's Report".*

## UNAUDITED [REDACTED] STATEMENT OF ADJUSTED CONSOLIDATED NET TANGIBLE ASSETS

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

# Independent Technical Report on the Yixiang Graphite Project

# China Graphite Group Limited

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**SRK Project Number YIX001**

[●] 2022

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## EXECUTIVE SUMMARY

SRK Consulting (Hong Kong) Limited (SRK) has been commissioned by China Graphite Group Limited (China Graphite or the Company) to prepare an Independent Technical Report (ITR or Report) on the Yixiang Graphite Project (the Project). The Project comprises the Beishan graphite mine (the Mine), a beneficiation plant and a spherical graphite processing plant, located in Yanjun Farm, Luobei County, Heilongjiang Province of the People's Republic of China (PRC). The Mine and the spherical graphite processing plant are held by Yixiang New Energy Materials Co., Ltd., while the beneficiation plant is held by Yixiang Graphite Co., Ltd. Both companies are wholly owned subsidiaries of China Graphite.

SRK understands that this Report will be included in a document relating to an [REDACTED] of [REDACTED] in the Company and associated capital raising on The Stock Exchange of Hong Kong Limited (Stock Exchange). This Report has been prepared in accordance with the Listing Rules of the Stock Exchange, which permit reporting in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). In addition, the Report has been prepared to the standard of, and is considered by SRK to be, a Technical Assessment under the guidelines of the 2015 edition of the Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets (the VALMIN Code).

The scope of work for this Report includes a review of the following technical aspects relating to the Project:

- Geology and Mineral Resource
- Mining and Ore Reserve
- Beneficiation and spherical graphite processing
- Environmental and social aspects
- Market study
- Capital and operating costs.

A risk assessment has also been included.

### Work program

SRK has reviewed information supplied by China Graphite, including production records, sales contracts, technical studies, a market study, drilling information, test reports and various other documents. SRK's consultants visited the Project site in July and August 2020 and January 2022. This Report documents the results of SRK's review of the Project.

### Yixiang Graphite Project

Commercial operations commenced at the Yixiang Graphite Project in 2006, with the beneficiation plant, located at the Luobei Graphite Industrial Park, processing graphite ores from third parties and producing flake graphite concentrates. The throughput capacity in 2006 was 0.1 Mtpa (million tonnes per annum). In 2011, the spherical graphite processing plant was constructed, and production commenced. Spherical graphite was manufactured from flake graphite concentrates produced from the beneficiation plant. In 2013, debottlenecking and upgrades at the beneficiation plant led to the throughput capacity being raised to 0.4 Mtpa. In 2019, a mining license was granted, with an approved annual graphite mining capacity of 0.5 Mtpa (the Mine). The Mine is located at Beishan 10 km to the northwest of the beneficiation plant and the spherical graphite processing plant complex. The mining license covers an area of 0.2615 $km^2$, with approved elevations of between 274 and 150 m above sea level (masl). In 2019, first ore was mined from the Mine and the beneficiation operation began to process graphite ore from China Graphite's own mine in addition to ores from third parties. By the third quarter of 2021, further expansion of the beneficiation plant was completed. The upgraded plant has a throughput capacity of 0.5 Mtpa. The spherical graphite processing graphite is currently being upgraded. The upgrade is expected to be completed by 2022 and the spherical graphite production capacity will be raised to 6,500tpa.

The major products from the Project include flake graphite concentrate and spherical graphite. As by-products of the spherical graphite processing, micro graphite powder and high-purity graphite powder are also produced. At the Mine, marble rock is also extracted as a by-product of graphite ore mining.

Since its inception in 2006, China Graphite has grown from being able to produce a graphite concentrate only to a company with capacity to produce a wide range of products (graphite concentrate, spherical graphite, micro graphite powder, high-purity graphite powder and marble).

SRK considers the Project to be a successful vertically integrated operation, spanning mining and beneficiation to spherical graphite processing. China Graphite is proposing to grow its operations.

Key initiatives include:

**Exploration:** The current mining license restricts graphite ore mining capacity to 0.5 Mtpa (maximum) and to a maximum mining depth of 150 masl. The Company plans to conduct additional technical studies and prepare relevant documents to support an application to increase the graphite ore mining capacity to 1.0 Mtpa and lower the minimum mining depth to 60 masl when the market conditions are favorable.

**Mining:** The Company will ramp up the graphite ore mining capacity to 0.5 Mtpa by 2023.

**Beneficiation:** The Company will construct a new beneficiation plant with a throughput capacity of 0.5 Mtpa in proximity to the Mine to increase total beneficiation capacity to 1.0 Mtpa.

**Spherical graphite processing:** The Company will upgrade the existing spherical graphite plant by installing new equipment and build a spherical graphite processing plant at Beishan with a target flake graphite processing capacity of 17,000 t to produce 6,000 t spherical graphite and 10,000 t micro graphite powder.

**New products:** The Company will strengthen its research and development efforts in order to launch new products such as coated spherical graphite and graphitized spherical graphite for the anode material market.

China Graphite has developed a financial model based on these key initiatives and is seeking to [REDACTED] and [REDACTED] to [REDACTED] the Company's development plan and initiatives.

## Geology and exploration

The Mine area is underlain by rocks of the Proterozoic Dapandao Group that consists of quartzo-feldspathic schist, graphitic schist, feldspathic schist, impure crystalized marble and a subordinate amount of quartzite and migmatite. The metamorphic rocks trend north-northeast and dip gently to moderately to the west-northwest. The graphitic schists are micaceous, fine grained, silvery gray with a schistose texture, and boudinage features. Graphitic schist and marble are the target economic units. Flake graphite is hosted by micaceous graphitic schist, with at least ten graphitic schist bands identified. These bands trend northwest to north-northeast and extend 50–380 m along strike and 80–300 m down dip. Most of the graphite flake size is classified as fine to very fine (<147 μm).

Exploration carried out in 2015 included geological mapping and a very low frequency electromagnetic geophysical survey. The identified targets were tested by trenching and diamond drilling at a nominal 100 m by 50 m spacing. The 2-year exploration program totalled approximately 6,000 m (36 holes) of diamond drilling and 10,000 $m^3$ of trench excavation.

In 2020, SRK conducted a review of the previous exploration work and recommended a verification program. The work program comprised a topographical survey, geological mapping, trenching and 1,647 m (11 holes) of diamond drilling.

## Mineral Resource estimation

Based on the verified exploration results, SRK conducted geological modeling and performed Mineral Resource estimation. The graphite and marble Mineral Resource for the Yixiang Graphite Project within the elevation limits of the mining license as at 31 December 2021, being reported in accordance with the JORC Code (2012) are presented in Table ES-1 and Table ES-2, respectively.

**Table ES-1: Graphite Mineral Resource Statement within the approved mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Mineral Resource Category | Tonnage *(kt)* | TGC *(%)* |
|---|---|---|
| Indicated | 13,753 | 9.59 |
| Inferred | 997 | 11.24 |
| Total | 14,750 | 9.70 |

*Notes:*

- The Mineral Resources are reported on an in situ basis at a 3.5% total graphitic carbon (TGC) cut-off.
- Bulk density: weathered zone: 2.31 t/$m^3$; M1:2.70 t/$m^3$; M: 2.76 t/$m^3$; M3:2.69 t/$m^3$; M4:2.71 t/$m^3$; M5:2.70 t/$m^3$; M6:2.62 t/$m^3$; M7:2.59 t/$m^3$; M8:2.63 t/$m^3$.
- Tonnages are reported in metric units, and grades are reported in percentage TGC. Tonnages and grades are rounded appropriately. Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

**Table ES-2: Marble Mineral Resource Statement within mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Mineral Resource Category | Tonnage *(kt)* |
|---|---|
| Indicated | 1,541 |
| Inferred | 582 |
| Total | 2,072 |

*Notes:*

- Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

As advised by the Company's legal advisers, upon completion of the agreed transfer process regarding an increase in mining scope under current applicable PRC Laws, there is no material legal impediment for China Graphite to obtain the mining rights below the current approved mining limit. On this basis, SRK considers there is a reasonable prospect for eventual economic extraction of material below 150 masl. The graphite and marble Mineral Resource for the Yixiang Graphite Project below the mining license elevation limits as at 31 December 2021 are presented in Table ES-3 and Table ES-4, respectively.

**Table ES-3: Graphite Mineral Resource Statement below the approved mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Mineral Resource Category | Tonnage *(kt)* | TGC *(%)* |
|---|---|---|
| Indicated | 20,937 | 10.59 |
| Inferred | 8,393 | 11.16 |
| Total | 29,330 | 10.75 |

*Notes:*

- The Mineral Resources are reported on an in situ basis at a 3.5% TGC cut-off.
- Bulk density: weathered zone: 2.31 $t/m^3$; M1:2.70 $t/m^3$; M2: 2.76 $t/m^3$; M3:2.69 $t/m^3$; M4:2.71 $t/m^3$; M5:2.70 $t/m^3$; M6:2.62 $t/m^3$; M7:2.59 $t/m^3$; M8:2.63 $t/m^3$.
- Tonnages are reported in metric units, grades are reported in percentage TGC. Tonnages and grades are rounded appropriately. Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

**Table ES-4: Marble Mineral Resource Statement below the approved mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Mineral Resource Category | Tonnage<br>*(kt)* |
|---|---|
| Inferred | 135 |

*Notes:*

- Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

**Mining and Ore Reserve**

The Mine commenced overburden stripping in 2019 and produced first ore in the same year. The Mine has adopted an open pit mining method, consisting of conventional drilling, blasting, loading and hauling, with a target annual graphite ore production rate of 0.5 Mtpa. In 2019, the total materials moved was 1.02 Mt, and reached 1.65 Mt and 1.55 Mt in 2020 and 2021 respectively. The production history over the past three years has provided China Graphite with a solid understanding of the likely operating conditions, mining equipment required and the operability of the pit, as well as the beneficiation plant's response to the mined ore.

SRK conducted an optimization using the Lerchs-Grossman 3D algorithm in Whittle software based on the previous technical studies, including a Chinese preliminary design, considered by SRK equivalent to a pre-feasibility study and current operational conditions as well as SRK's Mineral Resource estimate. Based on the results and detailed mine design, the production profile has been rescheduled. The life-of-mine (LoM) is 20 years. The average graphite grade is 10.15% TGC and the LoM stripping ratio is 1.15.

Applying the Modifying Factors, including an economic viability analysis, the graphite and marble Ore Reserve at the Yixiang Graphite Project as reported as at 31 December 2021 in accordance with the JORC Code (2012) is presented in Table ES-5 and Table ES-6, respectively, inclusive of Mineral Resources. The economically mineable parts of the Indicated Mineral Resources within the open pit design and the current mining license limits, allowing for ore loss and dilution, were classified as Probable Ore Reserves.

**Table ES-5: Graphite Ore Reserve Statement within mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Type | Ore Reserve Category | Tonnage<br>*(kt)* | TGC<br>*(%)* |
|---|---|---|---|
| Graphite | Probable | 9,549 | 10.15 |

**Table ES-6: Marble Ore Reserve Statement within the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Type | Ore Reserve Category | Tonnage |
|---|---|---|
| | | *(kt)* |
| Marble | Probable | 1,152 |

**Metallurgy and mineral processing**

The Project includes a beneficiation plant and a spherical graphite processing plant, located in the Luobei Industrial Park, 10 km to the west of the Mine. The beneficiation plant uses a conventional flowsheet that includes crushing, grinding and a single-stage rougher, single-stage scavenger, 10-stage regrinding on primary (rougher) concentrate followed by 11-stage cleaning and collective middlings recycling. The graphite concentrate undergoes 2-stage 'filtering and drying' to dewater the product. This product is then packaged and stored as flake graphite concentrate. The average graphite concentrate grades range between 94% and 95% TGC and the graphite recovery is above 90%. Approximately 75% of the flake graphite concentrate produced is sold to customers directly and the remaining 25% is used as feedstock for the spherical graphite processing plant.

The operation's history of steady plant capacity has allowed the annual throughput capacity to be increased from the initial 0.1 Mtpa to the current 0.4 Mtpa. The throughput capacity has been ramped up and reached 0.5 Mtpa by the third quarter of 2021. Prior to the Mine commencing production in 2019, the feed ore was fully sourced from third parties.

The spherical graphite processing plant commenced operation in 2013. It has four workshops. Facilities include a micronizing and rounding circuit, purification circuit, acid-and-alkali circuit, drying circuit, iron removal circuit, packaging plant and maintenance workshop. In 2019, an additional production line was installed. The current production capacity is 5,200 tpa of spherical graphite product and will be raised to 6,500 tpa when the upgrade is completed by 2022. The major product is spherical graphite (10 μm radius) and by-products are micro graphite powder and high-purity graphite powder.

**New beneficiation plant development plan**

China Graphite's overall strategy is to establish a vertically integrated production capacity at Beishan (from graphite ore mining to beneficiation and spherical graphite processing) and to maintain the beneficiation and spherical graphite processing operation at the current site. China Graphite plans to implement this strategy in phases. The first phase of the strategic development is to establish a 0.5 Mtpa beneficiation plant at Beishan to build up a combined beneficiation capacity of 1.0 Mtpa by 2025, with 0.5 Mtpa capacity at Beishan and 0.5 Mtpa at the current plant. Half of the feed ore will be sourced from the Mine and the remaining 50% will be from third parties.

**Capital and operating costs**

China Graphite has allocated RMB218.6 million in capital expenditure to be incurred in the next four years. An allowance of RMB0.8 million has been included for purchasing additional mining equipment for the development of the mining operation. The existing spherical graphite plant is currently being upgraded to an annual production capacity of 6,500 t spherical graphite. RMB3.1 million is to be incurred in 2022. The Project has a LoM of 20 years and as such the equipment at the beneficiation plant and spherical graphite processing plant will require ongoing replacement and refurbishment over that period. China Graphite has budgeted approximately RMB5-6 million per year as the sustaining capital for major plant and equipment replacement, as well as refurbishment.

China Graphite has prepared a capital cost estimate for the construction of the 0.5 Mtpa new beneficiation plant in the first phase of strategic development at Beishan. The cost estimate incorporates a land acquisition cost (RMB34.0 million) and a quotation from an EPCM company, indicating that the cost for the plant construction, equipment procurement and installation totals RMB72.0 million. Other costs include RMB2.0 million.

In the second phase of development at Beishan, China Graphite will construct a spherical graphite processing plant, with an annual flake graphite processing capacity of 17,000 t. The spherical graphite plant will produce 6,000 t of spherical graphite and 10,000 t of micro graphite powder annually. The cost estimate for constructing this plant is RMB93.2 million.

China Graphite has prepared an operating cost forecast over the LoM. In 2023, when all of the graphite ore is sourced from the Beishan Mine, the cash operating costs for mining cost (per tonne of graphite ore) are forecast at RMB/t 18.8, while the cash costs for flake graphite concentrate and spherical graphite are forecast at RMB/t 1,161 and RMB/t 10,212, respectively.

**Environment, permits and social impacts**

The status of the key operational licenses and permits for the Project is shown in Table ES-9.

**Table ES-9: Status of key operational licenses and permits**

| Business License | Mining License | Safety Production Permit | Real Estate Certificate | Water Use Permit | Site Discharge Permit |
|---|---|---|---|---|---|
| Granted | Granted | Granted | Granted | Granted | Granted |

*Note:* The water use permit as provided to SRK relates to surface water abstraction from the Yadan River and does not include groundwater at the plant or water abstraction from the tributary of the Yadan River.

In addition to the real estate certificates, SRK has sighted two approvals for use of forest land and two pre-approvals of land use for Project construction. The status of the environmental assessments and approvals for the Yixiang Graphite Project is shown in Table ES-10.

**Table ES-10: Status of environmental assessments and approvals**

| Environmental Impact Assessment Report (EIA) | Approval for EIA | Environmental Final Checking and Acceptance Approval |
|---|---|---|
| Approved | Approved | Approved |

Based on its review, SRK opines that the Environmental Impact Assessment (EIA) report for the Project has been compiled in accordance with the relevant Chinese laws and regulations.

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## DISCLAIMER

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (Hong Kong) Limited (SRK) by China Graphite Group Limited (China Graphite). The opinions in this Report are provided in response to a specific request from China Graphite to do so. SRK has exercised all due care in reviewing the supplied information. While SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this Report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

## GLOSSARY

| Abbreviation | Meaning |
|---|---|
| ° | Degrees |
| °C | degrees Celsius |
| AIG | Australian Institute of Geoscientists |
| ARD | acid rock drainage |
| asl | above sea level |
| AusIMM | Australasian Institute of Mining and Metallurgy |
| CaO | calcium oxide |
| cm | Centimeters |
| CRM | Certified Reference Material |
| EIA | Environmental Impact Assessment |
| EPCM | Engineering, Procurement and Construction Management |
| EPMP | Environmental Protection and Management Plan |
| ESHS | Environmental, Social, Health and Safety |
| EU | European Union |
| FCA | Environmental Final Check and Acceptance |
| Filtering and drying | filtering, dehydration and heat-drying are employed to dry the product. Dust and tiny particles are also removed during the heat-drying |
| IDW | inverse distance weighted |
| IFC | International Finance Corporation |
| [REDACTED] | [REDACTED] |
| ITR | Independent Technical Report |
| JORC Code | 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves |

| Abbreviation | Meaning |
|---|---|
| km | Kilometers |
| $km^2$ | square kilometers |
| LoM | life-of-mine |
| m | Meters |
| $m^2$ | square meters |
| $m^3$ | cubic meters |
| mm | Millimeters |
| masl | meters above sea level |
| MPa | Megapascals |
| Mtpa | million tonnes per annum |
| OHS | Occupational Health and Safety |
| OK | Ordinary Kriging |
| PPE | personal protective equipment |
| PRC | People's Republic of China |
| QA/QC | Quality Assurance and Quality Control |
| RMB | Chinese Yuan Renminbi |
| RQD | Rock Quality Designation |
| Ruifa | Harbin Ruifa Mineral Exploration Co., Ltd. |
| Scavenging | Collection of minerals that are attached to the graphite and could not be further processed. Such minerals shall be pumped away to a previous stage for re-possessing. |
| SMU | selective mining unit |
| SRK | SRK Consulting (Hong Kong) Limited |
| Stock Exchange | The Stock Exchange of Hong Kong Limited |
| swath plot | A swath plot shows the average grade for the blocks in the swath, along with the average sample values in the swath. Swath plots are an common validation tool for providing comparisons between sample points and estimated values to identify any potential bias. |
| t | Tonnes |

| Abbreviation | Meaning |
|---|---|
| $t/m^3$ | tonnes per cubic meter |
| TGC | total graphitic carbon |
| the SRK Group | SRK Global Limited |
| tpa | tonnes per annum |
| TSF | tailings storage facility |
| VLF-EM | very low-frequency electromagnetic |
| WRD | waste rock dump |
| WSCP | Water and Soil Conservation Plan |

## 1 INTRODUCTION AND SCOPE OF REPORT

SRK Consulting (Hong Kong) Limited (SRK) is an associate company of the international group holding company, SRK Global Limited (the SRK Group). SRK has been commissioned by China Graphite Group Limited (China Graphite, hereafter also referred to as the Company) to prepare an Independent Technical Report (ITR or the Report) on the Yixiang Graphite Project (the Project).

The Project comprises the Beishan graphite mine (the Mine), a beneficiation plant and a spherical graphite processing plant, located in Yanjun Farm, Luobei County, Heilongjiang Province of the People's Republic of China (PRC). The Mine and the spherical graphite processing plant are held by Yixiang New Energy Materials Co., Ltd, while the beneficiation plant is held under Yixiang Graphite Co., Ltd. Both companies are wholly owned subsidiaries of China Graphite.

### 1.1 Reporting standard

SRK understands that this Report will be included in a document relating to [REDACTED] of [REDACTED] in the Company and associated capital raising on the Hong Kong Stock Exchange (Stock Exchange). This Report is to be prepared in accordance with the Listing Rules of the Stock Exchange, which permits reporting in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

In addition, the Report has been prepared to the standard of, and is considered by SRK to be, a Technical Assessment under the guidelines of the VALMIN Code (2015).

The authors of this Report are Members or Fellows of either the Australasian Institute of Mining and Metallurgy (AusIMM) and/or the Australian Institute of Geoscientists (AIG) and, as such, are bound by both the VALMIN Code and JORC Codes.

For the avoidance of doubt, this Report has been prepared according to:

- the 2015 edition of the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (VALMIN Code)
- the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

All references to currency in this Report are expressed in terms of Chinese Yuan Renminbi (RMB). All years are calendar years (1 January to 31 December). The projection of all coordinates relies on the XIAN 80 44N datum.

### 1.2 Scope of work

The scope of work for this Report includes a review of the following technical aspects relating to the Project:

- Geology and Mineral Resource
- Mining and Ore Reserve
- Beneficiation and spherical graphite processing
- Environmental and social aspects
- Market study and contracts
- Capital and operating costs.

A risk assessment has also been included.

### 1.3 Project team

This Report has been prepared by a multidisciplinary team, comprising consultants and associates from various SRK offices. Their roles, responsibilities and involvement in the ITR are listed in Table 1–1. The lead office for this Report is SRK Consulting (Hong Kong) Limited.

**Table 1–1: SRK team members and responsibility**

| Consultant/ Associate | Role | Office | Date of site visit |
|---|---|---|---|
| (Gavin) Heung Ngai Chan | Project management; geology and Mineral Resource estimation; economic viability review; Competent Person for Mineral Resources and assuming overall responsibility | SRK Hong Kong | 4/1/2022 |
| Jinhui Liu | Geology review and Mineral Resource estimation | SRK Hong Kong | 15–19/7/2020, 26–27/08/2020 |
| Falong Hu | Mining review and Ore Reserves estimation, Competent Person on Ore Reserve | SRK China | 15–19/7/2020 |
| Nan Xue | Environment, permitting and social impact review | SRK China | 15–19/7/2020 |
| Lanliang Niu | Beneficiation and spherical graphite processing review | SRK China | 15–19/7/2020 |
| Michael Cunningham | Peer review — Mineral Resource and Overall Report | Associate Principal Consultant | No site visit |
| Simon Walsh | Peer review — Metallurgy and mineral processing | Associate Principal Consultant | No site visit |

| Consultant/ Associate | Role | Office | Date of site visit |
|---|---|---|---|
| Alex Thin | Peer review — Mining | SRK Australasia | No site visit |

Details of the consultants and associate involved in the preparation of this Report is provided below.

**(Gavin) Heung Ngai Chan, General Manager (Hong Kong) and Principal Consultant (Geology), PhD, FAIG**

Gavin has over 17 years of academic and commercial experience in geosciences and has worked on numerous deposit styles including precious metals, base metals, industrial minerals and dimension stones. Gavin has previously worked in China, Africa, Europe, Southeast Asia and Australia. His expertise lies in geological mapping, geological modelling, resource estimation, geological due diligence, valuation, fatal flaw and project analysis.

**Jinhui Liu, Principal Consultant (Geology), PhD (Mining Engineering), MSc (Ore Geology), MAIG**

Jinhui has over 17 years' experience in geological modelling, resource estimation and ore reserve estimations. He is experienced in the review of geology and resource projects in a variety of deposit styles. He has completed many due diligence projects in various countries and prepared public reports for the Hong Kong, Australia and Toronto Stock Exchanges.

**Falong Hu, Senior Consultant (Mining), BEng, MAusIMM**

Falong holds a Bachelor's degree in Mining Engineering from China Central South University. Before joining SRK he worked as an onsite and head office mining engineer at Sino Gold Mining Limited (which later merged with Eldorado Gold Corp.) and Silvercorp Metals Inc. He is familiar with underground mine production systems and has been involved in mine design, scheduling, and development; underground mining production; longhole blasting; rock mechanics; ventilation; backfill; and cost estimation. He is also proficient in digital modelling using Gemcom Surpac.

**Lanliang Niu, Principal Consultant (Processing), BEng, MAusIMM**

Lanliang has over 30 years' experience in processing testing and studies, production management and technical consultancy service. Lanliang has been involved in the new development and application of processing technologies, facilities, and reagents and has received two national awards for his achievements in this area. Since joining SRK, he has been involved in hundreds of independent technical review projects for fund raising and acquisition and has accumulated profound experience on technical review of mining project.

**Nan Xue, Senior Consultant (Environmental) MSc, MAusIMM**

Nan holds a Master's degree in environmental science from Nankai University in Tianjin, China. He has over 10 years' experience in environmental impact assessments (EIAs), environmental planning and environmental management. He has been involved in a number of large EIA projects and pollution source surveys for SINOPEC, as well as the environmental planning project funded by UNDP. He has particular expertise in construction project engineering analysis, pollution source calculations and impact predictions. Nan also has been involved in many due diligence projects.

**Michael Cunningham, Associate Principal Consultant (Geology), BSc Hons (Geoscience), PhD (Geology), MAusIMM, MAIG, MGSA, FGSL, MMGEI**

Michael (Mike) has over 15 years' experience as a geologist. His post-doctoral research involved evaluation and modelling of active oceanic slope processes and related hazards. Mike has worked in the Irish and British civil services. He has consulted on projects in Australia and overseas (Indonesia, Laos, Sri Lanka, Kyrgyzstan, Mongolia, Tanzania, Congo, Liberia and Malaysia), and on a variety of commodities including gold, iron, graphite, lead-zinc, antimony and coal. His expertise covers 3D modelling of vein, epithermal and banded iron formation (BIF) styles of mineralisation, drill targeting, modelling, Mineral Resource estimation, and modelling and evaluation of Exploration Targets. Mike has also been involved in preparation of Independent Geologists Reports (IGRs), due diligence and valuation studies, and is a well accomplished project manager.

**Simon Walsh, Associate Principal Consultant (Metallurgy and Processing) BSc, MBA, MAusIMM**

Simon has over 25 years in the metallurgy and processing industry. He has extensive design and operational expertise across a range of mineral processing and hydrometallurgical processes, including nickel, cobalt, alumina, copper, gold, zinc, lead and iron ore. His broad range of skills and experience includes management, supervisory and technical roles in plant operations, commissioning, troubleshooting, process simulation, acting as technical lead or project manager for studies from scoping level through to detailed design engineering, metallurgical testwork management and competent person reporting. Since 2007, Simon has worked in a consulting role providing metallurgical testwork, processing, infrastructure capital and operating cost support for independent technical reviews, due diligence assessments and other forms of competent person reporting. In this time, he has contributed to over 200 reviews of varying nature across a range of mineral commodities.

**Alex Thin, Principal Consultant (Mining) BEng Hons (Mining), FAusIMM, FIMMM, FSAIMM**

Alex is an experienced mining professional, with over 30 years' experience. His strategy and leadership experience spans feasibility studies, mineral asset audits and evaluations, independent technical reports and techno-economic studies. His industry experience spans operational (underground and open pit), technical, consulting and corporate within the metalliferous resources sector, covering precious metals, base metals and bulk commodities.

### 1.4 Effective Date and Publication Date

The Effective Date of this Report is 31 December 2021.

As informed by the Company, as at the Publication Date of this Report, there has been no material change to the status of the Project since the Effective Date. This includes no material change to the stated Mineral Resource and Ore Reserve estimates of the Project as outlined elsewhere in this Report.

### 1.5 Work program

SRK's work program completed under this commission included:

- Review of the supplied information
- Site visits by SRK consultants in July and August 2020 and January 2022
- Estimation of Mineral Resources and Ore Reserves
- Preparation of this Report.

### 1.6 Corporate capability

SRK is an independent, international group providing specialised consultancy services. Among SRK's clients are many of the world's mining companies, exploration companies, financial institutions, Engineering, Procurement and Construction Management (EPCM) and construction firms, and government bodies.

Formed in Johannesburg in 1974, the SRK Group now employs some 1,400 staff internationally in over 45 permanent offices in 20 countries on 6 continents. A broad range of internationally recognized associate consultants complements the core staff.

The SRK Group's independence is ensured by the fact that it is strictly a consultancy organization, with ownership by staff. SRK does not hold equity in any projects or companies. This permits SRK's consultants to provide clients with conflict-free and objective support on crucial issues.

### 1.7 Stock Exchange public reports

SRK has prepared many public reports for the Stock Exchange. Selected examples are listed in Table 1–2.

**Table 1–2: Public reports prepared by SRK for disclosure on the Stock Exchange**

| Company | Year | Nature |
|---|---|---|
| Zijin Gold Mining | 2004 | Listing on Stock Exchange |
| Lingbao Gold | 2005 | Listing on Stock Exchange |
| China Coal Energy Company | 2006 | Listing on Stock Exchange |
| Sino Gold Mining Limited | 2007 | Dual Listing on Stock Exchange |
| Xinjiang Xinxin Mining Industry | 2007 | Listing on Stock Exchange |
| United Company RUSAL | 2010 | Listing on Stock Exchange |
| Citic Dameng Holdings | 2011 | Listing on Stock Exchange |
| China Hanking Holdings | 2011 | Listing on Stock Exchange |
| China Nonferrous Metal Mining | 2012 | Listing on Stock Exchange |
| Wise Goal Enterprises | 2013 | Very Substantial Acquisition |
| Future Bright Mining | 2014 | Listing on Stock Exchange |
| Agritrade Resources | 2015 | Very Substantial Acquisition |
| Feishang Non-metals | 2015 | Listing on Stock Exchange |
| China Unienergy | 2016 | Listing on Stock Exchange |
| China Mining Resources | 2016 | Major transaction |
| Pizu Group | 2020 | Major transaction |

*Source: SRK compilation*

### 1.8 Statement of SRK independence

Neither SRK nor any of the project team members of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of SRK.

SRK has no prior association with China Graphite regarding the mineral assets that are the subject of this Report. SRK has no beneficial interest in the outcome of the technical assessment and valuation being capable of affecting its independence.

### 1.9 Legal matters

SRK has not been engaged to comment on any legal matters.

SRK notes that it is not qualified to make legal representations as to the ownership and legal standing of the tenements that are the subject of this Report. SRK has not attempted to confirm the legal status of the tenements with respect to joint venture agreements, local heritage or potential environmental or land access restrictions.

SRK has been provided with legal documentation obtained by China Graphite from Tian Yuan Law Firm. The document, 'PRC Legal Opinion', dated [●], comments on China Graphite's legal rights to the Project, which are the subject of this Report.

SRK's understanding of the current tenure situation is set out in Section 3.3 of this Report.

### 1.10 Warranties

China Graphite has represented in writing to SRK that full disclosure has been made of all material information and that, to the best of its knowledge and understanding, such information is complete, accurate and true.

### 1.11 Indemnities

China Graphite has provided SRK with an indemnity under which SRK is to be compensated for any liability and/or any additional work or expenditure resulting from any additional work required:

- which results from SRK's reliance on information provided by China Graphite or to China Graphite not providing material information; or
- which relates to any consequential extension workload through queries, questions or public hearings arising from this Report.

### 1.12 Reliance on other experts

SRK has not performed an independent verification of the mining license and land titles nor the legality of any underlying agreements that may exist concerning the permits, commercial agreements with third parties or sales contracts and instead has relied on information as provided to SRK by China Graphite's independent legal advisers.

### 1.13 Source of information

This Report is based on information made available to SRK by China Graphite, and on information collected during the site visits.

### 1.14 Consents

SRK consents to this Report being included, in full, in the document, in connection with the [REDACTED], in the form and context in which the technical assessment is provided, and not for any other purpose. SRK provides this consent on the basis that the technical assessment expressed in the Summary and in the individual sections of this Report is considered with, and not independently of, the information set out in the complete report.

### *1.14.1 Practitioner consent*

The competent person who has overall responsibility for this Report and Mineral Resources is Dr. (Gavin) Heung Ngai Chan. He is a Fellow of the Australasian Institute of Geoscientist ("AIG"), and a full-time employee of SRK Consulting (Hong Kong) Limited. Dr. Chan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as defined in the 2012 edition of the JORC Code. (Gavin) Heung Ngai Chan consents to the inclusion in the Report of the Mineral Resources in the form and context which it appears.

The information in this Report that relates to Ore Reserves is based on information compiled by Falong Hu, who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). He is a full-time employee of SRK Consulting (China) Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as defined in the 2012 Edition of the JORC Code. Falong Hu consents to the inclusion in the Report of the Mineral Resources in the form and context which it appears.

### *1.14.2 Stock Exchange requirements*

(Gavin) Heung Ngai Chan meets the requirements of competent person, as set out in Chapter 18 of the Stock Exchange Listing rules. Dr. Chan is a Fellow of good standing of AIG; has more than five years' experience relevant to the style of mineralisation and type of deposit under consideration; is independent of the issuer applying all the tests in section 18.21 and 18.22 of the Listing Rules; does not have any economic or beneficial interest (present or contingent) in any of the reported assets; has not received a fee dependent on the findings of this ITR; is not officer, employee of a proposed officer for the issuer or any group, holding or associated company of the issuer; and takes overall responsibility for the ITR.

## 1.15 Limitations

SRK, after due enquiry and subject to the limitations of this Report hereunder, confirms the following:

- The input, handling, computation, and output of the geological data and Mineral Resource and Ore Reserve information has been conducted professionally and accurately and to the high standards commonly expected within the geoscience profession.

- In conducting this assessment, SRK has assessed and addressed all activities and technical matters that might reasonably be considered to be relevant and material to such an assessment conducted to internationally accepted standards. Based on observations, interviews with appropriate staff and a review of available documentation, SRK is, after reasonable enquiry, satisfied that there are no outstanding relevant material issues other than those indicated in this Report. However, it is impossible to dismiss absolutely the possibility that parts of the site or adjacent properties may give rise to additional issues.

- The conclusions presented in this Report are professional opinions based solely on SRK's interpretations of the documentation received, interviews and conversations with personnel knowledgeable about the site, and other available information, as referenced in this Report. These conclusions are intended exclusively for the purposes stated herein.

For these reasons, prospective readers should make their own assumptions and assessments of the subject matter of this Report. Opinions presented in this Report apply to the site's conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions cannot necessarily apply to conditions and features that may arise after the effective date of this Report, about which SRK had no prior knowledge, nor had the opportunity to evaluate. Certain amounts and percentage figures included in this Report have been subject to rounding adjustments. As a result, any discrepancies in any table or chart between the total shown and the sum of the amounts listed are due to rounding. Where information is presented in thousands or millions of units, amounts may have been rounded up or down.

### 1.16 Consulting fees

SRK's fee for completing this Report is based on a fixed price contract. The fee payable to SRK for this engagement is estimated at approximately HK$[REDACTED]. The payment of that professional fee is not contingent on the outcome of this Report.

## 2 GRAPHITE

Graphite has been declared a strategic mineral by China, the United States of America (USA) and the European Union (EU), due to its potential applications within these jurisdictions, its unique physical and chemical properties and its growing importance in high technology applications and green energy initiatives. The strategic mineral status of graphite also acknowledges the dominance of China.

### 2.1 Graphite characteristics

Graphite is a natural form of carbon (chemical formula, C) and is characterized by its hexagonal crystalline structure. The two main forms of graphite are natural and synthetic.

Graphite's key physical and chemical characteristics include:

- high melting temperature
- stability and strength at high temperatures
- high thermal and electrical conductivity
- chemical inertness
- high resistance to thermal shock
- high conductivity in the solid form and low conductivity in porous foam, cloth and tape forms
- low coefficient of thermal expansion
- good electrical conductivity — it is the only non-metal that is a good conductor of electricity
- high radiation emissivity
- flame retardance
- high compressive strength
- stiffness of the solid form, and flexibility of filament, cloth or tape forms
- high resistance to erosion
- good machinability
- low friction, self-lubrication
- high resistance to chemical attack and corrosion.

Natural and synthetic graphite is processed at temperatures of up to 2,500°C to produce high-purity graphite with up to 99.9% total graphitic carbon (TGC). This permits the introduction of selected promoter elements, such as boron and silicon, into the graphite structure, which enhances its consistency, lubricant properties and conductivity. While crystalline graphite is preferred for making crucibles, amorphous graphite is used in foundry facings, steelmaking and refractories.

Natural graphite also has a low coefficient of friction rendering it suitable for coatings, pencils, powder metallurgy, refractories, lubricants and batteries. Low-quality graphite can also be used in advanced technology applications that were once the domain of synthetic material.

Natural graphite offers significant cost advantages over synthetic graphite but has limited recycling capacity, as it tends to be gradually consumed during use in applications, such as refractories or brake linings. However, recycling applications include renewal of used electrodes or use as a substitute for amorphous graphite. Hence, the use of recycled graphite refractories in such products as brake linings and thermal insulation is growing but, due to the abundance of natural graphite in the world markets, there is currently no great incentive for, or value in, recycling graphite on a mass scale.

Substitution of graphite by other minerals is currently low as no other mineral is so versatile while possessing such unique and important physical and chemical properties.

### 2.2 Flake graphite

For natural graphite, there are three main forms of commercial significance (Harben & Kužvart, 1996):

1. Flake (or crystalline/disseminated flake)

2. Crystalline vein (or lump)

3. Amorphous (microcrystalline).

For the purposes of this Report, SRK has only provided details relating to flake graphite, as this is the only form of graphite occurring at the Project.

The formation of graphite flake occurs from an amorphous precursor in rocks at or beyond amphibolite grade metamorphism. It occurs as flat, plate-like crystals with angular rounded or irregular edges, typically disseminated throughout an originally carbonaceous metasedimentary horizon. Host rocks principally include quartz-mica schist, feldspathic or micaceous quartzite and gneiss.

Coarse and fine or super jumbo to fine lake graphite deposits are usually stratabound, with individual beds or lenses ranging in thickness from 30 cm to more than 30 m, and mineralisation lenses can extend over strike lengths of >2 km or more. Mineralized zones are normally tabular, occasionally lenticular and occur locally as irregular bodies in the hinge zones of folds. Most economic deposits of flake graphite are of Archaean (4–2.5 billion years) to late Proterozoic (540 million years) age. These rocks may contain up to 90% TGC, although 10% to 15% TGC is more typical. Flake sizes can range from 1 mm to 25 mm, with an average size of 2.5 mm.

The main regions of occurrence include China, East Africa, Europe, North America, and predominantly Canada and Brazil.

Commercially, flake graphite is divided into the types listed in Table 2–1. Fine flake may be further sub-divided into medium flake, fine flake and powder. Impurities include minerals commonly found in metasedimentary units, usually quartz, feldspar, mica, garnet and calcite, with occasional amphiboles, pyrrhotite, pyrite and magnetite.

**Table 2–1: Graphite flake size classification**

| Flake type | Flake size *(μm)* | Mesh |
|---|---|---|
| Super jumbo | >500 | <35 |
| Jumbo | 300–500 | 50–35 |
| Large | 180–300 | 80–50 |
| Medium | 150–180 | 100–80 |
| Fine | 75–150 | 200–100 |
| Amorphous | <75 | >200 |

*Source: Benchmark Intelligence*

Flake graphite constitutes a unique set of properties, accredited to its molecular structure. It is a crystalline form of carbon, which is (i) a solid-state lubricant; (ii) the only non-metallic conductor; and (iii) can sustain temperatures greater than 3,000 degree Celsius. Though it is a non-metal, it has unique properties of both metal and non-metal. Given these molecular characteristics, graphite flake is the preferred and mostly non-replaceable choice in various industries, products and applications. China Graphite's flake graphite concentrate product is mainly used as heat resistant materials such as magnesia carbon brick.

### 2.3 Spherical graphite

Spherical graphite is manufactured from flake graphite concentrate. Flake graphite concentrate is processed to spherical graphite through micronizing, rounding and purifying. Flake graphite concentrate is micronized to approximately 10–15 μm. The micronized graphite is then made rounded to form spheres. The spherical graphite is further purified through a leaching process to remove impurities. Spherical graphite is widely used as anode material in lithium-ion batteries for electronic devices and electric vehicles.

During the micronizing and rounding stages, the reject, representing up to 60%-70% of the feed materials, is collected and is saleable as a micro graphite powder by-product. A subordinate amount of high-purity graphite powder by-product is also collected during the purifying stage and is also saleable.

## 3 PROJECT OVERVIEW

### 3.1 Background

The Yixiang Graphite Project has been in operation since 2006. Commercial operations commenced with the beneficiation plant processing graphite ores from third parties. The plant produced flake graphite concentrates with grades primarily between 94.0% and 96.8% TGC (-100 mesh), with a recovery of over 90%. The plant is located at the Luobei Graphite Industrial Park. The Plant's initial throughput capacity was 0.1 Mtpa.

In late 2011, the spherical graphite processing plant commenced production. Spherical graphite was manufactured from graphite concentrate produced from the beneficiation plant.

In 2013, debottlenecking and upgrades completed at the beneficiation plant enabled the throughput capacity to be increased to 0.4 Mtpa.

In 2019, a mining license was granted, which allowed an approved graphite mining capacity of 0.5 Mtpa (the Mine), located 10 km to the northwest of the beneficiation plant and the spherical graphite processing plant complex.

In 2019, first ore was mined from the Mine and the beneficiation operation began to process graphite ore from China Graphite's own mine in addition to ores from third parties.

By the third quarter of 2021, the beneficiation plant upgrade was completed with a throughput capacity of 0.5 Mtpa.

The major products from the Project include flake graphite concentrate and spherical graphite. As by- products of the spherical graphite processing, micro graphite powder and high-purity graphite powder are also produced. At the Mine, marble rock is also extracted as a by-product of graphite ore mining.

Since 2006, China Graphite has grown from being able to produce a flake graphite concentrate mainly used as heat resistant materials only to a company with capacity to produce a wide range of products with further added-values (graphite concentrate, spherical graphite, micro graphite powder, high-purity graphite powder and marble). The spherical graphite is used as anode materials in lithium-ion batteries for electronic devices and vehicles.

Looking ahead, China Graphite has prepared a development plan to unlock further value from the Project. The key initiatives are listed below.

***Exploration:***

The current mining license restricts graphite ore mining capacity to 0.5 Mtpa (maximum) and to a maximum mining depth of 150 m above sea level (masl). The Company plans to conduct additional technical studies and prepare relevant documents to support an application to raise the graphite ore mining capacity to 1.0 Mtpa and lower the minimum mining depth to 60 masl when the market conditions are favorable.

***Mining:***

Ramp up the graphite ore mining capacity to 0.5 Mtpa by 2023.

***Beneficiation:***

Construct a new beneficiation plant with a throughput capacity of 0.5 Mtpa in proximity to the Mine to increase total beneficiation capacity to 1.0 Mtpa by 2025.

***Spherical Graphite Processing:***

Upgrade the existing beneficiation plant and spherical graphite plant by installing new equipment with a target production capacity of 6,500tpa spherical graphite. Build a spherical graphite processing plant at Beishan with a target flake graphite processing capacity of 17,000 t to produce 6,000 t spherical graphite and 10,000 t micro graphite powder.

***New products:***

Strengthen research and development efforts in order to launch new products such as coated spherical graphite and graphitized spherical graphite for the anode material market.

China Graphite has developed a financial model based on these key initiatives and is seeking to [REDACTED] and [REDACTED] on the Stock Exchange to [REDACTED] the Company's development plan and initiatives.

### 3.2 Property location and accessibility

The Project is located in Yanjun Farm, approximately 28 km northwest of the town of Luobei in Heilongjiang Province of the PRC and approximately 135 km north of Jiamusi, the largest city in the region (Figure 3–1). The Project is connected to a well-maintained road system. Access to the Project area from Luobei is through a series of paved roads via the village of Yanjun Farm.

The towns of Luobei and Yilan, and city of Jiamusi are the major sources of supplies, including coal, diesel and other consumables for the Project. These supplies are trucked to the Project area, and the current infrastructure in the area is considered sufficient for such purpose. There is an airport in Jiamusi, from which there are regular flights to Beijing and other major cities in China.


**Figure 3–1: Project location**

*Source: SRK, ESRI maps*

The principal assets supporting the Project comprise the Mine, the beneficiation plant and the spherical graphite processing plant. The graphite beneficiation plant and the spherical graphite processing plant are situated in the same location, while the Mine is located approximately 10 km to the west. The proposed new beneficiation plant is located near the Mine. The connecting road between the plants and the Mine consists of 10 km of paved road (Figure 3–2). The existing connecting road between the mine and the beneficiation and spherical graphite processing plants is considered adequate to support the operation.

The Mine and the beneficiation plant and spherical graphite processing plant complex are connected to the local grid, which provides a reliable supply of power to the operation. The water supply for the mining and processing operation is sourced from the Yadan River and its tributaries. The water source for domestic use is groundwater wells. The power and water supplies are reliable and sufficient to support the operation.


**Figure 3–2: Location of beneficiation plant, processing plant and open pits**

*Source: SRK*

### 3.3 Mining License

The Mine is held under a Mining License (No. C2300002018097110146712), which was granted to Yixiang New Energy Materials Co., Ltd., the wholly owned subsidiary of China Graphite in April 2019. The license is valid until August 2024. The mining license covers an area of 0.26 km$^2$ and its approved mining elevations are 274–150 masl. Details are given in Table 3–1. The license boundaries are shown in Figure 3–3.

**Table 3–1: Mining License details**

| **Mining License No.** | **C2300002018097110146712** |
|---|---|
| Owner of Mining License | Yixiang New Energy Materials Co., Ltd. |
| Name of Mine | Beishan Graphite Mine |
| Mining Method | Open pit |
| Production Volume | 0.50 Mtpa |
| Area of Mine | 0.2615 $km^2$ |
| Mining Elevations | 274–150 masl |
| Period of Validity | April 2019 to April 2024 |

*Source: Mining License, compiled by SRK*

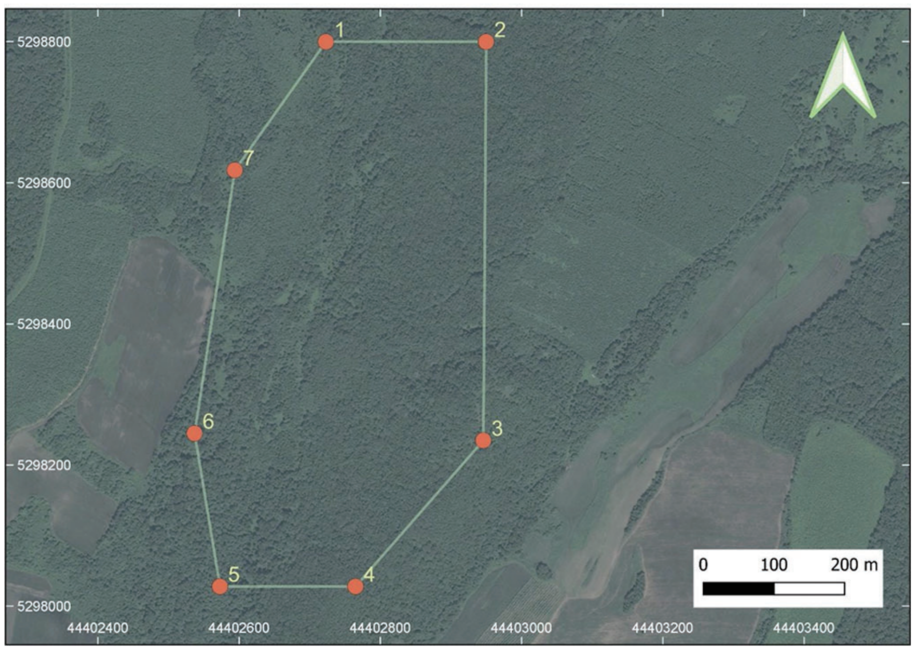


**Figure 3–3: Mining License boundaries**

*Source: SRK, Google satellite image acquired in 2013*

## 3.4 Climate, local resources and infrastructure

The Mine area is characterised by a humid-continental climate, with average minimum and maximum temperatures of -21°C and 21°C, respectively, and an average temperature of 2°C. The annual precipitation ranges from 400 mm to 700 mm. The winter extends from mid-October to late April.

The Mine area is covered by woodland (predominantly pine) and an undulating landform. The elevations in the Project area vary between 300 and 500 masl.

Mining operations are scheduled 260 days per year due to sub-zero and snowy weather in winter, while the beneficiation plant and spherical graphite plant are scheduled 240 days per year.

# 4 GEOLOGY

## 4.1 Regional geology

The Mine area forms part of the Jixi-Boli metallogenic zone in the southern portion of the Proterozoic Jiamusi-Xingkai Block. Here the Langjiagou anticline structure is developed, and its strata consist of regionally metamorphosed metasedimentary and igneous rocks. These rocks cover much of the eastern part of Heilongjiang Province and have undergone amphibolite- to granulite-facies metamorphism and polyphase deformation.

The subject flake graphite deposit is hosted by micaceous schist, which is sandwiched between quartzo-feldspathic schist, marble and gneiss. The graphitic schist is stratiform and is commonly deformed to form pinch and swell boudinage features (Ruifa, 2017, 2020; Sun et al., 2018). The structural trends are mainly northeast-northwest (Figure 4–1).

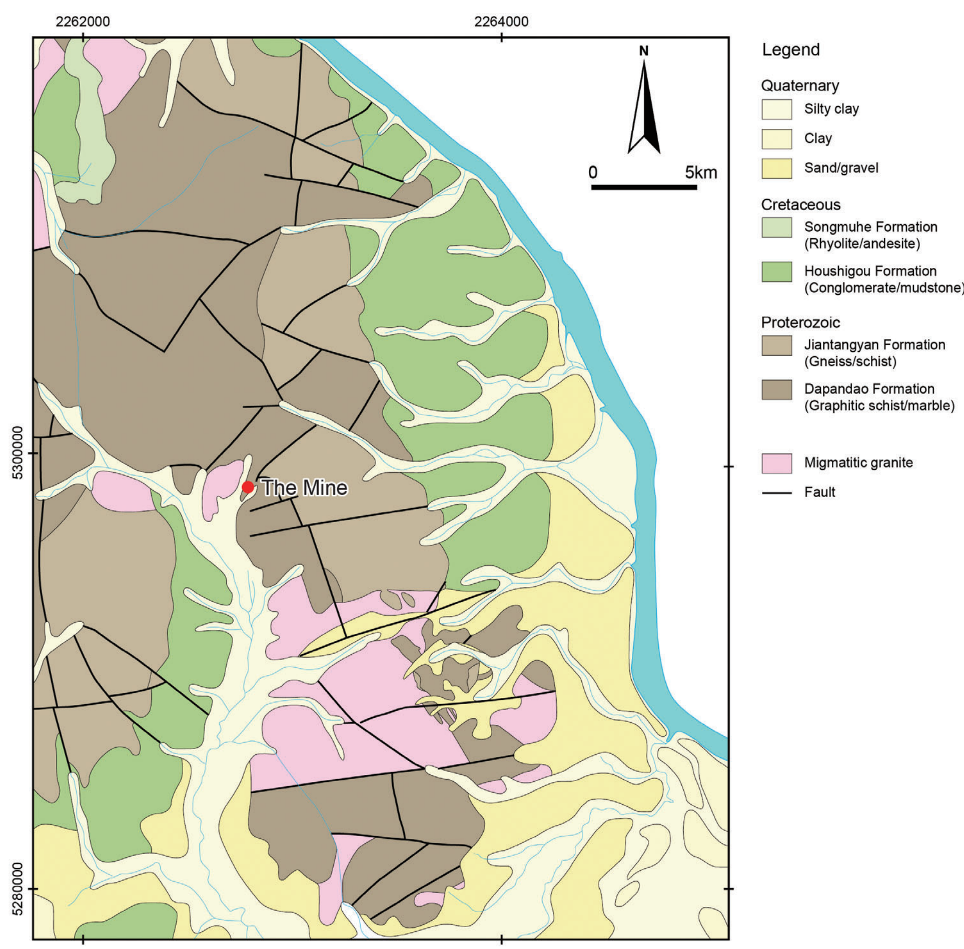


**Figure 4–1: Regional geological map**

*Source: Modified after Ruifa (2015)*

### 4.2 Local geology

The geology of the Mine area is represented by the Proterozoic Dapandao Group that consists of quartzo-feldspathic schist, graphitic schist, feldspathic schist, impure crystalized marble and a subordinate amount of quartzite and migmatite. These metamorphic rocks have a pelitic protolith (origin). The metamorphic rocks trend north-northeast and dip gently to moderately to the west-northwest. The entire metamorphic sequence is capped by 5–10 m thick Quaternary sediments in places. The graphitic schists are micaceous, fine grained, silvery grey with a schistose texture, and have boudinage features. Marble and graphitic schist are the target economic units (Figure 4–2).

Key structures mapped within the Mine area comprise minor shear zones along lithological contacts and minor faults. The latter trends east-northeast and dips sub-parallel to the schistosity. Field observations show that the metamorphic rocks have undergone polyphase deformation. It is not uncommon to observe fold closures, superimposed folds and flexures (Ruifa, 2015, 2020).

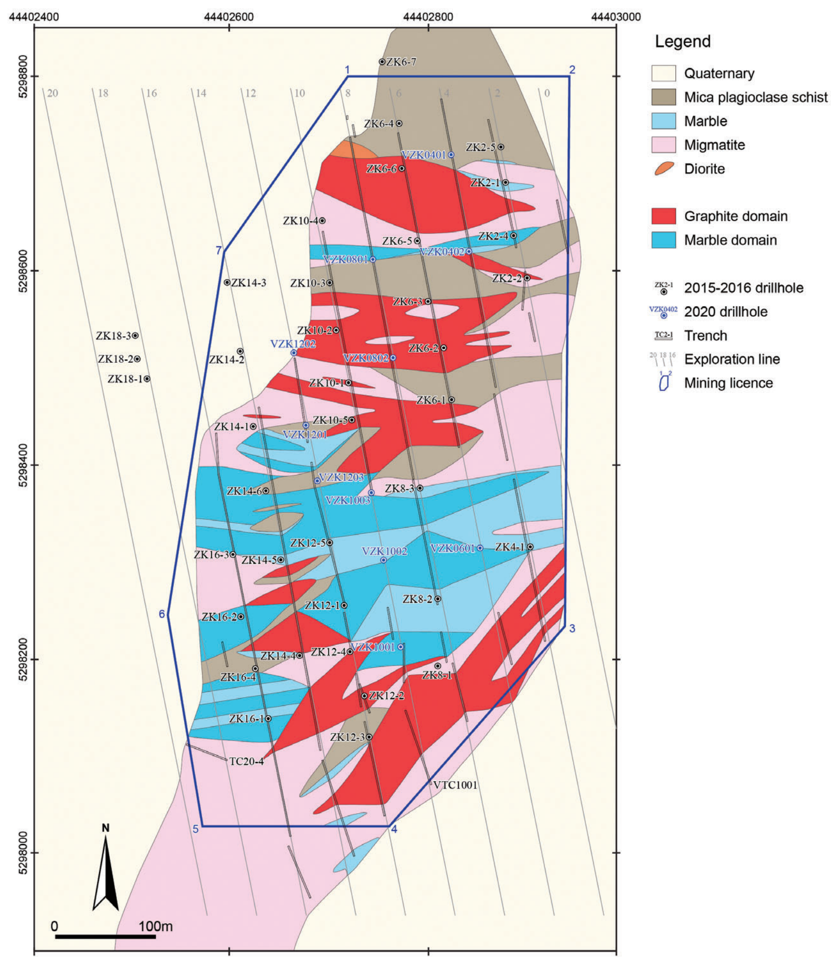


**Figure 4–2: Simplified geological map of the Project area**

*Source: modified after Ruifa (2017)*

### 4.3 Mineralisation

In the Mine area, flake graphite is hosted by micaceous graphitic schist. At least ten graphitic schist bands have been identified. These bands trend northwest to north-northeast and extend 50–380 m along strike and 80–300 m down dip (Figure 4–3 and Figure 4–4). The graphitic schist mineral assemblage consists of quartz, plagioclase mica, graphite, hornblende and tremolite. Other metallic minerals include pyrrhotite, pyrite, hematite, limonite and occasionally chalcopyrite. Polished thin sections show that graphite minerals appear black to brownish grey and exhibit as twisted leaf shape (Figure 4–5).

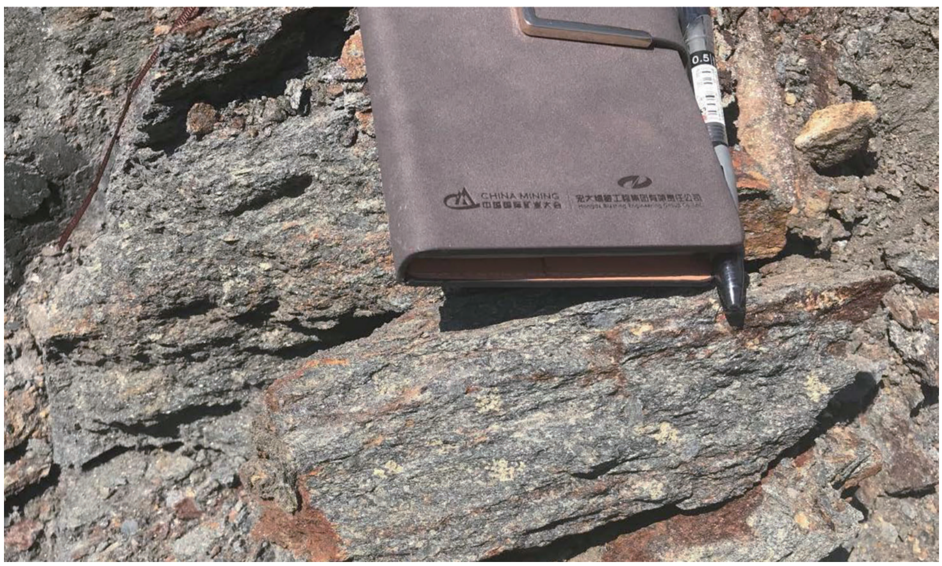


**Figure 4–3: Graphitic schist**

*Source: SRK site visit July 2020*


**Figure 4–4: Graphitic schist intersected by drillhole VZK0402**

*Source: SRK site visit July 2020*

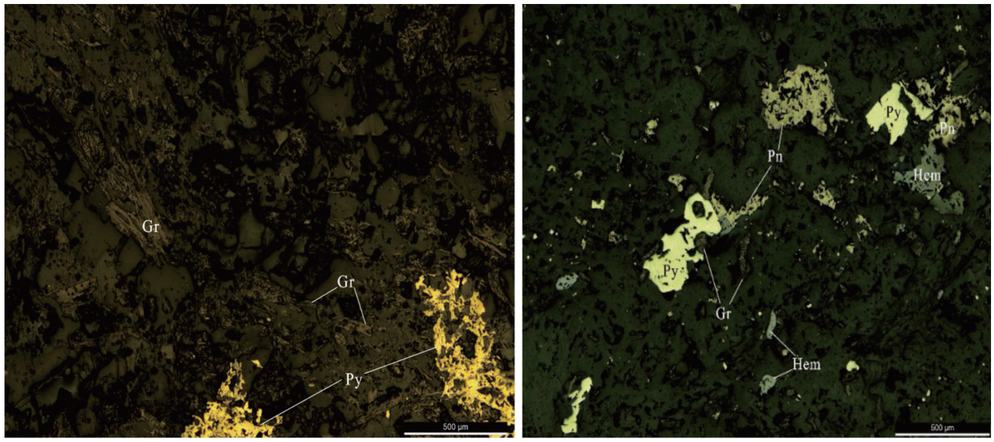


**Figure 4–5: Petrographical analysis**

*Notes:* Gr：graphite, Py: pyrite, Pn: pyrrhotite, Hem: hematite

*Source: Ruifa (2017)*

Table 4–1 and Figure 4–6 show the flake size distribution of graphite at the Mine taken in 2016 and 2020. Most of the graphite flake size is classified as fine to very fine according to the Chinese standard.

**Table 4–1: Flake size distribution**

| Year | Classification | Mesh | Flake size (µm) | Proportion (%) |
|---|---|---|---|---|
| 2016 | Jumbo | <50 | >287 | 6.85 |
| | Large | 50–100 | 175–287 | 14.14 |
| | Medium | 100–80 | 147–175 | 8.23 |
| | Very fine and fine | >100 | <147 | 70.78 |
| 2020 | Jumbo | <50 | >287 | 12.07 |
| | Large | 50–100 | 175–287 | 24.27 |
| | Medium | 100–80 | 147–175 | 8.4 |
| | Very fine and fine | >100 | <147 | 55.27 |

*Source: Rufia (2016, 2020)*

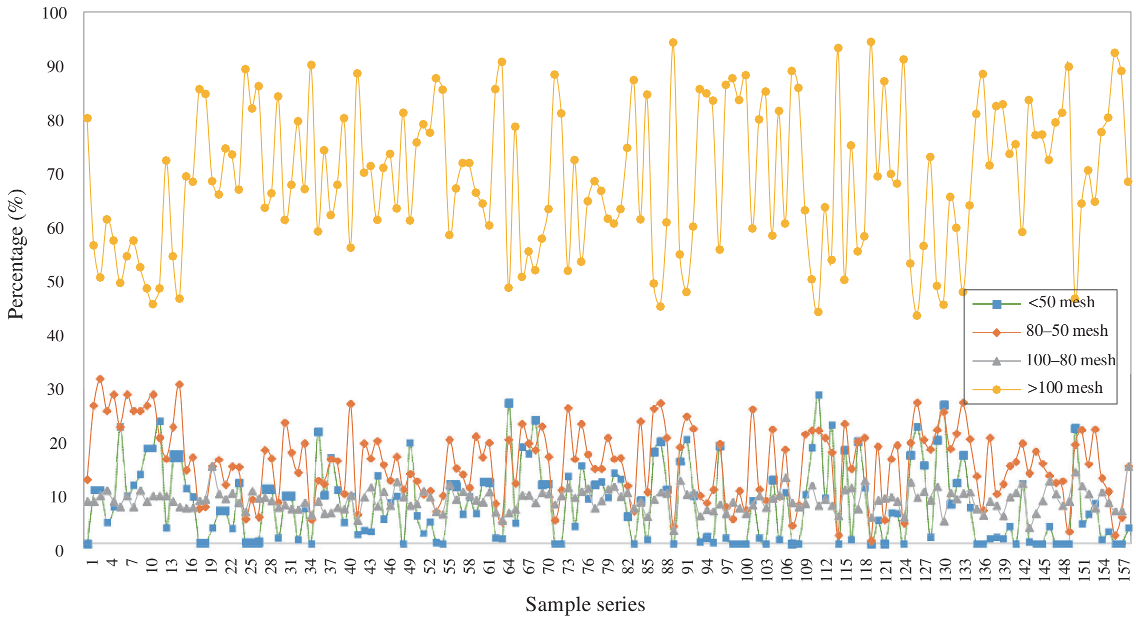


**Figure 4–6: Flake size distribution histogram**

*Source: SRK analysis*

### 4.4 Exploration history

Graphite mineralisation in the surrounding area was discovered during a regional exploration program in 1979, but no systematic exploration was conducted over the Project area until 2015.

In 2015, a reconnaissance exploration of the potential graphite mineralisation was performed by Harbin Ruifa Mineral Exploration Co., Ltd. (Ruifa), an independent exploration company. The assessment comprised geological mapping and a very low-frequency electromagnetic (VLF-EM) geophysical survey. The identified targets were tested by trenching and diamond drilling at a nominal 100 m by 50 m spacing.

In 2016, the identified stratiform graphitic schist bands were further explored by trenches at a spacing of 50–100 m and in-fill diamond drilling at a spacing of 100 m. The 2-year exploration program totalled approximately 6,000 m of diamond drilling and 10,000 m3 of trench excavation.

In July 2020, SRK conducted a review of the previous exploration work and recommended a verification program. In July-August 2020, China Graphite retained Ruifa to perform the verification program. The work program comprised a topographical survey, geological mapping, trenching (2 trenches for 148 $m^2$) and diamond drilling (11 validation holes for a total of 1,647 m). SRK visited the site while the drilling and trenching were in progress (Figure 4–7 and Figure 4–8). The validation program included the re-assay of 57 graphite pulp samples.

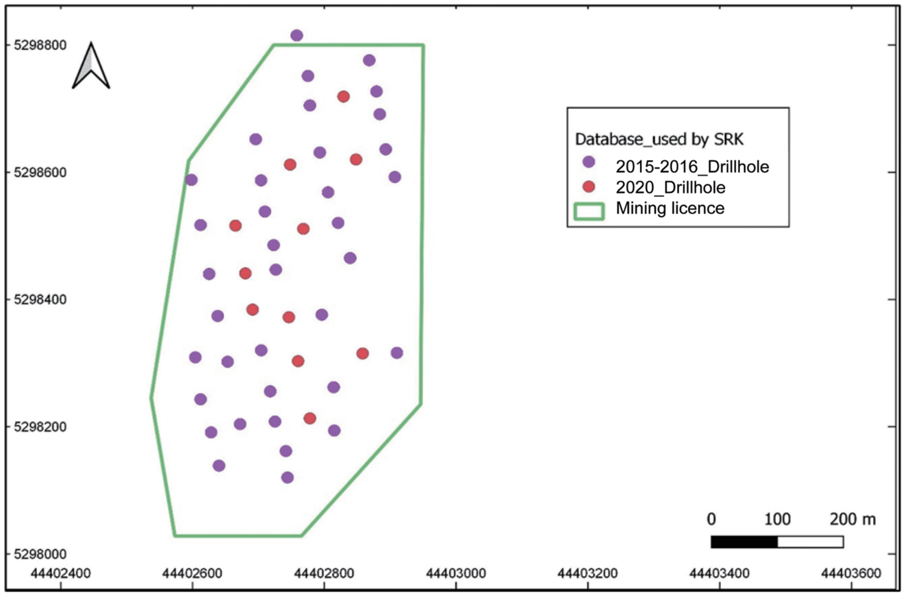


**Figure 4–7: Drillhole locations**

*Source: SRK*

**Figure 4–8: Verification drilling**

*Source: SRK site visit, July 2020*

### 4.5 Survey

The drillhole collars were surveyed using a real-time kinematic (RTK) geographic positioning system (GPS).

### 4.6 Geological mapping

Geological mapping at a 1:2,000 scale and structural mapping were carried out at exposed outcrops and trenches, where there was good exposure of fresh faces. The mapping was undertaken by Ruifa in 2016 and updated in 2020.

### 4.7 Drilling and trenching

Given the nature of the gentle to moderate dipping succession, exploration lines were spaced 50–100 m apart. The orientation of these exploration lines was north-northwest (at an angle of approximately 300°).

During the 2015–2016 exploration program, trenches were excavated along each exploration line prior to mapping and sampling. Five or six diamond drillholes were completed along each exploration line. Additional geological mapping was carried out over the area to support the drill findings.

In 2020, a further 11 verification diamond drillholes were completed between the existing exploration lines to validate the previous drilling results and confirm earlier geological interpretations.

All drillholes were initially completed using an HQ-sized (63.5 mm diameter) diamond drill bit, which was subsequently reduced to an NQ-sized (47.6 mm diameter) drill bit, after passing through the weathered zone (0.5–24.2 m, with average thickness of 8.0 m).

In 2015–2016, all holes were drilled vertically, whereas the azimuth and dip angle of the validation holes drilled in 2020 were 169° and 080°, respectively. The drill depth ranged from 64.1 m to 313 m. All holes were confirmed by a downhole survey taken every 50 m by the mean azimuth and inclined angle readings from two XJL-42 compass inclinometers. There is generally little deviation in azimuth and dip within each hole. The core recovery of the historical drilling and verification programs ranged from 96% to 100%, which SRK considers acceptable for resource estimation purposes. All the completed drillhole collars have been sealed with cement and marked by drillhole number, depth and end date.

The nominal dimensions of the trenches were 1 m in width and to a depth of 1 m. Some of the trenches were extended to a depth of 3 m to ensure that fresh bedrock was reached. All drillholes and trenches have been geologically logged, including lithology, minerals, mineral shape, color, core recovery. The Rock Quality Designation (RQD) was also estimated by the Ruifa geologists.

### 4.8 Sampling

#### *4.8.1 Sampling techniques*

Trenches were surveyed and logged prior to sampling. The trench channel sampling was described as being conducted by hand-cut channels with dimensions of 2 m by 3 cm by 5 cm. The samples were collected on a plastic sheet laid on the trench floor. The samples were bagged and weighed before dispatch to the laboratory.

The drill core was logged and photographed. Based on the logging results, the sample intervals were determined. The nominal sample length was 2 m and sampling did not cross lithological boundaries. The drill core was cut in half using a saw. Half of the core was taken for assay and the remaining half core was preserved.

#### *4.8.2 Sample preparation*

The drill core and trench samples were placed in sample bags marked with unique sample numbers and dispatched in batches to the laboratory of the 6th Geological Survey Institute (the 6th Laboratory), in Jiamusi for both the 2015–2016 and 2020 programs. The laboratory is independent of China Graphite and holds Chinese accreditation for rock and mineral analysis.

#### *4.8.3 Assay methodology*

Carbon in the graphite ores may have different origins, including organic, carbonates and/or graphitic. Application of an appropriate method is critical to determine the actual content of graphitic carbon. At the 6th Laboratory, carbonates were removed from the samples using nitric acid 1:1, followed by removal of organic carbon. The sample was dried in a furnace at 400°C for 3 hours. Once the carbonates and organic carbon were removed, the residual material sample was analyzed by a high- frequency infrared carbon and sulfur analyzer.

Marble is extracted from the Mine area mainly for use in the local aggregate market. An assessment of its physical properties according to the Chinese standard for Pebbles and Crushed Stone for Construction (GB/T 14685–2011) was conducted. In 2015–2016, a total of 12 marble samples were subjected to compressive and flexural strength tests at the Laboratory of Jiamusi Engineering Investigation Institute. Strength tests measure the ability of stone to carry loads in buildings and other applications and are thus required by architects and engineers. Compressive strength is the maximum compressive load that a stone can withstand without crushing or deforming. Flexural strength is a measure of the bending strength of the stone. It is measured by applying a load to a specimen that is supported near the ends.

In addition, chemical analysis was also performed by the gravimetric method to determine the composition of major elements of silicon dioxide ($SiO_2$), calcium oxide (CaO) and magnesium oxide (MgO).

### 4.9 Quality assurance and quality control

#### *4.9.1 Laboratory duplicates*

For the 2015–2016 exploration program, 139 laboratory duplicates were used as a standard quality control to test the reproducibility of the laboratory analysis, which represents 5.0% of all analyzed samples. Figure 4–9 presents the results, showing that the duplicates had good reproducibility.

In the 2020 verification program, laboratory duplicates were inserted at a frequency of one duplicate in every 25 samples. The result shows that there is no significant bias (Figure 4–10).

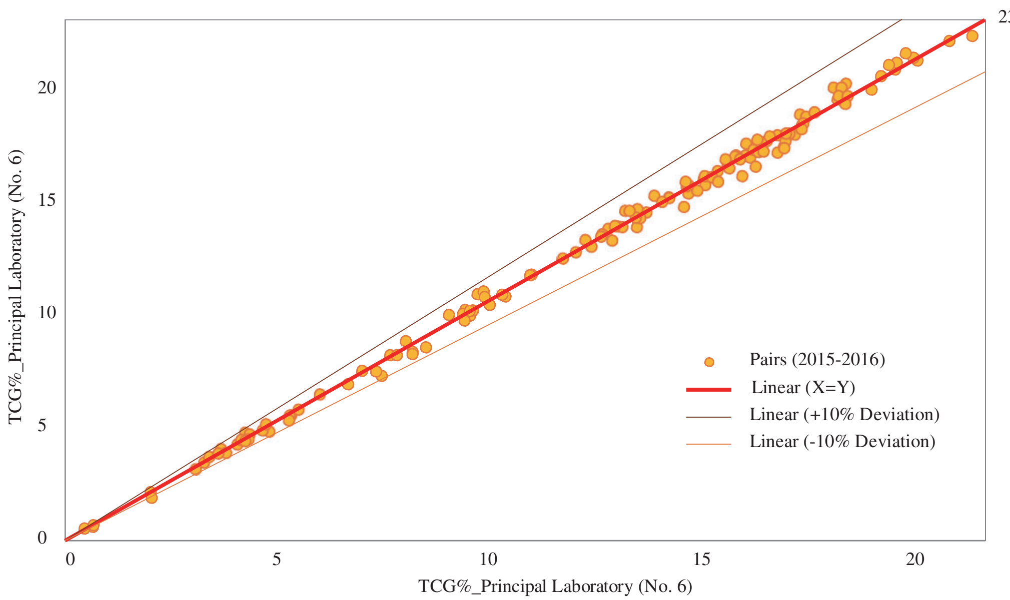


**Figure 4–9: Correlation diagram between original and duplicate assays (2015–2016)**

*Source: SRK analysis*

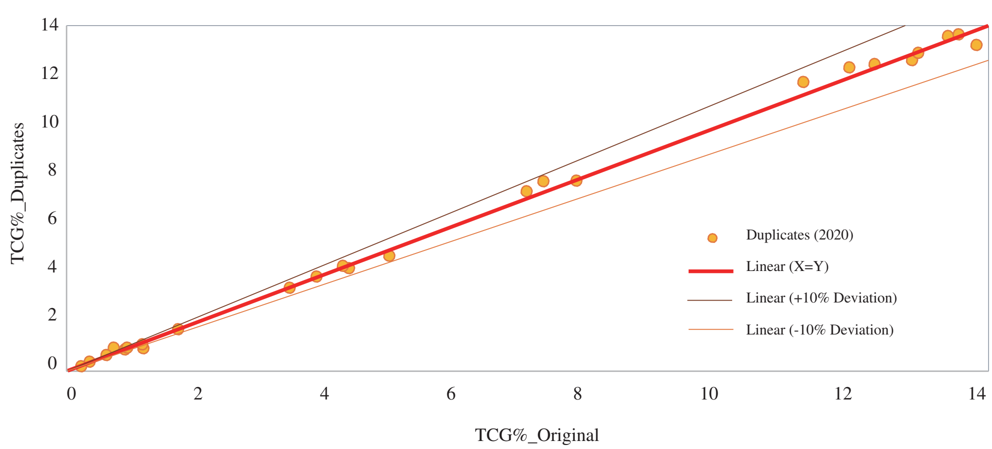


**Figure 4–10: Correlation diagram between original and duplicate assays (2020)**

*Source: SRK analysis*

### *4.9.2 Inter-laboratory check*

An inter-laboratory check was also part of the standard quality control protocol.

In 2015–2016, a total of 134 samples, representing 4.3% of all analyzed samples were sent to the Laboratory of Heilongjiang Provincial Geology and Mineral Resources Test and Application Institute (HPTI) in Harbin (Heilongjiang Province). The HPTI is an independent Chinese accredited laboratory. The result is shown in Figure 4–11, indicating that no systematic bias is present.

In 2020, HPTI was retained as the check laboratory and a total of 33 samples were assayed. The results are also presented in Figure 4–11. Most of the samples are within the 10% deviation buffer, with the exception of four samples, which represent 2% of total check samples.

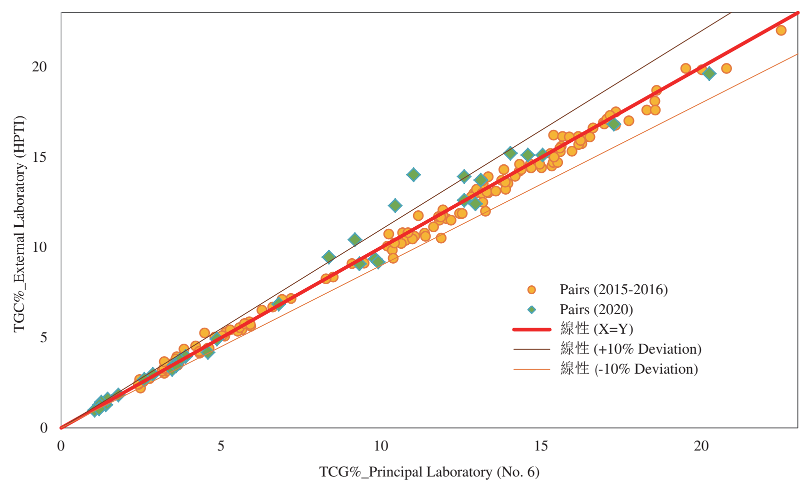


**Figure 4–11: Correlation diagram between original and inter-laboratory assays**

*Source: SRK analysis*

### *4.9.3 Blanks*

No blanks were inserted in the samples collected in the 2015–2016 exploration program.

In the 2020 verification program, a total of 24 quartzite blanks were inserted in the sample batches at a frequency of one in every 25 samples. The results were returned with values of the detection limits (Figure 4–12).

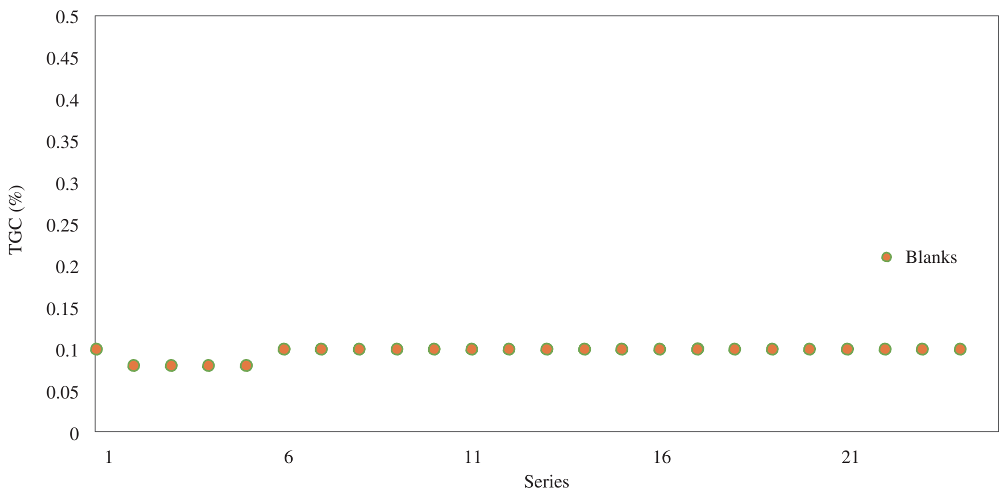


**Figure 4–12: Blanks inserted in the field sampling program**

*Source: SRK analysis*

#### *4.9.4 Certified reference materials*

Certified reference materials (CRMs) were not inserted in the samples for the 2015–2016 program. In the 2020 program, the CRMs comprised two graphite Chinese standard CRMs. The expected values and their acceptable limits are presented in Table 4–2.

**Table 4–2: Chinese standard CRMs**

| Standard | Certified mean | Acceptable deviation limit | Unit | Number of samples |
|---|---|---|---|---|
| GBW03118 | 2.91 | ± 0.12 | TGC % | 8 |
| GBW03119 | 9.91 | ± 0.08 | TGC % | 18 |

*Source: SRK compilation*

The graphite CRM results are presented in Figure 4–13. All the results are within the expected values except one of the GBW03119 samples that yielded a value slightly below the expected value.

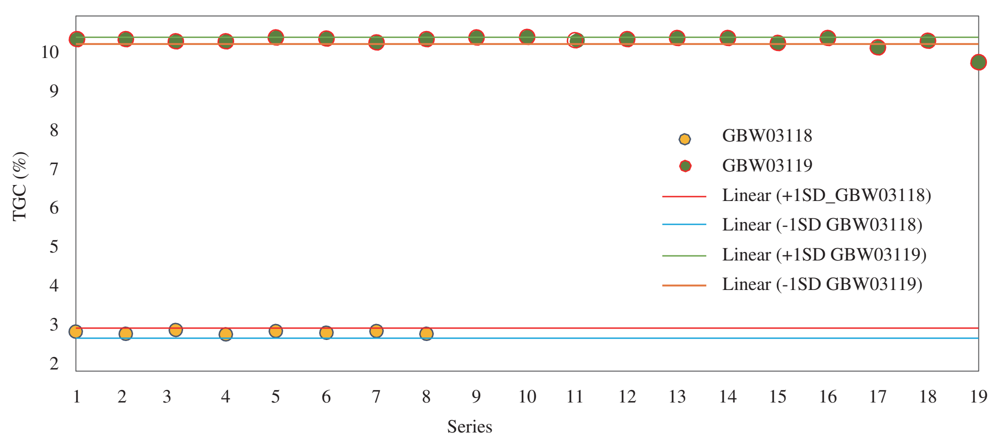


**Figure 4–13: Graphite CRM results**

*Source: SRK analysis*

### 4.10 Bulk density

Samples of graphite and marble collected for bulk density testing were dried and bulk density was determined using the water immersion method.

In the 2015–2016 exploration program, 232 graphitic schist bulk density samples were collected from the trenches and drill cores, 32 samples of which were from the weathered zone. The weathered zone yielded an average bulk density of 2.31 t/$m^3$, while the fresh zones had an average bulk density of 2.67 t/$m^3$.

During the 2020 verification program, 24 bulk density samples were taken from the drill cores in the fresh zone, with an average bulk density of 2.72 t/m$^3$.

A total of 42 marble samples were taken; the average bulk density value is 2.69 t/m$^3$ (Table 4–3).

**Table 4–3: Graphite and marble dry bulk density values**

| Domains | Number of samples | Average density *(t/m$^3$)* |
|---|---|---|
| Weathered zone | 32 | 2.31 |
| V1 | 24 | 2.70 |
| V2 | 9 | 2.71 |
| V3 | 65 | 2.69 |
| V4 | 13 | 2.71 |
| V5 | 49 | 2.70 |
| V6 | 11 | 2.65 |
| V7 | 32 | 2.60 |
| V8 | 12 | 2.64 |
| Marble | 42 | 2.69 |

*Source: SRK analysis*

## 4.11 Sample security

Samples were numbered and bagged and sent directly from the site to the relevant laboratories. No special measures were taken to secure the sample bags. Samples were weighed on dispatch from the site and on receipt at the laboratory.

### *4.11.1 Verification*

The data from the 2015–2016 exploration program included drilling and trenching data, core pictures, geological maps, core pictures and associated reports. SRK undertook a review of such data and recommended a verification program. The verification program included ground-truthing of the geological mapping results, spot-checking of drill cores against core photographs and a review of the procedures for sample collection, preparation and analysis. SRK also visited the 6th Laboratory on 19 July 2020.

As part of the verification program, 11 holes were drilled, and 57 graphite pulp samples and 9 marble pulp samples stored at the 6th Laboratory were selected and re-assayed. The pulp samples show a good correlation to the original sample. SRK is confident in the repeatability of the sample preparation and analysis of the samples (Figure 4–14).

A comparison between the 2015–2016 and 2020 verification drilling results has also been made. The result shows that mineralized intervals and TGC values intercepted during two exploration programs are similar. For instance, Figure 4–15 is a long section of domain

V5, showing verification drillhole VZK1201 and three other drillholes drilled in the 2015–2016 program. The verification drillhole has confirmed the geometry of the mineralized envelope and the grade distribution.

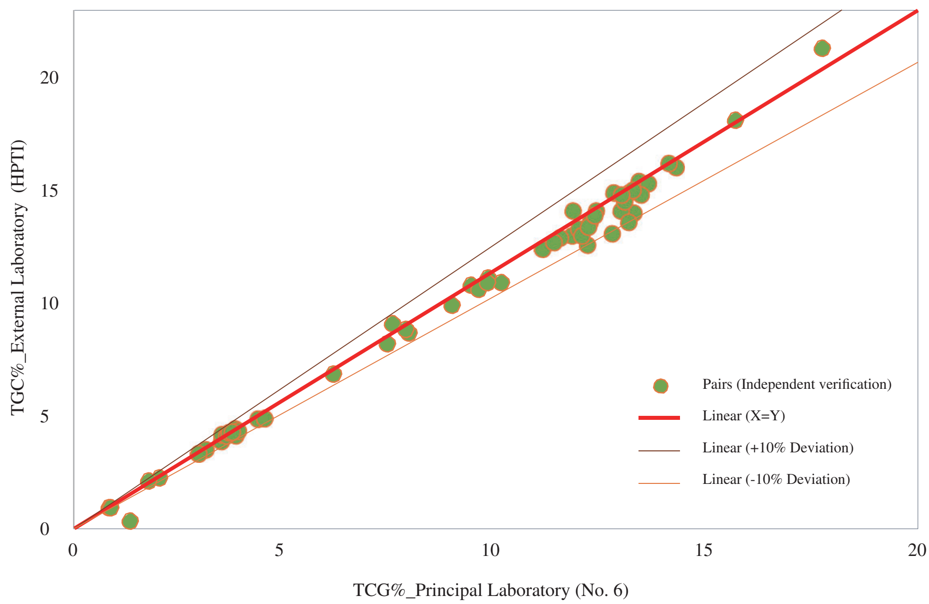


**Figure 4–14: Correlation graph between original data and check duplicates**

*Source: SRK analysis*

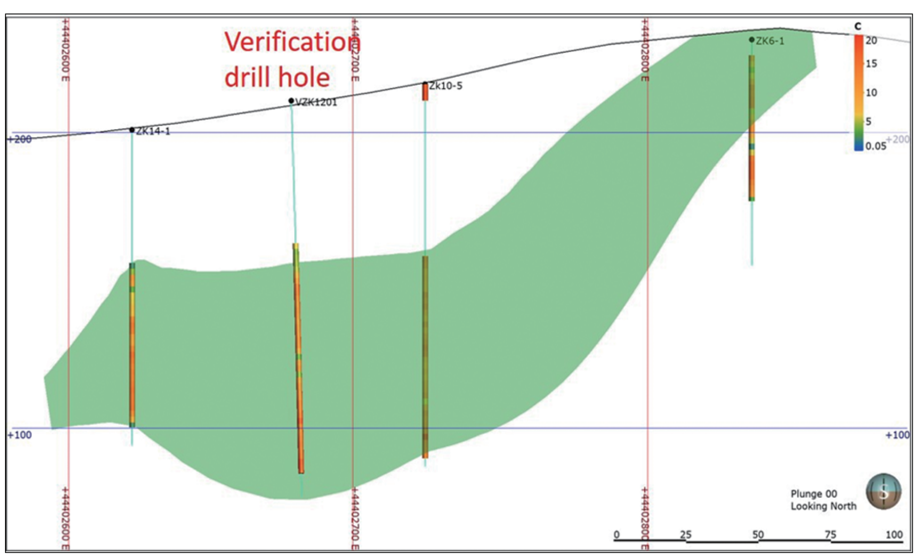


**Figure 4–15: Long section of domain V5 showing verification drillhole VZK1201**

*Source: SRK analysis*

## 5 MINERAL RESOURCE ESTIMATION

### 5.1 Introduction

Through the verification program and geostatistical analysis, SRK is of the opinion that the data collected from the 2015–2016 exploration program are reasonable. All the exploration data taken together are of a suitable accuracy and precision to be used for Mineral Resource estimation in accordance with the JORC Code (2012).

The JORC Code (2012) states that '*A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction*'. Mineral Resources are classified as Inferred, Indicated and Measured according to increasing degrees of geological confidence.

### 5.2 Mineral Resource estimation procedures

The resource evaluation involves the following steps:

- database compilation and verification
- construction of wireframe models for the boundaries of the graphite and marble mineralisation
- definition of resource domains
- data conditioning (compositing and capping) for geostatistical analysis and variography
- block modelling and grade interpolation
- Mineral Resource classification and validation
- assessment of 'reasonable prospects for economic extraction' and selection of appropriate cut-off grades
- preparation of the Mineral Resource Statement.

### 5.3 Database compilation and validation

Collar, assay and survey data, as well as logs from the 2015–2016 and 2020 programs, were compiled into a Microsoft Excel sheet and validated using Leapfrog software packages to search for errors such as missing or overlapping intervals and duplicated samples.

### 5.4 Geological modelling

The wireframe models for the deposits were built using Leapfrog software. A 2% TGC was used as a nominal cut-off to define the graphite mineralized intervals. On rare occasions, these cut-offs were not strictly adhered to in order to ensure the continuity of graphitic lodes. The marble boundary was defined by a 45% CaO cut-off and confirmed by lithological logging records. The contact points between mineralisation and waste on each cross section were picked up using the 'vein selection' function, and the mineralized envelopes were built by the 'vein modelling' and 'domain' functions. In total, eight graphite domains (V1 to V8) by geological logging and threshold grade of 2% TGC, and six marble units (M1 to M6) were modelled. The domains are shown in Figure 5–1 and Figure 5–2.

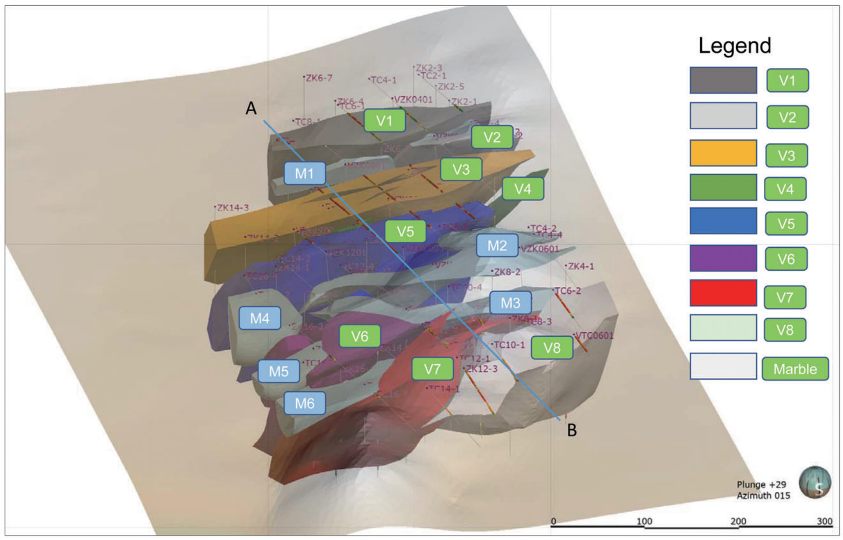


**Figure 5–1: 3D perspective of interpreted graphite and marble domains**

*Source: SRK*

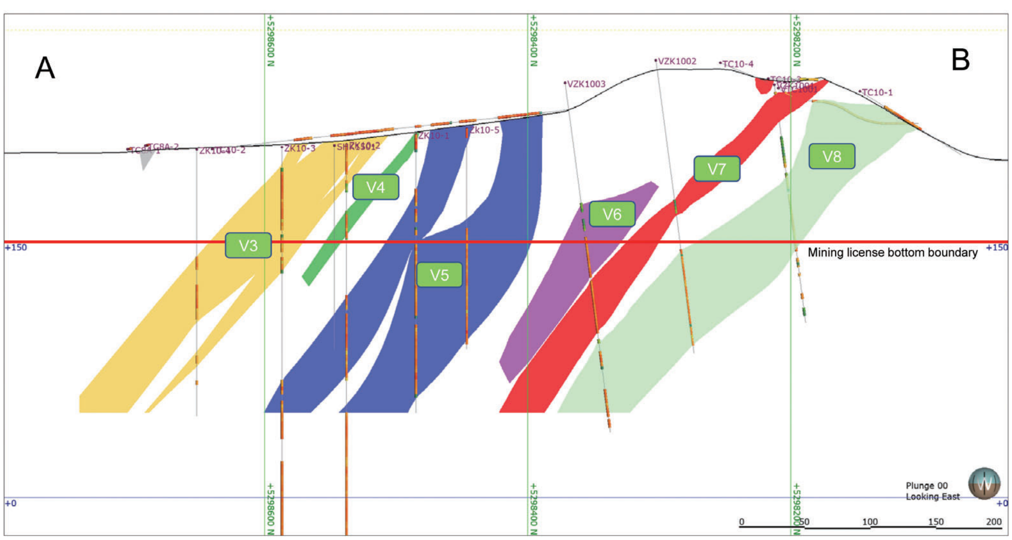


**Figure 5–2: Cross section along line A-B**

*Source: SRK*

SRK also constructed wireframe surfaces corresponding to weathering profiles. The surfaces were modelled based on drillhole logging results and sectional interpretation. The maximum depth of the weathering zone is 24.2 m, with an average of 8 m from the surface to the surface below the fresh zone. Figure 5–3 shows a cross section across the deposit, illustrating the relationship between the topography and interpreted weathering surface.

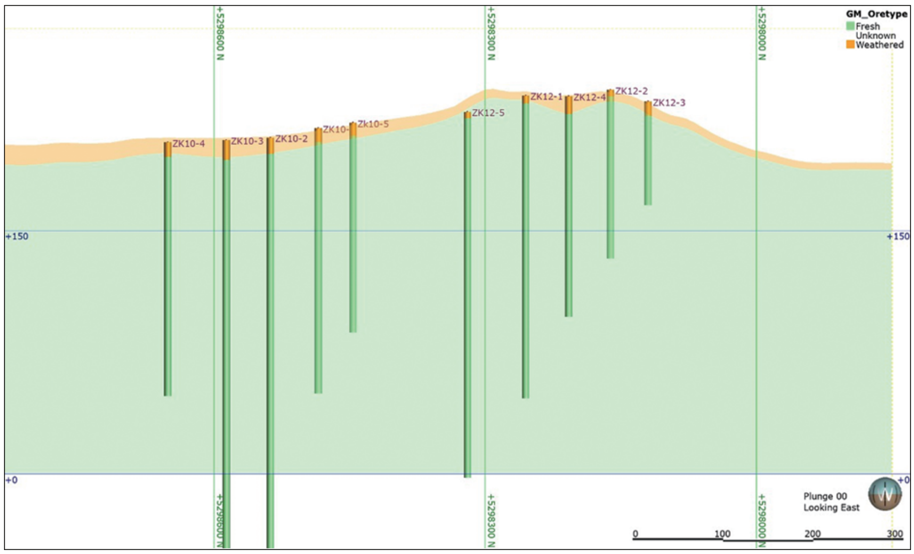


**Figure 5–3: Modelled weathering profile**

*Source: SRK*

## 5.5 Exploratory data analysis

All drillhole and trench samples were flagged with a domain code and checked in sections to ensure that all grades >2% TGC and >45% CaO were included in the appropriate domains.

### *5.5.1 Compositing*

Drillhole and trench sample data were extracted from each of the domains. These data were examined to select an appropriate composite length. Block model cell dimensions and anticipated mining methods were also considered. Sample lengths for drillholes and trenches are mainly 2.0 m. A composite length of 2.0 m was applied to all data from the graphite and marble domains.

### *5.5.2 Top-capping*

The impact of outliers on composite data in all domains was examined individually using log probability plots and cumulative statistics. A three-dimensional visual validation of the selected capping levels was also performed to assess the three-dimensional distribution of the higher-grade values. TGC values of 22%, 23% and 22% were capped for domains V1, V3 and V8, respectively. No grade capping was applied for other domains due to no significant outliers being observed.

The basic statistics for original, composites and capped composites are shown in Table 5–1. The frequency histograms and cumulative probability plots for capped composites are shown in Figure 5–4 to Figure 5–11.

**Table 5–1: Summary statistics of original, composite and capped composite data of graphite samples**

| Type | Domains | Count | Mean TGC % | Standard deviation TGC % | Coefficient of variation | Variance TGC % | Minimum TGC % | Maximum TGC % | Top-capping TGC % |
|---|---|---|---|---|---|---|---|---|---|
| Original | V1 | 289 | 7.53 | 5.53 | 0.73 | 30.53 | 0.36 | 30.82 | — |
| | V2 | 38 | 7.47 | 4.6 | 0.62 | 21.18 | 1.07 | 17.68 | — |
| | V3 | 425 | 11.44 | 5.55 | 0.49 | 30.82 | 0.05 | 28.15 | — |
| | V4 | 28 | 11.81 | 5.5 | 0.47 | 30.3 | 2.03 | 23.19 | — |
| | V5 | 526 | 12.6 | 4.62 | 0.37 | 21.31 | 0.45 | 22.68 | — |
| | V6 | 286 | 9.58 | 5.53 | 0.58 | 30.54 | 0.4 | 21.26 | — |
| | V7 | 470 | 8.53 | 5.4 | 0.63 | 29.2 | 0.41 | 19.52 | — |
| | V8 | 475 | 10.25 | 6.14 | 0.6 | 37.75 | 0.23 | 26.5 | — |
| Composites | V1 | 294 | 7.53 | 5.47 | 0.73 | 29.95 | 0.59 | 30.82 | — |
| | V2 | 43 | 7.41 | 4.12 | 0.56 | 16.94 | 1.14 | 15.83 | — |
| | V3 | 444 | 11.43 | 5.26 | 0.46 | 27.63 | 0.05 | 25.89 | — |
| | V4 | 32 | 11.81 | 5.34 | 0.45 | 28.47 | 2.03 | 23.19 | — |
| | V5 | 536 | 12.59 | 4.34 | 0.35 | 18.87 | 0.53 | 22.68 | — |
| | V6 | 288 | 9.58 | 5.47 | 0.57 | 29.89 | 0.55 | 21.26 | — |
| | V7 | 485 | 8.53 | 5.25 | 0.62 | 27.57 | 0.45 | 19.52 | — |
| | V8 | 485 | 10.25 | 6 | 0.59 | 35.97 | 0.23 | 26.5 | — |
| Capped composites | V1 | 294 | 7.47 | 5.33 | 0.71 | 28.44 | 0.59 | 22 | 22 |
| | V2 | 43 | 7.41 | 4.12 | 0.56 | 16.94 | 1.14 | 15.83 | — |
| | V3 | 444 | 11.31 | 5.27 | 0.47 | 27.76 | 0.05 | 23 | 23 |
| | V4 | 32 | 11.81 | 5.34 | 0.45 | 28.47 | 2.03 | 23.19 | — |
| | V5 | 536 | 12.59 | 4.34 | 0.35 | 18.87 | 0.53 | 22.68 | — |
| | V6 | 288 | 9.58 | 5.47 | 0.57 | 29.89 | 0.55 | 21.26 | — |
| | V7 | 485 | 8.53 | 5.25 | 0.62 | 27.57 | 0.45 | 19.52 | — |
| | V8 | 485 | 10.19 | 5.96 | 0.59 | 35.55 | 0.23 | 22 | 22 |

*Source: SRK analysis*

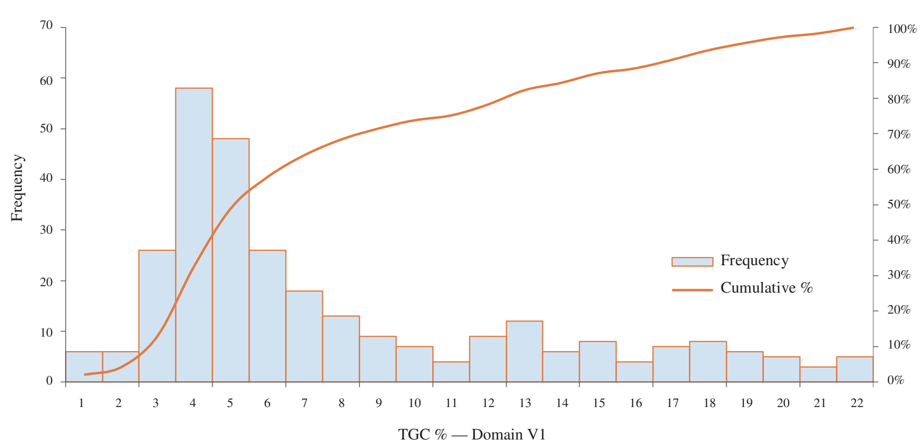


**Figure 5–4: Frequency and cumulative probability plot — Domain V1**

*Source: SRK analysis*

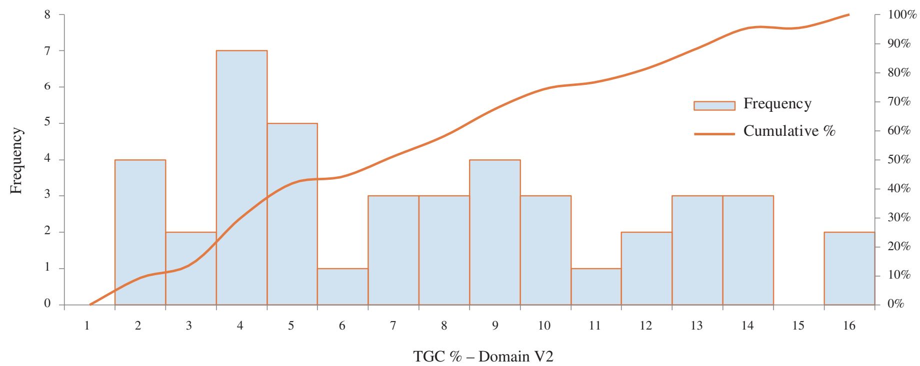


**Figure 5–5: Frequency and cumulative probability plot — Domain V2**

*Source: SRK analysis*

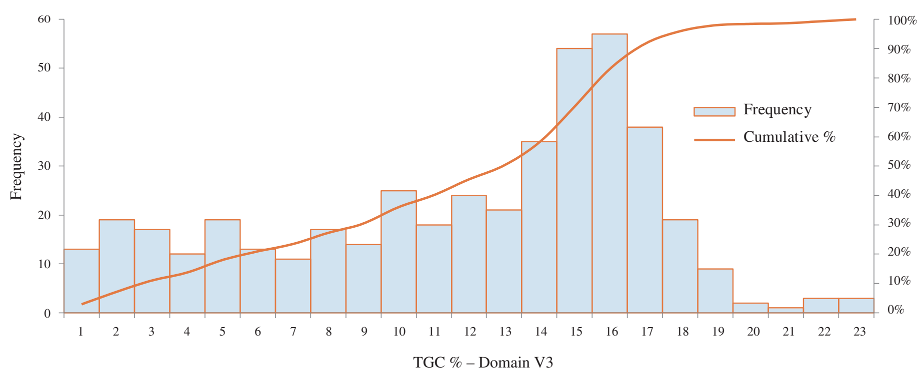


**Figure 5–6: Frequency and cumulative probability plot — Domain V3**

*Source: SRK analysis*

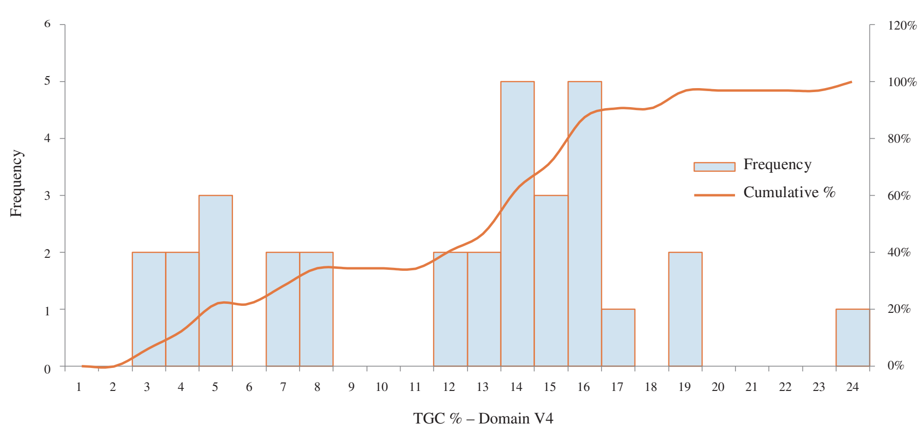


**Figure 5–7: Frequency and cumulative probability plot — Domain V4**

*Source: SRK analysis*

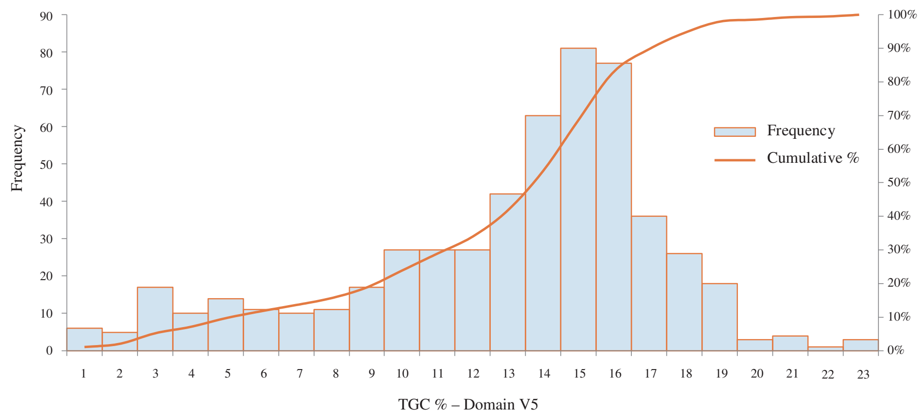


**Figure 5–8: Frequency and cumulative probability plot — Domain V5**

*Source: SRK analysis*

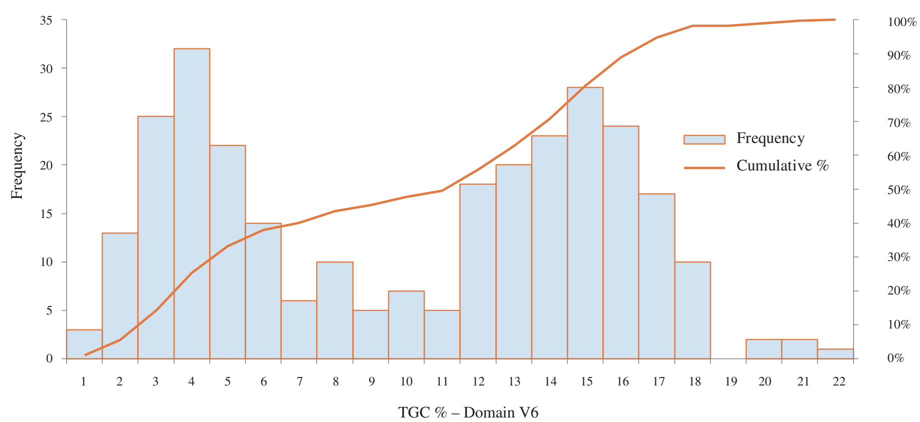


**Figure 5–9: Frequency and cumulative probability plot — Domain V6**

*Source: SRK analysis*

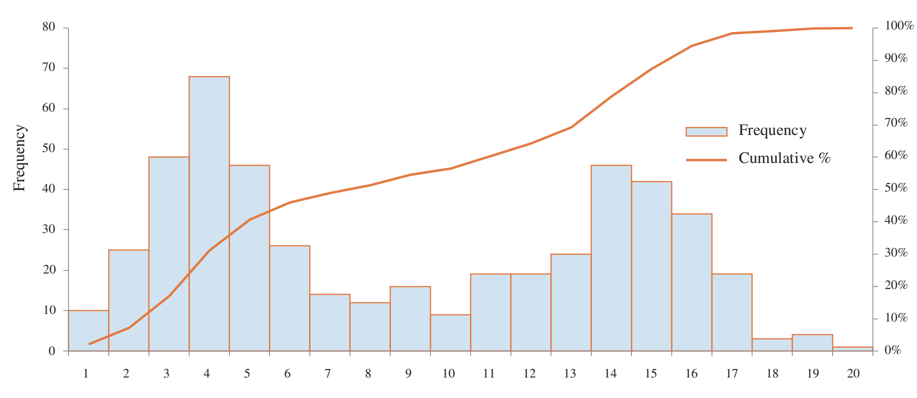


**Figure 5–10: Frequency and cumulative probability plot — Domain V7**

*Source: SRK analysis*

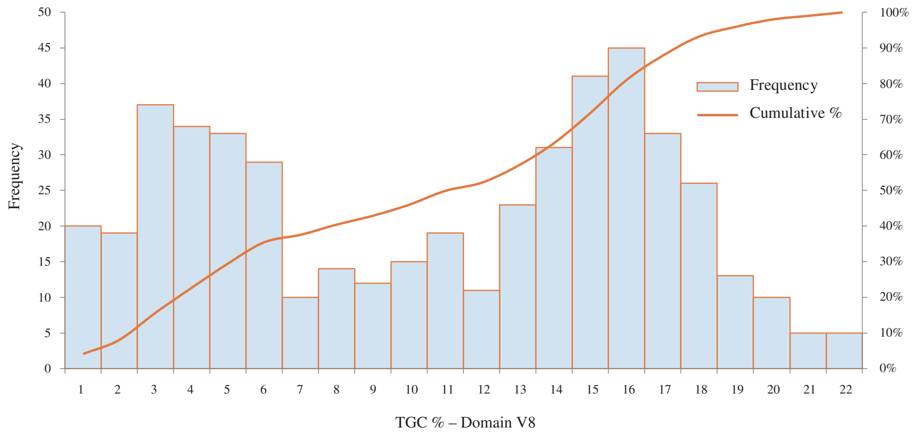


**Figure 5–11: Frequency and cumulative probability plot — Domain V8**

*Source: SRK analysis*

The marble is primarily intended for the local aggregate market. Compressive strength of the 12 samples analyzed from the 2015–2016 program range from 35.59 to 102.78 MPa, with an average of 73.17 MPa. Flexural strength spans between 1.40 and 4.05 MPa, with an average of 2.89 MPa (Table 5–2). The results indicate that the marble is suitable for use as aggregate.

**Table 5–2: Physical properties of marble**

| | **Compressive strength** *(MPa)* | **Flexural strength** *(MPa)* |
|---|---|---|
| Minimum | 35.59 | 1.40 |
| Maximum | 102.78 | 4.05 |
| Average | 73.17 | 2.89 |

*Source: Ruifa (2017), compiled by SRK*

The basic statistics of the assay of the marble samples are presented in Table 5–3.

**Table 5–3: Basic statistics for marble assays**

| Type | Domains | Count | Mean | Standard deviation | Coefficient of variation | Variance | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | CaO | 410 | 49.63 | 4.63 | 0.09 | 21.44 | 9.11 | 54.95 |
| Raw data | MgO | 410 | 0.64 | 0.43 | 0.67 | 0.19 | 0.18 | 3.25 |
| | $fSiO_2$ | 406 | 5.22 | 4.32 | 0.83 | 18.64 | 0.44 | 28.96 |

*Source: Ruifa (2017), compiled by SRK*

### *5.5.3 Variography*

Variogram modelling was performed using Leapfrog Edge for all domains except Domain V4 as the number of samples was insufficient to warrant the construction of a meaningful variogram.

Variogram fitting was completed in the following steps:

- The nugget was determined by the downhole variogram.
- The variogram anisotropy ellipsoid was set on the horizontal plane based on data scatter features.
- The direction of maximum continuity within the sample plane was taken as the major axis of the variogram anisotropy ellipsoid, and the perpendicular direction (within the plane) was taken as the semi-major axis of the anisotropy ellipsoid.
- The direction perpendicular to the plane was used as the minor axis of the anisotropy ellipsoid.
- The variogram model was set to fit the three principal directions and checked against other directions.

Figure 5–12 shows an example of the variogram map and fitted variogram model of Domain V8.

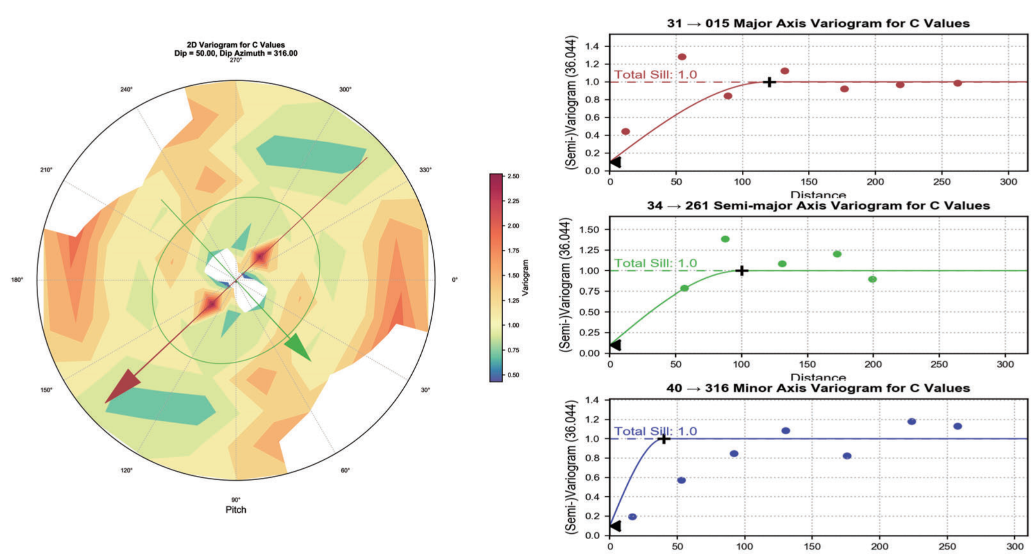


**Figure 5–12: Variogram map and fitted model — Domain V8**

*Source: SRK analysis*

### *5.5.4 Grade and tonnage estimation*

A three-dimensional block modelling approach has been used to estimate the tonnage and grade at a range of cut-off grades. The coordinates and dimensions of the block model are presented in Table 5–4. No rotation has been applied.

**Table 5–4: Block model parameters**

| Dimension | Base point | Rotation | Block size (m) | Minimum sub-block |
|---|---|---|---|---|
| Easting | 44402370 | N/A | 5 | N/A |
| Northing | 5297850 | N/A | 5 | N/A |
| Z (RL) | 274 | N/A | 2 | NA |

*Source: SRK*

### *5.5.5 Grade estimation*

The block values were interpolated using ordinary kriging (OK) on domains V1, V2, V3, V5, V6, V7 and V8, and the Inverse Distance Weighted (IDW) method was used for Domain V4 as there were insufficient samples to construct meaningful variograms. The parameters used for the grade estimation are summarized in Table 5–5. Grade estimation was not performed for the marble domains.

**Table 5–5: Parameters used for grade estimation**

| | Variogram | | | | | Ellipse | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Domain | Nugget | Sill | Range (m) | Major/ Semi-major | Major/ minor | Dip (°) | Dip azimuth (°) | Pitch (°) | Minimum number of samples | Maximum number of samples | Search distance (m) |
| V1 | 4.5 | 29.8 | 100 | 1 | 10 | 49 | 11 | 62 | 2 | 16 | 100 |
| V2 | 10.2 | 17 | 75 | 1.25 | 7.5 | 46 | 8 | 85 | 2 | 16 | 70 |
| V3 | 5.6 | 28.1 | 150 | 1.25 | 3.75 | 44 | 354 | 149 | 2 | 16 | 150 |
| V4 | — | — | — | — | — | 46 | 346 | 96 | 2 | 12 | 50 |
| V5–1 | 6.8 | 15.8 | 100 | 1.25 | 2 | 52 | 250 | 163 | 2 | 16 | 100 |
| V5–2 | 4.5 | 17.9 | 120 | 1 | 2.4 | 52 | 334 | 167 | 2 | 16 | 120 |
| V6 | 3.1 | 31 | 150 | 1.5 | 3 | 53 | 322 | 158 | 2 | 16 | 150 |
| V7 | 5.5 | 27.5 | 100 | 1.25 | 2.5 | 46 | 324 | 160 | 2 | 16 | 100 |
| V8 | 3.6 | 36 | 120 | 1.2 | 3 | 50 | 316 | 137 | 2 | 16 | 144 |

*Source: SRK*

### *5.5.6 Model validation*

SRK undertook block model validation to confirm the reasonableness of the estimation parameters and estimation results. SRK adopted the following methods for the validation:

- visual validation of block grades against drillhole grades

- statistical comparison of mean grades between composites and block
- trend analysis.

SRK conducted visual validation of the cross section view of the drillhole and trench grades and block model grades (Figure 5–13), which shows a good correlation between local block estimations and nearby samples, without excessive smoothing in the block model.

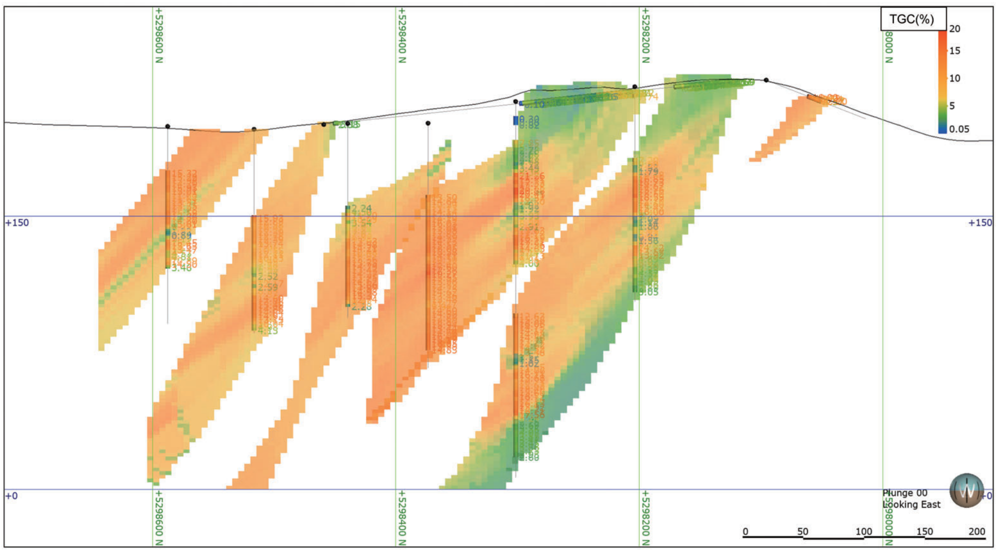


**Figure 5–13: Visual check of selected cross section (looking east)**

*Source: SRK*

The arithmetic mean values of the composite and the block were also compared, showing that the deviations are within an acceptable level (Table 5–6).

**Table 5–6: Composite and block means comparison**

| Domain | Composite mean | Block mean | Absolute deviation | Relative deviation *(%)* |
|---|---|---|---|---|
| V1 | 7.47 | 7.64 | 0.17 | 2% |
| V2 | 7.41 | 7.31 | 0.10 | –1% |
| V3 | 11.31 | 10.92 | 0.40 | –3% |
| V4 | 11.81 | 11.64 | 0.17 | –1% |
| V5 | 12.59 | 12.27 | 0.32 | –3% |
| V6 | 9.58 | 9.74 | 0.17 | 2% |
| V7 | 8.53 | 8.41 | 0.12 | –1% |
| V8 | 10.19 | 10.08 | 0.11 | –1% |

*Source: SRK analysis*

Figure 5–14, Figure 5–15 and Figure 5–16 present the grade swath plots for Domain V8 in the east- west, north-south and vertical directions. The swath plots show that the composite and block grades generally correlate at an acceptable level.

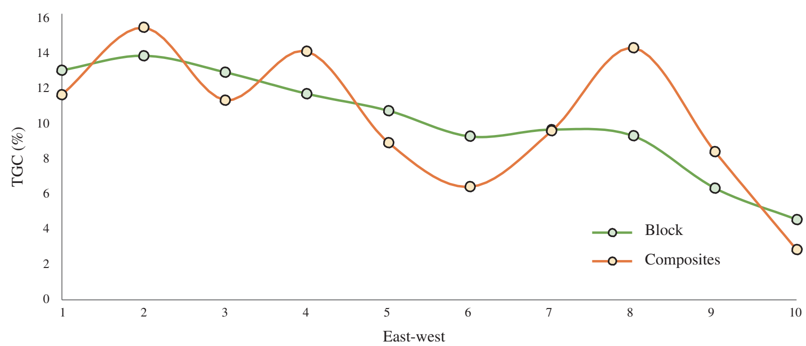


**Figure 5–14: Swath plot along the east-west direction**

*Source: SRK analysis*

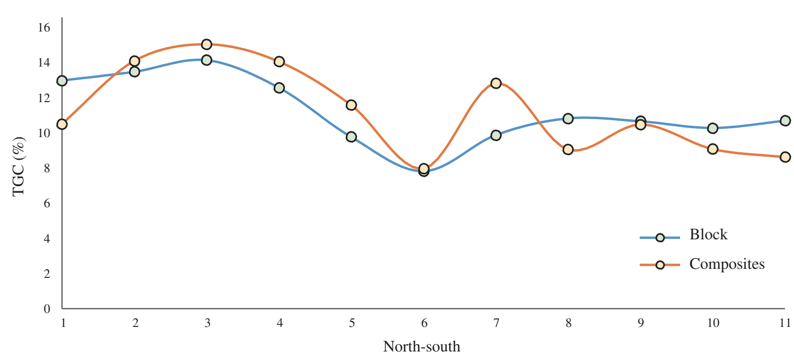


**Figure 5–15: Swath plot along the north-south direction**

*Source: SRK analysis*

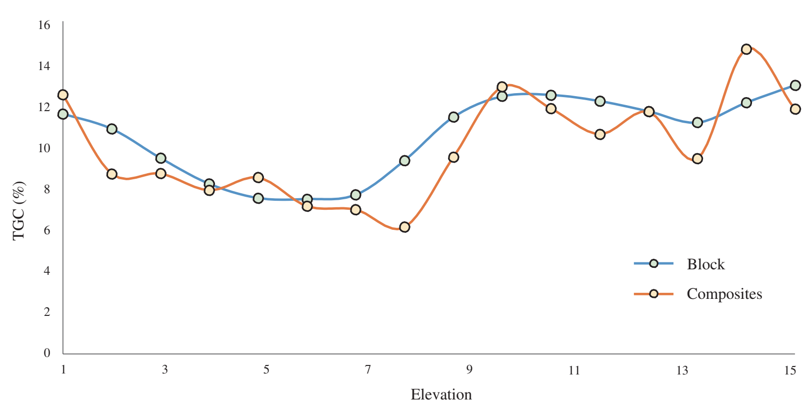


**Figure 5–16: Swath plot along the elevation direction**

*Source: SRK analysis*

### 5.6 Classification

Mineral Resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim to integrate all these concepts to delineate regular areas under similar resource classifications.

The following guidelines have been applied in classifying the Mineral Resources:

- geological continuity
- quality of the historical exploration campaign data and the validation results
- classification criteria as shown in Table 5–7.

**Table 5–7: Mineral Resource classification criteria used in the estimation**

| Category | Graphite Mineral Resource classification criteria | Marble Mineral Resource classification criteria |
|---|---|---|
| Indicated | Drill spacing is 50 m along strike and 50–80 m in the dip direction and high confidence in the geological continuity in V1, V2, V3, V5, V6, V7 and V8 domains. | Drill spacing is 50 m along strike and 50–80 m in the dip direction and high confidence in the geological continuity in the M2 and M3 domains. |
| Inferred | All Mineral Resources within the Domain V4; the adjoining area of the Indicated Mineral Resource or drill spacing is more than 50 m along strike and 50–80 m in the dip direction. | All Mineral Resources in the M1, M4, M5 and M6 domains; the adjoining area of the Indicated Mineral Resource or drill spacing is more than 50 m along strike and 50–80 m in the dip direction. |

*Source: SRK*

Figure 5–17 shows the classified graphite and marble Mineral Resources based on the criteria listed in Table 5–7.

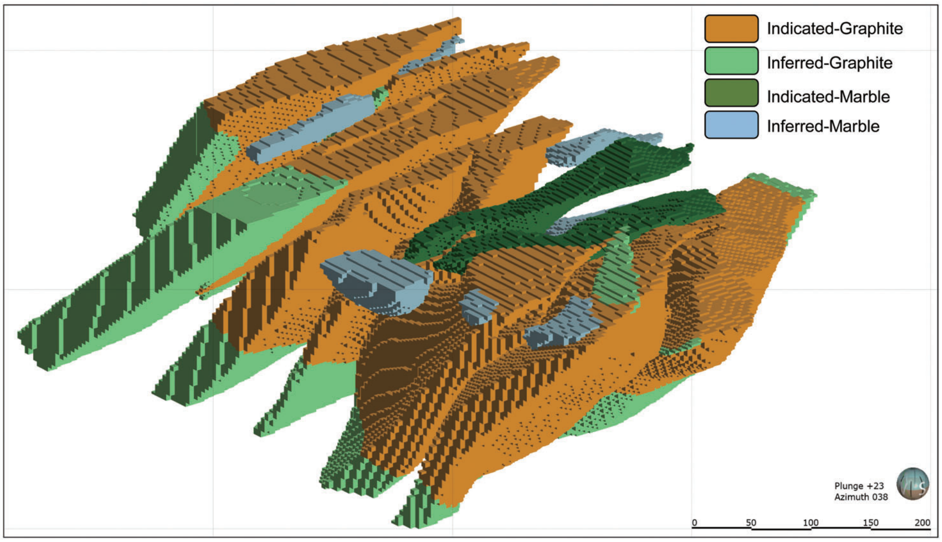


**Figure 5–17: Oblique view of the classified graphite and marble Mineral Resources**

*Source: SRK*

## 5.7 Mineral Resource reporting

The JORC Code (2012) defines a Mineral Resource as:

*'a concentration or occurrence of material of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.'*

The 'reasonable prospects for eventual economic extraction' requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade, taking extraction scenarios and processing recoveries into account. In order to meet this requirement, SRK considers that major portions of the Mine are amenable for open pit extraction.

Clause 49 of the JORC Code also states:

*'When reporting information and estimates for industrial minerals, the key principles and purpose of the JORC Code apply and should be borne in mind. Assays may not be relevant, and other quality criteria may be more applicable. If criteria such as deleterious elements or physical properties are of more relevance than the composition of the bulk mineral itself, then they should be reported accordingly.*

*'The factors underpinning the estimation of Mineral Resources and Ore Reserves for industrial minerals are the same as those for other deposit types covered by the JORC Code. It may be necessary, prior to the reporting of a Mineral Resource, to take particular account of certain key characteristics such as likely product specifications, proximity to markets and product marketability.'*

### *5.7.1 Cut-off assumptions*

In order to determine the quantities of materials offering reasonable prospects for eventual economic extraction, SRK has adopted certain assumptions to evaluate the proportions of the block model (Indicated and Inferred blocks) that could be reasonably expected to be mined from an open pit.

The most important parameters related to the graphite sales price are grade (TGC %) and flake size. Table 5–8 shows the assumptions applied by SRK for flake size distribution, concentrate specification and concentrate sales price. Other assumed parameters, including mining dilution, mining loss, and processing recovery are shown in Table 5–9. These parameters have been reviewed and adjusted by SRK for the conceptual cut-off grade calculations.

The conceptual economic cut-off grade for each graphite block is 3.5% TGC. Here, cut-off grade specifically means the grade that is applied to the block model to determine which portion of the model qualifies as a Mineral Resource.

**Table 5–8: Graphite concentrate flake size distribution and assumed sales price**

| | Item | Unit | Value |
|---|---|---|---|
| Flake size | | | |
| | -325 mesh | % | 42.5 |
| | +100 mesh | % | 8.6 |
| TGC | | % | 95 |
| Graphite concentrate specification | | mesh | -194 |
| Concentrate sales price | | RMB/t | 3,000 |

*Source: SRK*

**Table 5–9: Other assumed parameters**

| Parameter | Unit | Value |
|---|---|---|
| Mining loss | % | 5 |
| Dilution rate | % | 5 |
| Processing recovery | % | 90 |
| Mining cost | RMB/t | 25 |
| Processing cost | RMB/t | 45 |
| General and Administration (G&A) cost | RMB/t | 10 |
| Selling expense | RMB/t | 10 |
| Graphite concentrate price | RMB/t | 3,000 |
| Processing cut-off grade | TGC % | 3.50 |

*Source: SRK*

### *5.7.2 Industrial minerals considerations*

Graphite ores have been mined or sourced from third parties and processed at the Company's beneficiation plant and spherical graphite processing plant. Flake graphite concentrate, spherical graphite and other by-products have been sold to various customers. The potential development of the market has also been supported by a market study (Frost & Sullivan, 2021).

The marble blocks are separated and stockpiled during graphite mining activities as a by-product. These marble blocks are then sold to nearby aggregate companies at the mine gate.

### *5.7.3 Mining License elevation limits*

The approved mining elevations of the mining license are between 274 and 150 masl. As advised by the Company's legal advisers, upon completion of the agreed transfer process regarding an increase in mining scope under current applicable PRC Laws, there is no material legal impediment for China Graphite to obtain the mining rights below the current approved mining limit. On this basis, SRK considers there is a reasonable prospect for eventual economic extraction of material below 150 masl.

### *5.7.4 Mineral Resource Statement*

The Mineral Resource estimates prepared by SRK as at 31 December 2021 for the Mine within and below the elevation limits of the mining license are tabulated in Table 5–10 and Table 5–11 (graphite) and Table 5–12 and Table 5–13 (marble). The graphite and marble Mineral Resources have been classified as Indicated and Inferred in accordance with the JORC Code (2012) and are based on the analysis and assumptions outlined in this Report. Production in 2021 has been depleted from the Mineral Resource.

**Table 5–10: Graphite Mineral Resource Statement within the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| **Domain** | **Mineral Resource Category** | **Tonnage** *(kt)* | **TGC** *(%)* |
|---|---|---|---|
| V1 | Indicated | 1,740 | 7.86 |
| | Inferred | 138 | 12.62 |
| V2 | Indicated | 229 | 7.71 |
| | Inferred | 48 | 7.97 |
| V3 | Indicated | 3,333 | 10.99 |
| | Inferred | 656 | 11.81 |
| V5 | Indicated | 2,440 | 11.86 |
| V6 | Indicated | 1,348 | 8.37 |
| | Inferred | 107 | 8.87 |
| V7 | Indicated | 2,123 | 8.14 |
| | Inferred | 29 | 4.98 |
| V8 | Indicated | 2,539 | 8.83 |
| | Inferred | 20 | 12.59 |
| | **Indicated** | **13,753** | **9.59** |
| | **Inferred** | **997** | **11.24** |
| | **Total** | **14,750** | **9.70** |

*Notes:*

- The Mineral Resources are reported on an in situ basis at a 3.5% TGC cut-off.
- Bulk density: weathered zone: 2.31 t/m$^3$; M1:2.70 t/m$^3$; M2: 2.76 t/m$^3$; M3:2.69 t/m$^3$; M4:2.71 t/m$^3$; M5:2.70 t/m$^3$; M6:2.62 t/m$^3$; M7:2.59 t/m$^3$; M8:2.63 t/m$^3$.
- Tonnages are reported in metric units, grades are reported in percentage TGC. Tonnages and grades are rounded appropriately. Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

**Table 5–11: Graphite Mineral Resource Statement below the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Domain | Mineral Resource Category | Tonnage *(kt)* | TGC *(%)* |
|---|---|---|---|
| V1 | Indicated | 1,417 | 6.61 |
| | Inferred | 218 | 8.86 |
| V2 | Indicated | 118 | 6.97 |
| | Inferred | 115 | 6.47 |
| V3 | Indicated | 3,820 | 9.83 |
| | Inferred | 1,474 | 9.82 |
| V5 | Indicated | 5,410 | 12.11 |
| | Inferred | 2,541 | 12.12 |
| V6 | Indicated | 2,152 | 12.25 |
| | Inferred | 986 | 11.63 |
| V7 | Indicated | 4,284 | 9.95 |
| | Inferred | 578 | 10.87 |
| V8 | Indicated | 3,737 | 10.59 |
| | Inferred | 2,480 | 11.27 |
| | **Indicated** | **20,937** | **10.59** |
| | **Inferred** | **8,393** | **11.16** |
| | **Total** | **29,330** | **10.75** |

*Notes:*

- The Mineral Resources are reported on an in situ basis at a 3.5% TGC cut-off.
- Bulk density: weathered zone: 2.31 t/m$^3$; M1:2.70 t/m$^3$; M2: 2.76 t/m$^3$; M3:2.69 t/m$^3$; M4:2.71 t/m$^3$; M5:2.70 t/m$^3$; M6:2.62 t/m$^3$; M7:2.59 t/m$^3$; M8:2.63 t/m$^3$.
- Tonnages are reported in metric units, grades are reported in percentage TGC. Tonnages and grades are rounded appropriately. Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

**Table 5–12: Marble Mineral Resource Statement within the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Mineral Resource Category | Tonnage *(kt)* |
|---|---|
| Indicated | 1,541 |
| Inferred | 582 |
| **Total** | 2,123 |

*Note:* Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

**Table 5–13: Marble Mineral Resource Statement below the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| **Mineral Resource Category** | **Tonnage** *(kt)* |
|---|---|
| Inferred | 135 |

*Note:* Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, SRK does not consider them to be material.

### *5.7.5 Grade-tonnage sensitivities*

The stated Mineral Resources are sensitive to the selection of the reporting cut-off grades. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Table 5–14 at different cut-off grades. The figures presented in this table are not equivalent to a Mineral Resource Statement; they are presented for information purposes only and are intended to show the sensitivity of the block model estimates to the selection of cut-off grade only. Figure 5–18 presents this sensitivity as grade- tonnage curves.

**Table 5–14: Global block model quantities and grade estimates — Yixiang Graphite Project at various cut-off grades within the mining license area**

| **Grade cut-off (TGC %)** | **Tonnage** *(Mt)* | **Grade** *(TGC %)* |
|---|---|---|
| 2.0 | 16.2 | 9.33 |
| 2.5 | 16.1 | 9.38 |
| 3.0 | 15.9 | 9.49 |
| 3.5 | 15.4 | 9.69 |
| 4.0 | 14.7 | 9.96 |
| 4.5 | 14.1 | 10.21 |
| 5.0 | 13.5 | 10.46 |
| 5.5 | 12.9 | 10.69 |
| 6.0 | 12.4 | 10.91 |
| 6.5 | 11.8 | 11.12 |
| 7.0 | 11.3 | 11.34 |
| 7.5 | 10.7 | 11.56 |
| 8.0 | 10.1 | 11.79 |

*Note:* The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are presented to show the sensitivity of the block model estimates to the selection of cut-off grade only.

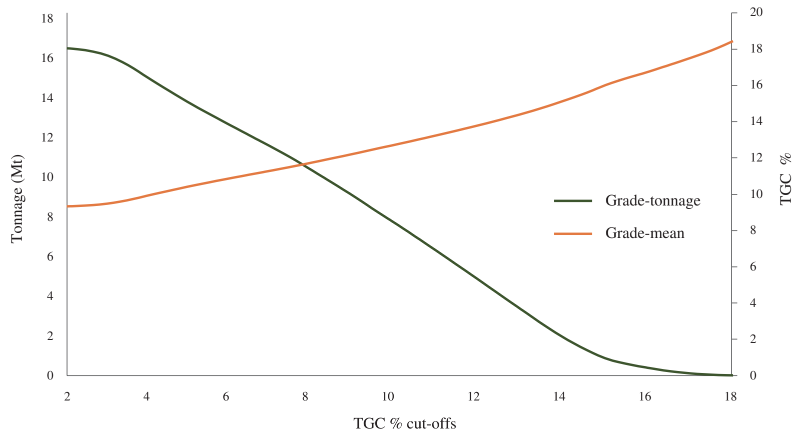


**Figure 5–18: Grade-tonnage curve for Yixiang Graphite Project within the mining license area**

*Source: SRK analysis*

## 6 MINING

### 6.1 Introduction

The existing Mine is an open pit operation, consisting of conventional drilling, blasting, loading and hauling, with a target annual graphite ore production rate of 0.5 Mtpa. China Graphite plans to reach this targeted production rate by 2023.

The construction of the Mine commenced in mid-2019 with early waste stripping and produced first ore in the same year. The total materials moved attained 1.02 Mt in 2019, 1.65 Mt in 2020 and 1.55 Mt in 2021 respectively. The production history over the past three years has provided China Graphite with a solid understanding of the likely operating conditions, mining equipment selected and operability of the pit, as well as the beneficiation plant's response to the mined ore. The operation's statistics are given in Table 6–1.

At the time of SRK's site visit in January 2022, the Mine was positioned as a hilltop mining area. Four benches were developed in the southern part of the Mine area at 240 masl, 225 masl, 210 masl and 195 masl. The dimensions of the 195 masl and 240 masl benches measure approximately 350 m and 200 m, respectively (Figure 6–1).

**Table 6–1: 2019–2021 operation statistics**

| Year | Waste removal | Graphite ore | Marble ore | Total material mined |
|---|---|---|---|---|
| | *(Mt)* | *(Mt)* | *(Mt)* | *(Mt)* |
| 2019 | 0.56 | 0.26 | 0.20 | 1.02 |
| 2020 | 0.72 | 0.21 | 0.72 | 1.65 |
| 2021 | 0.95 | 0.26 | 0.34 | 1.55 |

*Source: China Graphite, compiled by SRK*

**Figure 6–1: Development at bench 195 masl**

*Source: SRK site visit, July 2020*

## 6.2 Technical studies

The technical work and studies undertaken for the Mine are described in two reports as outlined below. These studies support the current open pit operation, the currently approved production capacity of 0.5 Mtpa and the lowest mining elevation limit at 150 masl (Table 3–1):

- Feasibility Study on the Beishan Graphite Mine with 0.5 Mtpa Mining Capacity, by Suzhou Sinoma Design and Research Institute of Non-metallic Minerals Industry Co., Ltd. (Sinoma) dated December 2017, referred to as the '2017 FS'.

- Preliminary Engineering Design for the Beishan Graphite Mine with 0.5 Mtpa Mining Capacity, by Heilongjiang Province Metallurgical Design and Planning Institute (MDPI) dated January 2019 and updated in December of the same year, referred to as the '2019 FS'.

SRK considers the level of accuracy of the Modifying Factors described in the 2017 FS and 2019 FS to be similar to a pre-feasibility study (PFS) as defined by the JORC Code (2012). Based on the current operational conditions and Company's forecast together with other Modifying Factors described in the previous technical studies, SRK conducted an open pit optimisation, mine design and production schedule.

### 6.3 Optimisation

To develop an optimal open pit design for the Mine, an optimized open pit shell was prepared using the Lerchs-Grossman 3D algorithm in Whittle software (LG 3D). The LG 3D open pit optimizer determines a set of resource blocks with the maximum value per tonne, creating an optimized open pit shell from a 3D resource block model.

The range of open pit shells varies according to the value of the Revenue Factor applied. At a Revenue Factor of 1.0, the ultimate open pit shell is found where the marginal cost for an additional unit of product is equal to the net revenue received for that additional unit of product. This solution is specific to the revenue and project cost assumptions. Revenue Factors greater than 1.0 will generate larger open pits that decrease in profitability until the open pits become sub-economic. Open pit shells based on Revenue Factors lower than 1.0 will typically target higher-grade areas, as the revenue per product is artificially depressed by multiplying the Revenue Factor by the base product price. For the lower Revenue Factor shells to be viable, similar revenue is required to offset similar mining costs to the Revenue Factor 1.0 case and, as such, will need to be generated by higher-grade blocks.

With defined open pit optimisation parameters, including saleable product prices, mining, processing and other indirect costs, graphite and marble material recoveries, open pit slopes and other project- related constraints, the open pit optimizer searches for the open pit shell with the highest undiscounted cashflow. In accordance with the guidelines of the JORC Code (2012), only blocks classified as either Measured or Indicated are allowed to drive the open pit optimizer. Open pit shells are used as a guide for subsequent practical open pit mine designs.

#### *6.3.1 Optimisation inputs*

SRK conducted a review of the 2019 FS, and considers the Company's forecast based on the actual operating statistics appropriate for the optimisation. The key open pit optimisation inputs used in LG 3D are presented in Table 6–2.

**Table 6–2: Open pit optimisation inputs**

| Item | Unit | Input |
|---|---|---|
| Mining cost | RMB/t total material moved | 6.3 |
| Processing cost | RMB/t feed ore | 125.7 |
| G&A cost | RMB/t feed ore | 14.0 |
| Graphite transport cost | RMB/t feed ore | 15.0 |
| Graphite concentrate sales (95% TGC) price | RMB/t | 2,578 |
| Marble sales price | RMB/t | 7 |
| Graphite recovery | % | 91.5 |
| Marble block recovery | % | 97 |
| Mining dilution | % | 10 |
| Mining loss | % | 5 |
| Overall slope angle | degrees | 43 |

*Source: China Graphite information memorandum, compiled by SRK*

The graphite processing recovery rate relies on the actual production records from the beneficiation plant. The sales price for the graphite concentrate relies on the Company's forecast, supported by recent sales contracts. Marble is mined as a by-product during the mining process and sold as unprocessed blocks. The marble block recovery, representing the saleable proportion of mined marble, is reliant on the production records over 2020.

The mining dilution was designed at 5% in the 2019 FS; however, information provided by the Company indicates that 10% dilution is more practical, based on the actual production records.

As proposed by the 2019 FS, the overall slope angle (OSA) is 43°; the permanent bench face angle (BFA) is 65°, and temporary BFA is 70°. SRK considers the recommended slope angles are reasonable. As mining progresses deeper, an independent geotechnical review and guidance on actual and recommended mining should be conducted to validate the FS design.

The Mineral Resource model (MRM) within the current mining elevation limit (Table 5–10) was re-coded and validated in Whittle. The difference between the original MRM and the re-coded MRM is within 0.3% in both grade and tonnage, which in SRK's opinion is acceptable.

The re-coding included:

- re-blocking the MRM from 5 × 5 × 2 (X × Y× Z) into 10 × 10 × 5 to represent the selective mining unit (SMU) and an efficient Whittle processing timeframe
- adding waste rock at a specific gravity of 2.68 t/m$^3$
- other minimum re-coding for the Whittle optimisation requirements, such as rock type coding based on both ore type and resource classification.

The mining license spatial limit was also considered during the optimisation.

***6.3.2 Optimisation results***

Using the inputs described above, the LG 3D open pit optimizer tool was run and produced an optimum open pit at different product prices, which are referred to as Revenue Factors (RFs), for the Mine.

Revenue Factor 1.0 was achieved for open pit shell 30, which was selected as the base case because the ultimate open pit shell was achieved at RF 1.0 when the Whittle economic return is maximized. At Revenue Factor 1.0, the marginal cost for an additional unit of product is equal to the net revenue received for that additional unit of product. The isometric view of the optimisation result of open pit shell 30 is presented in Figure 6–2.

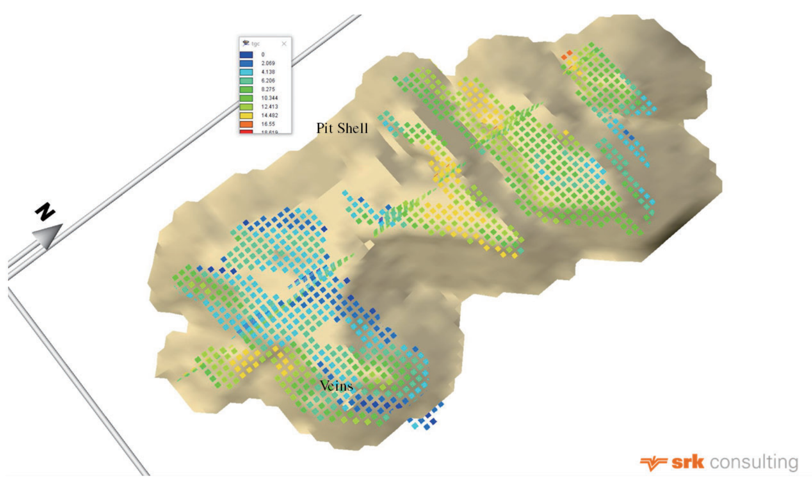


**Figure 6–2: Isometric view of open pit shell 30 (RF 1.0)**

*Source: SRK*

***6.3.3 Detailed mine design***

The detailed mine design was carried out using the selected LG 3D open pit shell (RF 1.0) as a guide. The proposed open pit design includes the practical geometry required in the Mine, including open pit access and haulage ramp to all open pit benches, open pit slope design, benching configurations, smoothed open pit walls and catch berms. The major design parameters used are described in Table 6–3. The plan view of the open pit design is presented in Figure 6–3, while the comparison between the open pit design and LG 3D shell is shown in Figure 6–4. The open pit design indicates that above 195 masl, the mining operation will require the removal of a hill. Below 195 masl, the operation will be an open pit excavation. The open pit access is at 195 masl on the southeast pit edge.

**Table 6–3: Detailed open pit design parameters**

| Item | Unit | Parameter |
|---|---|---|
| Bench height | m | 15 |
| BFA | degrees | 65 |
| Catch berm | m | 8 |
| Ramp width | m | 13 |
| Road gradient | % | 10 |
| OSA | degrees | 43 |

*Source: 2019 FS, compiled by SRK*

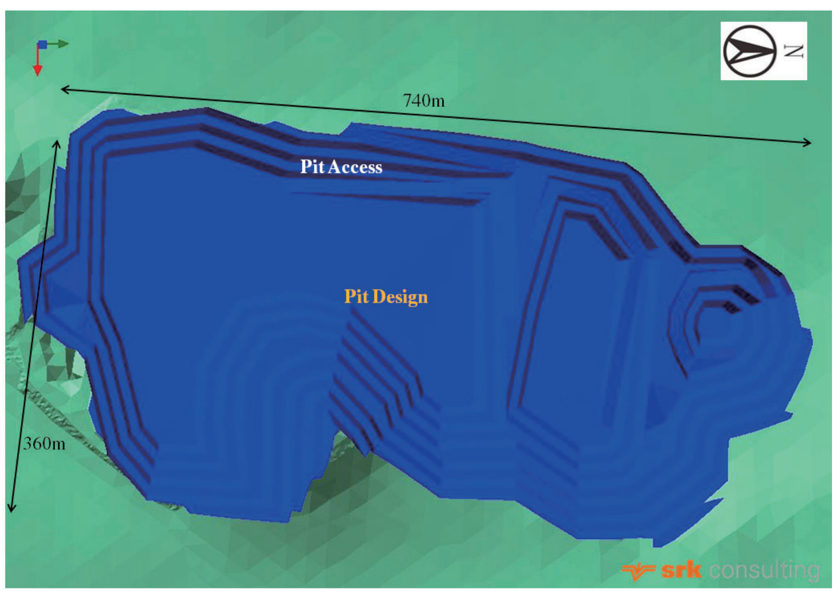


**Figure 6–3: Plan view of open pit design**

*Source: SRK*

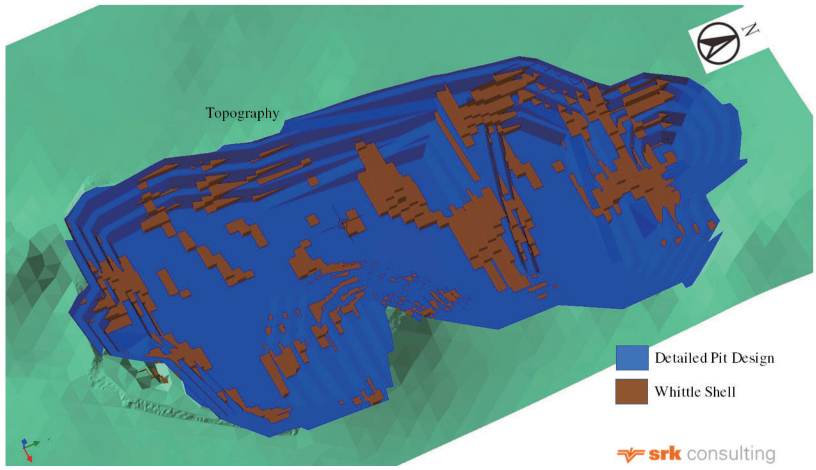


**Figure 6–4: Isometric view of open pit design and Whittle optimisation**

*Source: SRK*

The Mineral Resources and waste materials within the open pit design on each beach are presented in Table 6–4, at a zero cut-off grade. The mine design against the current mining operation is shown in Figure 6–5.

**Table 6–4: Materials within the open pit design**

| Bench | Toe elevation (masl) | Indicated Mineral Resource (kt) — Graphite | Inferred Mineral Resource (kt) — Graphite | Indicated Mineral Resource (kt) — Marble | Inferred Mineral Resource (kt) — Marble | Waste (kt) |
|---|---|---|---|---|---|---|
| B240 | 240 | — | — | 37 | 33 | 96 |
| B225 | 225 | 255 | 0 | 288 | 15 | 984 |
| B210 | 210 | 1,335 | 24 | 476 | 24 | 1,892 |
| B195 | 195 | 2,392 | 57 | 453 | 28 | 2,783 |
| B180 | 180 | 2,655 | 184 | 229 | 12 | 2,942 |
| B165 | 165 | 2,596 | 70 | 56 | — | 1,687 |
| B150 | 150 | 2,427 | 11 | 0 | — | 528 |
| **Total** | | **11,661** | **347** | **1,540** | **112** | **10,913** |

*Source: SRK*

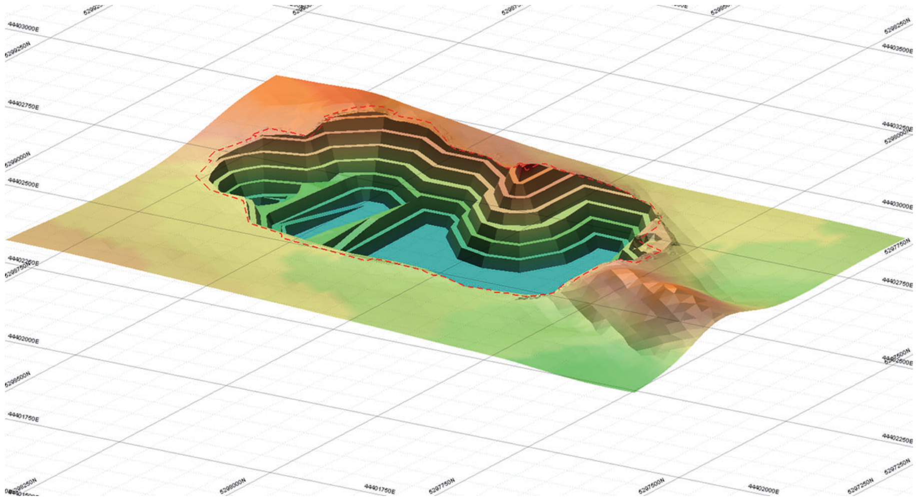

**Figure 6–5: Oblique view of the mine design, looking northeast**

*Source: SRK*

### 6.4 Mining method

The 2019 FS considers a conventional mining sequence proceeding downwards and two benches being worked simultaneously. A conventional open pit mining methodology is currently used, comprising drilling, blasting, loading, and haulage. The mine is run as an owner operation, except for blasting work which is contracted to a professional contractor. The blasting contractor provides hole survey, explosive transportation, charging, and blasting works. No magazine has been built on site.

Two down-the-hole (DTH) drills (model KGH6) are used for drilling based on the physical characteristics of the orebody and the mine production rate, with bore diameters of 140 mm and vertical hole depths of 16.5 m, including sub-drilling of 1.5 m. Blasting holes are arranged in rectangular or quincunx shapes, with spacing of 5.5 m and burden of 4.5 m.

The maximum acceptable lump size of the mined materials is 750 mm, and the oversize proportion is designed at 5%. Large waste rocks will be transported directly to the waste dump without re-crushing, while large lumps of mineralized materials will be stockpiled and re-crushed by hydraulic hammers.

Loading is carried out using 2.5 $m^3$ hydraulic excavators (Model CAT349/345 and Sany550) supported by a bulldozer and a front-end loader (FEL) to clean and pile the working face. Broken ore and waste are loaded by the excavators into 30 t or 50 t dump trucks and hauled to the beneficiation plants (~10 km away).

SRK considers the mining and stripping method adopted to be mature mining technology commonly used in open pit mining operations. The designed bench height and bench slope angle are considered reasonable.

### 6.5 Mining equipment

China Graphite currently has the following mining equipment to support the mining operation:

- Drilling: 1 set of KGH6 DTH drill with mobile air compressor (Atlas Copco brand)
- Mining: 3 sets of excavators, 1 × CAT349, 1 × CAT345, and 1 x Sany550
- Hauling: 10 dump trucks with a nameplate capacity of 30 t and 10 dump trucks with a nameplate capacity of 50 t.
- 1 hydraulic hammer equipped on a CAT340 excavator
- 1 modified watering tank truck
- 1 FEL.

China Graphite plans to purchase an additional FEL in 2022. SRK considers the chosen equipment fleet is reasonable for the graphite ore mining capacity of 0.5 Mtpa and 1.7 Mtpa total material moved. However, the LoM is 20 years, and the equipment should be replaced every 7–10 years.

### 6.6 Mine service

A flood prevention channel is to be gradually constructed as open pit stripping progresses, and a temporary channel will be established if required as a temporary measure during mining activities.

Provision has been made in the mine design for water sumps to be constructed at the lowest point in the open pit to capture water, which is then discharged in a suitable manner, or pumped to the elevated water tank associated with the processing concentrator. The maximum water discharge capacity of proposed drainage facilities is 300 m3 per day.

Water consumption is mainly attributable to dust suppression and for drilling purposes. A 300 $m^3$ head tank is proposed in the 2019 FS on a 235 masl bench.

The electric power requirement of the mine site is minimal, and its main uses are the dewatering pump, air compressor and lighting. A 10 kV/0.4 kV substation is located on the mine site and is connected to the national electricity grid.

Maintenance of mobile mining equipment is proposed to be outsourced to the graphite industrial park, where the beneficiation plant and the spherical graphite processing plant are located.

SRK considers the existing water supply and electricity infrastructure to be sufficient for the current and planned operation.

### 6.7 Mine scheduling

Based on the 2019 FS, the Mine was designed to operate 200 working days per year, with three shifts per day of 8 hours each to account for the snowy weather that usually stops mining activities or reduced mining productivity in the winter months. The designed production rate is 500 ktpa graphite ore mining, and the total material mining capacity is 1.2 Mtpa. During the site visit in July 2020, SRK was informed by site technicians that the operation was currently 12 hours per day by 1 shift, during daylight hours. The arrangement resulted in 1.6 Mt of total material moved in 2020.

SRK has re-scheduled the production based on the parameters and mining sequence proposed in the 2019 FS against SRK's Mineral Resource estimate and open pit design, and the project goal proposed by China Graphite, which plans to achieve the target graphite feed ore capacity of 0.5 Mtpa by 2023.

To reach this target, the annual profile of total material mined has been left unconstrained within reason. The total material mined is expected to attain, 1.78 Mt in 2022 and 1.51 Mt in 2023 respectively, and gradually reduce to 1.42 Mt to 1.38 Mt from 2023 onwards. The current and proposed mining fleet is sufficient to meet the required capacity.

The annual LoM open pit mining schedule for the Mine is presented in Table 6–5 and Figure 6–6. The LoM is 20 years, with an LoM average graphite grade of 10.15% TGC and LoM stripping ratio of 1.15 (waste divided by graphite feed ore plus by-product marble material).

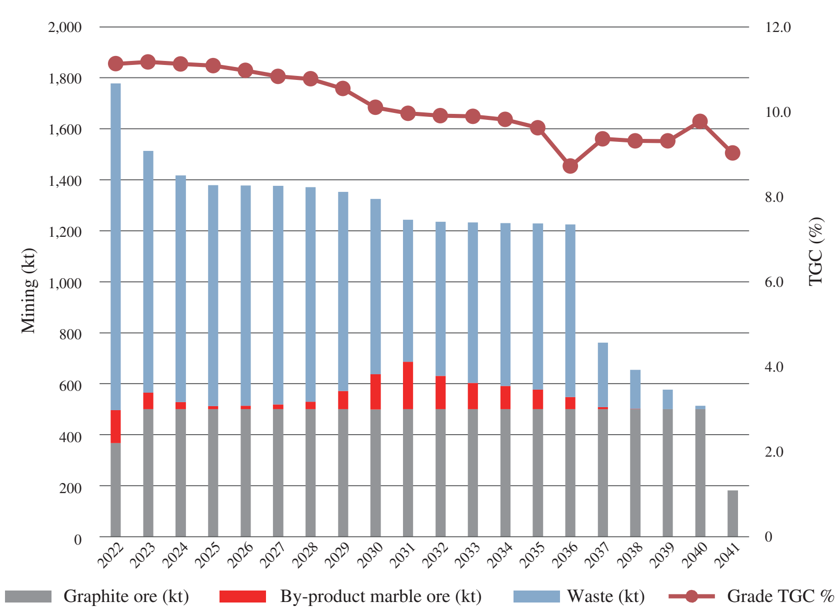


**Figure 6–6: Production schedule over LoM**

*Source: SRK*

**Table 6–5: Production schedule**

| Item | Unit | LoM total | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Graphite ore | kt | 9,549 | 367 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 181 |
| Graphite ore grade | TGC % | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 9 | 10 | 9 |
| Marble ore by-product | kt | 1,151 | 130 | 65 | 28 | 12 | 13 | 19 | 30 | 72 | 138 | 185 | 131 | 103 | 92 | 77 | 47 | 7 | 1 | 0 | 0 | 0 |
| Stripping waste | kt | 12,273 | 1,281 | 948 | 889 | 866 | 865 | 857 | 842 | 781 | 687 | 557 | 605 | 629 | 639 | 652 | 678 | 254 | 153 | 77 | 13 | 0 |
| Total materials | kt | 22,974 | 1,778 | 1,514 | 1,417 | 1,379 | 1,378 | 1,376 | 1,371 | 1,353 | 1,325 | 1,243 | 1,236 | 1,232 | 1,231 | 1,229 | 1,225 | 761 | 655 | 577 | 513 | 216 |
| Stripping ratio (S/R) | t/t | 1.15 | 2.58 | 1.68 | 1.68 | 1.69 | 1.69 | 1.65 | 1.59 | 1.37 | 1.08 | 0.81 | 0.96 | 1.04 | 1.08 | 1.13 | 1.24 | 0.50 | 0.31 | 0.15 | 0.03 | — |

*Source: SRK*

## 7 ORE RESERVE ESTIMATION

The definition of Ore Reserves in accordance with the JORC Code (2012) is as follows:

*An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.*

The conversion from Mineral Resources to is Ore Reserves is presented in Figure 7–1.

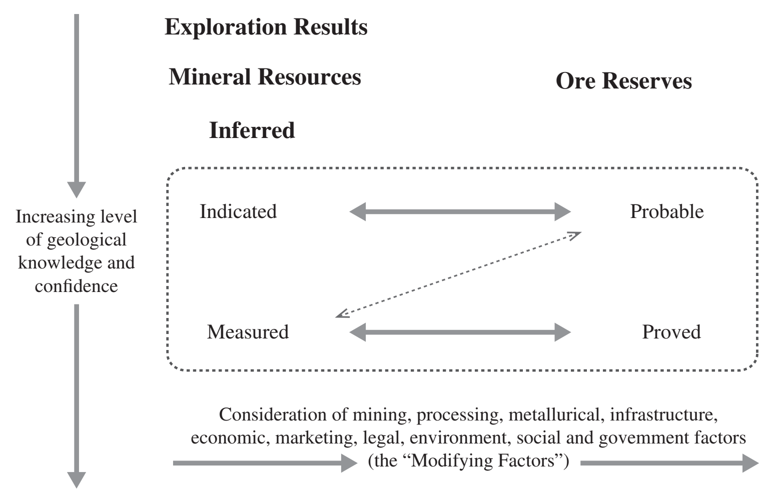


**Figure 7–1: General relationship between Mineral Resources and Ore Reserves**

*Source: JORC Code (2012)*

The definition of economically mineable ore is based on the results of open pit optimisation. Open pit optimisation was used to identify the optimum economic open pit shape based on the highest projected cashflow. The marginal cut-off grade (MCOG) of graphite is defined by the destination for material within designed open pit. If the material has a grade higher than the MCOG, the material is trucked to the beneficiation plant, otherwise it is considered waste and dumped onto the waste dump. The marble material within the open pit is by-product, and its contribution to the mine economics has been considered during open pit optimisation process.

The following formula was applied by SRK to estimate the MCOG for the graphite ore, by applying the inputs presented in Table 7–1. The calculation shows that materials within the open pit that have more than 6.6% TGC can be processed economically, and the Ore Reserves at the MCOG will have positive revenues. These assumptions may change in the future, which will affect the MCOG calculation, which will then impact the mine inventory estimation.

$$A = \frac{C^p + C^g + C^t}{R * P}$$

**Table 7–1: Estimates of MCOG for graphite ore**

| Item | Unit | Input | Description |
|---|---|---|---|
| A | % | 6.6 | Graphite MCOG |
| Cp | RMB/t Feed Ore | 125.7 | Processing cost |
| Cg | RMB/t Feed Ore | 14.0 | G&A cost |
| Ct | RMB/t Feed Ore | 15 | Graphite transport cost |
| R | % | 91.5 | Processing recovery for graphite in concentrate |
| P | RMB/t | 2,578 | Forecast (95%) graphite concentrate prices |

*Source: SRK*

### 7.1 Modifying Factors

The following Modifying Factors were used by SRK to determine the Ore Reserve.

- Optimal pit shell: included the Mineral Resources within the economic pit limits.
- Open pit design: the conversion factor for the Ore Reserve between the optimized open pit shell and the practical mine design has been accounted for in this parameter.
- Dilution: mining dilution was estimated as 5% by the 2019 FS but recorded as 10% in the 2020 production record. A 10% dilution rate was adopted for Ore Reserve estimation purposes.
- Mining recovery: a 5% mining loss rate was applied in the 2019 FS, which is consistent with the operational records.

### 7.2 Ore Reserve estimates

The estimated Ore Reserve based on the Mineral Resource estimate and Modifying Factors to the tonnage and contained graphite is summarized in Table 7–2, and illustrated in the waterfall chart shown in Figure 7–2.

**Table 7–2: Ore Reserve estimation**

| Description | Tonnage *(kt)* | Grade *(TGC %)* |
|---|---|---|
| Indicated Mineral Resource (at a 3.5% TGC grade cut-off) | 14,158 | 9.6 |
| Indicated Mineral Resource in optimal pit shell | 10,196 | 10.3 |
| Open pit design | 11,326 | 10.1 |
| Indicated Mineral Resource in open pit design (at a 6.6% TGC MCOG) | 9,385 | 11.2 |
| Allowance for dilution | 936 | — |
| Mining loss | (516) | 10.2 |
| Mining inventory | 9,808 | 10.2 |
| 2021 Depletion | (258) | 10.9 |
| Ore Reserve | 9,549 | 10.1 |

*Source: SRK*

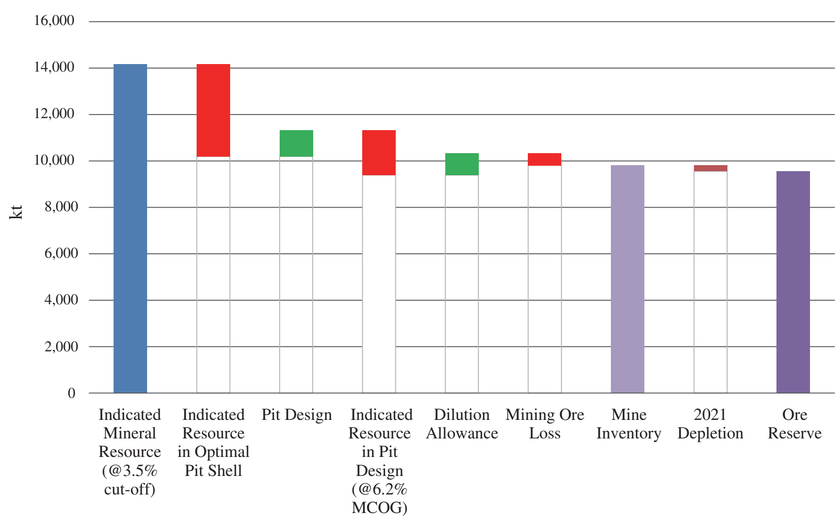


**Figure 7–2: Ore Reserve estimation waterfall chart**

*Source: SRK*

## 7.3 Ore Reserve Statement

Applying the Modifying Factors, SRK estimated the Ore Reserve of the Mine in accordance with the JORC Code (2012) and presents them in Table 7–3, inclusive of Mineral Resources. The economically mineable parts of the Indicated Mineral Resources within the open pit design and the current mining license limits, including diluting materials and allowances of losses, were classified as Probable Ore Reserves. Production in 2021 has been depleted from the Ore Reserve.

**Table 7–3: Graphite Ore Reserve Statement within the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Ore Reserve Category | Ore Reserve *(kt)* | Grade *(TGC %)* |
|---|---|---|
| Probable | 9,549 | 10.15 |

**Table 7–4: Marble Ore Reserve Statement within the mining license elevation limits — Yixiang Graphite Project as at 31 December 2021**

| Ore Reserve Category | Ore Reserve *(kt)* |
|---|---|
| Probable | 1,152 |

## 8 METALLURGY AND MINERAL PROCESSING

### 8.1 Introduction

The Project is an existing graphite mining and processing operation.

In 2006, China Graphite built a beneficiation plant and began processing ores from third parties and producing flake graphite concentrates. As a result, it has an established historical operating basis on which to base future upgrades. The existing plant adopted a flotation flowsheet incorporating primary grinding, rougher flotation, multiple stages of regrinding on the primary concentrate and multiple stages of cleaning, to produce high-carbon graphite concentrates. Debottlenecking and upgrades completed in 2013 expanded the processing capacity to 0.4 Mtpa. From the historical production records, the graphite grade of concentrate was above 94% TGC and the graphite recovery was over 90%. A second phase of expansion was completed in the third quarter of 2021 and the upgraded processing capacity is nominally 0.5 Mtpa.

Between 2006 to 2018, the feed ore was provided by third parties. In 2019, the operation began to process graphite ore from its own Mine and reduced reliance on third parties' ores.

In 2011, China Graphite built a spherical graphite processing plant to the west of the current beneficiation plant. It processes graphite concentrate from the beneficiation plant to produce spherical graphite, a graphite anode material used in lithium-ion batteries. In 2019, an additional production line was installed. The current production capacity is 5,200 tpa spherical graphite. Since the fourth quarter of 2021, the spherical graphite processing plant has been being upgraded. The upgrade is expected to be completed by the second quarter of 2022 with a nominal capacity of 6,500 tpa spherical graphite.

To date, the major products from the Project comprises flake graphite concentrate and spherical graphite. As by-products of the spherical graphite processing, micro graphite powder and high-purity graphite powder are also produced (Figure 8–1 and Figure 3–2).

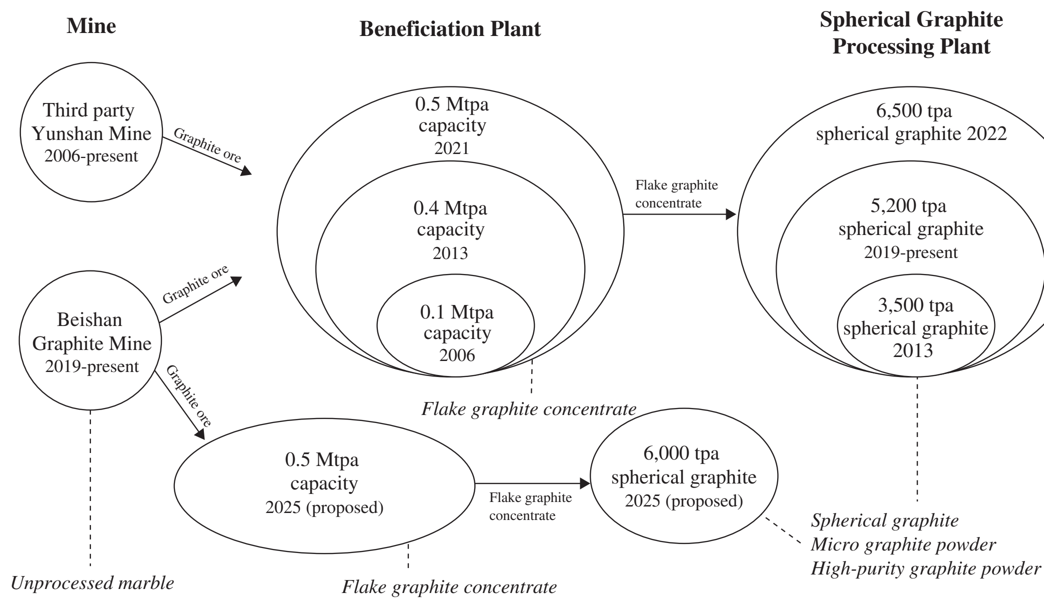


**Figure 8–1: China Graphite production workflow**

*Source: China Graphite information memorandum, compiled by SRK*

China Graphite plans to build a new beneficiation plant with a throughput capacity of 0.5 Mtpa located beside the Mine to increase the total beneficiation capacity to 1.0 Mtpa by 2025. A new spherical graphite processing plant with an annual processing capacity of 17,000 t is also proposed. The new plant targets an annual production of 6,000 t of spherical graphite and 10,000 t of micro graphite powder. The target date for commissioning of the new plant is 2025.

## 8.2 Metallurgical testwork

### *8.2.1 Testwork samples*

China Graphite planned to commence processing third party ores and use ores from its own Mine. In order to facilitate this plan, China Graphite commissioned Suzhou Sinoma Design and Research Institute of Non-metallic Minerals Industry Co., Ltd. (Sinoma) to conduct metallurgical testwork on the weathered and fresh ores from the Mine in 2016. The test samples were collected by Ruifa.

Two composite samples were collected. The weathered ore composite was collected from surface trenches and the fresh ore composite was collected from multiple drill core intervals at a depth of at least 30 m below the surface. Each of the weathered and fresh ores composites were combined with hangingwall and footwall waste rock to represent typical dilution levels encountered during mining. This waste component represented 8% of the total sample weight. The sample numbers and collection locations are shown in Table 8–1 and Table 8–2 and Figure 8–2, respectively. The average grades of the weathered and fresh ore composites were 10.23% and 10.30% TGC, respectively. The samples were composited to reflect different parts of the orebody. They are regarded as representative and allows the variability of behaviour between fresh and oxidized domains to be determined.

**Table 8–1: Metallurgical samples of weathered ore**

| Trench ID | Sampling location From *(m)* | To *(m)* | Sample weight *(kg)* | Grade *(TGC %)* |
|---|---|---|---|---|
| TC6–1 | 24.00 | 104.00 | 64.00 | 10.05 |
| TC8–1 | 167.00 | 210.00 | 34.64 | 9.82 |
| TC6–1 | 195.20 | 251.50 | 45.04 | 9.82 |
| TC8–1 | 276.20 | 325.50 | 39.44 | 14.11 |
| TC14–2 | 210.00 | 258.00 | 38.40 | 4.89 |
| TC10–1 | 21.50 | 54.00 | 26.00 | 10.72 |

| Trench ID | Sampling location From *(m)* | To *(m)* | Sample weight *(kg)* | Grade *(TGC %)* |
|---|---|---|---|---|
| TC8–3 | 10.70 | 53.00 | 33.84 | 6.54 |
| TC10–2 | 92.00 | 141.00 | 39.20 | 15.50 |
| TC4–1 | 208.00 | 233.50 | 20.40 | 14.03 |
| Ore | | | 361.36 | 10.23 |
| Wall rock | | | 80.00 | |
| **Total** | | | **441.36** | |

*Source: Sinoma, compiled by SRK*

**Table 8–2: Metallurgical samples of fresh ore**

| Drillhole ID | Sampling location From *(m)* | To *(m)* | Sample weight *(kg)* | Grade *(TGC %)* |
|---|---|---|---|---|
| ZK6–1 | 30.00 | 54.70 | 18.53 | 10.85 |
| ZK6–2 | 30.00 | 43.60 | 10.20 | 12.04 |
| ZK6–3 | 30.80 | 85.00 | 10.65 | 10.54 |
| ZK6–4 | 49.10 | 97.00 | 35.93 | 8.87 |
| ZK10–5 | 58.15 | 126.40 | 51.19 | 13.23 |
| ZK10–1 | 31.90 | 59.10 | 20.40 | 10.81 |
| ZK10–1 | 64.20 | 106.00 | 31.35 | 11.96 |
| ZK10–3 | 30.30 | 74.00 | 32.78 | 8.99 |
| ZK10–2 | 39.00 | 56.15 | 12.86 | 12.08 |
| ZK12–1 | 45.00 | 173.00 | 96.00 | 8.69 |
| ZK12–2 | 30.00 | 86.00 | 42.00 | 9.76 |
| Ore | | | 391.89 | 10.30 |
| Wall rock | | | 40.00 | |
| **Total** | | | **431.88** | |

*Source: Sinoma, compiled by SRK*

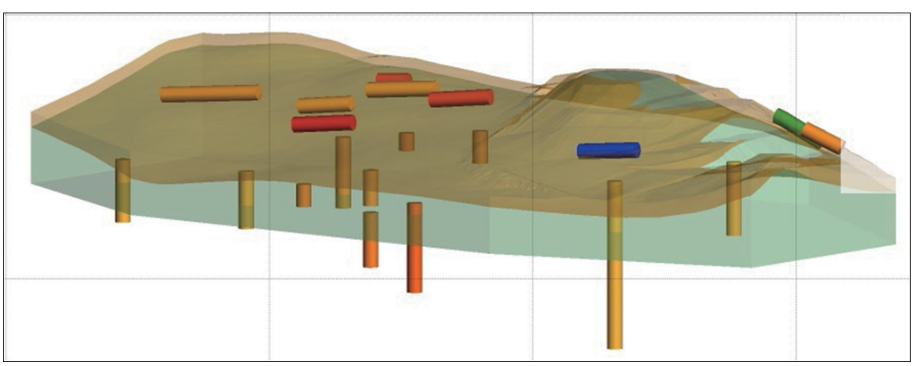

**Figure 8–2: Beishan Mine graphite orebody and relative metallurgical sampling locations**

*Source: SRK*

*8.2.2 Mineralogy*

The results of the head grade analysis of the composite samples are shown in Table 8–3. The key chemical composition is silica, aluminum oxide, graphitic carbon and iron oxide as well as trace amounts of titanium, phosphorus and sulfur. The chemical composition of weathered ore and fresh ore are very similar. Mineral composition and content of the ore are shown in Table 8–4.

**Table 8–3: Composite sample head grade analysis**

| | Element content (%) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample | Graphitic carbon | $SiO_2$ | $Fe_2O_3$ | $Al_2O_3$ | $K_2O$ | $Na_2O$ | CaO | MgO | $TiO_2$ | Loss of Ignition (LOI) |
| Weathered ore | 10.22 | 54.17 | 5.03 | 13.16 | 2.45 | 2.8 | 3.79 | 2.07 | 0.68 | 15.94 |
| Fresh ore | 10.15 | 53.01 | 5.18 | 13.11 | 2.41 | 2.8 | 4.16 | 2.18 | 0.63 | 16.53 |

*Source: Sinoma, compiled by SRK*

**Table 8–4: Principal mineral assemblage**

| Mineral | Graphite | Quartz | Mica | Albite | Microcline | Chlorite | Tremolite | Calcite |
|---|---|---|---|---|---|---|---|---|
| Content (%) | 10 | 44 | 13 | 8 | 9 | 6 | 5 | 5 |

*Source: Sinoma, compiled by SRK*

The ore is hosted in a mica-graphite-plagioclase schist. The graphite component is in a flake graphite form. The oxidized ore is relatively loose and soft with extensive joint fissures. Feldspar, muscovite and pyrite are commonly turned into kaolin, sericite and limonite. Its loose and soft nature makes it easy to mine and process. Fresh ore has the same mineral composition as weathered ore, but is harder than the weathered ore.

The ore has a flaky metamorphosed texture under a microscope. Principal minerals are graphite, quartz, calcite, tremolite and diopside, with minor garnet, rutile, muscovite, allanite and pyrite. Graphite is the target mineral. It is opaque and flaky under polarized light. The mineral is grey under a reflecting microscope, with obvious pleochroism and directional distribution. The graphite grain size ranges from 0.050 mm to 0.150 mm, i.e. is relatively fine, with a maximum size of 0.8 mm. Graphite is interlocked with gangue minerals such as pyrite, quartz and calcite with straight edges, while a trace amount of graphite is deformed. The thickness of graphite flakes is uneven, ranging from 0.005 mm to 0.124 mm. The modal content of graphite is approximately 10% (Table 8–5).

**Table 8–5: Particle size distribution of the Yixiang graphite ore samples**

| Particle size | | Grain distribution | | Area distribution (%) | |
|---|---|---|---|---|---|
| µm | mesh | Traversing number of grains | % | Distribution rate | Cumulative distribution |
| +600 | +30 | 5 | 0.38 | 5.42 | 5.42 |
| –600+300 | –30+50 | 14 | 1.07 | 7.58 | 13 |
| –300+150 | –50+100 | 79 | 6.06 | 21.4 | 34.4 |
| –150+75 | –100+200 | 194 | 14.89 | 26.27 | 60.67 |
| –75+37 | –200+400 | 354 | 27.17 | 23.97 | 84.64 |
| –37+20 | –400+800 | 300 | 23.02 | 10.16 | 94.8 |
| –20+10 | –800+1,250 | 257 | 19.72 | 4.35 | 99.15 |
| 10 | 1,250 | 100 | 7.67 | 0.85 | 100 |
| **Total** | | 1303 | 100 | 100 | |

*Source: Sinoma, compiled by SRK*

### *8.2.3 Metallurgical testwork*

Grinding and flotation are two important processes in graphite beneficiation. The purpose of grinding is to liberate the graphite from other gangue minerals so that it can be subsequently separated. Flotation aims to enrich the liberated graphite through utilizing the natural hydrophobicity of the graphite surface in order to separate it from the other waste minerals with the application of flotation reagents.

Sinoma has conducted systematic flotation tests over a range of conditions, including rougher feed (primary grind) size, flotation feed solids concentration, flotation residence times, regrind size feeding cleaner flotation, different reagent types and strengths, open circuit and locked-cycle flotation testing, to define the optimum flowsheet and conditions for graphite beneficiation. This benefits from the experience gained by the historical operation.

The processing flowsheet of weathered and fresh ore is the same as shown in Figure 8–3, with a single-stage rougher, single-stage scavenger, 5-stage regrinding on primary concentrate and 7-stage cleaning and collective middlings recycling. The primary grind size is -75 µm (60% passing -200 mesh). Paraffin is used as a collector of graphite, 2# oil as a frothing agent and sodium silicate as an inhibitor of gangue minerals. The results of the locked-cycle test are shown in Table 8–6. The graphite concentrate grades of both composite samples are over 95%, achieving a high-purity graphite product specification (94.0% ≤ graphitic carbon content ≤ 99.9%). The graphite recovery of weathered ore is 94.5%, while the fresh ore is 93.7%. The metallurgical test results of the two types of ores are very similar.

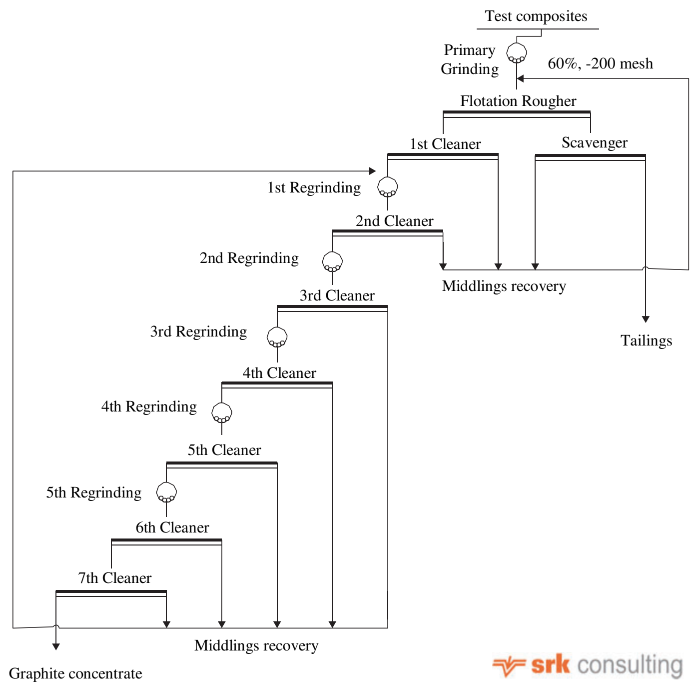


**Figure 8–3: Testwork flowsheet for the Yixiang graphite composite samples**

*Source: Sinoma, compiled by SRK*

**Table 8–6: Results of locked-cycle test**

| Ore | Product | Yield (%) | Grade (%) | Recovery (%) |
|---|---|---|---|---|
| Weathered | Concentrate | 10.12 | 95.45 | 94.52 |
| | Tailings | 89.88 | 0.62 | 5.48 |
| | Raw ore | 100 | 10.2 | 100 |
| Fresh | Concentrate | 10 | 95.11 | 93.7 |
| | Tailings | 90 | 0.71 | 6.3 |
| | Raw ore | 100 | 10.15 | 100 |

*Source: Sinoma, compiled by SRK*

X-ray diffraction (XRD) analysis showed that the major impurities in the concentrate are mica and kaolin. The multi-chemical analysis showed that the impurities composition is predominantly made up of $SiO_2$, $Al_2O_3$ and $Fe_2O_3$, as shown in Table 8–7.

**Table 8–7: Major chemical composition of the graphite concentrate**

| Composition | Graphitic carbon | $SiO_2$ | $Al_2O_3$ | $Fe_2O_3$ | $K_2O$ | $Na_2O$ | CaO | MgO | $TiO_2$ | LOI |
|---|---|---|---|---|---|---|---|---|---|---|
| Content (%) | 95.45 | 2.49 | 1.34 | 0.18 | 0.13 | 0.11 | 0.12 | 0.17 | 0.03 | 0.005 |

*Source: Sinoma, compiled by SRK*

The particle size analysis of the concentrate is shown in Table 8–8. The grain size of the concentrate is 10%-16% larger than +100 mesh (150μm) and 84%-90% less than -100 mesh that includes 34%-42% of 325 mesh (45μm), as shown in Table 8–8.

**Table 8–8: Particle size analysis of the graphite concentrate**

| Particle size (μm) | Yield (%) | TGC (%) |
|---|---|---|
| +300 | 0.06 | 94.01 |
| –300+150 (100 mesh) | 0.36 | 94.2 |
| –150+100 | 1.92 | 95.11 |
| –100+45 | 27.15 | 96.13 |
| 45 (325 mesh) | 70.51 | 95.21 |
| Total | 100 | 95.45 |

*Source: Sinoma, compiled by SRK*

#### *8.2.4 Testwork conclusions*

The Mine contains a flake graphite which is amenable to processing through conventional beneficiation processes. Treatment is through crushing and grinding, rougher and scavenger flotation of the primary mill product, followed by 5-stage regrinding and 7-stage cleaning on the primary (rougher) concentrate. A high-carbon grade graphite concentrate can be produced with a grade above 95% TGC and a graphite recovery over 93%. The final graphite concentrate product, which is thickened and filtered, has a 10%-16% larger than +100 mesh (150 μm) and 84%-90% less than -100 mesh that includes 34%-42% of 325 mesh (45 μm).

The beneficiation behaviours of the weathered and fresh samples are very similar. This allows the same processing flowsheet to be used for both ore types, to obtain, in general, the same graphite recovery and graphite concentrate grade results. Therefore, in practice, the two ores do not require separate treatment.

### 8.3 Beneficiation plant

#### *8.3.1 History and current status*

Luobei County is rich in graphite resources and is one of China's largest graphite producing centers. The Yunshan graphite mine in Luobei County is regarded as one of the largest graphite mines in Asia (Li et al., 2016). The Yunshan graphite mine was the major source of third-party ores for China Graphite. In 2005, China Graphite commenced construction of a beneficiation plant in the Luobei Graphite Industrial Park, which began processing graphite ore from the Yunshan graphite mine to produce graphite concentrate.

The initial processing capacity of the beneficiation plant was 0.1 Mtpa feed which produced 10,000 tpa of graphite concentrate. In 2013, Heilongjiang Metallurgical Design and Planning Institute redesigned the plant to increase the processing capacity. Based on the design, the beneficiation plant was upgraded to include two separate crushing lines, three grinding lines, two flotation lines and three concentrate dewatering-drying lines which were able to produce graphite concentrate from the Yunshan graphite mine ores. The two crushing circuits use 3-stage and 4-stage open-circuits flowsheets respectively, to produce final products with a particle size of less than 20–30 mm. The three grinding circuits all incorporate the same single-stage closed circuit configuration to generate product with 60%-70% passing -75 μm fineness.

The flotation flowsheet involves a single-stage rougher, single-stage scavenger, 10-stage regrinding on primary (rougher) concentrate followed by 11-stage cleaning and collective middlings recycling. The graphite concentrate undergoes 2-stage 'filtering and drying' to dewater the product. This is then packaged, inspected, and stored as flake graphite concentrates that are saleable, or alternatively, can be used as feedstock for further processing. The quality of the product, including graphitic carbon content, flake size and other physical parameters is checked to ensure industry and national standards are met. (Figure 8–5).

In 2019, the plant began to process graphite ores from the Mine, in addition to ores purchased from third parties. In order to match an increase of the mining production rate from the Mine, China Graphite has recently completed a plant expansion in the third quarter of 2021. The new flotation circuit has been installed beside the existing grinding and flotation workshop. The processing capacity has reached 0.50 Mtpa to produce approximately 50,000 t of graphite concentrate.

**Figure 8–4: Panoramic view of China Graphite's beneficiation plant, tailings storage facility and spherical graphite processing facility**

*Source: SRK site visit, July 2020*

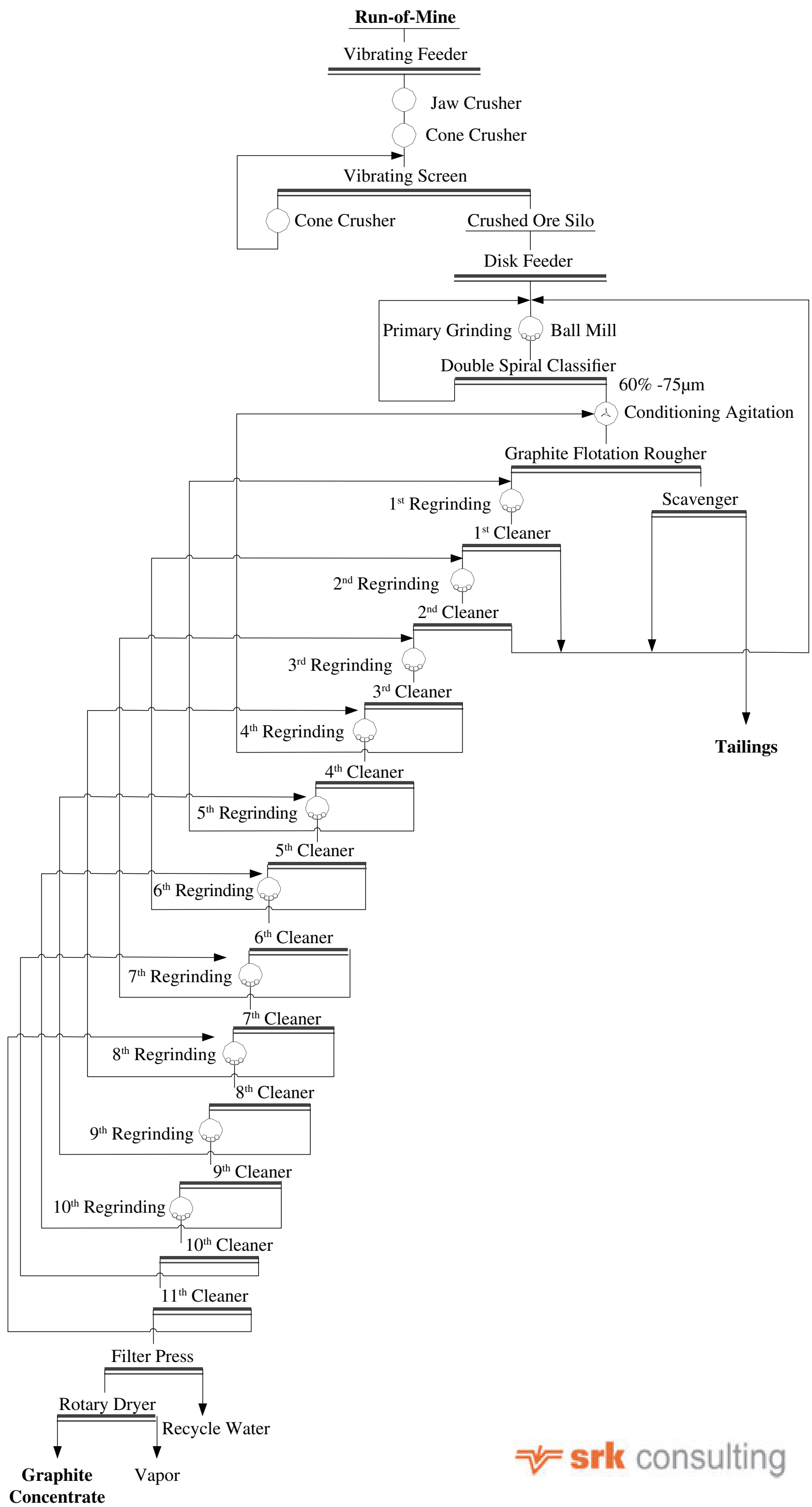


**Figure 8–5: Current beneficiation plant flowsheet**

*Source: China Graphite information memorandum*

#### *8.3.2 Beneficiation plant mechanical equipment*

The current beneficiation plant has a run-of-mine (RoM) pad, RoM bin, crushing circuit, crushed ore storage, primary grinding circuit, flotation plant, concentrate dewatering circuit and concentrate storage shed (Figure 8–6). The key mechanical equipment of the beneficiation plant is listed in Table 8–9 and Table 8–10, while the flotation equipment related to the expansion is also listed.

The beneficiation plant has undergone a number of phases of development and upgrading since 2005. The set-up comprises a large amount of small-scale equipment which appears not to perform in an optimal condition.

**Table 8–9: Crushing and primary grinding equipment in the current beneficiation plant**

| Item | Equipment name | Model/specification | Power *(kW)* | Amount |
|---|---|---|---|---|
| 1 | Heavy plate feeder | GBZ150-6 | 22 | 2 |
| 2 | Medium plate feeder | HBG1200×3000 | 11 | 1 |
| 3 | Disk feeder | CK20 | 7.5 | 2 |
| 4 | Jaw crusher | PEF750×1060 | 110 | 2 |
| 5 | Jaw crusher | PE600×900 | 75 | 1 |
| 6 | Jaw crusher | PEX250×1200 | 45 | 1 |
| 7 | Jaw crusher | PEX300×1300 | 75 | 2 |
| 8 | Jaw crusher | PEV950×1250 | 160 | 1 |
| 9 | Hammer crusher | Φ2m | 160 | 2 |
| 10 | Ball mill | GMC2745 | 570 | 1 |
| 11 | Spiral classifier | FG-24 | 30 | 1 |
| 12 | Ball mill | MQS2145 | 280 | 2 |
| 13 | Spiral classifier | FG-20 | 28 | 2 |

*Source: China Graphite information memorandum*

**Table 8–10: Flotation and concentrate regrinding equipment**

| Item | Equipment | Model/specification | Power *(kW)* | Amount |
|---|---|---|---|---|
| 13 | Ball mill | MQS1530 | 95 | 1 |
| 14 | Ball mill | MQS18.3×4.5 | 95 | 1 |
| 15 | Ball mill | MQS1245 | 55 | 2 |
| 16 | Spiral classifier | FG-12 | 15.4 | 2 |
| 17 | Wet ultrafine mill | SDM12 | 150 | 3 |
| 18 | Vertical mill | Φ800 | 15 | 42 |
| 19 | Stirring tank | Φ2000×2300 | 11 | 1 |
| 20 | Stirring tank | Φ2500×2500 | 15 | 1 |
| 21 | Flotation machine | BSK-8 | 19.6 | 18 |
| 22 | Flotation machine | FS-4 | 16.5 | 36 |
| 23 | Flotation machine | XJ-2.8 | 5 | 98 |
| 24 | Flotation machine | XJ-1.1 | 4 | 32 |
| 25 | Flotation machine | BF-24 | 55 | 3 |
| 26 | Flotation machine | JJF-24 | 45 | 9 |
| 27 | Flotation machine | BF-16 | 45 | 10 |
| 28 | Flotation machine | JJF16 | 37 | 22 |
| 29 | Ultrafine mill | 1750×1750 | 75 | 9 |
| 30 | Vertical sand mill | Φ1000 | 37 | 14 |
| 31 | Vacuum filter | GD-12 | 4 | 4 |
| 32 | Vacuum filter | GD-24 | 7.4 | 1 |
| 33 | Rotary dryer | Φ2.2×23m | 30 | 1 |
| 34 | Rotary dryer | Φ1.8×23m | 28 | 1 |
| 35 | Rotary dryer | Φ2.4×23m | 35 | 1 |

*Source: China Graphite information memorandum*

**Figure 8–6: New flotation machines**

*Source: China Graphite information memorandum*

### *8.3.3 Production and sales records*

The actual production figures between 2018 and 2021 are presented in Table 8–11. The amount of processed ores was approximately 0.32 Mt and 0.42 Mt in 2018 and 2019, respectively. In 2020, the production volume was 0.39 Mt. In the third quarter of 2021, the expanded processing capacity is expected to reach a throughput capacity of 0.5 Mtpa, with a concentrate recovery of approximately 91.5%. The average graphite concentrate grades range between 94% and 95% TGC, and the graphite recovery is above 90%. This is consistent with the sales records which shows the majority of the concentrate sales were type -194, -195 and -196, indicating the mesh size of these products are below 100 mesh with grades between 94.0% and 96.8% TGC (Table 8–12). The forecast production profile is shown in Table 8–13.

From 2019, the raw ores processed in the plant have been mined from the Company's Beishan graphite mine and from third parties. The new Beishan beneficiation plant will reach its designed production capacity of 0.5 Mt by 2025, the existing plant will continue its operation with ores from third parties, while the new plant will be dedicated to ores from the Mine.

**Table 8–11: 2018–2021 flake graphite concentrate production records**

| Items | Unit | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| Feed ore volume | Mt | 0.32 | 0.42 | 0.39 | 0.51 |
| Feed ore grade | % | 9.33 | 7.97 | 10.27 | 9.58 |
| Concentrate output | kt | 27 | 31 | 38 | 48 |
| Average concentrate grade | % TGC | 94.52 | 93.96 | 94.01 | 95.28 |
| Concentrate yield | % | 8.5 | 7.4 | 10 | 9.50 |
| Concentrate recovery | % | 86 | 87.4 | 91.4 | 94.5 |
| Flake graphite concentrate direct sales | kt | 15 | 18 | 34 | 37 |
| Spherical graphite processing feed | kt | 10 | 8 | 10 | 12 |

*Source: China Graphite information memorandum*

**Table 8–12: 2019–2021 flake graphite concentrate sales records**

| Type | 2019 | 2020 | 2021 |
|---|---|---|---|
| | *(t)* | *(t)* | *(t)* |
| –194 | 8,396 | 11,132 | 18,102 |
| –195 | 4,007 | 13,837 | 15,803 |
| –196 | 2,002 | 3,671 | 1,339 |
| Other | 3,996 | 5,494 | 2,015 |
| **Total** | 18,401 | 34,134 | 37,259 |

*Source: China Graphite information memorandum*

**Table 8–13: Beneficiation plant forecast production profile**

| Production Profile | Unit | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Third party ore volume | — | 0.13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Beishan ore volume | — | 0.37 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.22 |
| Total feed ore volume | Mt | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.22 |
| Feed ore grade | % TGC | 10.70% | 11.18% | 11.12% | 11.08% | 10.97% | 10.83% | 10.77% | 10.54% | 10.10% | 9.97% | 9.91% | 9.89% | 9.82% | 9.63% | 8.73% | 9.37% | 9.32% | 9.32% | 9.78% | 7.59% |
| Flake graphite concentrate output | kt | 51.51 | 53.82 | 53.56 | 53.37 | 52.81 | 52.15 | 51.85 | 50.75 | 48.62 | 47.99 | 47.71 | 47.65 | 47.30 | 46.37 | 42.03 | 45.14 | 44.90 | 44.88 | 47.10 | 15.77 |
| Flake graphite concentrate grade | % TGC | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% |
| Flake graphite concentrate direct sales | kt | 35.01 | 36.82 | 36.56 | 36.37 | 35.81 | 35.15 | 34.85 | 33.75 | 31.62 | 30.99 | 30.71 | 30.65 | 30.30 | 29.37 | 25.03 | 28.14 | 27.90 | 27.88 | 30.11 | 13.77 |
| Spherical graphite processing plant feed | kt | 16.50 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 2.00 |

*Source: China Graphite information memorandum, compiled by SRK*

#### *8.3.4 Current tailings storage facility*

The tailings storage facility (TSF) is located on the northern bank of Yadan River, adjacent to the north of the beneficiation plant and spherical graphite processing facility. The TSF was constructed on flat ground. The wall is a one-off compacted embankment dam. The designed storage capacity is 1,592,000 $m^3$. Applying the utilization factor of 0.75, the effective storage capacity is 1,194,000 $m^3$. The highest point of the dam is 21.5 m; the width of the dam crest is 4–10 m. The elevation of the dam bottom is 228.5 m, while the dam crest is 280.5 m. The water level inside the storage facility is 245 m. The storage facility has already accumulated approximately 572,000 $m^3$ of tailings or 760,760 t. Tailings are pumped from the beneficiation plant to the TSF through a pressurized pipeline, and settle along the northern, eastern and southern faces (Figure 8–7).

A 70 m × 130 m × 2 m decant water pond has been constructed at the western dam toe. A 70 m × 35 m × 2 m overflow pond is built north of the backwater pond as a flood control. Clarified water in the TSF is drained into the decant pond using a well-pipe drainage facility and pumped back for use in the beneficiation plant. The 325 mm diameter central decant (drainage) well and the 267 mm diameter drainage pipe are able to drain water via gravity under normal working conditions. A 0.8 m diameter overflow pipe is laid inside the western dam (the discharge outlet is connected to a metal chute to prevent the influx of water during flooding). Two water pumps have been installed in the western dam as auxiliary discharge equipment.

The Yadan River is located to the south of the TSF. To prevent the river eroding the dam and discharging the seepage water of the dam, prism drainage is designed at the toe of the southern dam. The prism is built with waste rock. It is 3.0 m in height with a 1:15 outer slope. Its surface width is 3.0 m.

To meet the LoM operation requirements of the beneficiation plant, China Graphite signed a 'Tailings Comprehensive Utilization Agreement' on 3 January 2015 with an independent third party, which is responsible for re-using the tailings to produce bricks. In July and August 2021, similar agreements were signed with two other companies. China Metallurgical Mining Anshan Metallurgical Design and Research Institute Co., Ltd. has designed a workflow in the 'Design on the reconstruction of the flat ground tailings storage into a safety facility for Heilongjiang Baoquanling Nongken Yixiang Graphite Co., Ltd.'. Dredging, re-mining and refurbishment are being collectively carried out during the winter break period every year to free up new storage required for the next year. Part of the cleared tailings is also stored at a secondary TSF. The secondary TSF is located approximately 3 km to the east of the current TSF. The designed capacity is 900,000 $m^3$.

**Figure 8–7: Current tailings storage facility, looking from the southeast to northwest**

*Source: SRK site visit, July 2020*

#### *8.3.5 Conclusion and recommendations*

- The current beneficiation plant has a processing capacity of nominally 0.4 Mtpa, producing a high- purity graphite concentrate powder. The expansion program was completed on the existing processing facility in the third quarter of 2021 with a throughput capacity of 0.5 Mtpa.

- The current beneficiation plant has been gradually scaled up from the original 0.1 Mtpa capacity. The current set-up comprises a large amount of small-scale equipment. This arrangement is not as efficient as a plant that has larger mechanical equipment and is more complex to operate, with associated higher operating costs. The production capacity can be maintained but the operation rate is not optimized, and maintenance and operation costs are high. SRK recommends to gradually replace the old equipment with larger-scale alternatives when the conditions are favorable. Adopting larger equipment to upgrade the current plant can expand the processing capacity and achieve the amount of production required for further processing.

- The current TSF of the beneficiation plant is a paddock-style TSF, constructed on flat ground with fixed storage capacity. Tailings are required to be reclaimed during the 3–4 months operation break time in winter, to free up tailings storage space for next year. The reclaimed tailings were sent to local construction companies for use as raw materials in brick production. Some of the reclaimed tailings are also stored temporarily at a secondary TSF, located 3 km to the east of the current TSF.

### 8.4 Spherical graphite processing plant

#### *8.4.1 History and current status*

The current processing plant is located west of the existing beneficiation plant. It started operation in 2011 and has four spherical graphite workshops. Facilities include a micronizing and rounding circuit, purification circuit, acid-and-alkali circuit, drying circuit, iron removal circuit, packaging plant and maintenance workshop. In 2019, an additional production line was installed. The current production capacity is 5,200 tpa of spherical graphite product. China Graphite has applied for a patent for the processing flowsheet generating a micro-spherical product, namely 'A processing flowsheet on fine-grained highly vibrated spherical graphite'. China Graphite's office and the processing plant building are shown in Figure 8–8.

**Figure 8–8: Spherical graphite processing plant**

*Source: SRK site visit, July 2020*

The rounding circuit at the spherical graphite processing plant is shown in Figure 8–9. The processing plant uses the high-carbon flake graphite concentrate as raw material, upgrading the flake graphite concentrate through a flowsheet of 'pulverizing-rounding-classifying-purifying-drying-iron removal', producing spherical graphite and the by-products, micro graphite powder and high-purity graphite powder.

The graphite concentrate of 95% TGC is pulverized and rounded on the pulverising (micronizing)- rounding production line, and then separated into micro graphite powder and spherical graphite by an air classifier. The spherical graphite is produced through purification by leaching impurities from the graphite with hydrochloric acid and nitric acid, is washed to pH 5 using deionized water, filter pressed, dried, and undergoes any final iron removal by a high intensity magnetic separator. A small amount of high-purity graphite powder by-product is collected during the drying stage (Figure 8–10).

The pulverising (micronizing)-rounding production line consists of 162 ultrafine pulverizer, 52 classifiers, 18 double cyclone separators, 23 pulsed dust collectors, 23 roots blowers and 2 air compressors (12 $m^3$/0.8 MPa). The above equipment is connected to piping. The whole production process is carried out in a complete locked automated network operation. Spherical graphite and micro graphite powder with different specifications are produced after 18 stages of grinding and 14 stages of classifying. The historical production volume is presented in Table 8–15. SG10 (denotes the radius of 10 μm for each spherical graphite), is one of the key products. As by- products of the spherical graphite process, micro graphite powder and high-purity graphite powder are also produced. Table 8–16 summarizes the sales volume of spherical graphite and by-products between 2019 and 2021.

Since the fourth quarter of 2021, China Graphite has commenced an expansion program of the spherical graphite processing plant and such work is expected to be completed by the second quarter of 2022. Upon completion of the expansion and being fully operational, the total processing capacity will be raised to 6,500 tpa.

Table 8–14 shows the current and new processing mechanical equipment. Table 8–15 and Table 8–16 show the historical production and sales records. The historical production figures show that the spherical graphite processing yields range from 28.1% in 2018, 35.3% in 2019 and 36.1% in 2020 to 36.8% in 2021. The forecast production profile of the spherical graphite plant with an expected processing yield of 35% is shown in Table 8–17.

**Figure 8–9: Rounding circuit in the spherical graphite processing plant**

*Source: SRK site visit, July 2020*

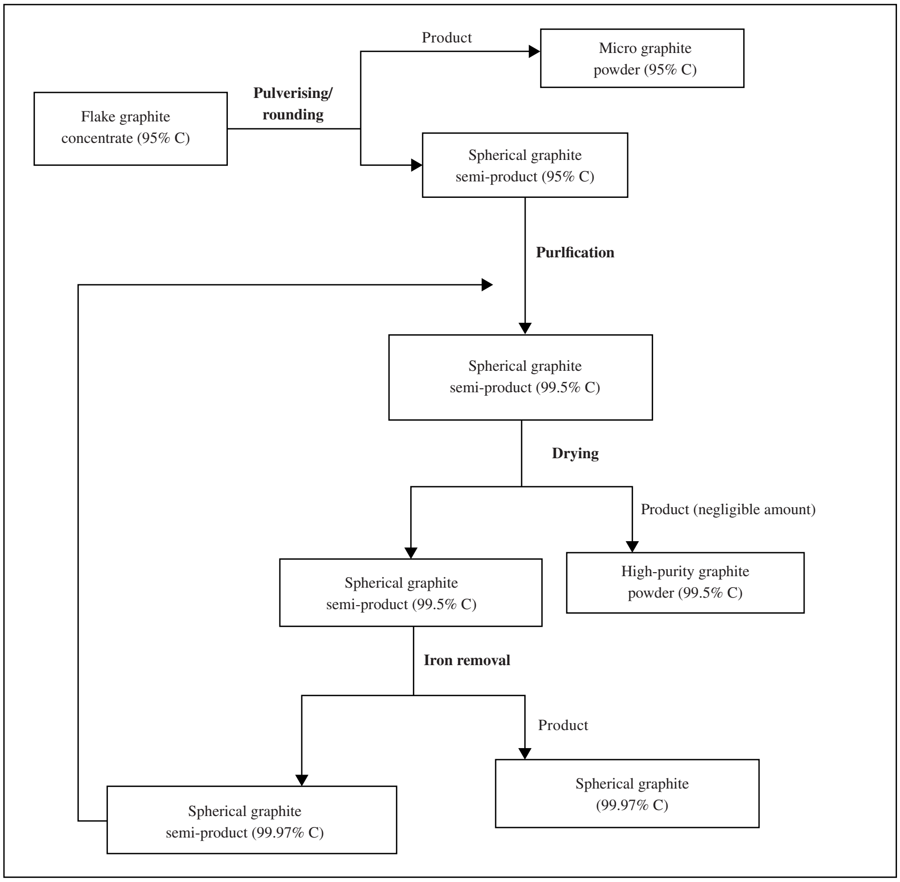


**Figure 8–10: Spherical graphite flowsheet**

*Source: China Graphite information memorandum*

*Note:*

Pulverizing and rounding — flake graphite concentrate is pulverized to around 40 microns. Once ground, the graphite undergoes further shaping and classification processes to produce spheroidal shaped particles with a ''cabbage'' structure. The round shape is necessary for them to be spread thinly and uniformly during the high-speed manufacturing process. The reject during this process is collected as micro graphite powder by-product.

Purification and drying — spherical graphite is then purified using hydrofluoric and nitric acid through leaching impurities. After purification, it will be dehydrated first via a press filter, and then with a centrifuge. Spherical graphite with 99.5% graphitic carbon is produced. The reject during this process is high-purity graphite powder.

Iron removal — iron removal was undertaken to remove any remaining magnetic iron impurities that have an impact on the commercial use of spherical graphite.

**Table 8–14: Spherical graphite processing plant current and new**

| Item | Equipment | Model | Unit |
|---|---|---|---|
| 1 | Ultrafine pulverising unit | GWFL50/GWFL70 | 162 |
| 2 | Classifier | FJJ-3.5 | 52 |
| 3 | Pure water equipment | 6 $m^3$/h | 1 |
| 4 | Acid tank | Acid-resistant FRP material | 3 |
| 5 | Measuring tank | Acid-resistant PP material | 3 |
| 6 | Material tank | Acid-resistant PP material | 8 |
| 7 | Reactor kettle | Acid-resistant PP material | 18 |
| 8 | Centrifuge | PAUT1600S | 4 |
| 9 | Filter press | Acid-resistant material | 4 |
| 10 | Feeder pump | Acid-resistant material | 8 |
| 11 | Tunnel kiln | Gas type | 1 |
| 12 | Stainless steel disk | 304 stainless steel | 75*24 |
| 13 | Mixer | 3 $m^3$ | 1 |
| 14 | Rotary vibrating screen | XZKS-0.8–1F | 3 |
| 15 | Ultrasonic shaking sieve | JXZS-1 | 3 |
| 16 | Magnetic separator | 10000GS or above | 3 |
| 17 | Packaging scale | | 1 |
| Expansion equipment | | | |
| 18 | Ultrafine pulverising unit | GWFL40/C/50/70 | 31 |
| 19 | Classifier | GWFJ230/260 | 17 |
| 20 | Cyclone separator | 2–650 | 15 |

*Source: China Graphite information memorandum*

**Table 8–15: Historical spherical graphite processing plant production records**

| **Materials** | **TGC** | **2018** | **2019** | **2020** | **2021** |
|---|---|---|---|---|---|
| | % | *(t)* | *(t)* | *(t)* | *(t)* |
| Flake graphite concentrate feed | 95% | 9,957 | 8,446 | 10,243 | 12,419 |
| Spherical graphite product | 99.97% | 2,437 | 3,267 | 2,668 | 3,992 |
| Micro graphite powder by-product | 95% | 6,165 | 6,073 | 6,202 | 7,600 |
| High-purity graphite by-product | 99% | 172 | 7 | 157 | 1 |
| Processing yield | | 28.1% | 35.3% | 36.1% | 36.8% |

*Note:* Semi-finished products are not shown in this table.

Processing yield is derived from each workshop (pulverizing/rounding, purification, drying and iron removal) performance.

*Source: China Graphite information memorandum*

**Table 8–16: 2019–2021 spherical graphite and by-products sales records**

| **Type** | **2019** | **2020** | **2021** |
|---|---|---|---|
| | *(t)* | *(t)* | *(t)* |
| Spherical graphite | | | |
| SG-10 | 2,343 | 3,479 | 3,059 |
| Other specifications | 645 | 444 | 3,002 |
| Subtotal | 2,988 | 3,923 | 6,061 |
| Micro graphite powder | 5,049 | 6,296 | 7,733 |
| High-purity graphite powder | 282 | 134 | 48 |
| **Total** | **8,319** | **10,353** | **13,842** |

*Note:* Sales volume includes: (i) finished products; and (ii) unfinished products.

*Source: China Graphite information memorandum*

## Table 8–17: Spherical graphite plant forecast production profile

| Production Profile | Unit | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spherical graphite processing plant feed | kt | 16.50 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 2.00 |
| Spherical graphite product | t | 5,780 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 5,955 | 4,904 | 5,955 | 701 |
| Micro graphite powder | t | 9,683 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 9,976 | 1,174 |
| High-purity graphite powder | t | 230 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 237 | 28 |

*Source: China Graphite information memorandum, compiled by SRK*

### 8.5 New beneficiation plant development plan

China Graphite's overall strategy is to establish a vertically integrated production capacity at Beishan, the same location of the mine site, from graphite ore mining to beneficiation and spherical graphite processing. Further research and studies will also be conducted to investigate the economic and technical viability of producing high value products, such as high-purity graphite, coated spherical graphite and graphitized spherical graphite.

China Graphite plans to implement this strategy in phases. The first phase of the strategic development is to develop a 0.5 Mtpa beneficiation plant at Beishan to establish a combined beneficiation capacity of 1.0 Mtpa by 2025, with 0.5 Mtpa capacity at Beishan and 0.5 Mtpa at the current plant. Half of the feed ore will be produced from the Company's Mine and the remaining 50% will be from third parties. At Beishan, the second phase of the strategic development is to construct a spherical graphite processing plant. The spherical graphite processing plant targets to processing of 17,000 t of flake graphite concentrate annually, representing approximately one-third of the flake graphite concentrate being produced by the new beneficiation plant, and production of 6,000 t of spherical graphite and 10,000 t of micro graphite powder. The spherical graphite processing plant targets commencement of production in 2025.

A feasibility study, 'Beishan Graphite 0.5Mtpa Beneficiation Plant', was prepared in March 2021 (the Beishan Study), by Yantai Oriental Metallurgical Design Institute. SRK considers the level of detail and accuracy of the Beishan Study is commensurate with a pre-feasibility study study. The spherical graphite processing plant is supported by a business study, prepared by Yantai Oriental Design Institute in April 2021, with conceptual targets, key technical parameters and a high-level financial evaluation. SRK considers the level of detail and accuracy of the business study is at a conceptual stage.

Based on the resources of the Mine, the Beishan Study has included a study of the product plan, construction plan, beneficiation, TSF, public and auxiliary facilities, environment, safety and technical economic aspects. The new beneficiation plant will be located 300 m to the southeast of the Mine. The planned location of the beneficiation plant is on farmland and its current location is shown in Figure 8–11.

The designed beneficiation plant has a processing capacity of 0.5 Mtpa to produce 50,000 t of flake graphite concentrate with grades between 94% and 96% TGC. The estimated detailed design and construction time is two years, while the actual construction schedule depends on the time required to obtain a real estate certificate and other required permits and approvals. China Graphite plans to commence the two-year period of preparation and construction in the fourth quarter of 2022. Trial production is targeted to commence in fourth quarter of 2024. Commissioning will begin in 2025 when the new plant will reach its full designed throughput capacity of 0.5 Mtpa.

**Figure 8–11: The planned beneficiation plant at Beishan, looking to the southeast**

*Source: SRK site visit, July 2020*

### *8.5.1 Beneficiation flowsheet*

In accordance with the existing processing plant flowsheet and the metallurgical testwork results, the designed processing flowsheet is similar to the current workflow of the existing beneficiation plant but with larger equipment and streamlined set-up. The crushed ores will go through floatation which involves a single-stage rougher, single-stage scavenger, 5-stage regrinding and 6-stage cleaning and collective middlings recycling. The graphite concentrate undergoes 2-stage 'filtering and drying' to dewater the product. This is then packaged and stored as flake graphite concentrates that are saleable, or alternatively, can be used as feedstock for further processing.

### *8.5.2 Production facilities and equipment*

Production facilities in the beneficiation plant include a RoM pad, primary crushing circuit, secondary and tertiary crushing circuit incorporating crushed ore screening, crushed ore storage silo, main concentrator plant (grinding and flotation circuits, dewatering and drying circuit), product classification and packaging facility, product conveyor, product storage shed, warehouse, deep well pump room, water processing station, process water pond, process water recycle pond, power substation, boiler room, maintenance workshop and laboratory.

The mechanical equipment selected for the new beneficiation plant is based on a design processing capacity of 0.5 Mtpa, an overall crushing circuit uptime (availability and utilization) of 49.32% and a grinding-flotation-dewatering operation uptime of 65.8%. Considering the local climate and with reference to the current operation rate, the operation rate of the designed equipment is 65.8%, working 240 days per annum. No production is carried out in winter.

### *8.5.3 Beneficiation production criteria*

The beneficiation production criteria selected and designed for in the Beishan Study are shown in Table 8–18. The annual ore processing volume is 0.5 Mtpa, and the average feed grade is 10.28%. The annual production is 0.05 Mtpa of 95% TGC flake graphite concentrate and graphite recovery is 92%.

**Table 8–18: Designed production criteria**

| Product | Production *(Mtpa)* | Yield *(%)* | Grade *(%)* | Recovery *(%)* |
|---|---|---|---|---|
| Concentrate | 0.05 | 9.7 | 95.00 | 92 |
| Tailings | 0.45 | 90.3 | 0.91 | 8 |
| Raw ore | 0.50 | 100 | 10.28 | 100 |

*Source: Beishan Study*

### *8.5.4 New tailings storage facility*

A new TSF is proposed to be located 800 m southeast of the beneficiation plant. The designed TSF is designed to be constructed in stages. The proposed TSF is a valley-style facility. Its initial dam height is designed at 70 m. It is a pervious earth fill dam constructed in three phases using the downstream construction method.

The Phase 1 dam crest elevation is at 270 m, dam height 35 m, crest width 5 m and dam axis length 400 m. The Phase 2 dam crest elevation is at 290 m, crest width 10 m and dam axis length 597 m. The Phase 3 dam crest elevation is at 310 m, crest width 10 m and dam axis length 807 m. Filters are inserted in the inner slope of each phase. After the outer slope is leveled, the filter structure from the inner to outer dam is as follows: (1) 200 mm of thick rock transition layer; (2) 300 mm of thick gravel lining bed; (3) 500 g/$m^2$ geotextile layer; (4) 300 m thick gravel upper lining bed; (5) 300 mm thick dry arranged slope protection block. The initial outer slope has built a 5 m berm for every 10 m height increment. When the waste rock is abundant, the initial outer slope can be expanded using the discharged waste rock. The final initial outer slope is installed with a 300 mm thick, dry arranged slope protection block.

A tailings dam is constructed using the upstream construction method above the initial dam until reaching the design elevation at 318 m. The tailings accumulation dam is 8 m in height and divided into four-phase sub-dams; each phase is 2 m in height and 3 m in crest width.

### *8.5.5 Production schedule*

China Graphite's development plan assumes a production schedule for the period of 2022–2026, a summary of which is given in Table 8–19. In developing the production schedule, China Graphite has made the assumptions that the new beneficiation plant will take 3 months to ramp-up operation to reach its peak. The supply of third party ores will attain 0.13Mt in 2022. From 2025 onwards, 0.50 Mt of third party ores are required annually.

**Table 8–19: Preliminary production and ramp-up schedule 2022–2026**

| Year | Beishan Mine graphite ore *(Mt)* | Third parties' ore *(Mt)* | New beneficiation plant throughput capacity *(Mt)* | Current beneficiation plant throughput capacity *(Mt)* | Total beneficiation plant throughout capacity *(Mt)* |
|---|---|---|---|---|---|
| 2022 | 0.37 | 0.13 | — | 0.50 | 0.50 |
| 2023 | 0.50 | — | — | 0.50 | 0.50 |
| 2024 | 0.50 | 0.30 | 0.30 | 0.50 | 0.80 |
| 2025 | 0.50 | 0.50 | 0.50 | 0.50 | 1.00 |
| 2026 | 0.50 | 0.50 | 0.50 | 0.50 | 1.00 |

*Source: China Graphite information memorandum and Beishan Study*

### *8.5.6 Spherical graphite processing plant*

China Graphite proposes to apply the same flowsheet as it currently applies in its spherical graphite plant. The flowsheet includes micronizing, rounding, purification, acid-and-alkali, drying and iron removal. The designed annual processing capacity is 17,000 t to produce 6,000 t of spherical graphite and 10,000 t of micro graphite powder.

### *8.5.7 Conclusion and recommendations*

- Both the third-party (Yunshan) mines and the Beishan graphite mine contain flake graphite which is suitable as feed for the production of spherical graphite. The current production capacity is about 5,200 tpa and will increase to 6,500 tpa by the second quarter of 2022. In SRK's opinion, the production flowsheet and equipment that have been installed are reasonable. The spherical graphite product yield is approximately 38% of the feed. Optimisation of the production flowsheet might improve the product yield.

- The Beishan Study has proposed a new beneficiation plant, and the TSF's location adjacent to the open pit mine. The new beneficiation plant is designed with a 0.5 Mtpa capacity to produce approximately 50,000 tpa of high-purity flake graphite concentrate at 92% graphite recovery. The selected location is favorable, and the designed beneficiation flowsheet and historical production data are well supported with metallurgical testwork undertaken.

- The business study on the spherical graphite is preliminary in nature, but the proposed flowsheet has been applied by China Graphite successfully over the years. SRK considers the plan proposed is reasonable, but further technical studies are required.

- The location of the proposed TSF is favorable. Waste rock from the mine stripping can be used to construct the dam foundation. The downstream method is adopted to raise the dam from the foundations in order to provide additional future capacity.

## 9 COSTS

### 9.1 Capital costs

SRK has reviewed the capital cost forecast over the next four years of the Project. These capital costs have been estimated by China Graphite from actual costs associated with the mining, beneficiation and processing operations to date as well as a series of indicative prices received from equipment manufacturers and suppliers.

In 2020 and 2021, the total materials moved at Beishan reached 1.65 Mt and 1.55 Mt respectively. The total materials moved will reach 1.78 Mt in 2022. China Graphite has allocated an allowance of RMB0.8 million for purchasing additional mining equipment to support the ramp-up of mining operations.

The spherical graphite processing plant is currently being upgraded to an annual production capacity of 6,500 tpa spherical graphite. China Graphite expects an amount of RMB3.1 million to be incurred in 2022.

The Project has a LoM of 20 years and as such the equipment at the beneficiation plant and spherical graphite processing plant will require ongoing replacement and refurbishment over that period. China Graphite has budgeted approximately RMB5–6 million per year as the sustaining capital for major plant and equipment replacement as well as refurbishment.

China Graphite has also prepared a capital cost estimate for the construction of the 0.5 Mtpa new beneficiation plant in the first phase of strategic development at Beishan (RMB108.0 million). The cost estimate incorporates a land acquisition cost (RMB34.0 million) and a quotation from an EPCM company, indicating that the cost for the plant construction, equipment procurement and installation, which totals RMB72.0 million. Other costs total RMB2.0 million.

In the second phase of development at Beishan, China Graphite will construct a spherical graphite processing plant, with an annual flake graphite processing capacity of 17,000 t. The spherical graphite plant will produce 6,000 t of spherical graphite and 10,000 t of micro graphite powder annually. The cost estimate for constructing such plant is RMB93.2 million.

In general, SRK considers that appropriate capital has been allocated for the proposed mine production expansion to 0.5 Mtpa graphite ore by 2023 and the upgrade of the spherical graphite plant in 2022. Sufficient sustaining capital has also been allocated to support the operation. The cost estimate for the proposed beneficiation plant and spherical plant requires further evaluation at a feasibility study or detailed design level to further support the adequacy of the budget.

**Table 9–1: Capital cost estimate 2022–2025**

| | **2022** *(RMB million)* | **2023** *(RMB million)* | **2024** *(RMB million)* | **2025** *(RMB million)* |
|---|---|---|---|---|
| Mining equipment | 0.8 | | | |
| Current spherical graphite plant expansion | 3.1 | | | |
| New beneficiation plant | 39.5 | 54.7 | 13.8 | |
| New spherical graphite processing plant | | | 57.8 | 35.4 |
| Sustaining capital | 5.1 | 5.7 | 5.9 | 6.1 |
| **Total** | **48.5** | **60.4** | **77.5** | **41.5** |

*Source: China Graphite information memorandum*

## 9.2 Operating costs

An operating cost estimate has been developed for the Project by China Graphite's financial team. The key activities accounted for include mining, flake graphite beneficiation and spherical graphite processing, general and administrative expenses, and government levies and resource tax (Table 9–2).

The forecast operating costs are based on the following items:

- Historical operation records
- The third-party Yushan's graphite ore contract
- Contracts with consumable providers
- VAT of 13% levied for the sale of the products
- City maintenance and construction levy of 1% of the net amount of VAT generated by the Project
- Education levy of 5% of the net amount of VAT generated by the Project
- Resource tax of 12% of sales revenue of graphite ore and 6% sales revenue of marble ore.

China Graphite is forecasting the mining cash cost (per tonne of graphite ore) to RMB/t 27.0 in 2022 to RMB/t 18.8 in 2023. Between 2024 and 2041, the average mining cash cost is forecast at RMB/t 15.5, within a minimum of RMB/t 10.3 and RMB/t 18.8. The forecast mining cash cost used for the China Graphite LoM model is supported by the previous three years' operations. It appears to be reasonable, although SRK notes that the cash unit cost is on the low side, compared with other similar projects.

The cash cost for flake graphite beneficiation (per tonne of flake graphite concentrate) is forecast at RMB/t 1,342 in 2022 and RMB/t 1,161 in 2023. The cost reduction is mainly related to the source of graphite ore, which would be supplied from China Graphite's own Beishan mine and an increase of the average grade of feed ore. SRK considers the forecast is reasonable and well supported by historical performance.

The spherical graphite processing cash cost (per tonne of spherical graphite) is forecast at RMB/t 10,507 in 2022 and remains similar throughout the LoM. In SRK's opinion, the spherical graphite assumption and forecast is reasonable.

The forecast operating costs as provided by China Graphite and reviewed by SRK are shown in Table 9–2, Table 9–3 and Figure 9–1.

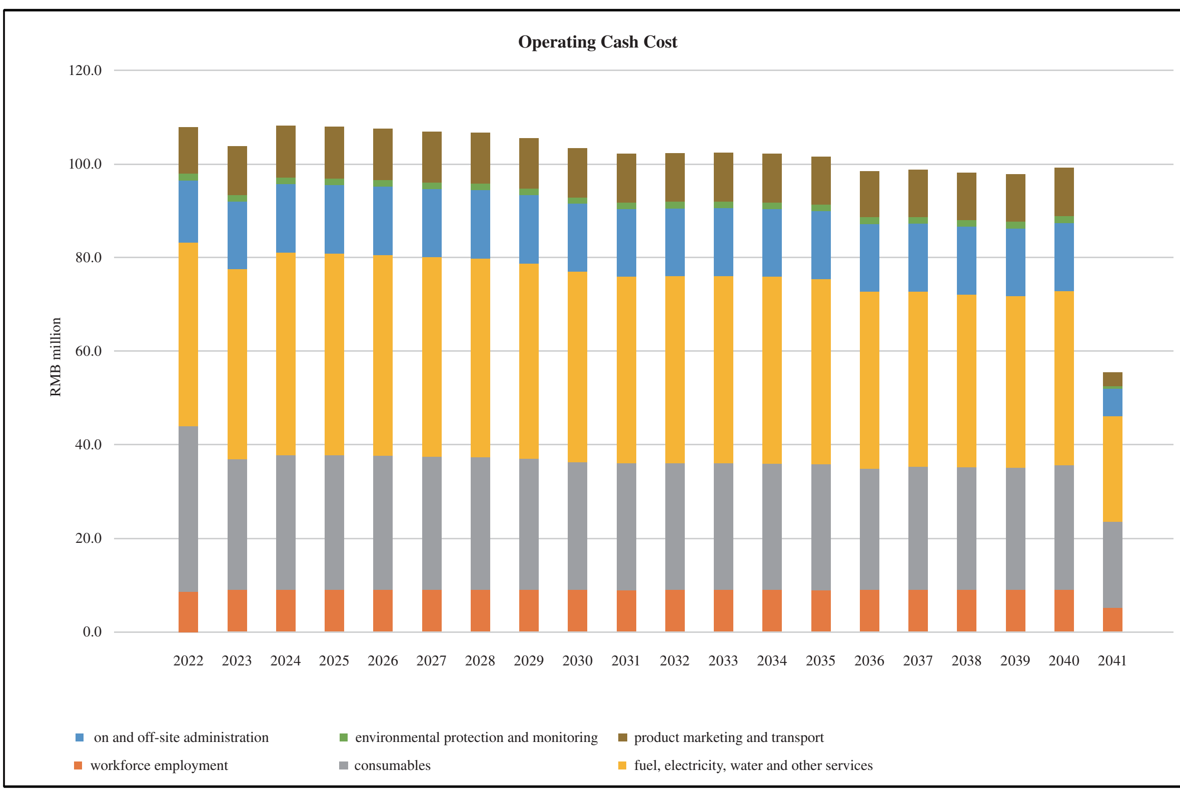


**Figure 9–1: Operating cost forecast by categories**

*Source: China Graphite and SRK analysis*

## Table 9–2: Historical and forecast operating cash cost

| Operating Cash Cost | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mining | RMB million | 8.2 | 6.0 | 8.3 | 10.7 | 9.8 | 9.6 | 9.4 | 9.4 | 9.4 | 9.4 | 9.3 | 9.1 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 6.4 | 5.9 | 5.5 | 5.2 | 1.9 |
| Less: marble by-product revenue | RMB million | – | –6.9 | –2.2 | –0.8 | –0.4 | –0.2 | –0.1 | –0.1 | –0.1 | –0.2 | –0.5 | –0.9 | –1.2 | –0.8 | –0.7 | –0.6 | –0.5 | –0.3 | – | – | – | – | – |
| Net mining cost | RMB million | 8.2 | –0.9 | 6.1 | 9.9 | 9.4 | 9.4 | 9.3 | 9.3 | 9.3 | 9.2 | 8.8 | 8.3 | 7.6 | 7.9 | 8.0 | 8.1 | 8.2 | 8.4 | 6.4 | 5.9 | 5.5 | 5.2 | 1.9 |
| Flake graphite beneficiation cost | RMB million | 53.3 | 61.2 | 65.7 | 59.2 | 53.1 | 53.8 | 53.6 | 53.1 | 52.5 | 52.3 | 51.3 | 49.4 | 48.8 | 48.5 | 48.5 | 48.2 | 47.3 | 43.3 | 46.2 | 45.9 | 45.9 | 48.0 | 12.6 |
| Spherical graphite processing | RMB million | 31.5 | 36.4 | 52.9 | 49.8 | 52.9 | 56.6 | 56.6 | 56.7 | 56.8 | 56.8 | 57.0 | 57.3 | 57.4 | 57.5 | 57.5 | 57.5 | 57.7 | 58.4 | 57.9 | 57.9 | 57.9 | 57.5 | 52.6 |
| Less: micro graphite powder by-product revenue | RMB million | –7.1 | –6.3 | –8.0 | –10.4 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 | –10.9 |
| Less: high-purity graphite powder revenue | RMB million | –2.1 | –0.7 | –0.2 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 | –0.9 |
| Net spherical graphite processing cost | RMB million | 22.3 | 29.4 | 44.7 | 38.6 | 41.1 | 44.7 | 44.8 | 44.8 | 44.9 | 45.0 | 45.1 | 45.5 | 45.6 | 45.6 | 45.6 | 45.7 | 45.8 | 46.6 | 46.0 | 46.1 | 46.1 | 45.7 | 40.7 |
| Total | RMB million | 83.8 | 89.7 | 116.5 | 107.7 | 103.6 | 107.9 | 107.7 | 107.3 | 106.7 | 106.4 | 105.2 | 103.1 | 101.9 | 102.0 | 102.1 | 101.9 | 101.3 | 98.2 | 98.6 | 97.9 | 97.5 | 98.9 | 55.2 |

| Operating Cash Unit Cost | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Materials moved | RMB/t materials moved | 8.2 | 3.5 | 5.2 | 6.0 | 6.5 | 6.8 | 6.8 | 6.8 | 6.8 | 6.8 | 6.9 | 6.9 | 7.0 | 7.0 | 7.1 | 7.1 | 7.1 | 7.1 | 8.4 | 9.0 | 9.6 | 10.2 | 10.3 |
| Graphite ore | RMB/t graphite ore | 27.3 | –4.5 | 20.3 | 27.0 | 18.8 | 18.8 | 18.6 | 18.6 | 18.5 | 18.3 | 17.6 | 16.5 | 15.1 | 15.7 | 16.1 | 16.2 | 16.3 | 16.7 | 12.7 | 11.8 | 11.1 | 10.5 | 10.3 |
| Flake graphite concentrate | RMB/t concentrate | 1,994 | 1,576 | 1,496 | 1,342 | 1,161 | 1,180 | 1,179 | 1,182 | 1,185 | 1,185 | 1,184 | 1,185 | 1,174 | 1,182 | 1,186 | 1,189 | 1,197 | 1,228 | 1,164 | 1,155 | 1,147 | 1,129 | 921 |
| Spherical graphite | RMB/t spherical graphite | 14,265 | 10,406 | 10,175 | 10,507 | 10,212 | 10,881 | 10,884 | 10,905 | 10,929 | 10,936 | 10,962 | 11,020 | 11,107 | 11,036 | 11,047 | 11,066 | 11,112 | 11,331 | 11,052 | 11,033 | 11,010 | 10,898 | 9,466 |

*Source: China Graphite and SRK analysis*

*Note: By-product revenue is credited to the primary product*

**Table 9–3: Historical and forecast operating cash cost by categories**

| Operating Cash Cost | Unit | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| workforce employment | RMB million | 8.2 | 7.0 | 8.5 | 8.6 | 8.8 | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 5.0 |
| consumables | RMB million | 24.3 | 30.9 | 40.4 | 35.3 | 27.8 | 28.7 | 28.7 | 28.5 | 28.4 | 28.3 | 27.9 | 27.3 | 27.1 | 27.1 | 27.1 | 27.0 | 26.9 | 25.9 | 26.3 | 26.2 | 26.1 | 26.6 | 18.4 |
| fuel, electricity, water and other services | RMB million | 29.1 | 32.9 | 45.0 | 39.2 | 40.6 | 43.2 | 43.0 | 42.8 | 42.5 | 42.4 | 41.7 | 40.6 | 39.9 | 39.9 | 39.5 | 40.0 | 39.5 | 37.8 | 37.4 | 36.9 | 36.6 | 37.3 | 22.5 |
| on and off-site administration | RMB million | 7.6 | 8.5 | 10.5 | 13.3 | 14.5 | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 14.5 | 14.5 | 14.4 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 5.9 |
| environmental protection and monitoring | RMB million | 0.3 | 1.0 | 1.0 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.5 |
| transportation of workforce | RMB million | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| product marketing and transport subtotal | RMB million | 14.3 | 9.4 | 10.1 | 9.9 | 10.4 | 11.0 | 11.0 | 11.0 | 10.9 | 10.9 | 10.7 | 10.5 | 10.4 | 10.4 | 10.4 | 10.3 | 10.3 | 9.8 | 10.1 | 10.1 | 10.1 | 10.3 | 2.9 |
| contingency allowances | RMB million | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | RMB million | 83.8 | 89.7 | 116.5 | 107.7 | 103.6 | 107.9 | 107.7 | 107.3 | 106.7 | 106.4 | 105.2 | 103.1 | 101.9 | 102.0 | 102.1 | 101.9 | 101.3 | 98.2 | 98.6 | 97.9 | 97.5 | 98.9 | 55.2 |

*Source: China Graphite and SRK analysis*

### 9.3 Economic viability analysis

SRK has conducted an analysis of the economic viability of the Project. The analysis was based on capital and operating costs, the production schedules as presented in this Report. A base case scenario of the Project over the LoM (1 January 2022 to 2041) on an annual basis was constructed. The base case is based on the mining, beneficiation and spherical graphite processing schedules as outlined in Table 6–5, Table 8–13 and Table 8–17. It envisages an integrated operation, from mining, beneficiation to spherical graphite processing. It does not include the proposed new beneficiation and spherical graphite processing plants at Beishan.

In the base case analysis presented in real terms, SRK adopted the forecast sales prices provided by the Company (see Section 10.3.5) and a discount rate of 10%. The discount rate was based on the considerations of the real, risk free long-term interest rate (2.59% for the 5-year PRC Government bond yield), mining project risk (2% to 4%) and country risk (2% to 4%).

It is important to note that the purpose of SRK's techno-economic analysis is to demonstrate the potential to provide a positive net present value (NPV) and hence the economic viability of the Project in support of the declaration of the Ore Reserve. The techno-economic analysis is not a financial valuation and the derived NPVs are not intended to represent the market value (i.e. the cash equivalent value that may be obtained were the project placed up for sale through a structured process) or likely profitability of the Project.

SRK's discounted cashflow (DCF) analysis shows that the Project's after tax (25% corporate income tax) NPV at a discount rate of 10% returned a positive NPV of RMB923 million at 31 December 2021. A straight-line depreciation method was used; financing costs, capital raising expenses or company debts have not been considered and a 100% equity has been assumed in this analysis.

A sensitivity analysis (after tax) has also been undertaken by SRK with respect to the flake graphite recovery, capital and operating costs and flake graphite concentrate and spherical graphite sales prices (Figure 9-2).

The results reveal the following changes:

- A 1% increase in flake graphite recovery will result in a positive 1.09% change in NPV.
- A 1% increase in operating cost will result in a negative 1.18% change in NPV.
- A 1% increase in capital cost will result in a negative 0.06% change in NPV.
- A 1% increase in flake graphite concentrate sales price will result in a positive 0.87% change in NPV.
- A 1% increase in spherical graphite sales price will result in a positive 1.04% change in NPV.

Of these parameters, the operating cost is the most sensitive parameter, followed by flake graphite recovery.

The economic analysis of the Project over the LoM, together with the sensitivity analysis, has demonstrated that the Project is technically feasible and economically viable, thereby justifying the reporting of Ore Reserves as declared in Section 7.3.

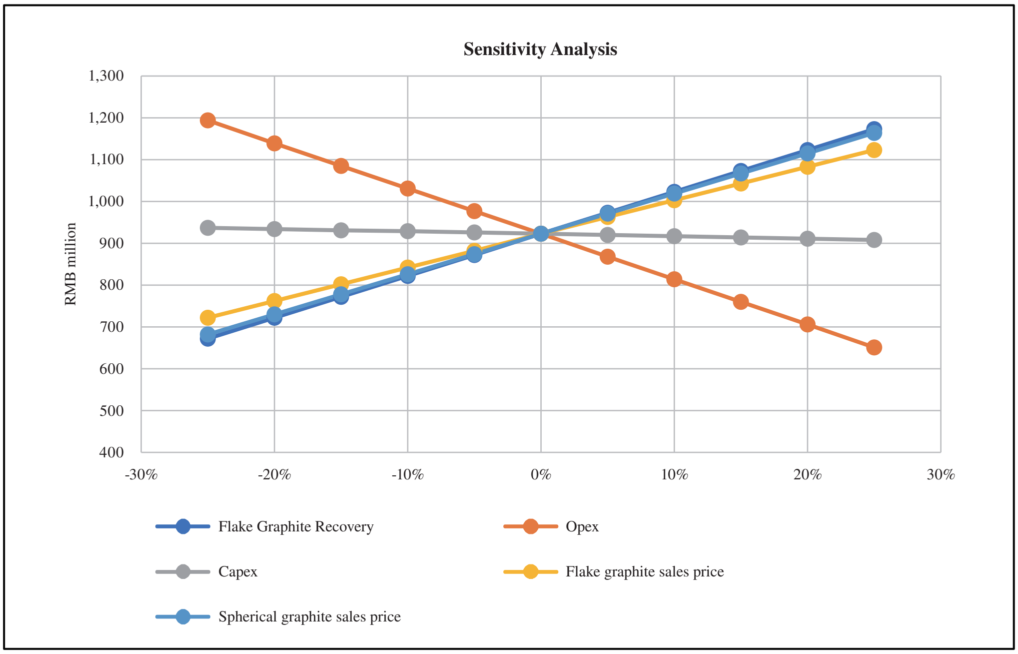


**Figure 9–2: After-tax NPV sensitivity analysis of the Project**

*Source: SRK analysis*

**Table 9–4: After-tax NPV sensitivity analysis of the Project**

| Variance | Flake Graphite Recovery | Opex | Capex | Flake graphite sales price | Spherical graphite sales price |
|---|---|---|---|---|---|
| 25% | 1,173 | 651 | 908 | 1,123 | 1,164 |
| 20% | 1,123 | 706 | 911 | 1,083 | 1,115 |
| 15% | 1,073 | 760 | 914 | 1,043 | 1,067 |
| 10% | 1,023 | 814 | 917 | 1,003 | 1,019 |
| 5% | 973 | 868 | 920 | 963 | 971 |
| 0% | 923 | 923 | 923 | 923 | 923 |
| –5% | 872 | 977 | 926 | 882 | 874 |
| –10% | 822 | 1,031 | 929 | 842 | 826 |
| –15% | 772 | 1,085 | 931 | 802 | 778 |
| –20% | 722 | 1,139 | 934 | 762 | 730 |
| –25% | 672 | 1,194 | 937 | 722 | 682 |

*Source: SRK analysis*

## 10 MARKET STUDY

### 10.1 Introduction

China Graphite commissioned Frost & Sullivan, an independent market research and consulting company to:

- conduct a market study on the Chinese graphite market
- provide a forecast on prices of natural graphite, flake graphite and spherical graphite for the period from 2021 to 2025
- assess market size, growth and opportunities.

China Graphite's major graphite products include flake graphite concentrates, spherical graphite, micro graphite and high-purity graphite powder (by-products of spherical graphite process).

The Market Study report (Frost & Sullivan, 2022) relies on sources such as the International Monetary Fund (IMF), Chinese National Bureau of Statistics (NBSC), United States Geological Survey (USGS), China Association of Automobile Manufacturers General administration of Customers of the PRC, as well as its own research. The following notes draw on the Market Study where sources are considered reliable, as well as other sources, as noted.

### 10.2 World markets and trade

According to the International Monetary Fund (IMF, 2022), the global economy remains highly uncertain since the COVID-19 pandemic began in 2020. The COVID-19 pandemic has had high human costs worldwide and is severely impacting economic activity. Economic recoveries are diverging across countries and sectors, reflecting variation in pandemic-induced disruptions and the extent of policy support.

At present, the IMF has projected a strong global growth of 5.9% in 2021, followed by moderate growth of 4.4% in 2022. The projected strong growth reflects additional fiscal policies in a few large economics including China and the anticipated vaccine-driven recovery in the second half of 2021 and continued adaption of economic activity with limited mobility.

According to the IMF (2022), advanced economies contracted -4.5% in 2020, but are expected to rebound to 5.0% in 2021 and 3.9% in 2022. Emerging markets and developing economies, including China, contracted, at -2.0% in 2020, but are forecast to grow significantly by 6.5% in 2021, recovering at approximately 4.8% in 2022.

Considerable uncertainty exists in the global economy, especially regarding the path of the pandemic and the road to recovery under the influence of a range of stimulus measures. Economic output growth in China is projected by the IMF (2022) to moderate from 8.1% in 2021 to 4.8% in 2022.

## 10.3 Chinese graphite market

### *10.3.1 Flake graphite*

The key applications for flake graphite comprise batteries, refractories, foundries and lubricants. The flake graphite industry is forecast to grow, primarily driven by the lithium-battery, steelmaking and refractory markets.

The sales volume of flake graphite has increased from 401,000 t in 2017 to approximately 542,000 t in 2021. Frost & Sullivan forecasts the sales volume to continue to increase to approximately 827,000 t in 2026, representing a compound annual growth rate (CAGR) of 8.2% from 2022.

### *10.3.2 Spherical graphite*

China Graphite's spherical graphite is mainly used as the anode materials for lithium-ion batteries. There has been a significant increase in the shipment volume of electronic vehicle from approximately 0.5% million units in 2016 to approximately 3.3 million units in 2021, with a CAGR of 45.7%. The rapid development of the electronic vehicle market has driven the demand for lithium-ion batteries, which in turn has supported the growth of the spherical graphite market. The Chinese sales volume of spherical graphite has increased at a CAGR of 20.8% from 61,000 t in 2017 to 130,000 t in 2021. Frost & Sullivan forecast the sales volume to increase from 150,000 t in 2022 to 237,000 t in 2026, with a CAGR of 12.0%.

### *10.3.3 Competition*

Frost & Sullivan's Market Study report shows that China Graphite currently ranks as the fifth largest flake graphite producer in the world and the sixth largest producer of spherical graphite according to its sale revenues in 2021. With the commercial production of graphite ore from its own mine in 2019, China Graphite will become less dependent on the supply of third-party ores and has an advantage over many of its competitors in terms of its lower operating cost.

### *10.3.4 China Graphite's current markets*

China Graphite is currently producing a range of flake graphite concentrates, including the key products -193, -194, -195 and -196 (which represents -100 mesh with grades between 93% and 96% TGC). These products represent approximately 95% of the Company's revenue in 2021. From 2019 to 2021, the average price received by China Graphite fell by approximately 16% from 3,118 RMB/t to 2,621 RMB/t (delivered price) in line with increased sales volumes, as shown in Table 10–1.

**Table 10–1: 2019–2021 flake graphite sales records**

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| Type | Revenue | Sales volume | Average selling price | Revenue | Sales volume | Average selling price | Revenue | Sales volume | Average selling price |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* |
| 194 | 26,479 | 8,396 | 3,154 | 28,288 | 11,132 | 3,541 | 47,268 | 18,102 | 2,611 |
| 195 | 14,139 | 4,007 | 3,529 | 35,525 | 13,837 | 2,567 | 41,804 | 15,803 | 2,645 |
| 196 | 7,968 | 2,002 | 3,980 | 10,218 | 3,671 | 2,783 | 3,889 | 1,339 | 2,904 |
| Others | 8,788 | 3,996 | 2,199 | 11,678 | 5,494 | 2,126 | 4,709 | 2,015 | 2,337 |
| **Total** | **57,374** | **18,401** | | **85,709** | **34,134** | | **97,672** | **37,259** | |

*Source: China Graphite memorandum*

One of the key spherical graphite products produced by China Graphite is SG-10, a 10μm diameter product. Compared with flake graphite concentrate, the average price of spherical graphite has decreased 22% from 2019 (20,112 RMB/t) to 2021 (15,638 RMB/t). In addition, two by-products, namely micro graphite powder and high-purity graphite powder, were also sold. Their average sales prices in 2021 were 1,040 RMB/t and 3,771 RMB/t, respectively (delivered price), as shown in Table 10–2.

**Table 10–2: 2019–2021 spherical graphite and by-products records**

| | For the year ended December 31, | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | | 2021 | | |
| | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price | Revenue generated | Sales volume | Average selling price |
| | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* | *(RMB'000)* | *(Tonnes)* | *(RMB/tonne)* |
| **Spherical graphite** | | | | | | | | | |
| *SG-10* | 47,122 | 2,343 | 20,112 | 63,926 | 3,479 | 18,375 | 47,842 | 3,059 | 15,638 |
| *Other models* | 9,998 | 645 | 15,501 | 5,237 | 444 | 11,795 | 42,443 | 3,002 | 14,138 |
| **Subtotal** | **57,120** | **2,988** | | **69,163** | **3,923** | | **90,285** | **6,061** | |
| **Micro graphite powder** | 7,103 | 5,049 | 1,407 | 6,284 | 6,296 | 998 | 8,043 | 7,733 | 1,040 |
| **High-purity graphite powder** | 2,139 | 282 | 7,585 | 712 | 134 | 5,313 | 181 | 48 | 3,771 |
| **Total** | **66,362** | **8,319** | | **76,159** | **10,353** | | **98,509** | **13,842** | |

*Source: China Graphite memorandum*

In 2020 and 2021, China Graphite also completed commercial sales of marble ore to local customers at an average price (ex-works) of 10 RMB/t and 6 RMB/t respectively (Table 10–4).

**Table 10–3: 2020–2021 marble sales records**

| | 2020 | | | 2021 | | |
|---|---|---|---|---|---|---|
| Type | Sales volume *(t)* | Revenue *(million RMB)* | Average selling price *(RMB/t)* | Sales volume *(t)* | Revenue *(million RMB)* | Average selling price *(RMB/t)* |
| Marble | 675,202 | 6.9 | 10 | 341,700 | 2.2 | 6 |

*Source: China Graphite memorandum*

***10.3.5 Prices***

The market study by Frost & Sullivan (2022) included a price forecast for unprocessed graphite, flake graphite and spherical graphite. The specifications of each product, including flake size, graphitic content as well as the physical properties of spherical graphite were not specified in the study.

The unprocessed graphite is expected to raise 4% in 2022. For the flake graphite, the price is forecast to increase 4% and remains steady until 2025. The spherical graphite will receive an increase of 4% in 2022, followed by a modest annualized growth of 1% to 2% in the period of 2023–2025.

The forecast prices by China Graphite are shown in Table 10–4. In 2022, China Graphite forecasts modest growth of 3% for all graphite products from the previous year. In 2023, 2% growth of all graphite products is expected. The forecast sales price of marble remains the same from 2022 to 2023. The prices of all products are assumed to remain the same from 2023 over the LoM (Table 10–4). Based on a review of the historical prices, recent contracts and the Frost & Sullivan forecast, SRK considers the forecast by China Graphite is reasonable.

**Table 10–4: Historical and forecast weighted average sales price**

| | | Historical | | | | Forecast | | |
|---|---|---|---|---|---|---|---|---|
| Type | Unit | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Long-term price |
| Flake graphite concentrate | RMB/t | 3,679 | 3,118 | 2,511 | 2,621 | 2,700 | 2,754 | 2,754 |
| Spherical graphite | RMB/t | 19,055 | 19,117 | 17,631 | 14,895 | 15,342 | 15,649 | 15,649 |
| Micro graphite powder | RMB/t | 2,220 | 1,407 | 998 | 1,040 | 1,071 | 1,093 | 1,093 |
| High-purity graphite powder | RMB/t | 7,823 | 7,582 | 5,306 | 3,771 | 3,884 | 3,962 | 3,962 |
| Marble ore | RMB/t | — | — | 10 | 6 | 6 | 6 | 6 |

*Source: China Graphite memorandum*

## 11 ENVIRONMENT, PERMITS AND SOCIAL IMPACTS

SRK's review of environmental and social aspects is presented below.

### 11.1 Operational licenses and permits

#### *11.1.1 Business License*

The Business License details for the Project are presented in Table 11–1.

**Table 11–1: Details of the Business License**

| License no. | Issued to | Issued by | Issue date | Expiry date | Licensed business activities |
|---|---|---|---|---|---|
| 91233001569893325G | Yixiang New Energy Materials Co., Ltd. | Hegang City Market Supervision Bureau Baoquanling Branch | 05/01/2021 | 19/04/2031 | Manufacture, wholesale and retail of graphite and carbon products; quarrying, wholesale and retail of graphite ores, slag, limestone and stones for building and decoration |

*Source: China Graphite information memorandum, SRK compilation*

#### *11.1.2 Mining License*

Details of the Mining License for the Project are shown in Table 11–2.

**Table 11–2: Details of the Mining License**

| License no. | Issued to | Issued by | Issue date | Expiry date | Area *($km^2$)* | Mining type | Production rate *(Mtpa)* |
|---|---|---|---|---|---|---|---|
| C2300002018097110146712 | Yixiang New Energy Materials Co., Ltd. | Heilongjiang Province Natural Resources Bureau | 08/04/2019 | 08/04/2024 | 0.2615 | Open pit | 0.50 |

*Source: China Graphite information memorandum, SRK compilation*

#### *11.1.3 Safety Production Permit*

The Safety Production Permit for the Project is presented in Table 11–3.

**Table 11–3: Details of the Safety Production Permit**

| Permit no. | Issued to | Issued by | Issue date | Expiry date |
|---|---|---|---|---|
| (Hei)FM[2020]HG3729 | Yixiang New Energy Materials Co., Ltd. | Heilongjiang Province Emergency Management Bureau | 19/03/2020 | 18/03/2023 |
| (Hei)FM[2020]HG3050 | Yixiang Graphite Co. | Hegang City Emergency Management Bureau | 10/01/2020 | 09/01/2023 |

*Source: China Graphite information memorandum, SRK compilation*

#### *11.1.4 Water Use Permit*

Details of the Water Use Permit for the Project are shown in Table 11–4.

**Table 11–4: Details of the Water Use Permit**

| Permit no. | Issued to | Issued by | Issue date | Expiry date | Water supply source | Water use allocation *($m^3$)* |
|---|---|---|---|---|---|---|
| Qushui (Heikenbao) Zi[2018] 11410 | Yixiang Graphite Co. | Heilongjiang Agricultural Reclamation Baoquanling Administration Water Bureau | 19/06/2018 | 31/12/2022 | Surface water | 39,000 |

*Source:* China Graphite information memorandum, SRK compilation

The water use permit provided to SRK relates to surface water abstraction from the Yadan River and does not include the groundwater at the plant or the water abstraction from the tributary of the Yadan River.

#### *11.1.5 Site Discharge Permit*

Details of the Site Discharge Permit for the Project are presented in Table 11–5.

**Table 11–5: Details of the Site Discharge Permit**

| Permit no. | issued to | Issued by | Issue date | Expiry date |
|---|---|---|---|---|
| 91233001569893325G001Q | Yixiang New Energy Materials Co., Ltd. | Hegang City Ecological Environment Bureau | 19/06/2020 | 18/06/2023 |
| 91233017905010282001Q | Yixiang Graphite Co. | Hegang City Ecological Environment Bureau | 21/07/2020 | 20/07/2023 |

*Source:* China Graphite information memorandum, SRK compilation

### *11.1.6 Real Estate certificates*

Details of the Real Estate Permit for the Project are presented in Table 11–6.

**Table 11–6: Details of the real estate certificates**

| Permit no. | Issued to | Issued by | Issue date | Expiry date | Land use | Area ($m^2$) |
|---|---|---|---|---|---|---|
| Hei (2020)0002418 | Yixiang New Energy Materials Co., Ltd. | Heilongjiang Province People's Government | 24/12/2020 | 19/04/2061 | Industrial use | 24,610 |
| Hei (2021)4000135 | Yixiang Graphite Co. | Heilongjiang Province People's Government | 26/11/2021 | 01/04/2071 | Industrial use | 25,264.59 |
| Hei (2020)0002419 | Yixiang Graphite Co. | Heilongjiang Province People's Government | 24/12/2020 | 19/10/2036 | Industrial use | 16,000 |

*Source:* China Graphite information memorandum, SRK compilation

SRK has been provided with the following Forest Land Use approvals/agreements for the Project:

- Approval for use of Forest Land No. [2019]15, which was issued by Heilongjiang Provincial Forestry and Grassland Bureau on 24 January 2019. The approval is valid for 2 years and the permitted forest land area is 9.5746 hectares.

- Pre-approval of Land for Construction Project No. [2019]4, which was issued by Luobei County Land and Resources Bureau on 2 February 2019. The approval is valid for 3 years and the permitted forest land area is 9.5746 hectares.

- Forest Land Compensation Agreement, which was signed by Yixiang New Energy Materials Co., Ltd. and Luobei Yunshan Forest Farm on 27 November 2018. The total cost for the forest land compensation is RMB2,596,470.

- Approval for Use of Forest Land No. [2020]186, which was issued by Heilongjiang Provincial Forestry and Grassland Bureau on 31 July 2020. The approval is valid for 2 years and the permitted forest land area is 9.4303 hectares.

- Pre-approval of Land for Construction Project No. [2020]37, which was issued by Luobei County Natural Resources Bureau on 31 July 2020. The approval is valid for 3 years and the permitted forest land area is 9.4287 hectares.

- Forest Land Compensation Agreement, which was signed by Yixiang New Energy Materials Co., Ltd. and Luobei Yunshan Forest Farm on 12 May 2020. The total cost for the forest land compensation is RMB2,629,512. Land lease agreement, which was signed by Yixiang New Energy Materials Co., Ltd. and Heilongjiang Yanjun Farm on 24 February 2021. The lease term is three years and the leased land area is 7.530343 hectares.

- Temporary land use approval for waste dump, which was issued by Luobei County People's Government on 7 December 2021. The permitted land area is 6.5004 hectares.

- Temporary land use compensation agreement, which was signed by Yixiang New Energy Materials Co., Ltd. and Heilongjiang Yanjun Farm on 4 December 2021. The lease term is two years and the leased land area is 58,119.71 $m^3$.

### 11.2 Environmental, social, health and safety review process, scope and standards

The process for the verification of the environmental compliance and conformance for the Project comprised a review and inspection of the Project's environmental management performance against:

- Chinese national environmental regulatory requirements
- Equator Principles (World Bank/International Finance Corporation (IFC) environmental and social standards and guidelines) and Internationally Recognized Environmental Management Practices.

The methodology applied for this environmental review of the Yixiang Graphite Project consisted of documentation review, a site visit, and interviews with Company technical representatives. The site visit for the environmental review was undertaken on 15 and 16 July 2020.

### 11.3 Status of ESHS approvals and permits

The details of the Environmental Impact Assessment (EIA) reports and Environmental, Social, Health and Safety (ESHS) approvals for the Project are presented in Table 11–7.

**Table 11–7: EIA reports and ESHS approvals**

| Area | Produced by | Report date | Approved by | Approval date |
|---|---|---|---|---|
| Beishan Graphite Mine | Heilongjiang Qingze Environmental Technology Company Limited | May 2018 | Hegang City Environmental Protection Bureau | 31/05/2018 |
| Beneficiation Plant | Hegang Environmental Protection Institute | July 2005 | Heilongjiang Agricultural Reclamation Bureau — Environmental Protection Bureau | 30/08/2005 |
| Beneficiation Plant Expansion | Heilongjiang Bohuan Scientific and Technological Consulting Company Limited | December 2020 | Hegang Bureau of Ecology and Environment | 25/3/2021 |
| Spherical graphite processing plant | Heilongjiang Academy of Agricultural Sciences | January 2011 | Heilongjiang Province Environmental Protection Bureau, Agricultural Branch | 24/01/2011 |
| Tailings Storage Facility (Secondary) | Heilongjiang Kedaxinxin Environmental Protection and Technological Company Limited | January 2022 | Hegang Bureau of Ecology and Environment | 27/01/2022 |

*Source:* China Graphite information memorandum, SRK compilation

SRK has sighted the Water and Soil Conservation Plan (WSCP) for the Beishan Graphite Mine and its approval that was issued by Luobei County Water Bureau on 17 December 2021. In addition, the WSCP approval for the Yixiang Graphite was issued by Luobei County Water Bureau on 17 December 2021 as well.

The details of the Environmental Final Check and Acceptance (FCA) Approvals for the Project are presented in Table 11–8.

**Table 11–8: Environmental Final Check and Acceptance Approvals**

| Area | Approved by | Approval date |
|---|---|---|
| Beneficiation Plant | Heilongjiang Province Environmental Protection Bureau, Agricultural Branch | 05/11/2008 |
| Spherical graphite processing plant | Heilongjiang Province Environmental Protection Bureau, Agricultural Branch | 17/01/2014 |

*Source:* China Graphite information memorandum, SRK compilation

Self environmental FCA process has been conducted for the Beishan Graphite Mine and Beneficiation Plant Expansion.

SRK has sighted the following project safety assessments for the Yixiang Graphite Project:

- Safety Design Modification Report for the tailings storage facility (TSF)
- Safety Design Modification Report for the open pit
- Safety Final Check Assessment Report for the open pit
- Safety Final Check Assessment Report for the TSF renovation.

## 11.4 Environmental conformance and compliance

SRK notes that the EIA reports for the Project have been compiled in accordance with the relevant Chinese laws and regulations. SRK has reviewed the provided EIA reports and approvals and conducted an environmental site visit in Luobei County against Chinese legislation and recognized international industry environmental management standards, guidelines, and practices.

At the time of SRK's July 2020 site visit, the Project was in operation. SRK recommends the Company develops the Project in accordance with the Project's EIA approval conditions. In the following sections, SRK provides comments in respect of the Project's existing and proposed environmental management measures, and their conformance to recognized international industry environmental management standards, guidelines and practices.

## 11.5 Key environmental, social, and health and safety aspects

### *11.5.1 Site ecological assessment*

The landform and topography in the mining area is commonly modified by open pit mining, waste rock dumping, haul roads, office buildings and dormitories, and other facilities. The development of the Yixiang Graphite Project may also result in impacts to or loss of flora and fauna habitat. If effective measures are not taken to manage and rehabilitate the disturbed areas, the surrounding land can become polluted and the land use function will be changed, causing an increase in land desertification, water loss and soil erosion.

The EIA of the open pit introduced the baseline of the ecological environment, which includes current land use, and information in vegetation, animal resources and soil erosion. The Project area is dominated by man-made forest, natural secondary forest and shrubs. The EIA report also indicates that there are no rare and endangered species identified within the Project area. The main vegetation in the Project area is pine, birch, oak, yellow pineapple, low shrubs and weeds in the understorey. The main animals in the Project area are sika deer, horse deer, black bear, wild boar, roe deer, fox, small house mouse, frogs, snakes and sparrows. The Project's EIA reports proposes conceptual measures to reduce and manage the potential impacts on the ecosystem. SRK recommends the Company follows the requirements of EIA report during the Project's operation.

According to the EIA report, the total disturbed area for the mine site is estimated to be 0.3163 km2. At the time of writing, no other documented, estimated, and/or currently surveyed areas of land disturbance for the Project's mine site have been sighted as part of this review. The Company stated that measures and programs will be developed to strike a balance between mining development and ecology. In addition, the Company will commission qualified parties to conduct annual assessment.

*11.5.2 **Waste rock and tailings management***

According to the EIA report, the waste rock should be temporarily discharged to the waste rock dump (WRD), located to the west of the mine site which has a capacity of only 53,000 $m^3$. The EIA report states that the volume of waste rock is estimated to be 373,100 $m^3$ per annum, which will be temporarily stored in the WRD and sold periodically for use as construction material. At the time of the site visit in July 2020, SRK observed that a small amount of stripped topsoil and waste rock had been discharged on site and no WRD had been sighted as part of this review. The Company stated that most of the waste rock produced in the period of 2019–2020 at the Mine was sold to local developers, and a small amount was used to maintain its TSF of the beneficiation plant. The Company is of the opinion that such use will continue consuming the majority of waste rocks. The Company has also leased a piece of land, located 2 km to the west of the mine site with a capacity of hosting approximately 1,000,000 $m^3$ of waste rocks temporarily. The construction of the new TSF associated with the new beneficiation plant, located in the proximity of the Mine will also provide opportunity for further consumption of waste rock. The current waste rock management plan appears to have worked successfully, however, SRK recommends long term contracts to be secured with local developers to ensure the waste rocks are disposed accordingly. The tailings generated by the processing plant is discharged to a TSF on site. According to the latest TSF design, the TSF has a total storage capacity of 1,591,800 $m^3$ and an effective storage capacity of 1,193,850 $m^3$. The TSF design states that the stability of the dam should be protected due to the increased risk during the highest flood of the Yadan River. The TSF consists of a sedimentation pond, a recycle pond and an overflow pond, and the tailings is used for brick making. SRK has sighted a tailings use agreement which was signed by Heilongjiang Baoquanling Farmland Yixiang Graphite Company Limited and an independent third party on 3 January 2015. The agreement stipulates the Project needs to provide a minimum of 300,000 tonnes of tailings per annum. Similar agreements were signed with two other companies in July and August 2021. Some of the reclaimed tailings is also stored temporarily at the secondary TSF, located 3 km to the east of the current TSF. The secondary TSF has a designed capacity of 900,000 $m^3$. SRK sighted an environmental impact assessment report and associated government approval.

A potential risk to the environment from waste rock and TSF is acid rock drainage (ARD) created when reducing sulfide minerals are exposed to air, precipitation and bacteria and, through an oxidation reaction, produce sulfuric acid, during mining, transportation, processing, waste rock discharge, and tailings storage, etc. ARD has the potential to introduce acidity and dissolved metals into water, which can be harmful to surface and groundwater. The EIA states that according to the leaching test conducted by Gansu Geological Engineering Laboratory on waste rock in the Project area on 6 July 2016, the waste rock generated from the Project belongs to solid waste Class I, the pollutants in the leachate are mainly conventional pollution factors and the concentration of heavy metals is low.

***11.5.3 Water management***

The nearest surface water body to the mine site and processing plant is the Yadan River and its tributary. The Yadan River eventually feeds into the Heilongjiang River. According to information obtained from site visits and interviews, the Project's water source for production comes from the Yadan River next to the processing plant and a tributary of the Yadan River near the mine site, while the water source for domestic use is groundwater wells. No production or domestic water use is currently recorded for the Project.

SRK recommends implementation of a sustainable water supply management plan to minimize the Project's impact on natural systems through the management of water use, avoid the depletion of aquifers, and reduce the impact on water users. Alternative water sources can be provided if the development affects the surrounding community's access to water.

The potential negative impact of the Project on surface water and groundwater is mainly due to the arbitrary discharge of untreated production and domestic wastewater. In addition, mining activities may also cause changes in groundwater levels. The main wastewater pollution sources of the project include mine water, processing wastewater, return water from TSF, waste rock leachate, wastewater from maintenance workshop, industrial site rainwater, domestic sewage, etc.

The EIA for the mine site proposes to collect the mine water in the settling pond and then discharge outside within the limit of standards. During this site visit, SRK noted that the mine water is collected and re-used for dust suppression. The EIA for the beneficiation plant and spherical graphite processing plant requires all production wastewater to be discharged to the TSF. The Company also states that production wastewater from the plants is collected and discharged to the TSF.

Based on the observations made during the site visit, SRK recommends that surface drains be installed around the open pit and adequate stormwater diversion facilities be established at the plant to separate surface runoff from contaminated areas and clean areas. SRK also recommends implementing a monitoring program to assess the quality of surface water and groundwater within the Project area (including upstream and downstream areas, especially Yadan River and its tributary). Measures such as ground hardening, cofferdam, water-collecting ditch, leachate collection pool and accident pool in the processing plant area, temporary storage of hazardous waste, topsoil dump and TSF are recommended to mitigate the contamination risk of surface water and groundwater. The Company has already planned a plant optimisation program which will start with the sedimentation pond, and then gradually improve other facilities, including the stormwater diversion facilities. The Company also stated that qualified parties will be commissioned to conduct water quality monitoring every year.

#### *11.5.4 Air quality and noise*

The dust emission sources are mainly from open pit mining, loading and unloading, WRD, TSF, crushing, screening, drying, packaging and movement of vehicles and mobile equipment. Dust management measures for the mine site and plants proposed in the EIA reports mainly comprise wet drilling, watering of roads and stockpiles, greening on site and using dust remover for the process of crushing, screening and drying. During the site visit, SRK did not observe obvious fugitive dust emissions in the open pit area and the fleet includes a water truck for dust suppression. The EIA report states the fumes from the boiler during the graphite drying process need to be treated by a cyclone dust collector and then discharged. The EIA also proposes installation of a waste treatment facility to treat the exhaust gases from the coating surface treatment and charring processes which release smoke, dust, bituminous fumes and benzopyrene.

The main sources of noise are from the operation of rock drill, explosion, pump, crane, crusher, ball mill, dryer, loader and vehicles. The EIA reports for the mine site and plants propose the following noise management measures:

- enclosure of high noise equipment
- selection of low noise equipment
- use of vibration damping facilities
- time and speed limit on transportations
- greening and optimizing the layout.

It is SRK's opinion that the noise prevention measures mentioned in the EIA reports are feasible.

#### *11.5.5 Hazardous materials management*

Hazardous materials are corrosive, reactive, explosive, toxic, flammable and potentially biologically infectious, which poses a potential risk to human and/or environmental health. The hazardous materials will be generated mainly by the Project's construction, mining, and include of hydrocarbons (i.e. fuels, waste oils and lubricants), chemical and oil containers, batteries, medical waste, and paint.

During the site visit, SRK did not observe any evidence of any significant hydrocarbon (i.e. fuel and oils) spillage in the open pit area. However, there is no separate facility for storage of hazardous wastes on site. SRK recommends that the Company collects the waste oil generated by the Project and hands it over to a qualified contractor for disposal. SRK also recommends that management of the collected waste oil, fuel tanks, acid storage tanks and mineral processing chemicals includes measures such as hardening the ground and setting up secondary containment facilities to reduce the risk of pollution caused by leakage. The Company stated that there is currently no waste oil generated at the mine site, and if there is, the Company will set up separate containment facilities and commission a qualified contractor to dispose of it.

***11.5.6 Occupational health and safety***

A well developed and comprehensive safety management system comprises site inductions, site policies, safe work procedures, training, risk/hazard management (including signage), use of personal protective equipment (PPE), emergency response process, incident/accident reporting, an onsite first aid/medical center, designated safety responsibilities for site personnel, regular safety meetings and a work permit/tagging system.

SRK has reviewed the safety assessment reports and safety production procedures as provided by the Company, and is of the opinion that the reports cover items that are generally in line with recognized Chinese industry standard practices and Chinese safety regulations. The safety assessment reports and safety production procedures cover the basic safety production managements for mining, processing and TSF operation. SRK notes that these proposed safety management measures are the basis for the operational Occupational Health and Safety (OHS) management system/procedures. During the site visit, SRK observed that safety signs were in place, safety provisions and rules were also displayed within the work areas, guard railings were installed on all gantries, and proper PPE, such as hardhats and dust masks, was provided and was being used by the workers.

SRK has not sighted, as part of this review, any operational OHS records for the current construction of the Project. SRK recommends the Company maintains safety records and develops incident analysis reports for possible injuries. The proposed reports analyze the cause of injuries and identifies measures to prevent a recurrence, which is in line with internationally recognized OHS accident monitoring practice.

***11.5.7 Environmental protection and management plan***

The purpose of an operational Environmental Protection and Management Plan (EPMP) is to direct and coordinate the management of the Project's environmental risks. The EPMP documents the establishment, resourcing, and implementation of the Project's environmental management programs. The site environmental performance should be monitored, and feedback from this monitoring could then be used to revise and streamline the implementation of the EPMP.

No such plan has been developed for Project operations that cover the aforementioned components. However, the EIA reports reviewed by SRK describe the various components of a comprehensive operational EPMP for the Project, such as environmental administration, regular air/water/noise/ecology monitoring to be conducted by the qualified contractor and site environmental management. The EIA reports also specify the monitoring points, analysis items and monitoring frequency. The proposed monitoring covers groundwater, wastewater, PM10, total suspended particles, $SO_2$, ecology and noise.

#### *11.5.8 Site closure planning and rehabilitation*

The Chinese national requirements for mine closure are covered under Article 21 of the Mineral Resources Law of People's Republic of China (2009), the Rules for Implementation of the Mineral Resources Law of the People's Republic of China (1994), the Mine Site Geological Environment Protection Regulations (2019), and the Land Rehabilitation Regulation (2011) issued by the State Council. In summary, these legislative requirements cover the need to conduct land rehabilitation, to prepare a site closure report, and submit a site closure application for assessment and approval.

The internationally recognized industry practice for managing site closure is to develop and implement an operational site closure planning process and document this through an operational closure plan. While this site closure planning process is not specified in the Chinese national requirements for mine closure, the implementation of this process for a Chinese mining project will:

- facilitate achieving compliance with these Chinese national legislative requirements
- demonstrate conformance to internationally recognized industry management practice.

There is currently no overall operational closure planning process in place for the Project that is in line with internationally recognized industry management practices. However, SRK has sighted a Geological Environment Protection and Land Reclamation Plan developed by Heilongjiang 625 Territorial Resources Survey Technical Services Company Limited in March 2018. The Plan describes the proposed treatment measures, schedule, monitoring, cost estimation, etc. The Plan also stated that the total cost for the geological environment protection and land reclamation is estimated to be RMB4,797,400, which comprises geological environment protection of RMB2,924,300 and land reclamation of RMB1,853,100. According to the Chinese legal requirements, the Company is required to establish a mine geological environment treatment and restoration fund account. SRK has sighted an agreement for the aforementioned fund account which was signed by the Company, Luobei County Natural Resources Bureau and China Postal Savings Bank Luobei Branch dated December 2019. In addition, the Company provided a receipt voucher which shows RMB317,100 land reclamation fees.

#### *11.5.9 Social aspects*

The Project is located in Luobei County, Hegang City, Heilongjiang Province. The land surrounding the Project are generally comprises forest and farmland.

The main administrative body for the Project is the Heilongjiang Provincial Government, with some delegation of environmental regulation to the city of Hegang and Luobei County. According to the provided documentation and Company statement, SRK has not sighted any historical or current non-compliance notices and or other documented regulatory directives in relation to the development of the Project. The Company states that there are no natural reserves or significant cultural heritage sites within or surrounding the Project area; and the EIA reports also do not report any natural reserves or protected cultural heritage sites within the mine site.

The EIA reports for the Project provided public participation survey for the mine site and processing plant construction. The survey results showed 100% support for the Project's construction. The EIA reports also state the local residents believe the Project will improve the development of local economy. The local residents did raise water, air and noise pollution as the key environmental concerns for the Project's development. No other documented public consultation process for the development of the Yixiang Graphite Project has been sighted as part of this review.

As part of this review, SRK has not sighted any documentation in relation to any actual or potential impacts of non-governmental organizations on the sustainability of the Project. SRK recommends that the Company designs and implements a public consultation and disclosure plan to ensure ongoing community engagement. The Company stated that annual public consultation will be implemented to ensure the social responsibility requirements are met.

## 12 RISK ASSESSMENT

SRK has undertaken a risk assessment and provided a qualitative assessment of the likelihood and consequence of each specific risk identified for the Project.

Risk has been classified from major to minor:

- Major risk: the factor poses an immediate danger of a failure which, if uncorrected, will have a material effect (>15% to 20%) on the project cashflow and performance and could potentially lead to project failure
- Moderate risk: the factor, if uncorrected, could have a significant effect (10% to 15–20%) on the project cashflow and performance unless mitigated by some corrective action
- Minor risk: the factor, if uncorrected, will have little or no effect (<10%) on project cashflow and performance.

In addition to the risk factor, the likelihood of risk must also be considered. Likelihood of occurrence within a 7-year timeframe can be considered as:

- likely: will probably occur
- possible: may occur
- unlikely: unlikely to occur.

The degree or consequence of a risk and its likelihood are combined in an overall risk assessment as presented in Table 12–1. The risk assessment including a risk rating is presented in Table 12–2.

**Table 12–1: Risk assessment rating**

| Likelihood | Consequence | | |
|---|---|---|---|
| | **Minor** | **Moderate** | **Major** |
| Likely | Medium | High | High |
| Possible | Low | Medium | High |
| Unlikely | Low | Low | Medium |

**Table 12–2: Risk assessment**

| Risk | Description | Control Recommendations | Likelihood | Consequence | Rating |
|---|---|---|---|---|---|
| Graphite flake size | Smaller flake size and lower graphitic content, resulting in lower head grade | Regular production grade control and feed ore grade monitoring as well as ore grade reconciliation | Unlikely | Moderate | Low |
| Geological structure | Geological continuity is disrupted by much complicated geological structures | Production in-fill drilling to further constrain areas with complex geological structures | Unlikely | Moderate | Low |
| Mineral Resource | Lower Mineral Resource to support Ore Reserve conversion | Lower the current mining elevation limit | Unlikely | Moderate | Low |
| Mine plan | Failure to meet production targets | Ensure adequate planning to supervision to ensure maximum efficiency, and identify and address issues that may cause production delays | Unlikely | Moderate | Low |
| Waste rock management | Inadequate space for waste rock storage | An alternative waste rock disposal plan should be developed before the storage space is full | Possible | Moderate | Medium |
| Water management | Pollution of surface and/or groundwater | Develop a comprehensive water monitoring program and prevention of wastewater leakage | Unlikely | Moderate | Low |
| TSF management | Failure to reclaim tailings in winter, resulting insufficient space for tailings storage in the next year | Develop a long- term plan on winter tailings excavation program | Unlikely | Moderate | Low |
| Capital and operating costs | Higher capital and operating costs, resulting in poor financial performance | Secure long-term contracts with contractors and confirm advanced procurement orders with suppliers | Possible | Moderate | Medium |
| Processing equipment efficiency | Lower throughput and performance due to the lower processing efficiency | Gradually replace aged equipment and streamline the flowsheet | Unlikely | Moderate | Low |
| Graphite recovery | Lower graphite recovery than the designed targets, inducing lower product outputs | Feed ore blending and flowsheet optimisation | Unlikely | Moderate | Low |

| Risk | Description | Control Recommendations | Likelihood | Consequence | Rating |
|---|---|---|---|---|---|
| Product quality | Lower quality product produced, reducing the profit margin | Process monitoring and flowsheet optimisation | Possible | Moderate | Medium |
| Sales & pricing | Forecast sales not achieved at expected prices, reducing cashflow | Modify production volume; actively seek new customers and establish long-term contracts | Possible | Moderate | Medium |
| Increased competition | Competition and possible reduction of price and sales volume leading to reduced cashflow | Market and prices be monitored to ensure the prices received are maximized | Possible | Moderate | Medium |

*Source: SRK analysis*

It is SRK's opinion that the above risks are generally manageable if China Graphite properly implements the control recommendations and strictly adheres to the standards and regulatory requirements in the PRC. A regular update of the risk assessment is also recommended.

**Compiled by**

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# Appendices

**Appendix A: Table 1 — JORC Code (2012)**

**Section 1: Sampling Techniques and Data**

| Criteria | Commentary |
|---|---|
| *Sampling techniques* | • The main source of information, which supports the declaration of Mineral Resources, is from vertical drilling in 2015–2016 and inclined core drilling in 2020.<br>• Downhole surveys were measured every 50 m.<br>• The surface mineralisation was determined from trenches.<br>• The channel sampling method was used for the trench sampling, at general length intervals of approximately 2 m.<br>• The drill core sample intervals were determined according to the geological logging and observation.<br>• The sample length is generally 2 m, with a minimum length of 1 m and maximum length of 3.5 m.<br>• The samples do not cross the different lithology units.<br>• The drill core was cut into two equal halves by a core saw. One half was taken as basic samples for assaying, and the remaining half was left in the core box for further checking. |
| *Drilling techniques* | • The rigs used the wireline diamond drilling technique with a single core barrel inside the drilling rods to take diamond core. The diameter of drill started at 110 mm, and the diameter of 75 mm drill was then used to the end after penetrating through the surface fracture zone. |
| *Drill sample recovery* | • The mineralized core recovery was approximately 96% and overall core recovery was approximately 90%. |
| *Logging* | • Geological logging (lithology, minerals crystal morphology, minerals color and approximate content, core recovery, etc.) was logged by the site geologist of Ruifa.<br>• The Rock Quality Designation (RQD) was also logged as well as the basic geotechnical logging. |
| *Sub-sampling techniques and sample preparation* | • For the two exploration campaigns of 2015–2016 and 2020, the laboratory of the No.6 Geological Survey Institute (No.6 laboratory) undertook basic analysis for the total graphitic carbon (TGC) and marble chemical contents for CaO, MgO and free $SiO_2$. The sampling preparation before testing was as follows:<br>— The samples were dried, and then crushed to 1 mm by a jaw crusher, mixed evenly, shrunk, and then divided into two splits by a riffle splitter.<br>— One of the splits was ground into 300 mesh, and then a 300 g sample was taken to use for basic analysis.<br>— The remaining splits were taken approximately 500 g to be reserved as duplicates. |

| Criteria | Commentary |
|---|---|
| *Quality of assay data and laboratory tests* | • 2015–2016: The No.6 laboratory used internal and external check procedures to carry out the QA/QC procedure, which met the China industry standard practice.<br>• 2020: The control samples including the Certified Reference Materials (CRMs), blanks and duplicates were inserted into the sample batches, at a frequency of one in every 25 samples.<br>• Graphite assay methodology: The TGC analysis procedure used in the internal and external two laboratories was generally divided into three steps as follows:<br>— Step 1 — Carbonate carbon removal: 1:1 nitric acid was added to the sample to remove the carbonate carbon with low temperature heating.<br>— Step 2 — Organic carbon removal: Once removed the carbonate carbon, sample was dried, and then put in muffle furnace with 400°C temperature heating for 3 hours to remove the organic carbon.<br>— Step 3 — TGC content determination: After the carbonate carbon and organic carbon removal, the sample was finally determined by the high-frequency infrared carbon and sulfur analyzer. |
| *Verification of sampling and assaying* | • No material issues were found with the analysis for the QA/QC procedures for 2015–2016 and 2020 exploration programs.<br>• SRK has been provided with some of the 2015–2016 sampling procedures and protocol documents for review, which meets the China industry standards.<br>• The QA/QC procedures in 2020 were supervised by SRK.<br>• The drilling, logging, sampling, and assaying methods are considered consistent with industry best practice.<br>• To SRK's knowledge, no adjustments to the assay data were made. |
| *Location of data points* | • All drillhole and trench collars were surveyed by real-time kinematic GPS by XIAN 80 44N datum.<br>• All the downhole surveys were measured every 50 m. |
| *Data spacing and distribution* | • The resource drilling was conducted on a 50 m grid spacing.<br>• Most of the samples were collected at a depth of approximately 2 m.<br>• The majority of the drillhole spacing inside the mining license is sufficient to support the declaration of Mineral Resources.<br>• Sample compositing across the mineralized domains has been applied. |

| Criteria | Commentary |
|---|---|
| *Orientation of data in relation to geological structure* | • The vertical and inclined drillholes were drilled to intercept the mineralized intervals, hosted by a sequence of graphitic schists with moderate dip to the northwest.<br>• Considering all the holes passed through the existing mineralized intervals, historical vertical drillholes did not introduce bias in the sampling and were designed to intersect the mineralisation. |
| *Sample security* | • Based on the information available, all remaining drill core and pulp samples are held securely at Yixiang New Energy's onsite facility. |
| *Audits or reviews* | • SRK reviewed the 2015–2016 historical works, including drillhole locations, mineralisation examination, drill core loggings validation, the sampling techniques checking and choosing pulp sample to the third laboratory validation during the process of preparing this Report.<br>• In 2020, the additional infilled drilling program was monitored by SRK. |

**Section 2: Reporting of Exploration Results**

| Criteria | Commentary |
|---|---|
| *Mineral tenement and land tenure status* | • The mining license for the Yixiang Graphite Project covers an area of 0.2615 km². Yixiang New Energy was awarded the license in April 2019.<br>• The mining license valid period is from April 2019 to April 2024.<br>• The mining license can be renewed when it expires. |
| *Exploration done by other parties* | • There are two systematic exploration phases:<br>— In 2015–2016, the Project was explored by Ruifa.<br>— In 2020, the additional exploration program was also carried out by Ruifa, and supervised by SRK.<br>• All available drilling and trench information has been incorporated in the geological database used in support of the Mineral Resource estimate. |
| *Geology* | • The Beishan graphite mineralisation is of flake type, with flake size ranging from fine to medium, hosted by a sequence of graphitic schists with moderate dip to the northwest.<br>• The by-product material is marble units that overlie the graphite mineralized domains. |
| *Drillhole Information* | • In 2015–2016, a total of 39 diamond holes were drilled for a total length of 5,770 m. In 2020, a total of 11 infilled diamond holes were drilled for a total length of 1,647 m.<br>• The drillhole collars were surveyed by real-time kinematic GPS.<br>• In 2015–2016, all the holes were drilled vertically. In 2020, all additional infilled holes were inclined at 080°toward 169°(southeast).<br>• Unless otherwise specified, all the coordinates used in this Report are XIAN 80 44N datum. |
| *Data aggregation methods* | • Not applicable; no Exploration Results are specifically reported. |
| *Relationship between mineralisation on widths and intercept lengths* | • Not applicable; no Exploration Results are specifically reported. |
| *Diagrams* | • Various maps, sections and diagrams are included in the Report, but they are not reproduced here for clarity. |
| *Balanced reporting* | • Not applicable; no Exploration Results are specifically reported. |
| *Other substantive exploration data* | • Not applicable; no Exploration Results are specifically reported. |
| *Further work* | • Not applicable; no Exploration Results are specifically reported. |

**Section 3: Estimation and reporting of Mineral Resources**

| Criteria | Commentary |
|---|---|
| *Database integrity* | • The database was prepared by SRK according to the geological information following Chinese industry standards, provided by Ruifa, and managed by Yixiang New Energy.<br>• SRK validated the database.<br>• SRK modelled the graphite mineralized domains and marble units based on the database.<br>• SRK excluded three holes that are beyond the mining license boundary, and four very shallow holes (with no collar coordinates) drilled before 2015. |
| *Site visits* | • Jinhui Liu visited the Project on 15–19 July 2020 and 26–27 August 2020.<br>• Gavin Chan visited the Project on 4 January 2022<br>• Lanliang Niu visited the Project on 15–16 July 2020<br>• Falong Hu visited the Project on 15–16 July 2020.<br>• Xue Nan visited the Project on 15–16 July 2020. |
| *Geological interpretation* | • SRK recorded the graphite mineralized code based on the threshold of 2.0% TGC as well as the lithological logging code.<br>• SRK recorded the marble units based on the CaO threshold of 45% as well as the lithological logging code.<br>• A total of eight graphite mineralized domains were interpreted, and six marble units were modelled by SRK. |
| *Dimensions* | • SRK notes that the mining license's vertical limit is from 274 m to 150 masl. The dipping extent of the mineralized domains is below the bottom limit of 150 masl, even to ~100 masl.<br>• The in situ rough dimensions (in meters) of graphite mineralized domains are as below:<br>— Domain V1: 250 × 200 × 37 (strike × dip extension × average thickness)<br>— Domain V2: 100 × 100 × 7<br>— Domain V3: 350 × 300 × 50<br>— Domain V4: 100 × 80 × 10<br>— Domain V5: 250 × 330 × 60<br>— Domain V6: 180 × 150 × 30<br>— Domain V7: 290 × 260 × 25<br>— Domain V8: 380 × 260 × 45. |

| Criteria | Commentary |
|---|---|
| *Estimation and modelling techniques* | • The by-product is marble units interleaving with the graphite domains. The marble blocks mined out during mining development were transported by local building materials companies for sale. SRK has reviewed the contracts between Yixiang New Energy and the local building materials companies.<br>• The Mineral Resource estimate was carried out using Leapfrog Geo 5.0 software.<br>• Graphite mineralized domains and marble units were constructed: Graphite domains were defined by threshold of 2% TGC based on the lithological code.<br>• Marble units were defined by CaO≥45% as well as lithological logging.<br>• Samples were composited to 2 m within the domains and units, and the residual length was added to previous intervals.<br>• Top-capping was only used for composites in domains V1, V2 and V8.<br>• Directional variogram modelling was performed within the plane of domain orientation. The Inverse Distance Weighted (IDW) method was used to interpolate the TGC grade on Domain V4, and CaO, MgO and $SiO_2$ on the marble units due to there being insufficient data to create meaningful variograms. The TGC was estimated by ordinary kriging (OK) on the remaining seven graphite domains.<br>• Block estimation was conducted using Leapfrog Edge software.<br>• SRK produced the one-layer block model for two seams with dimensions of 5 m × 5 m × 2 m (east × north × elevation) without a sub-block dimension. No rotation was applied to fit the seam zones.<br>• The search distances were derived from the variogram ranges or the drilling density spacing.<br>• Block model validation was conducted by visual comparisons between drillholes and grade estimates, comparison between block and composite grades, and by swath plots along major axes showing comparisons between mean composite and mean block grades. No detailed grade control data or production records are available for reconciliation.<br>• No modelling of selective mining units was undertaken.<br>• The Mineral Resource estimate was initially reported on 31 December 2020. The Mineral Resource has been updated as at 31 December 2021 by depleting the production in 2021. |
| *Moisture* | • All tonnages are reported as dry tonnages using an average dry in situ bulk density factor for each graphite domain and marble unit. |
| *Cut-off parameters* | • Based on actual production parameters and SRK's assumptions for the reasonable prospects for eventual economic extraction, a 3.5% TGC cut-off grade was applied for the Mineral Resource Statement for graphite.<br>• No cut-off parameters were used for the marble units that are sold for building materials. |

| Criteria | Commentary |
|---|---|
| *Mining factors or assumptions* | • A 1 m minimum ore thickness to comply with inferred mining equipment capacities was used.<br>• No other mining factors were applied to the Mineral Resource estimation process. |
| *Metallurgical factors or assumptions* | • Metallurgical factors were indirectly integrated by defining TGC cut-off grades. No other metallurgical factors were directly or indirectly applied in Mineral Resource estimation. |
| *Environmental factors or assumptions* | • No environmental factors or assumptions have been applied to the present Mineral Resources. |
| *Bulk density* | • The average density on each graphite domain was used in the Mineral Resource estimate.<br>• The average density for all the marble units was used. |
| *Classification* | • Inferred Mineral Resources have been reported<br>• Classification based on data quality and quantity (including drillhole spacing), geological complexity and grade continuity and grade interpolation.<br>• Indicated Mineral Resources Classification Criteria: Drill spacing is 50 m (strike) × 50-80 m (dip extension) with high confidence regarding the domain thickness and grade continuity area, on graphite domains V1, V2, V3, V5, V6, V7 and V8, and marble units M2 and M3.<br>• Inferred Mineral Resources Classification Criteria: Expansion area of Indicated Mineral Resources, or the drill spacing is more than 50 m × 50-80 m, and all the resources of graphite Domain V4, and marble units M1, M4, M5 and M6 were considered as Inferred.<br>• The result appropriately reflects the competent person's view of the deposit. |
| *Audits or reviews* | • No other external reviews in relation to the latest Mineral Resource estimate have been completed to date. |
| *Discussion of relative accuracy/confidence* | • There is a high level of confidence in the underlying drillhole sample data.<br>• There is a moderate to high level of confidence in the geological continuity of the mineralisation. |

**Section 4: Estimation and reporting of Ore Reserves**

**Criteria** | **Commentary**

*Mineral Resource estimate for conversion to Ore Reserves*

- The graphite Ore Reserves estimate was based on the Mineral Resource model developed by the SRK team and excluded Inferred Mineral Resources.
- The marble Ore Reserves estimate was based on the Mineral Resource model developed by the SRK team are reported and is inclusive of Mineral Resources.
- The Ore Reserve estimate is derived from pit optimisation and pit design, mining dilution and loss. The referent point of Ore Reserve estimates is the primary crusher or feed ore bin located in beneficiation plant.
- The following table shows the Ore Reserve for the Beishan graphite mine. Any Mineral Resources are reported as wholly inclusive of the Ore Reserves. Production in 2021 has been depleted from the Ore Reserve. Note rounding errors may occur:

| **Ore Reserve Category** | **Tonnage** *(kt)* | **Grade** *(% TGC)* |
|---|---|---|
| Probable | 9,549 | 10.15 |

*Site visits*

- The SRK team that includes mining, processing, geology, environment disciplines visited the site in July 2020. Gavin Chan visited the site in January 2022.

*Study Status*

- Two studies had been completed for Beishan graphite mine by third parties, which are named feasibility study or preliminary engineering design: 1). Feasibility Study Report on Beishan Graphite Mine as 500ktpa Ore Mining Capacity, compiled by Suzhou Sinoma Design and Research Institute of Non-metallic Minerals Industry Co., Ltd. dated December 2017 (2017 FS) and 2). Preliminary Engineering Design for Beishan Graphite Mine at 500ktpa Ore Mining Capacity, compiled by Heilongjiang Province Metallurgical Design and Planning Institute, dated January 2019 and modified slightly in December the same year (2019 FS)
- The Ore Reserve estimate was completed based on the operational achievements to date and the 2019 FS.
- SRK examined the historical production achievements and the 2019 FS, and the degree of correlation is sufficient for them to be used in the study.
- Any material classified as an Inferred Mineral Resource was not included in the Ore Reserves calculations.
- The mining schedule is technically achievable and economically viable as determined by the economic analysis.
- After reviewing the feasibility study reports, SRK opines that the FS could meet the international pre-feasibility study level in general and could be basis for Ore Reserve conversion.

| Criteria | Commentary |
|---|---|
| | • Considering the mine design of 2019 FS honored the mining license limit on both mining scope and mining capacity, 2019 FS is the basis of Ore Reserve conversion. |
| *Cut-off parameters* | • The marginal cut-off grade (MCOG) is applied for graphite feed ore, within the pit design, to define ore and waste.<br>• The MCOG is estimated as 6.6% TGC.<br>• Considering both trial production conducted by the Company in 2020 and 2019 FS forecasted, the total cost of non-mining is RMB166.7/t ore.<br>• The processing recovery of graphite is recorded by the company in trial production is 91.5% and is within the estimated range of 2019 FS.<br>• The product of the mine is considered as graphite concentrate with 95% TGC, which is RMB2,578/t excluding value added tax (VAT).<br>• The by-product of marble material is credited during MCOG estimates, but the economic contribution to the mine is considered during pit optimisation progress. |
| *Mining factors or assumptions* | • The open pit mining with a conventional drill-blast, shovel and truck method is employed for the mine.<br>• The conversion of Mineral Resources to Ore Reserves is based on pit optimisation which considers Indicated Mineral Resources only (there is no Measured Mineral Resource for this Mine).<br>• The main input for pit optimisation is similar to MCOG estimates; the additional inputs to MCOG estimates are:<br>— Mining cost is RMB6.3/t rock material, based on the actual achieved costs.<br>— Non-mining cost is RMB154.7/t ore, based on the actual achieved costs.<br>— Marble material price is RMB7.0/t, excluding VAT.<br>— Marble material recovery rate (utilization ratio) is 97%.<br>— Mining dilution is 10% according to the trial production.<br>— Mining loss rate is 5%.<br>— Overall slope angle is 43°.<br>• The pit design are as follows:<br>— Bench height is 15 m<br>— Bench face angle is 65°<br>— Catch berm is 8 m wide<br>— Ramp is 13 m wide (dual lane)<br>— Road gradient is 10%<br>— Overall slope angle is approximately 43°.<br>• The LoM plan is developed based on the parameters and mining sequence proposed by in the 2019 FS against SRK's Mineral Resource estimate and open pit design, and the project goal proposed by China Graphite, which plans to achieve the target graphite feed ore capacity of 0.5 Mtpa by 2023. |

| Criteria | Commentary |
|---|---|
| | • The LoM is 20 years, with an average graphite grade of 10.15% TGC. The LoM stripping ratio is 1.15 (waste divided by graphite feed ore plus by-product marble material). |
| *Metallurgical factors or assumptions* | • Graphite ore is crushed and grinded prior to being processed by flotation at the beneficiation plant, which involves a single-stage rougher, single-stage scavenger, 10-stage regrinding on primary (rougher) concentrate followed by 11-stage cleaning and collective middlings recycling. The product is a flake graphite concentrate with grades ranges between 94% and 95% TGC. The graphite recovery is above 90%.<br>• The processing plant uses the flake graphite concentrate as raw material, upgrading the flake graphite concentrate through a flowsheet of 'pulverising-rounding-classifying-purifying-drying-iron removal', producing spherical graphite and the by-products, micro graphite powder and high-purity graphite powder.<br>• The beneficiation and spherical graphite plants are existing operations that commenced in 2006 and 2013, respectively. The processing flowsheets applied are considered appropriate.<br>• Additional testwork was conducted by Suzhou Sinoma Design and Research Institute of Non-metallic Minerals Industry Co., Ltd. in 2016.<br>• The metallurgical samples taken for the testwork in 2016 are considered representative. |
| *Environmental* | • The Project has been covered by Environmental Impact Assessments and granted Environmental, Social, Health and Safety approvals. |
| *Infrastructure* | • The mining operation does not require a significant supply of fresh water. Water is only used for watering the roads and mining benches. The water is sourced from a tributary of Yadan River.<br>• A 10 kV/0.4 kV substation is located on the mine site and is connected to the national electricity grid.<br>• The beneficiation and spherical graphite processing plants are connected with a well- maintained road system. Access to the Project area from Luobei, the closet town, is through a series of paved roads via the village of Yanjun Farm. |
| *Costs* | • The capital cost forecast was provided by China Graphite and reviewed by SRK as being reasonable.<br>• The operating cost forecast was based on historical operating costs and reviewed by SRK as being reasonable.<br>• The marble ore is sold at the mine gate, whereas other products are sold at delivered price (transportation cost is borne by China Graphite).<br>• All non-income taxes have been factored in the cost estimate. |

| Criteria | Commentary |
|---|---|
| *Revenue factors* | • Revenue forecast were based on sales of marble, flake graphite concentrate, spherical graphite and micro graphite powder and high-purity graphite by-products.<br>• Sales contracts of previous years were reviewed, and similar terms have been negotiated. The forecast assumes similar conditions will continue.<br>• All products are contracted for delivered prices, whereas the marble is contracted as ex-works price. |
| *Market assessment* | • Market forecast was based on a market study by Frost & Sullivan.<br>• The products selling price forecast was based on the Frost & Sullivan Market Study, and the existing and historical sales contracts with customers provided by China Graphite.<br>• Sales volume has been forecast to be similar tonnages to recent forecast.<br>• Specifications based on current contracts and previous records. The major flake graphite concentrate products are -193, -194, -195 and -196, indicating the mesh size of these products is below 100 mesh and grades are between 93% and 96% TGC. |
| *Economic* | • The capital and operating cost forecasts were provided by China Graphite and reviewed by SRK as being reasonable.<br>• The product selling prices are based on forecast made by Frost & Sullivan, substantiated by historical sales prices.<br>• An economic viability shows that after tax (25% corporate income tax) NPV over the LoM at a discount rate of 10% returned a positive NPV as at 31 December 2021. The positive NPV suggests the Ore Reserve defined is economically viable. Every year of the forecast shows positive cashflow. |
| *Social* | • The land surrounding the Project area generally comprises forest and farmland.<br>• The Environmental Impact Assessments for the Project provided public participation survey for the Mine site and processing plant construction. The survey results showed 100% support for the Project's construction. The EIA reports also state the local residents believe the Project will improve the development of local economy. The local residents did raise water, air and noise pollution as the key environmental concerns for the Project's development. |
| *Other* | • The Project has been operating successfully.<br>• A risk assessment is included in this Report. No risks are classified as high risk. |

| Criteria | Commentary |
|---|---|
| *Classification* | • The Probable Ore Reserves were based on Indicated Mineral Resources. The classification is further supported by the 2019 FS, production records and data provided by China Graphite. |
| *Audits or reviews* | • No external audits of the Ore Reserves have been undertaken. SRK has completed an internal audit review as part of Ore Reserve estimation process. |
| *Discussion of relative accuracy/confidence* | • All mining estimates are based on the 2019 FS, production records and forecast made by China Graphite.<br>• There are no unforeseen Modifying Factors at the time of this statement that will have material impact on the Ore Reserve estimates.<br>• Where practical and possible, current industry practices have been used to quantify estimation made. |

*The following is the text of a report prepared for the purpose of incorporation in this document received from Roma Appraisals Limited, an independent valuer, in connection with its valuations as at 30 April 2022 of the property.*

ROMA

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[●] 2022

**China Graphite Group Limited**
No. 1, Building 1,
Graphite Development Zone,
Yanjun Farm, Luobei County,
Hegang City,
Heilongjiang Province,
the PRC

Dear Sir/Madam,

**Re: Valuation of an industrial development located at No. 15 Residential Group, Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the People's Republic of China**

In accordance with your instruction for us to value the property held by China Graphite Group Limited (the "**Company**") and/or its subsidiaries (together with the Company referred to as the "**Group**") in the People's Republic of China (the "**PRC**"), we confirm that we have carried out inspection, made relevant enquiries and obtained such further information as we consider necessary for the purpose of providing you with our opinion of the market value of the property as at 30 April 2022 (the "**Date of Valuation**") for the purpose of incorporation in the document of the Company dated [●].

## 1. BASIS OF VALUATION

Our valuation of the property is our opinion of the market value of the concerned property which we would define as intended to mean "the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion".

Market value is understood as the value of an asset or liability estimated without regard to costs of sale or purchase (or transaction) and without offset for any associated taxes or potential taxes.

## 2. VALUATION METHODOLOGY

Due to the specific purpose for the buildings and structures of the property, there are no readily identifiable market comparables. Thus the buildings and structures have been valued on the basis of their depreciated replacement costs instead of direct comparison method. The depreciated replacement cost approach ("**DRC**") is based on an estimate of the market value for the existing use of the land, plus the current cost of replacement of the existing structures less deductions for physical deterioration and all relevant forms of obsolescence and optimization. In practice, DRC approach may be used as a substitute for the market value of specialized property, due to the lack of market comparable available. Our valuation does not necessarily represent the amount that might be realized from the disposition of the property and the PRC is subject to adequate profitability of the concerned business.

## 3. TITLE INVESTIGATION

For the property in the PRC, we have been shown copies of extracts of various title documents relating to the property in the PRC. However, due to the nature of the land registration system in the PRC, we have not been able to examine the original documents to verify ownership or to ascertain the existence of any amendment documents, which may not appear on the copies handed to us. We have relied on the information given by the Group and advice given by its PRC legal advisor, Tian Yuan Law Firm (天元律師事務所), regarding the titles of the properties in the PRC.

We have also relied on the document given by the Group that the Group has valid and enforceable titles to the properties which are freely transferable, and have free and uninterrupted right to use the same, for the whole of the unexpired term granted subject to the payment of annual government rent/ land use fees and all requisite land premium/purchase consideration payable have been fully settled.

## 4. VALUATION ASSUMPTIONS

Our valuation has been made on the assumption that the owners sell the properties in the market in their existing states without the benefit of deferred term contracts, leasebacks, joint ventures, management agreements or any similar arrangements which would serve to affect the values of such properties. In addition, no account has been taken of any option or right of pre-emption concerning or affecting the sale of the properties and no allowance has been made for the properties to be sold in one lot or to a single purchaser.

## 5. SOURCE OF INFORMATION

In the course of our valuation, we have relied to a very considerable extent on the information provided by the Group and have accepted advice given to us on such matters as planning approvals or statutory notices, easements, tenure, identification of properties, particulars of occupation, site/floor areas, ages of buildings and all other relevant matters which can affect the values of the properties. All documents have been used for reference only.

We have no reason to doubt the truth and accuracy of the information provided to us. We have also been advised that no material facts have been omitted from the information supplied. We consider that we have been provided with sufficient information to reach an informed view, and have no reason to suspect that any material information has been withheld.

## 6. VALUATION CONSIDERATION

We have inspected the exterior and, where possible, the interior of certain properties. No structural survey has been made in respect of the properties. However, in the course of our inspections, we did not note any serious defects. We are not, however, able to report that the properties are free from rot, infestation or any other structural defects. No tests were carried out on any of the building services.

We have not carried out on-site measurement to verify the site/floor areas of the properties under consideration but we have assumed that the site/floor areas shown on the documents handed to us are correct. Except as otherwise stated, all dimensions, measurements and areas included in the valuation certificates are based on information contained in the documents provided to us by the Group and are therefore approximations.

No allowance has been made in our valuations for any charges, mortgages or amounts owing on the properties nor for any expenses or taxation which may be incurred in effecting a sale. Unless otherwise stated, it is assumed that the properties are free from encumbrances, restrictions and outgoings of an onerous nature which could affect their values.

The outbreak of the Novel Coronavirus (COVID-19), declared by the World Health Organization as a "Global Pandemic" on 11 March 2020, has impacted global financial markets. Travel restrictions have been implemented by many countries. Market activity is being impacted in many sectors. As at the valuation date, we consider that we can attach less weight to previous market evidence for comparison purposes, to inform opinions of value. Indeed, the current response to COVID-19 means that we are faced with an unprecedented set of circumstances on which to base a judgment.

Our valuation is prepared in compliance with the requirements set out in Chapter 5 and Practice Note 12 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, and in accordance with the "RICS Valuation — Global Standards" published by the Royal Institution of Chartered Surveyors and the International Valuation Standards published by the International Valuation Standards Council.

## 7. REMARKS

Unless otherwise stated, all monetary amount stated in our valuation is in Renminbi (RMB).

Our Valuation Certificate is attached.

Yours faithfully,
For and on behalf of
**Roma Appraisals Limited**
**Frank F Wong**
*BA (Business Admin in Acct/Econ) MSc (Real Est)*
*MRICS Registered Valuer MAusIMM ACIPHE*
*Director*

*Note:* Mr. Frank F Wong is a Chartered Surveyor, Registered Valuer, Member of the Australasian Institute of Mining & Metallurgy and Associate of Chartered Institute of Plumbing and Heating Engineering who has 22 years' valuation, transaction advisory and project consultancy of properties experience in Hong Kong and 14 years' experience in valuation of properties in the PRC as well as relevant experience in the Asia-Pacific region, Australia and Oceania-Papua New Guinea, France, Germany, Poland, United Kingdom, Canada, United States, Abu Dhabi (UAE) and Jordan.

## VALUATION CERTIFICATE

**Property held by the Group in the PRC for owner occupation**

| **Property** | **Description and Tenure** | **Particulars of Occupancy** | **Market Value in Existing State as at 30 April 2022** |
|---|---|---|---|
| An industrial development located at No.15 Residential Group, Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC<br><br>中國<br>黑龍江省<br>鶴崗市<br>蘿北縣<br>延軍農場<br>第十五居民組<br>之工業項目 | The property comprises three parcels of land with a total site area of approximately 65,874.59 sq.m. and 33 industrial buildings erected thereon completed between 2006 and 2020.<br><br>The property has a total gross floor area ("**GFA**") of approximately 39,137.02 sq.m..<br><br>The land use rights of the property have been granted for terms expiring on 19 October 2036 and 1 April 2071 for industrial uses. | The property is occupied by the Group as at the Date of Valuation. | RMB[40,800,000] |

*Notes:*

1. Pursuant to the Real Estate Title Certificate, Hei (2020) Luo Bei Xian Bu Dong Chan Quan Di No.0002418 (黑(2020)蘿北縣不動產權第0002418號), issued by the Luo Bei County Natural Resources Bureau on 24 December 2020, the land use rights of the property with a site area of approximately 24,610 sq.m. and a building area of approximately 17,168 sq.m. have been granted to Heilongjiang Baoquanling Farmland Yixiang Graphite Company Limited ("**Yixiang New Energy**") (黑龍江省寶泉嶺農墾溢祥新能源材料有限公司), a wholly-owned subsidiary of the Group, for a term expiring on 19 April 2061 for industrial use. The details of building area are as follows:

| **Buildings** | **GFA** *(sq.m.)* |
|---|---|
| Crushing Workshop | 2,324 |
| First Damage Workshop | 900 |
| Product Library | 6,000 |
| Switch Room | 630 |
| Repairing Room | 320 |
| Product Packaging Workshop | 600 |
| Drying Workshop | 1,200 |
| Office Building | 2,944 |
| Purification Workshop | 1,000 |
| Warehouse | 200 |
| Secondary Damage Workshop | 1,050 |
| **Total** | 17,168 |

2. Pursuant to the Real Estate Title Certificate, Hei (2020) Luo Bei Xian Bu Dong Chan Quan Di No.0002419 (黑(2020)蘿北縣不動產權第0002419號), issued by the Luo Bei County Natural Resources Bureau on 24 December 2020, the land use rights of the property with a site area of approximately 16,000 sq.m. and a building area of approximately 9,802 sq.m. have been granted to Heilongjiang Baoquanling Farmland Yixiang Graphite Company Limited ("**Yixiang Graphite**") (黑龍江省寶泉嶺農墾溢祥石墨有限公司), a wholly-owned subsidiary of the Group, for a term expiring on 19 October 2036 for industrial use. The details of building area are as follows:

| **Buildings** | **GFA** *(sq.m.)* |
|---|---|
| Staff Bath and Warehouse | 756 |
| Motor Room Warehouse | 456 |
| Electromechanical Maintenance Room | 360 |
| Staff Dormitory Building | 1,083 |
| Factory Workshop | 5,611 |
| Staff Family Dormitory Building | 1,536 |
| **Total** | 9,802 |

3. Pursuant to the State-owned Construction Land Use Rights Assignment Agreement entered into between Luo Bei County Natural Resources Bureau and Yixiang Graphite on 16 June 2021, the land use rights of a parcel of land with a total site area of approximately 25,264.59 sq.m. were granted to Yixiang Graphite for a term for industrial use which commencing on 16 June 2021 and expiry on 1 April 2071.

4. Pursuant to the Construction Land Planning Permit Di Zi No. 2021–004, issued by the Luo Bei County Natural Resources Bureau on 16 June 2021, the construction works of property of Yixiang Graphite with a total GFA of approximately 12,518.79 sq.m. on a site area of approximately 25,264.59 sq.m. have been approved.

5. Pursuant to Real Estate Title Certificate, Hei (2021) Luo Bei Xian Bu Dong Chan Quan Di No.4000128 (黑(2021)蘿北縣不動產權第4000135號), issued by the Luo Bei County Natural Resources Bureau on 26 November 2021, the land use rights of the property with a site area of approximately 25,264.59 sq.m. and a building area of approximately 12,167.02 sq.m. have been granted to Heilongjiang Baoquanling Farmland Yixiang Graphite Company Limited ("Yixiang Graphite") (黑龍江省寶泉嶺農墾溢祥石墨有限公司), a wholly-owned subsidiary of the Group, for a term expiring on 1 April 2071 for industrial use.

6. The site inspection was performed by Mr. Jack Junjie Zhou, MSc (Real Estate & Hospitality Asset), with about 2 years property valuation experience in the PRC in April 2021.

7. We have been provided with a legal opinion on the title to the property issued by the Group's PRC Legal Advisers, which contains, *inter-alia*, the following information:

   a. Yixiang New Energy and Yixiang Graphite has obtained the state-owned land use rights and building ownership rights of the property and is in possession of a proper legal title to the property; and

   b. The property is not subject to mortgage or any other material encumbrances.

Set out below is a summary of certain provisions of the Memorandum and the Articles of the Company and of certain aspects of Cayman Islands company law.

The Company was incorporated in the Cayman Islands as an exempted company with limited liability on August 3, 2020 under the Companies Act. The Company's constitutional documents consist of the Memorandum and the Articles.

## 1. MEMORANDUM OF ASSOCIATION

(a) The Memorandum provides, *inter alia*, that the liability of members of the Company is limited and that the objects for which the Company is established are unrestricted (and therefore include acting as an investment company), and that the Company shall have and be capable of exercising any and all of the powers at any time or from time to time exercisable by a natural person or body corporate whether as principal, agent, contractor or otherwise and, since the Company is an exempted company, that the Company will not trade in the Cayman Islands with any person, firm or corporation except in furtherance of the business of the Company carried on outside the Cayman Islands.

(b) By special resolution the Company may alter the Memorandum with respect to any objects, powers or other matters specified in it.

## 2. ARTICLES OF ASSOCIATION

The Articles were conditionally adopted on [●] with effect from the [REDACTED]. A summary of certain provisions of the Articles is set out below.

### (a) Shares

*(i) Classes of shares*

The share capital of the Company consists of ordinary shares.

*(ii) Variation of rights of existing shares or classes of shares*

Subject to the Companies Act, if at any time the share capital of the Company is divided into different classes of shares, all or any of the special rights attached to any class of shares may (unless otherwise provided for by the terms of issue of the shares of that class) be varied, modified or abrogated either with the consent in writing of the members together holding not less than three-fourths of the voting rights of issued shares of that class or with the sanction of a special resolution passed at a separate general meeting of the holders of the shares of that class. The provisions of the Articles relating to general meetings shall *mutatis mutandis* apply to every such separate general meeting, but so that the necessary quorum (other than at an adjourned meeting) shall be not less than two persons together holding (or, in the case of a member being a corporation, by its duly authorized representative) or representing by proxy not less than one-third in nominal value of the issued shares of that class. Every holder of shares of the class shall be entitled on a poll to one vote for every such share held by him, and any holder of shares of the class present in person or by proxy may demand a poll.

Any special rights conferred upon the holders of any shares or class of shares shall not, unless otherwise expressly provided in the rights attaching to the terms of issue of such shares, be deemed to be varied by the creation or issue of further shares ranking *pari passu* therewith.

*(iii) Alteration of capital*

The Company may, by an ordinary resolution of its members: (a) increase its share capital by the creation of new shares of such amount as it thinks expedient; (b) consolidate or divide all or any of its share capital into shares of larger or smaller amount than its existing shares; (c) divide its unissued shares into several classes and attach to such shares any preferential, deferred, qualified or special rights, privileges or conditions; (d) subdivide its shares or any of them into shares of an amount smaller than that fixed by the Memorandum; (e) cancel any shares which, at the date of the resolution, have not been taken or agreed to be taken by any person and diminish the amount of its share capital by the amount of the shares so cancelled; (f) make provision for the allotment and issue of shares which do not carry any voting rights; and (g) change the currency of denomination of its share capital.

*(iv) Transfer of shares*

Subject to the Companies Act and the requirements of The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**"), all transfers of shares shall be effected by an instrument of transfer in the usual or common form or in such other form as the Board may approve and may be under hand or, if the transferor or transferee is a Clearing House or its nominee(s), under hand or by machine imprinted signature, or by such other manner of execution as the Board may approve from time to time.

Execution of the instrument of transfer shall be by or on behalf of the transferor and the transferee, provided that the Board may dispense with the execution of the instrument of transfer by the transferor or transferee or accept mechanically executed transfers. The transferor shall be deemed to remain the holder of a share until the name of the transferee is entered in the register of members of the Company in respect of that share.

The Board may, in its absolute discretion, at any time and from time to time remove any share on the principal register to any branch register or any share on any branch register to the principal register or any other branch register. Unless the Board otherwise agrees, no shares on the principal register shall be removed to any branch register nor shall shares on any branch register be removed to the principal register or any other branch register. All removals and other documents of title shall be lodged for registration and registered, in the case of shares on any branch register, at the relevant registration office and, in the case of shares on the principal register, at the place at which the principal register is located.

The Board may, in its absolute discretion, decline to register a transfer of any share (not being a fully paid up share) to a person of whom it does not approve or on which the Company has a lien. It may also decline to register a transfer of any share issued under any share option scheme upon which a restriction on transfer subsists or a transfer of any share to more than four joint holders.

The Board may decline to recognize any instrument of transfer unless a certain fee, up to such maximum sum as the Stock Exchange may determine to be payable, is paid to the Company, the instrument of transfer is properly stamped (if applicable), is in respect of only one class of share and is lodged at the relevant registration office or the place at which the principal register is located accompanied by the relevant share certificate(s) and such other evidence as the Board may reasonably require is provided to show the right of the transferor to make the transfer (and if the instrument of transfer is executed by some other person on his behalf, the authority of that person so to do).

The register of members may, subject to the Listing Rules, be closed at such time or for such period not exceeding in the whole 30 days in each year as the Board may determine and by sending a notice to the members, which may be extended for no more than another 30 days in respect of any year by an ordinary resolution of the members passed in that year.

Fully paid shares shall be free from any restriction on transfer (except when permitted by the Stock Exchange) and shall also be free from all liens.

*(v) Power of the Company to purchase its own shares*

The Company may purchase its own shares subject to certain restrictions and the Board may only exercise this power on behalf of the Company subject to any applicable requirement imposed from time to time by the Articles or any, code, rules or regulations issued from time to time by the Stock Exchange and/or the Securities and Futures Commission of Hong Kong.

*(vi) Power of any subsidiary of the Company to own shares in the Company*

There are no provisions in the Articles relating to the ownership of shares in the Company by a subsidiary.

*(vii) Calls on shares and forfeiture of shares*

The Board may, from time to time, make such calls as it thinks fit upon the members in respect of any monies unpaid on the shares held by them respectively (whether on account of the nominal value of the shares or by way of premium) and not by the conditions of allotment of such shares made payable at fixed times. A call may be made payable either in one sum or by installments. If the sum payable in respect of any call or installment is not paid on or before the day appointed for payment thereof, the person or persons from whom the sum is due shall pay interest on the same at such rate not exceeding 20% per annum as the Board shall fix from the day appointed for payment to the time of actual payment, but the Board may waive payment of such interest wholly or in part. The Board may, if it thinks fit, receive from any member willing to advance the same, either in money or money's worth, all or any part of the money uncalled and unpaid or instalments payable upon any shares held by him, and in respect of all or any of the monies so advanced the Company may pay interest at such rate (if any) not exceeding 20% per annum as the Board may decide.

If a member fails to pay any call or instalment of a call on the day appointed for payment, the Board may, for so long as any part of the call or instalment remains unpaid, serve not less than 14 days' notice on the member requiring payment of so much of the call or instalment as is unpaid, together with any interest which may have accrued and which may still accrue up to the date of actual payment. The notice shall name a further day (not earlier than the expiration of 14 days from the date of the notice) on or before which the payment required by the notice is to be made, and shall also name the place where payment is to be made. The notice shall also state that, in the event of non-payment at or before the appointed time, the shares in respect of which the call was made will be liable to be forfeited.

If the requirements of any such notice are not complied with, any share in respect of which the notice has been given may at any time thereafter, before the payment required by the notice has been made, be forfeited by a resolution of the Board to that effect. Such forfeiture will include all dividends and bonuses declared in respect of the forfeited share and not actually paid before the forfeiture.

A person whose shares have been forfeited shall cease to be a member in respect of the forfeited shares but shall, nevertheless, remain liable to pay to the Company all monies which, at the date of forfeiture, were payable by him to the Company in respect of the shares together with (if the Board shall in its discretion so require) interest thereon from the date of forfeiture until payment at such rate not exceeding 20% per annum as the Board may prescribe.

**(b) Directors**

*(i) Appointment, retirement and removal*

At any time or from time to time, the Board shall have the power to appoint any person as a Director either to fill a casual vacancy on the Board or as an additional Director to the existing Board subject to any maximum number of Directors, if any, as may be determined by the members in general meeting. Any Director so appointed to fill a casual vacancy shall hold office only until the first annual general meeting of the Company after his appointment and be eligible for re-election at such meeting. Any Director so appointed as an addition to the existing Board shall hold office only until the first annual general meeting of the Company after his appointment and be eligible for re-election at such meeting. Any Director so appointed by the Board shall not be taken into account in determining the Directors or the number of Directors who are to retire by rotation at an annual general meeting.

At each annual general meeting, one third of the Directors for the time being shall retire from office by rotation. However, if the number of Directors is not a multiple of three, then the number nearest to but not less than one third shall be the number of retiring Directors. The Directors to retire in each year shall be those who have been in office longest since their last re-election or appointment but, as between persons who became or were last re-elected Directors on the same day, those to retire shall (unless they otherwise agree among themselves) be determined by lot.

No person, other than a retiring Director, shall, unless recommended by the Board for election, be eligible for election to the office of Director at any general meeting, unless notice in writing of the intention to propose that person for election as a Director and notice in writing by that person of his willingness to be elected has been lodged at the head office or at the registration office of the Company. The period for lodgment of such notices shall commence no earlier than the day after despatch of the notice of the relevant meeting and end no later than seven days before the date of such meeting and the minimum length of the period during which such notices may be lodged must be at least seven days.

A Director is not required to hold any shares in the Company by way of qualification nor is there any specified upper or lower age limit for Directors either for accession to or retirement from the Board.

A Director may be removed by members of the Company by an ordinary resolution of the Company before the expiration of his term of office (but without prejudice to any claim which such Director may have for damages for any breach of any contract between him and the Company) and members of the Company may by ordinary resolution appoint another in his place. Any Director so appointed shall be subject to the "retirement by rotation" provisions. The number of Directors shall not be less than two.

The office of a Director shall be vacated if he:

(aa) resigns;

(bb) dies;

(cc) is declared to be of unsound mind and the Board resolves that his office be vacated;

(dd) becomes bankrupt or has a receiving order made against him or suspends payment or compounds with his creditors generally;

(ee) is prohibited from being or ceases to be a director by operation of law;

(ff) without special leave, is absent from meetings of the Board for six consecutive months, and the Board resolves that his office is vacated;

(gg) has been required by the stock exchange of the Relevant Territory (as defined in the Articles) to cease to be a Director; or

(hh) is removed from office by the requisite majority of the Directors or otherwise pursuant to the Articles.

From time to time the Board may appoint one or more of its body to be managing director, joint managing director or deputy managing director or to hold any other employment or executive office with the Company for such period and upon such terms as the Board may determine, and the Board may revoke or terminate any of such appointments.

The Board may also delegate any of its powers to committees consisting of such Director(s) or other person(s) as the Board thinks fit, and from time to time it may also revoke such delegation or revoke the appointment of and discharge any such committees either wholly or in part, and either as to persons or purposes, but every committee so formed shall, in the exercise of the powers so delegated, conform to any regulations that may from time to time be imposed upon it by the Board.

*(ii) Power to allot and issue shares and warrants*

Subject to the provisions of the Companies Act, the Memorandum and Articles and without prejudice to any special rights conferred on the holders of any shares or class of shares, any share may be issued with or have attached to it such rights, or such restrictions, whether with regard to dividend, voting, return of capital or otherwise, as the Company may by ordinary resolution determine (or, in the absence of any such determination or so far as the same may not make specific provision, as the Board may determine). Any share may be issued on terms that, upon the happening of a specified event or upon a given date and either at the option of the Company or the holder of the share, it is liable to be redeemed.

The Board may issue warrants to subscribe for any class of shares or other securities of the Company on such terms as it may from time to time determine.

Where warrants are issued to bearer, no certificate in respect of such warrants shall be issued to replace one that has been lost unless the Board is satisfied beyond reasonable doubt that the original certificate has been destroyed and the Company has received an indemnity in such form as the Board thinks fit with regard to the issue of any such replacement certificate.

Subject to the provisions of the Companies Act, the Articles and, where applicable, the rules of any stock exchange of the Relevant Territory (as defined in the Articles) and without prejudice to any special rights or restrictions for the time being attached to any shares or any class of shares, all unissued shares in the Company shall be at the disposal of the Board, which may offer, allot, grant options over or otherwise dispose of them to such persons, at such times, for such consideration and on such terms and conditions as it in its absolute discretion thinks fit, but so that no shares shall be issued at a discount.

Neither the Company nor the Board shall be obliged, when making or granting any allotment of, offer of, option over or disposal of shares, to make, or make available, any such allotment, offer, option or shares to members or others whose registered addresses are in any particular territory or territories where, in the absence of a registration statement or other special formalities, this is or may, in the opinion of the Board, be unlawful or impracticable. However, no member affected as a result of the foregoing shall be, or be deemed to be, a separate class of members for any purpose whatsoever.

*(iii) Power to dispose of the assets of the Company or any of its subsidiaries*

While there are no specific provisions in the Articles relating to the disposal of the assets of the Company or any of its subsidiaries, the Board may exercise all powers and do all acts and things which may be exercised or done or approved by the Company and which are not required by the Articles or the Companies Act to be exercised or done by the Company in general meeting, but if such power or act is regulated by the Company in general meeting, such regulation shall not invalidate any prior act of the Board which would have been valid if such regulation had not been made.

*(iv) Borrowing powers*

The Board may exercise all the powers of the Company to raise or borrow money, to mortgage or charge all or any part of the undertaking, property and uncalled capital of the Company and, subject to the Companies Act, to issue debentures, debenture stock, bonds and other securities of the Company, whether outright or as collateral security for any debt, liability or obligation of the Company or of any third party.

*(v) Remuneration*

The Directors shall be entitled to receive, as ordinary remuneration for their services, such sums as shall from time to time be determined by the Board or the Company in general meeting, as the case may be, such sum (unless otherwise directed by the resolution by which it is determined) to be divided among the Directors in such proportions and in such manner as they may agree or, failing agreement, either equally or, in the case of any Director holding office for only a portion of the period in respect of which the remuneration is payable, pro rata. The Directors shall also be entitled to be repaid all expenses reasonably incurred by them in attending any Board meetings, committee meetings or general meetings or otherwise in connection with the discharge of their duties as Directors. Such remuneration shall be in addition to any other remuneration to which a Director who holds any salaried employment or office in the Company may be entitled by reason of such employment or office.

Any Director who, at the request of the Company, performs services which in the opinion of the Board goes beyond the ordinary duties of a Director may be paid such special or extra remuneration as the Board may determine, in addition to or in substitution for any ordinary remuneration as a Director. An executive Director appointed to be a managing director, joint managing director, deputy managing director or other executive officer shall receive such remuneration and such other benefits and allowances as the Board may from time to time decide. Such remuneration shall be in addition to his ordinary remuneration as a Director.

The Board may establish, either on its own or jointly in concurrence or agreement with subsidiaries of the Company or companies with which the Company is associated in business, or may make contributions out of the Company's monies to, any schemes or funds for providing pensions, sickness or compassionate allowances, life assurance or other benefits for employees (which expression as used in this and the following paragraph shall include any Director or former Director who may hold or have held any executive office or any office of profit with the Company or any of its subsidiaries) and former employees of the Company and their dependents or any class or classes of such persons.

The Board may also pay, enter into agreements to pay or make grants of revocable or irrevocable, whether or not subject to any terms or conditions, pensions or other benefits to employees and former employees and their dependents, or to any of such persons, including pensions or benefits additional to those, if any, to which such employees or former employees or their dependents are or may become entitled under any such scheme or fund as mentioned above. Such pension or benefit may, if deemed desirable by the Board, be granted to an employee either before and in anticipation of, or upon or at any time after, his actual retirement.

*(vi) Compensation or payments for loss of office*

Payments to any present Director or past Director of any sum by way of compensation for loss of office or as consideration for or in connection with his retirement from office (not being a payment to which the Director is contractually or statutorily entitled) must be approved by the Company in general meeting.

*(vii) Loans and provision of security for loans to Directors*

The Company shall not directly or indirectly make a loan to a Director or a director of any holding company of the Company or any of their respective close associates, enter into any guarantee or provide any security in connection with a loan made by any person to a Director or a director of any holding company of the Company or any of their respective close associates, or, if any one or more of the Directors hold(s) (jointly or severally or directly or indirectly) a controlling interest in another company, make a loan to that other company or enter into any guarantee or provide any security in connection with a loan made by any person to that other company.

*(viii) Financial assistance to purchase Shares*

Subject to the Companies Act, or any other law or so far as not prohibited by any law and subject to any rights conferred on the holders of any class of Shares, the Company shall have the power to give, directly or indirectly, by means of a loan, a guarantee, an indemnity, the provision of security or otherwise howsoever, financial assistance for the purpose of or in connection with a purchase or other acquisition made or to be made by any person of any Shares or warrants or other securities in the Company or any company which is a holding company of the Company.

*(ix) Disclosure of interest in contracts with the Company or any of its subsidiaries*

With the exception of the office of auditor of the Company, a Director may hold any other office or place of profit with the Company in conjunction with his office of Director for such period and upon such terms as the Board may determine, and may be paid such extra remuneration for that other office or place of profit, in whatever form, in addition to any remuneration provided for by or pursuant to any other Articles. A Director may be or become a director, officer or member of any other company in which the Company may be interested, and shall not be liable to account to the Company or the members for any remuneration or other benefit received by him as a director, officer or member of such other company. The

Board may also cause the voting power conferred by the shares in any other company held or owned by the Company to be exercised in such manner in all respects as it thinks fit, including the exercise in favor of any resolution appointing the Directors or any of them to be directors or officers of such other company.

No Director or intended Director shall be disqualified by his office from contracting with the Company, nor shall any such contract or any other contract or arrangement in which any Director is in any way interested be liable to be avoided, nor shall any Director so contracting or being so interested be liable to account to the Company for any profit realized by any such contract or arrangement by reason only of such Director holding that office or the fiduciary relationship established by it. A Director who is, in any way, materially interested in a contract or arrangement or proposed contract or arrangement with the Company shall declare the nature of his interest at the earliest meeting of the Board at which he may practically do so.

There is no power to freeze or otherwise impair any of the rights attaching to any share by reason that the person or persons who are interested directly or indirectly in that share have failed to disclose their interests to the Company.

A Director shall not vote or be counted in the quorum on any resolution of the Board in respect of any contract or arrangement or proposal in which he or any of his close associate(s) has/have a material interest, and if he shall do so his vote shall not be counted nor shall he be counted in the quorum for that resolution, but this prohibition shall not apply to any of the following matters:

(aa) the giving of any security or indemnity to the Director or his close associate(s) in respect of money lent or obligations incurred or undertaken by him or any of them at the request of or for the benefit of the Company or any of its subsidiaries;

(bb) the giving of any security or indemnity to a third party in respect of a debt or obligation of the Company or any of its subsidiaries for which the Director or his close associate(s) has/have himself/themselves assumed responsibility in whole or in part whether alone or jointly under a guarantee or indemnity or by the giving of security;

(cc) any proposal concerning an offer of shares, debentures or other securities of or by the Company or any other company which the Company may promote or be interested in for subscription or purchase, where the Director or his close associate(s) is/are or is/are to be interested as a participant in the underwriting or sub-underwriting of the offer;

(dd) any proposal or arrangement concerning the benefit of employees of the Company or any of its subsidiaries, including the adoption, modification or operation of either: (i) any employees' share scheme or any share incentive or share option scheme under which the Director or his close associate(s) may benefit; or (ii) any of a pension fund or retirement, death or disability benefit scheme which relates to Directors, their close associates and employees of the Company or any of its subsidiaries and does not provide in respect of any Director or his close associate(s) any privilege or advantage not generally accorded to the class of persons to which such scheme or fund relates; and

(ee) any contract or arrangement in which the Director or his close associate(s) is/are interested in the same manner as other holders of shares, debentures or other securities of the Company by virtue only of his/their interest in those shares, debentures or other securities.

*(x) Proceedings of the Board*

The Board may meet anywhere in the world for the despatch of business and may adjourn and otherwise regulate its meetings as it thinks fit. Questions arising at any meeting shall be determined by a majority of votes. In the case of an equality of votes, the chairman of the meeting shall have a second or casting vote.

**(c) Alterations to the constitutional documents and the Company's name**

To the extent that the same is permissible under Cayman Islands law and subject to the Memorandum and Articles of the Company may only be altered or amended, and the name of the Company may only be changed, with the sanction of a special resolution of the Company.

**(d) Meetings of member**

*(i) Special and ordinary resolutions*

A special resolution of the Company must be passed by a majority of not less than three-fourths of the votes cast by such members as, being entitled so to do, vote in person or by proxy or, in the case of members which are corporations, by their duly authorized representatives or, where proxies are allowed, by proxy at a general meeting of which notice specifying the intention to propose the resolution as a special resolution has been duly given.

Under the Companies Act, a copy of any special resolution must be forwarded to the Registrar of Companies in the Cayman Islands within 15 days of being passed.

An "ordinary resolution", by contrast, is a resolution passed by a simple majority of the votes of such members of the Company as, being entitled to do so, vote in person or, in the case of members which are corporations, by their duly authorized representatives or, where proxies are allowed, by proxy at a general meeting of which notice has been duly given.

A resolution in writing signed by or on behalf of all members shall be treated as an ordinary resolution duly passed at a general meeting of the Company duly convened and held, and where relevant as a special resolution so passed.

*(ii) Voting rights and right to demand a poll*

Subject to any special rights, restrictions or privileges as to voting for the time being attached to any class or classes of shares at any general meeting: (a) on a poll every member present in person or by proxy or, in the case of a member being a corporation, by its duly authorized representative shall have one vote for every share which is fully paid or credited as fully paid registered in his name in the register of members of the Company but so that no amount paid up or credited as paid up on a share in advance of calls or instalments is treated for this purpose as paid up on the share; and (b) on a show of hands every member who is present in person (or, in the case of a member being a corporation, by its duly authorized representative) or by proxy shall have one vote. Where more than one proxy is appointed by a member which is a Clearing House (as defined in the Articles) or its nominee(s), each such proxy shall have one vote on a show of hands. On a poll, a member entitled to more than one vote need not use all his votes or cast all the votes he does use in the same way.

At any general meeting a resolution put to the vote of the meeting is to be decided by poll save that the chairman of the meeting may, in good faith and pursuant to the Listing Rules, allow a resolution which relates purely to a procedural or an administrative matter to be voted on by a show of hands. Where a show of hands is allowed, before or on the declaration of the result of the show of hands, a poll may be demanded by (in each case by members present in person or by proxy or by a duly authorized corporate representative):

(A) at least two members present in person or by proxy for the time being entitled to speak and vote at the meeting;

(B) any member or members representing not less than one-tenth of the total voting rights of all the members having the right to attend, speak and vote at the meeting; or

(C) a member or members holding shares in the Company conferring a right to attend, speak and vote at the meeting on which an aggregate sum has been paid equal to not less than one-tenth of the total sum paid up on all the shares conferring that right.

Should a Clearing House or its nominee(s) be a member of the Company, such person or persons may be authorized as it thinks fit to act as its representative(s) at any meeting of the Company or at any meeting of any class of members of the Company, or (where appropriate and subject to the Companies Act) at any meeting of creditors of the Company, provided that, if more than one person is so authorized, the authorization shall specify the number and class of shares in respect of which each such person is so authorized. A person authorized in accordance with this provision shall be deemed to have been duly authorized without further evidence of the facts and be entitled to exercise the same rights and powers on behalf of the Clearing House or its nominee(s) as if such person were an individual member including the right to vote individually on a show of hands and the right to speak.

Where the Company has knowledge that any member is, under the Listing Rules, required to abstain from voting on any particular resolution or restricted to voting only for or only against any particular resolution, any votes cast by or on behalf of such member in contravention of such requirement or restriction shall not be counted.

*(iii) Annual general meetings*

The Company must hold an annual general meeting each financial year other than the financial year of the Company's adoption of the Articles. Such meeting must be held within 6 months after the end of the Company's financial year (unless a longer period would not infringe the Listing Rules), at such time and place as may be determined by the Board.

*(iv) Requisition of general meetings*

Extraordinary general meetings may be convened on the requisition of one or more members holding, at the date of deposit of the requisition, shares in the share capital of the Company that represent not less than one tenth of the voting rights at general meetings of the Company on a one vote per share basis. Such requisition shall be made in writing to the Board or the secretary of the Company for the purpose of requiring an extraordinary general meeting to be called by the Board for the transaction of any business or resolution specified in such requisition. Such meeting shall be held within two months after the deposit of such requisition. If within 21 days of such deposit, the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

*(v) Notices of meetings and business to be conducted*

An annual general meeting of the Company shall be called by at least 21 days' notice in writing, and any other general meeting of the Company shall be called by at least 14 days' notice in writing. The notice shall be exclusive of the day on which it is served or deemed to be served and of the day for which it is given, and must specify the time, place and agenda of the meeting and particulars of the resolution(s) to be considered at that meeting and, in the case of special business, the general nature of that business.

Except where otherwise expressly stated, any notice or document (including a share certificate) to be given or issued under the Articles shall be in writing, and may be served by the Company on any member personally, by post to such member's registered address or (in the case of a notice) by advertisement in the newspapers. Any member whose registered address is outside Hong Kong may notify the Company in writing of an address in Hong Kong which shall be deemed to be his registered address for this purpose. Subject to the Companies Act and the Listing Rules, a notice or document may also be served or delivered by the Company to any member by electronic means.

Although a meeting of the Company may be called by shorter notice than as specified above, such meeting may be deemed to have been duly called if it is so agreed:

(i) in the case of an annual general meeting, by all members of the Company entitled to attend, speak and vote thereat; and

(ii) in the case of any other meeting, by a majority in number of the members having a right to attend, speak and vote at the meeting holding not less than 95% of the total voting rights in the Company.

All business transacted at an extraordinary general meeting shall be deemed special business. All business shall also be deemed special business where it is transacted at an annual general meeting, with the exception of certain routine matters which shall be deemed ordinary business.

*(vi) Quorum for meetings and separate class meetings*

No business shall be transacted at any general meeting unless a quorum is present when the meeting proceeds to business, and continues to be present until the conclusion of the meeting.

The quorum for a general meeting shall be two members present in person (or in the case of a member being a corporation, by its duly authorized representative) or by proxy and entitled to speak and vote. In respect of a separate class meeting (other than an adjourned meeting) convened to sanction the modification of class rights the necessary quorum shall be two persons holding or representing by proxy not less than one-third in nominal value of the issued shares of that class.

*(vii) Proxies*

Any member of the Company entitled to attend, speak and vote at a meeting of the Company is entitled to appoint another person as his proxy to attend, speak and vote instead of him. A member who is the holder of two or more shares may appoint more than one proxy to represent him and attend, speak and vote on his behalf at a general meeting of the Company or at a class meeting. A proxy need not be a member of the Company and shall be entitled to exercise the same powers on behalf of a member who is an individual and for whom he acts as proxy as such member could exercise. In addition, a proxy shall be entitled to exercise the same powers on behalf of a member which is a corporation and for which he acts as proxy as such member could exercise if it were an individual member. On a poll or on a show of hands, votes may be given either personally (or, in the case of a member being a corporation, by its duly authorized representative) or by proxy.

The instrument appointing a proxy shall be in writing under the hand of the appointor or of his attorney duly authorized in writing, or if the appointor is a corporation, either under seal or under the hand of a duly authorized officer or attorney. Every instrument of proxy, whether for a specified meeting or otherwise, shall be in such form as the Board may from time to time approve, provided that it shall not preclude the use of the two-way form. Any form issued to a member for appointing a proxy to attend, speak and vote at an extraordinary general meeting or at an annual general meeting at which any business is to be transacted shall be such as to enable the member, according to his intentions, to instruct the proxy to vote in favor of or against (or, in default of instructions, to exercise his discretion in respect of) each resolution dealing with any such business.

*(viii) Right to Speak*

All members have the right to (a) speak at a general meeting of the Company; and (b) vote at a general meeting except where a member is required, by the Listing Rules, to abstain from voting to approve the matters under consideration.

**(e) Accounts and audit**

The Board shall cause proper books of account to be kept of the sums of money received and expended by the Company, and of the assets and liabilities of the Company and of all other matters required by the Cayman Companies Act (which include all sales and purchases of goods by the company) necessary to give a true and fair view of the state of the Company's affairs and to show and explain its transactions.

The books of accounts of the Company shall be kept at the head office of the Company or at such other place or places as the Board decides and shall always be open to inspection by any Director. No member (other than a Director) shall have any right to inspect any account, book or document of the Company except as conferred by the Cayman Companies Act or ordered by a court of competent jurisdiction or authorized by the Board or the Company in general meeting.

The Board shall from time to time cause to be prepared and laid before the Company at its annual general meeting balance sheets and profit and loss accounts (including every document required by law to be annexed thereto), together with a copy of the Directors' report and a copy of the auditors' report, not less than 21 days before the date of the annual general meeting. Copies of these documents shall be sent to every person entitled to receive notices of general meetings of the Company under the provisions of the Articles together with the notice of annual general meeting, not less than 21 days before the date of the meeting.

Subject to the rules of the stock exchange of the Relevant Territory (as defined in the Articles), the Company may send summarized financial statements to members who have, in accordance with the rules of the stock exchange of the Relevant Territory, consented and elected to receive summarized financial statements instead of the full financial statements. The summarized financial statements must be accompanied by any other documents as may be required under the rules of the stock exchange of the Relevant Territory, and must be sent to those members that have consented and elected to receive the summarized financial statements not less than 21 days before the general meeting.

The members may by ordinary resolution appoint auditor(s) to hold office until the conclusion of the next annual general meeting on such terms and with such duties as may be agreed with the Board. The auditors' remuneration shall be fixed by the Company in general meeting by ordinary resolution.

The members may, at a general meeting remove the auditor(s) by an ordinary resolution at any time before the expiration of the term of office of the auditor(s) and shall, by an ordinary resolution, at that meeting appoint new auditor(s) in place of the removed auditor(s) for the remainder of the term.

The auditors shall audit the financial statements of the Company in accordance with generally accepted accounting principles of Hong Kong, the International Accounting Standards or such other standards as may be permitted by the Stock Exchange.

**(f) Dividends and other methods of distribution**

The Company in general meeting may declare dividends in any currency to be paid to the members but no dividend shall be declared in excess of the amount recommended by the Board.

Except in so far as the rights attaching to, or the terms of issue of, any share may otherwise provide:

(i) all dividends shall be declared and paid according to the amounts paid up on the shares in respect of which the dividend is paid, although no amount paid up on a share in advance of calls shall for this purpose be treated as paid up on the share;

(ii) all dividends shall be apportioned and paid pro rata in accordance with the amount paid up on the shares during any portion(s) of the period in respect of which the dividend is paid; and

(iii) the Board may deduct from any dividend or other monies payable to any member all sums of money (if any) presently payable by him to the Company on account of calls, instalments or otherwise.

Where the Board or the Company in general meeting has resolved that a dividend should be paid or declared, the Board may resolve:

(aa) that such dividend be satisfied wholly or in part in the form of an allotment of shares credited as fully paid up, provided that the members entitled to such dividend will be entitled to elect to receive such dividend (or part thereof) in cash in lieu of such allotment; or

(bb) that the members entitled to such dividend will be entitled to elect to receive an allotment of shares credited as fully paid up in lieu of the whole or such part of the dividend as the Board may think fit.

Upon the recommendation of the Board, the Company may by ordinary resolution in respect of any one particular dividend of the Company determine that it may be satisfied wholly in the form of an allotment of shares credited as fully paid up without offering any right to members to elect to receive such dividend in cash in lieu of such allotment.

Any dividend, bonus or other sum payable in cash to the holder of shares may be paid by cheque or warrant sent through the post. Every such cheque or warrant shall be made payable to the order of the person to whom it is sent and shall be sent at the holder's or joint holders' risk and payment of the cheque or warrant by the bank on which it is drawn shall constitute a good discharge to the Company. Any one of two or more joint holders may give effectual receipts for any dividends or other monies payable or property distributable in respect of the shares held by such joint holders.

Whenever the Board or the Company in general meeting has resolved that a dividend be paid or declared, the Board may further resolve that such dividend be satisfied wholly or in part by the distribution of specific assets of any kind.

The Board may, if it thinks fit, receive from any member willing to advance the same, and either in money or money's worth, all or any part of the money uncalled and unpaid or instalments payable upon any shares held by him, and in respect of all or any of the monies so advanced may pay interest at such rate (if any) not exceeding 20% per annum, as the Board may decide, but a payment in advance of a call shall not entitle the member to receive any dividend or to exercise any other rights or privileges as a member in respect of the share or the due portion of the shares upon which payment has been advanced by such member before it is called up.

All dividends, bonuses or other distributions unclaimed for one year after having been declared may be invested or otherwise used by the Board for the benefit of the Company until claimed and the Company shall not be constituted a trustee in respect thereof. All dividends, bonuses or other distributions unclaimed for six years after having been declared may be forfeited by the Board and, upon such forfeiture, shall revert to the Company.

No dividend or other monies payable by the Company on or in respect of any share shall bear interest against the Company.

The Company may exercise the power to cease sending cheques for dividend entitlements or dividend warrants by post if such cheques or warrants remain uncashed on two consecutive occasions or after the first occasion on which such a cheque or warrant is returned undelivered.

### (g) Inspection of corporate records

For so long as any part of the share capital of the Company is [REDACTED] on the Stock Exchange, except when the register of members is closed, the register of members in Hong Kong shall during business hours be kept open to inspection by any member without charge, and any member may require the provision to him of copies or extracts of such register in all respects as if the Company were incorporated under and were subject to the Hong Kong Companies Ordinance.

**(h) Rights of minorities in relation to fraud or oppression**

There are no provisions in the Articles concerning the rights of minority members in relation to fraud or oppression. However, certain remedies may be available to members of the Company under Cayman Islands law, as summarized in paragraph 3(f) of this Appendix.

**(i) Procedures on liquidation**

A resolution that the Company be wound up voluntarily shall be a special resolution.

Subject to any special rights, privileges or restrictions as to the distribution of available surplus assets on liquidation for the time being attached to any class or classes of shares:

(i) if the Company is wound up, the surplus assets remaining after payment to all creditors shall be divided among the members in proportion to the capital paid up on the shares held by them respectively; and

(ii) if the Company is wound up and the surplus assets available for distribution among the members are insufficient to repay the whole of the paid-up capital, such assets shall be distributed, subject to the rights of any shares which may be issued on special terms and conditions, so that, as nearly as may be, the losses shall be borne by the members in proportion to the capital paid up on the shares held by them, respectively.

If the Company is wound up (whether the liquidation is voluntary or compelled by the court), the liquidator may, with the sanction of a special resolution and any other sanction required by the Cayman Companies Act, divide among the members in specie or kind the whole or any part of the assets of the Company, whether the assets consist of property of one kind or different kinds, and the liquidator may, for such purpose, set such value as he deems fair upon any one or more class or classes of property to be so divided and may determine how such division shall be carried out as between the members or different classes of members and the members within each class. The liquidator may, with the like sanction, vest any part of the assets in trustees upon such trusts for the benefit of members as the liquidator thinks fit, but so that no member shall be compelled to accept any shares or other property upon which there is a liability.

**(j) Subscription rights reserve**

Provided that it is not prohibited by and is otherwise in compliance with the Companies Act, if warrants to subscribe for shares have been issued by the Company and the Company does any act or engages in any transaction which would result in the subscription price of such warrants being reduced below the par value of the shares to be issued on the exercise of such warrants, a subscription rights reserve shall be established and applied in paying up the difference between the subscription price and the par value of such shares.

## 3. CAYMAN ISLANDS COMPANY LAW

The Company was incorporated in the Cayman Islands as an exempted company on August 3, 2020 subject to the Companies Act. Certain provisions of Cayman Islands company law are set out below but this section does not purport to contain all applicable qualifications and exceptions or to be a complete review of all matters of the Companies Act and taxation, which may differ from equivalent provisions in jurisdictions with which interested parties may be more familiar.

### (a) Company operations

An exempted company such as the Company must conduct its operations mainly outside the Cayman Islands. An exempted company is also required to file an annual return each year with the Registrar of Companies of the Cayman Islands and pay a fee which is based on the amount of its authorized share capital.

### (b) Share capital

Under the Companies Act, a Cayman Islands company may issue ordinary, preference or redeemable shares or any combination thereof. Where a company issues shares at a premium, whether for cash or otherwise, a sum equal to the aggregate amount or value of the premiums on those shares shall be transferred to an account, to be called the ''share premium account''. At the option of a company, these provisions may not apply to premiums on shares of that company allotted pursuant to any arrangements in consideration of the acquisition or cancellation of shares in any other company and issued at a premium. The share premium account may be applied by the company subject to the provisions, if any, of its memorandum and articles of association, in such manner as the company may from time to time determine including, but without limitation, the following:

(i) paying distributions or dividends to members;

(ii) paying up unissued shares of the company to be issued to members as fully paid bonus shares;

(iii) any manner provided in section 37 of the Companies Act;

(iv) writing-off the preliminary expenses of the company; and

(v) writing-off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the company.

Notwithstanding the foregoing, no distribution or dividend may be paid to members out of the share premium account unless, immediately following the date on which the distribution or dividend is proposed to be paid, the company will be able to pay its debts as they fall due in the ordinary course of business.

Subject to confirmation by the court, a company limited by shares or a company limited by guarantee and having a share capital may, if authorized to do so by its articles of association, by special resolution reduce its share capital in any way.

**(c) Financial assistance to purchase shares of a company or its holding company**

There are no statutory prohibitions in the Cayman Islands on the granting of financial assistance by a company to another person for the purchase of, or subscription for, its own, its holding company's or a subsidiary's shares. Therefore, a company may provide financial assistance provided the directors of the company, when proposing to grant such financial assistance, discharge their duties of care and act in good faith, for a proper purpose and in the interests of the company. Such assistance should be on an arm's-length basis.

**(d) Purchase of shares and warrants by a company and its subsidiaries**

A company limited by shares or a company limited by guarantee and having a share capital may, if so authorized by its articles of association, issue shares which are to be redeemed or are liable to be redeemed at the option of the company or a member and, for the avoidance of doubt, it shall be lawful for the rights attaching to any shares to be varied, subject to the provisions of the company's articles of association, so as to provide that such shares are to be or are liable to be so redeemed. In addition, such a company may, if authorized to do so by its articles of association, purchase its own shares, including any redeemable shares; an ordinary resolution of the company approving the manner and terms of the purchase will be required if the articles of association do not authorize the manner and terms of such purchase. A company may not redeem or purchase its shares unless they are fully paid. Furthermore, a company may not redeem or purchase any of its shares if, as a result of the redemption or purchase, there would no longer be any issued shares of the company other than shares held as treasury shares. In addition, a payment out of capital by a company for the redemption or purchase of its own shares is not lawful unless, immediately following the date on which the payment is proposed to be made, the company shall be able to pay its debts as they fall due in the ordinary course of business.

Shares that have been purchased or redeemed by a company or surrendered to the company shall not be treated as cancelled but shall be classified as treasury shares if held in compliance with the requirements of Section 37A(1) of the Companies Act. Any such shares shall continue to be classified as treasury shares until such shares are either cancelled or transferred pursuant to the Companies Act.

A Cayman Islands company may be able to purchase its own warrants subject to and in accordance with the terms and conditions of the relevant warrant instrument or certificate. Thus there is no requirement under Cayman Islands law that a company's memorandum or articles of association contain a specific provision enabling such purchases. The directors of a company may under the general power contained in its memorandum of association be able to buy, sell and deal in personal property of all kinds.

A subsidiary may hold shares in its holding company and, in certain circumstances, may acquire such shares.

**(e) Dividends and distributions**

Subject to a solvency test, as prescribed in the Companies Act, and the provisions, if any, of the company's memorandum and articles of association, a company may pay dividends and distributions out of its share premium account. In addition, based upon English case law which is likely to be persuasive in the Cayman Islands, dividends may be paid out of profits.

For so long as a company holds treasury shares, no dividend may be declared or paid, and no other distribution (whether in cash or otherwise) of the company's assets (including any distribution of assets to members on a winding up) may be made, in respect of a treasury share.

**(f) Protection of minorities and shareholders' suits**

It can be expected that the Cayman Islands courts will ordinarily follow English case law precedents (particularly the rule in the case of Foss v. Harbottle and the exceptions to that rule) which permit a minority member to commence a representative action against or derivative actions in the name of the company to challenge acts which are ultra vires, illegal, fraudulent (and performed by those in control of the Company) against the minority, or represent an irregularity in the passing of a resolution which requires a qualified (or special) majority which has not been obtained.

Where a company (not being a bank) is one which has a share capital divided into shares, the court may, on the application of members holding not less than one-fifth of the shares of the company in issue, appoint an inspector to examine the affairs of the company and, at the direction of the court, to report on such affairs. In addition, any member of a company may petition the court, which may make a winding up order if the court is of the opinion that it is just and equitable that the company should be wound up.

In general, claims against a company by its members must be based on the general laws of contract or tort applicable in the Cayman Islands or be based on potential violation of their individual rights as members as established by a company's memorandum and articles of association.

**(g) Disposal of assets**

There are no specific restrictions on the power of directors to dispose of assets of a company, however, the directors are expected to exercise certain duties of care, diligence and skill to the standard that a reasonably prudent person would exercise in comparable circumstances, in addition to fiduciary duties to act in good faith, for proper purpose and in the best interests of the company under English common law (which the Cayman Islands courts will ordinarily follow).

**(h) Accounting and auditing requirements**

A company must cause proper records of accounts to be kept with respect to: (i) all sums of money received and expended by it; (ii) all sales and purchases of goods by it and (iii) its assets and liabilities.

Proper books of account shall not be deemed to be kept if there are not kept such books as are necessary to give a true and fair view of the state of the company's affairs and to explain its transactions.

If a company keeps its books of account at any place other than at its registered office or any other place within the Cayman Islands, it shall, upon service of an order or notice by the Tax Information Authority pursuant to the Tax Information Authority Act (2017 Revision) of the Cayman Islands, make available, in electronic form or any other medium, at its registered office copies of its books of account, or any part or parts thereof, as are specified in such order or notice.

**(i) Exchange control**

There are no exchange control regulations or currency restrictions in effect in the Cayman Islands.

**(j) Taxation**

Pursuant to section 6 of the Tax Concessions Act (2018 Revision) of the Cayman Islands, the Company has obtained an undertaking from the Financial Secretary that:

(i) no law which is enacted in the Cayman Islands imposing any tax to be levied on profits or income or gains or appreciations shall apply to the Company or its operations; and

(ii) no tax be levied on profits, income, gains or appreciations or which is in the nature of estate duty or inheritance tax shall be payable by the Company:

(aa) on or in respect of the shares, debentures or other obligations of the Company; or

(bb) by way of withholding in whole or in part of any relevant payment as defined in the Tax Concessions Act (2018 Revision).

The undertaking for the Company is for a period of 30 years from August 24, 2020.

The Cayman Islands currently levy no taxes on individuals or corporations based upon profits, income, gains or appreciations and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to the Company levied by the Government of the Cayman Islands save for certain stamp duties which may be applicable, from time to time, on certain instruments.

**(k) Stamp duty on transfers**

No stamp duty is payable in the Cayman Islands on transfers of shares of Cayman Islands companies save for those which hold interests in land in the Cayman Islands.

**(l) Loans to directors**

There is no express provision prohibiting the making of loans by a company to any of its directors. However, the company's articles of association may provide for the prohibition of such loans under specific circumstances.

**(m) Inspection of corporate records**

The members of a company have no general right to inspect or obtain copies of the register of members or corporate records of the company. They will, however, have such rights as may be set out in the company's articles of association.

**(n) Register of members**

A Cayman Islands exempted company may maintain its principal register of members and any branch registers in any country or territory, whether within or outside the Cayman Islands, as the company may determine from time to time. There is no requirement for an exempted company to make any returns of members to the Registrar of Companies in the Cayman Islands. The names and addresses of the members are, accordingly, not a matter of public record and are not available for public inspection. However, an exempted company shall make available at its registered office, in electronic form or any other medium, such register of members, including any branch register of member, as may be required of it upon service of an order or notice by the Tax Information Authority pursuant to the Tax Information Authority Act (2017 Revision) of the Cayman Islands.

**(o) Register of Directors and officers**

Pursuant to the Cayman Companies Act, the Company is required to maintain at its registered office a register of directors, alternate directors and officers which is not available for inspection by the public. A copy of such register must be filed with the Registrar of Companies in the Cayman Islands and any change must be notified to the Registrar within 30 days of any change in such directors or officers, including a change of the name of such directors or officers.

**(p) Winding up**

A Cayman Islands company may be wound up by: (i) an order of the court; (ii) voluntarily by its members; or (iii) under the supervision of the court.

The court has authority to order winding up in a number of specified circumstances including where, in the opinion of the court, it is just and equitable that such company be so wound up.

A voluntary winding up of a company (other than a limited duration company, for which specific rules apply) occurs where the company resolves by special resolution that it be wound up voluntarily or where the company in general meeting resolves that it be wound up voluntarily because it is unable to pay its debt as they fall due. In the case of a voluntary winding up, the company is obliged to cease to carry on its business from the commencement of its winding up except so far as it may be beneficial for its winding up. Upon appointment of a voluntary liquidator, all the powers of the directors cease, except so far as the company in general meeting or the liquidator sanctions their continuance.

In the case of a members' voluntary winding up of a company, one or more liquidators are appointed for the purpose of winding up the affairs of the company and distributing its assets.

As soon as the affairs of a company are fully wound up, the liquidator must make a report and an account of the winding up, showing how the winding up has been conducted and the property of the company disposed of, and call a general meeting of the company for the purposes of laying before it the account and giving an explanation of that account.

When a resolution has been passed by a company to wind up voluntarily, the liquidator or any contributory or creditor may apply to the court for an order for the continuation of the winding up under the supervision of the court, on the grounds that: (i) the company is or is likely to become insolvent; or (ii) the supervision of the court will facilitate a more effective, economic or expeditious liquidation of the company in the interests of the contributories and creditors. A supervision order takes effect for all purposes as if it was an order that the company be wound up by the court except that a commenced voluntary winding up and the prior actions of the voluntary liquidator shall be valid and binding upon the company and its official liquidator.

For the purpose of conducting the proceedings in winding up a company and assisting the court, one or more persons may be appointed to be called an official liquidator(s).The court may appoint to such office such person or persons, either provisionally or otherwise, as it thinks fit, and if more than one person is appointed to such office, the court shall declare whether any act required or authorized to be done by the official liquidator is to be done by all or any one or more of such persons. The court may also determine whether any and what security is to be given by an official liquidator on his appointment; if no official liquidator is appointed, or during any vacancy in such office, all the property of the company shall be in the custody of the court.

**(q) Reconstructions**

Reconstructions and amalgamations may be approved by a majority in number representing 75% in value of the members or creditors, depending on the circumstances, as are present at a meeting called for such purpose and thereafter sanctioned by the courts. Whilst a dissenting member has the right to express to the court his view that the transaction for which approval is being sought would not provide the members with a fair value for their shares, the courts are unlikely to disapprove the transaction on that ground alone in the absence of evidence of fraud or bad faith on behalf of management, and if the transaction were approved and consummated the dissenting member would have no rights comparable to the appraisal rights (i.e. the right to receive payment in cash for the judicially determined value of their shares) ordinarily available, for example, to dissenting members of a United States corporation.

### (r) Take-overs

Where an offer is made by a company for the shares of another company and, within four months of the offer, the holders of not less than 90% of the shares which are the subject of the offer accept, the offeror may, at any time within two months after the expiration of that four-month period, by notice require the dissenting members to transfer their shares on the terms of the offer. A dissenting member may apply to the Cayman Islands courts within one month of the notice objecting to the transfer. The burden is on the dissenting member to show that the court should exercise its discretion, which it will be unlikely to do unless there is evidence of fraud or bad faith or collusion as between the offeror and the holders of the shares who have accepted the offer as a means of unfairly forcing out minority members.

### (s) Indemnification

Cayman Islands law does not limit the extent to which a company's articles of association may provide for indemnification of officers and directors, save to the extent any such provision may be held by the court to be contrary to public policy, for example, where a provision purports to provide indemnification against the consequences of committing a crime.

### (t) Economic Substance Requirements

Pursuant to the International Tax Cooperation (Economic Substance) Act, 2018 of the Cayman Islands ("**ES Act**") that came into force on 1 January 2019, a "relevant entity" is required to satisfy the economic substance test set out in the ES Act. A "relevant entity" includes an exempted company incorporated in the Cayman Islands as is the Company; however, it does not include an entity that is tax resident outside the Cayman Islands. Accordingly, for so long as the Company is a tax resident outside the Cayman Islands, including in Hong Kong, it is not required to satisfy the economic substance test set out in the ES Act.

## 4. GENERAL

Appleby, the Company's legal advisor on Cayman Islands law, has sent to the Company a letter of advice which summarizes certain aspects of the Cayman Islands company law. This letter, together with a copy of the Cayman Companies Act, is available on display as referred to in the paragraph headed "Documents Available On Display" in Appendix VII. Any person wishing to have a detailed summary of Cayman Islands company law or advice on the differences between it and the laws of any jurisdiction with which he is more familiar is recommended to seek independent legal advice.

## A. FURTHER INFORMATION ABOUT OUR GROUP

### 1. Incorporation of our Company

Our Company was incorporated on August 3, 2020 in the Cayman Islands under the Companies Act as an exempted company with limited liability. Accordingly, our Company's corporate structure and its constitution, comprising its Memorandum of Association and Articles of Association are subject to relevant laws of the Cayman Islands. A summary of the Cayman Islands company law and of our Memorandum of Association and Articles of Association are set out in Appendix IV to this document. Our registered office is at [REDACTED], 71 Fort Street, PO Box 500, George Town, Grand Cayman, KY1-1106, Cayman Islands.

Our principal place of business in Hong Kong is at 40/F, Dah Sing Financial Centre, No. 248 Queen's Road East, Wanchai, Hong Kong. Our Company was registered as a non-Hong Kong company under Part 16 of the Companies Ordinance on February 10, 2021. Ms. Mak Po Man Cherie, a Hong Kong resident whose correspondence address is 40/F, Dah Sing Financial Centre, No. 248 Queen's Road East, Wanchai, Hong Kong, has been appointed as our authorized representative for the acceptance of service of process and notices in Hong Kong.

As at the date of this document, our Company's headquarters was located at No. 1, Building 1, Graphite Development Zone, Yanjun Farm, Luobei County, Hegang City, Heilongjiang Province, the PRC.

### 2. Changes in authorized and issued share capital of our Company

As at the date of incorporation, our Company had an initial authorized share capital of HK$380,000.00 divided into 380,000,000 shares with a nominal or par value of HK$0.001 each.

The following changes in the share capital of our Company took place since its incorporation:

(a) on August 3, 2020, upon the incorporation, our Company issued fully paid one Share with par value of HK$0.001 to AGS Nominees 1 Limited, an Independent Third Party, which in turn was subsequently transferred to Sandy Mining Limited at nominal consideration on the same day; and

(b) immediately following the completion of the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED] without taking into account any Shares which may be issued upon the exercise of [REDACTED] and any options granted or to be granted under the Share Option Scheme, the issued share capital of our Company will be HK$[REDACTED] divided into [REDACTED] Shares of HK$[REDACTED] each.

Save as disclosed above, there has been no other alteration in the share capital of our Company since its incorporation.

**3. Changes in share capital of our subsidiaries**

Our Company's subsidiaries are set out in the Accountant's Report in Appendix I to this document.

Saved as disclosed in "History, Reorganization and Corporate Structure — Our Corporate Development", there has been no alteration in the share capital of any of our subsidiaries within the two years immediately preceding the date of this document.

**4. Resolutions in writing of the then sole Shareholder of our Company passed on [●]**

The following resolutions were passed by the then sole Shareholder of our Company in writing on [●], pursuant to which, among others:

(a) our Company approved and adopted the Memorandum of Association and the Articles of Association conditionally upon fulfillment of the Conditions (as defined below), and with effect from [REDACTED];

(b) our Company increased its authorized share capital from HK$380,000 divided into 380,000,000 ordinary shares of par value HK$0.001 each to HK$[REDACTED] divided into [REDACTED] ordinary shares of par value HK$[REDACTED] each by the creation of [REDACTED] additional ordinary shares of par value HK$[REDACTED] each, each ranking pari passu in all respects with the Shares in issue at the date of passing of these resolutions, and the registered office provider of the Company be authorised to make requisite filing with the Registrar of Companies in the Cayman Islands;

(c) subject to the conditions of the [REDACTED] as set out in this document having been fulfilled and the obligations of the [REDACTED] under the respective [REDACTED] having become and remaining unconditional (including, if relevant, as a result of the waiver of any condition(s) thereunder by the [REDACTED] for itself and on behalf of the [REDACTED] and such obligations not having been terminated in accordance with their respective terms (the "**Conditions**" in each case on or before such dates and times as may be specified in such agreements and in any event no later than 30 days after the date of this document):

(i) the [REDACTED], the [REDACTED], the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED] were approved, subject to such modifications as our Directors (or any committee established by the Board) may in their sole discretion determine, and our Directors or any committee established by the Board were authorized to do all such things as they consider necessary to give effect to and execute and deliver all such documents on behalf of the Company in connection with the [REDACTED], the [REDACTED], the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED];

(ii) conditional on the share premium account of our Company having sufficient balance, or otherwise being credited as a result of the allotment and issue of the [REDACTED] by our Company pursuant to the [REDACTED], our Directors (or any committee established by our Directors) are authorized to allot and issue a total of [REDACTED] Shares, credited as fully paid at par, to the Shareholder(s) whose name(s) appear on the register of members of our Company or the principal share register of our Company at the close of business on the day on which the resolution of the sole Shareholder of the Company approving the [REDACTED] was passed (or as they may direct) in proportion to their respective shareholdings in our Company (as nearly as possible without involving fractions so that no fraction of a Share shall be allotted and issued) as of such date) by way of capitalization of the sum of HK$[REDACTED] standing to the credit of the share premium account of our Company, and the Directors (or any committee established by the Directors) be authorized to allot and issue one Share credited as fully paid at par to Sandy Mining Limited all with effect at the close of business on or about the date immediately preceding the date on which the [REDACTED] becomes unconditional by way of capitalization of the sum of HK$0.001 standing to the credit of the share premium account of our Company and the Shares allotted and issued shall rank pari passu in all respects with the then existing issued Shares and upon completion of the [REDACTED] and Loan Consideration Capitalization Issue;

(iii) a general unconditional mandate was granted to our Directors to, inter alia, allot, issue and deal with Shares or securities convertible into Shares or options, warranties or similar rights to subscribe for Shares or such convertible securities in the capital of our Company and to make or grant general offers, agreements or options which may require the exercise of such powers, provided that the aggregate number of Shares allotted or agreed conditionally or unconditionally to be allotted by the Directors otherwise than pursuant to (a) the exercise of any subscription rights, warrants which may be issued by our Company from time to time; (b) any scrip dividend scheme or similar arrangement providing for the allotment of Shares in lieu of the whole or part of a dividend on Shares in accordance with our Articles; (c) a specific authority granted by the shareholders in general meeting, shall not exceed the aggregate of (i) 20% of the total number of the Shares in issue following the completion of the [REDACTED] (excluding any Shares to be issued upon the [REDACTED]); and (ii) the aggregate number of the Shares repurchased by our Company (if any) under the general mandate to repurchase Shares referred to in paragraph (iv) below, such mandate to remain effective during the period from the passing of the resolution until the earliest of the conclusion of our earliest annual general meeting, the expiration of the period within which we are required by any applicable law of the Cayman Islands or the Articles to hold our next annual general meeting or the date on which the authority given to the Directors is varied or revoked by an ordinary resolution of the shareholders at a general meeting of our Company (the "**Applicable Period**");

(iv) a general unconditional mandate was granted to our Directors to exercise all the powers of our Company to purchase its Shares on the Stock Exchange or on any other stock exchange on which the securities of the Company may be listed and recognized by the SFC and the Stock Exchange for this purpose and made in accordance with all applicable laws and regulations and the requirements of the Listing Rules was approved, and the aggregate number of Shares which may be purchased or agreed to be purchased by the Company pursuant to such authority during the Applicable Period shall not exceed 10% of the total number of Shares in issue and to be issued immediately following the completion of the Loan Consideration Capitalization Issue, the [REDACTED] and the [REDACTED] but excluding (where applicable) any Shares to be issued upon the exercise of [REDACTED] or any options granted or to be granted under the Share Option Scheme;

(v) the general unconditional mandate mentioned in paragraph (iii) above to be extended by the addition to the aggregate number of the Shares which may be allotted and issued by our Directors pursuant to such general mandate of an amount representing the aggregate number of the Shares purchased by our Company pursuant to the repurchase mandate referred to in paragraph (iv) above, provided that such extended amount shall not exceed 10% of the aggregate number of the Shares in issue immediately following the completion of the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED] (excluding any [REDACTED] to be issued upon the [REDACTED] or any options granted or to be granted under the Share Option Scheme); and

(d) the rules of the Share Option Scheme was approved and adopted conditional upon (i) the [REDACTED] of the Stock Exchange granting approval (whether subject to conditions or not) of the Share Option Scheme and any options which may be granted hereunder, and the [REDACTED] of and permission to [REDACTED] in the [REDACTED] which may fall to be issued pursuant to the exercise of options to be granted under the Share Option Scheme, (ii) the obligations of the [REDACTED] under the [REDACTED] becoming unconditional (including, if relevant, as a result of the waiver of any such condition(s) by the [REDACTED] acting for and on behalf of the [REDACTED]) and not being terminated in accordance with the terms of the [REDACTED] or otherwise, and (iii) the commencement of [REDACTED] in the [REDACTED] on the Main Board of the Stock Exchange, the Directors or any committee thereof established by the Board are authorized, at their sole discretion, to: (i) administer the Share Option Scheme; (ii) modify or amend the Share Option Scheme from time to time as requested by the Stock Exchange; (iii) grant options to subscribe for Shares under the Share Option Scheme up to the limits referred to in the Share Option Scheme; (iv) allot, issue and deal with the Shares pursuant to the exercise of any option which may be granted under the Share Option Scheme; (v) make application at appropriate time or times to the Stock Exchange for the [REDACTED] of, and permission to [REDACTED], any [REDACTED] or any part thereof that may hereafter from time to time be issued and allotted pursuant to the exercise of the options granted under the Share Option Scheme; and (vi) take all such actions as they consider necessary, desirable or expedient to implement or give effect to the Share Option Scheme.

**5. Corporate Reorganization**

For details of the Reorganization, please see "History, Reorganization and Corporate Structure — Reorganization".

**6. Repurchase by our Company of its own securities**

This paragraph includes information required by the Stock Exchange to be included in this document concerning the repurchase by our Company of its own securities.

*(a) Shareholders' approval*

All proposed repurchases of securities (which must be fully paid up in the case of shares) by a company listed on the Stock Exchange must be approved in advance by an ordinary resolution of the shareholders, either by way of general mandate or by specific approval of a particular transaction. Pursuant to a resolution passed by the then sole Shareholder in writing on [●], the Repurchase Mandate was given to the Directors authorizing any repurchase by our Company of Shares on the Stock Exchange or any other stock exchange on which the securities of our Company may be [REDACTED] and which is recognized by the SFC and the Stock Exchange for this purpose, of up to 10% of the aggregate number of the issued Shares of our Company immediately following completion of the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED] but excluding any Shares which may be issued pursuant to the exercise of any options which may be granted under the Share Option Scheme, such mandate to expire at the conclusion of the next annual general meeting of our Company, or the date by which the next annual general meeting of our Company is required by the Articles, the Companies Act or applicable law(s) to be held, or the passing of an ordinary resolution by Shareholders in general meeting revoking or varying the authority given to the Directors, whichever is the earliest.

*(b) Source of funds*

Repurchases must be paid out of funds legally available for the purpose in accordance with the Articles and the Companies Act. A listed company may not repurchase its own securities on the Stock Exchange for a consideration other than cash or for settlement otherwise than in accordance with the trading rules of the Stock Exchange. Under the Companies Act, any repurchases by our Company may be made out of profits of our Company, out of the share premium account of the Company, or out of the proceeds of a fresh issue of Shares made for the purpose of the repurchase or, if so authorized by the Articles and subject to the provisions of the Companies Act, out of capital. Any premium payable on a repurchase over the par value of the Shares to be repurchased must have been provided for out of either or both of the profits of our Company or the share premium account of our Company, before or at the time the Shares are repurchased, or, if authorized by the Articles and subject to the provisions of the Companies Act, out of capital.

*(c) Reasons for repurchases*

The Directors believe that it is in the best interests of our Company and the Shareholders for the Directors to have general authority from the Shareholders to enable our Company to repurchase Shares in the market. Such repurchases may, depending on market conditions and funding arrangements at the relevant time, lead to an enhancement of the net asset value per Share and/or earnings per Share and will only be made if the Directors believe that such repurchases will benefit our Company and the Shareholders.

## B. FURTHER INFORMATION ABOUT OUR BUSINESS

### 1. Summary of material contracts

The following contracts (not being contracts entered into in the ordinary course of business) were entered into by our Company or any member of our Group within two years preceding the date of this document and are or may be material:

(a) the Deed of Indemnity;

(b) the Yixiang Graphite equity transfer agreement dated December 14, 2020, entered into between Mr. Zhao and the WFOE;

(c) the Yixiang Graphite equity transfer agreement dated December 14, 2020, entered into between Mr. Zhao Changshan and the WFOE;

(d) the Yixiang Graphite equity transfer agreement dated December 14, 2020, entered into between Ms. Song Meixin and the WFOE;

(e) the Yixiang New Energy equity transfer agreement dated December 14, 2020, entered into between Mr. Zhao and the WFOE;

(f) the Yixiang New Energy equity transfer agreement dated December 14, 2020, entered into between Mr. Zhao Changshan and the WFOE in relation to Yixiang New Energy;

(g) the Yixiang New Energy equity transfer agreement dated December 14, 2020, entered into between Ms. Song Meixin and the WFOE in relation to Yixiang New Energy;

(h) the agreement for assignment of loan rights and loan obligations dated May 15, 2021 entered into among Mr. Zhao, Mr. Zhao Changshan, Mr. Zhao Ming and Yixiang Graphite;

(i) the agreement for assignment of loan rights and loan obligations dated May 15, 2021 entered into among Mr. Zhao, Yixiang Graphite and the WFOE;

(j) the agreement for assignment of loan rights and loan obligations dated May 15, 2021 entered into among Mr. Zhao, Yixiang New Energy and the WFOE;

(k) the deed for loan novation dated May 27, 2021 entered into among Mr. Zhao, WFOE, Yixiang Graphite, Yixiang New Energy and the Company;

(l) the loan consideration capitalisation deed dated May 27, 2021 entered into among the Controlling Shareholders the WFOE, Yixiang Graphite, Yixiang New Energy and the Company; and

(m) the [REDACTED].

## 2. Intellectual Property Rights

### *(a) Trademarks*

#### *(i) Registered trademarks*

As at the Latest Practicable Date, we had registered the following trademarks which we consider to be material to our business:

| No. | Trademark | Class | Registered owner | Place of registration | Registration number | Expiry date |
|---|---|---|---|---|---|---|
| 1. | | 1 | Yixiang Graphite | PRC | 17895475 | July 27, 2027 |
| 2. | | 1, 37, 40, 42 | China Graphite Holdings Group (HK) Limited | Hong Kong | 305457790 | November 23, 2030 |

***(b) Patents***

*(i) Registered patents*

As at the Latest Practicable Date, we have the following registered patents which we consider to be material to our business:

| No. | Patent | Type | Registered owner | Place of application | Registration number | Date of expiry |
|---|---|---|---|---|---|---|
| 1. | A full-section airlift microbubble flotation machine for the use of mines | Invention | Yixiang Graphite | PRC | 2018104167312 | May 3, 2038 |
| 2. | A high-frequency flake graphite screening device | Utility model | Yixiang Graphite | PRC | 2021221163447 | September 3, 2031 |
| 3. | A digital grinding concentration control device | Utility model | Yixiang Graphite | PRC | 2021220812479 | August 31, 2031 |
| 4. | A reciprocating ball mill feeding device | Utility model | Yixiang Graphite | PRC | 2021220784163 | August 31, 2031 |
| 5. | A ball mill gear sealing device | Utility model | Yixiang Graphite | PRC | 2021215982658 | July 14, 2031 |
| 6. | A flotation machine mechanical stirring device | Utility model | Yixiang Graphite | PRC | 202121662297X | July 21, 2031 |
| 7. | A ball mill feeding device | Utility model | Yixiang Graphite | PRC | 2021215999536 | July 14, 2031 |
| 8. | A ball mill bearing sealing device | Utility model | Yixiang Graphite | PRC | 2021215999485 | July 14, 2031 |
| 9. | A flotation machine automatic ore discharge device | Utility model | Yixiang Graphite | PRC | 2021215999447 | July 14, 2031 |
| 10. | A graphite crushing device with dust removal function | Utility model | Yixiang Graphite | PRC | 2021215982696 | July 14, 2031 |
| 11. | A stirring device for graphite mills | Utility model | Yixiang Graphite | PRC | 202121534332X | July 7, 2031 |
| 12. | A high-efficiency dust removal device for graphite processing | Utility model | Yixiang Graphite | PRC | 2021215343368 | July 7, 2031 |
| 13. | A water mist dust removal device for graphite production | Utility model | Yixiang Graphite | PRC | 2021215343315 | July 7, 2031 |
| 14. | A crusher feeding device for graphite production | Utility model | Yixiang Graphite | PRC | 202121534011X | July 7, 2031 |
| 15. | A flotation machine scraper with adjustment function | Utility model | Yixiang Graphite | PRC | 202121454482X | June 29, 2031 |
| 16. | A flotation machine liquid level control device | Utility model | Yixiang Graphite | PRC | 2021214548816 | June 29, 2031 |
| 17. | A ball mill automatic ball feeding device | Utility model | Yixiang Graphite | PRC | 2021214548888 | June 29, 2031 |
| 18. | A transportation device for graphite production | Utility model | Yixiang Graphite | PRC | 2021214548905 | June 29, 2031 |
| 19. | A flake graphite classification device | Utility model | Yixiang Graphite | PRC | 2021213832660 | June 22, 2031 |
| 20. | A flake graphite packaging device | Utility model | Yixiang Graphite | PRC | 2021213832694 | June 22, 2031 |
| 21. | A dust recovery device | Utility model | Yixiang Graphite | PRC | 2021213836089 | June 22, 2031 |
| 22. | A graphite crushing and screening device | Utility model | Yixiang Graphite | PRC | 202121383638X | June 22, 2031 |

| No. | Patent | Type | Registered owner | Place of application | Registration number | Date of expiry |
|---|---|---|---|---|---|---|
| 23. | A dryer dust recovery device | Utility model | Yixiang Graphite | PRC | 2021213836695 | June 22, 2031 |
| 24. | A filter press feeding device | Utility model | Yixiang Graphite | PRC | 2021213409229 | June 17, 2031 |
| 25. | A large angle screw feeding device | Utility model | Yixiang Graphite | PRC | 202121341120X | June 17, 2031 |
| 26. | A flotation machine stator device | Utility model | Yixiang Graphite | PRC | 2021213411498 | June 17, 2031 |
| 27. | A flotation machine wave blocking device | Utility model | Yixiang Graphite | PRC | 2021213411500 | June 17, 2031 |
| 28. | A diaphragm filter press airbag board | Utility model | Yixiang Graphite | PRC | 2020230537971 | December 17, 2030 |
| 29. | A defoaming device | Utility model | Yixiang Graphite | PRC | 202023017077X | December 16, 2030 |
| 30. | A foam pump for graphite beneficiation | Utility model | Yixiang Graphite | PRC | 202023017101X | December 16, 2030 |
| 31. | An automatic device for controlling the liquid level of the graphite flotation machine | Utility model | Yixiang Graphite | PRC | 2020230170801 | December 16, 2030 |
| 32. | A multi-stage device for graphite dust recovery | Utility model | Yixiang Graphite | PRC | 2020230171039 | December 16, 2030 |
| 33. | A graphite fine powder slag removing device | Utility model | Yixiang Graphite | PRC | 202023027771X | December 16, 2030 |
| 34. | A new practical device for self-adjusting anti-clogging feedstock overflowing graphite | Utility Model | Yixiang Graphite | PRC | 2020230277669 | December 16, 2030 |
| 35. | A grinder for graphite beneficiation use with stirring and fine grinding | Utility Model | Yixiang Graphite | PRC | 2020230277692 | December 16, 2030 |
| 36. | A flue gas drying device | Utility model | Yixiang Graphite | PRC | 2020230076157 | December 15, 2030 |
| 37. | A device for preventing media loss | Utility model | Yixiang Graphite | PRC | 2020230076458 | December 15, 2030 |
| 38. | A powder classification device | Utility model | Yixiang Graphite | PRC | 2020230135704 | December 15, 2030 |
| 39. | A device for recovering fine graphite powder from flue gas dryers | Utility model | Yixiang Graphite | PRC | 2020230135776 | December 15, 2030 |
| 40. | A disconnectable power output device | Invention patent | Yixiang New Energy | PRC | 2021108398943 | July 24, 2041 |
| 41. | A system and method for circular processing of spherical graphite tailings | Patent for invention | Yixiang New Energy | PRC | 2020106553831 | July 9, 2040 |
| 42. | A filter press feeding pump for graphite beneficiation | Utility model | Yixiang Graphite | PRC | 202023017084X | December 16, 2030 |
| 43. | A check valve device | Utility model | Yixiang Graphite | PRC | 2020230134468 | December 15, 2030 |
| 44. | A type of diaphragm filter press | Utility Model | Yixiang Graphite | PRC | 2020230134650 | December 15, 2030 |

| No. | Patent | Type | Registered owner | Place of application | Registration number | Date of expiry |
|---|---|---|---|---|---|---|
| 45. | A moisture-removing fine graphite powder recovery device | Utility model | Yixiang Graphite | PRC | 2020230076142 | December 15, 2030 |
| 46. | A drying, cooling and collecting device for spherical graphite production | Utility Model | Yixiang New Energy | PRC | 2021207474610 | April 13, 2031 |
| 47. | A detection and sampling device for spherical graphite | Utility model | Yixiang New Energy | PRC | 2021207458745 | April 13, 2031 |
| 48. | A protection device for graphite anode material processing | Utility model | Yixiang New Energy | PRC | 2021207082718 | April 8, 2031 |
| 49. | A graphite anode material winnowing device | Utility Model | Yixiang New Energy | PRC | 2021207084836 | April 8, 2031 |
| 50. | A device for grading graphite anode materials | Utility Model | Yixiang New Energy | PRC | 2021207085186 | April 8, 2031 |
| 51. | A raw material screening device for graphite anode material | Utility model | Yixiang New Energy | PRC | 202120692173X | April 6, 2031 |
| 52. | A kind of graphite anode material conveying device | Utility model | Yixiang New Energy | PRC | 2021206931500 | April 6, 2031 |
| 53. | A drying and charging device for spherical graphite production | Utility model | Yixiang New Energy | PRC | 2021206700224 | April 1, 2031 |
| 54. | A spherical graphite multi-stage grinding device | Utility model | Yixiang New Energy | PRC | 2021206705730 | April 1, 2031 |
| 55. | A demagnetization device for graphite anode material | Utility model | Yixiang New Energy | PRC | 2021206705891 | April 1, 2031 |
| 56. | A multi-stage screening device for graphite negative electrode material processing | Utility model | Yixiang New Energy | PRC | 2021206318884 | April 1, 2031 |
| 57. | A graphite anode material feeding device | Utility model | Yixiang New Energy | PRC | 2021206324550 | April 1, 2031 |
| 58. | A pulverizing device for producing graphite negative electrode material | Utility model | Yixiang New Energy | PRC | 202120632471X | April 1, 2031 |
| 59. | A sieving device for spherical graphite production | Utility Model | Yixiang New Energy | PRC | 2021206700101 | April 1, 2031 |

| No. | Patent | Type | Registered owner | Place of application | Registration number | Date of expiry |
|---|---|---|---|---|---|---|
| 60. | A detection device for the production of graphite anode materials | Utility Model | Yixiang New Energy | PRC | 202120670582X | April 1, 2031 |
| 61. | A cleaning device for processing graphite anode materials | Utility Model | Yixiang New Energy | PRC | 2021206187500 | March 26, 2031 |
| 62. | A high-efficiency polishing device for graphite anode material production | Utility Model | Yixiang New Energy | PRC | 2021206187680 | March 26, 2031 |
| 63. | A graphite anode material mixing and kneading device | Utility Model | Yixiang New Energy | PRC | 2021205953856 | March 24, 2031 |
| 64. | A device for drying graphite anode materials | Utility Model | Yixiang New Energy | PRC | 2021205953979 | March 24, 2031 |
| 65. | A cooling device for producing graphite negative electrode material | Utility model | Yixiang New Energy | PRC | 2021205959797 | March 24, 2031 |
| 66. | A kind of heat preservation device for production of negative electrode material of lithium battery | Utility model | Yixiang New Energy | PRC | 2021205885562 | March 23, 2031 |
| 67. | A discharging device for spherical graphite production | Utility Model | Yixiang New Energy | PRC | 2021205885810 | March 23, 2031 |
| 68. | A device for drying spherical graphite production | Utility Model | Yixiang New Energy | PRC | 2021205885793 | March 23, 2031 |
| 69. | A vibrating screen for the production of graphite negative electrode material | Utility model | Yixiang New Energy | PRC | 2021205635406 | March 19, 2031 |
| 70. | A dust collector for graphite anode material | Utility model | Yixiang New Energy | PRC | 2021205637562 | March 19, 2031 |
| 71. | A multi-stage screening device for spherical graphite production | Utility Model | Yixiang New Energy | PRC | 2021205424710 | March 16, 2031 |
| 72. | A device for mixing and kneading spherical graphite anode material | Utility Model | Yixiang New Energy | PRC | 2021205281736 | March 15, 2031 |
| 73. | A dust recovery device for the production of graphite negative electrode materials | Utility model | Yixiang New Energy | PRC | 2021205156543 | March 11, 2031 |

| No. | Patent | Type | Registered owner | Place of application | Registration number | Date of expiry |
|---|---|---|---|---|---|---|
| 74. | A stirring device for graphite anode material production | Utility model | Yixiang New Energy | PRC | 202120515676X | March 11, 2031 |
| 75. | A feeder for feeding powder continuously and evenly | Utility model | Yixiang New Energy | PRC | 2020213339151 | July 9, 2030 |
| 76. | A mixing device | Utility model | Yixiang New Energy | PRC | 2019222676128 | December 17, 2029 |
| 77. | A piece of equipment for direct drying | Utility model | Yixiang New Energy | PRC | 2019222602139 | December 17, 2029 |
| 78. | A feeder for feeding evenly | Utility model | Yixiang New Energy | PRC | 2019222688619 | December 17, 2029 |
| 79. | A pulse collecting device | Utility model | Yixiang New Energy | PRC | 2019223263781 | December 20, 2029 |
| 80. | A piece of washing equipment | Utility model | Yixiang New Energy | PRC | 2019222675604 | December 17, 2029 |
| 81. | A new type of reactor | Utility model | Yixiang New Energy | PRC | 2019222277791 | December 12, 2029 |
| 82. | A noise canceling device for spherical graphite blower fan | Utility model | Yixiang New Energy | PRC | 2019222688623 | December 17, 2029 |
| 83. | A new type of mobile dust removal device | Utility model | Yixiang New Energy | PRC | 2019222174850 | December 12, 2029 |
| 84. | A new type of feeding and slag removal equipment | Utility model | Yixiang New Energy | PRC | 201922217769X | December 12, 2029 |
| 85. | A cyclone separator for prevention of accumulation of ash | Utility model | Yixiang New Energy | PRC | 2017218284346 | December 25, 2027 |
| 86. | A self-adjusting cyclone separator | Utility model | Yixiang New Energy | PRC | 2017218194034 | December 23, 2027 |
| 87. | A horizontal cyclone separator | Utility model | Yixiang New Energy | PRC | 2017218169352 | December 22, 2027 |
| 88. | A high-efficiency cyclone separator with a central tube | Utility model | Yixiang New Energy | PRC | 2017218170504 | December 22, 2027 |
| 89. | A cyclone separator | Utility model | Yixiang New Energy | PRC | 2017218171032 | December 22, 2027 |

*(ii) Patent applications pending*

As at the Latest Practicable Date, we have applied for the registration of the following patents which we consider to be material to our business:

| No. | Patent | Type | Applicant | Place of application | Application number | Date of application |
|---|---|---|---|---|---|---|
| 1. | A flake graphite purification process and device with a strong acid method | Invention | Yixiang Graphite | PRC | 2021110330328 | September 3, 2021 |
| 2. | A natural spherical graphite chemical purification and wastewater treatment process | Invention | Yixiang Graphite | PRC | 2021110330332 | September 3, 2021 |
| 3. | A graphite electrode material and the preparation method thereof | Invention | Yixiang New Energy | PRC | 202110378107X | April 8, 2021 |
| 4. | An equipment for preparing graphitized mixed materials | Invention | Yixiang New Energy | PRC | 2021103676054 | April 6, 2021 |
| 5. | A production process of carbon coating material | Invention | Yixiang New Energy | PRC | 2021103682303 | April 6, 2021 |
| 6. | A device and process for protecting graphite flakes | Invention | Yixiang Graphite | PRC | 202011589854X | December 29, 2020 |
| 7. | A treating process and device for graphite flotation ore | Invention | Yixiang Graphite | PRC | 2020115893404 | December 29, 2020 |
| 8. | Process method and device for synthesizing fine particle natural graphite | Invention | Yixiang Graphite | PRC | 2020115741810 | December 28, 2020 |
| 9. | An intelligent process method and device for graphite grinding and floating | Invention | Yixiang Graphite | PRC | 2020115569788 | December 25, 2020 |
| 10. | A circulating processing system and method for spherical graphite tailing charge | Invention | Yixiang New Energy | PRC | 2020106553831 | July 9, 2020 |
| 11. | A process for the production of spherical graphite raw material | Invention | Yixiang New Energy | PRC | 2020106555521 | July 9, 2020 |
| 12. | A demagnetization process for spherical graphite with low magnetic substance | Invention | Yixiang New Energy | PRC | 2019113361636 | December 23, 2019 |

| No. | Patent | Type | Applicant | Place of application | Application number | Date of application |
|---|---|---|---|---|---|---|
| 13. | A high-temperature purified graphene carbonene lithium-ion battery anode materials and the production method thereof | Invention | Yixiang Graphite | PRC | 2021108481048 | July 27, 2021 |
| 14. | A production method of high-performance natural graphite lithium-ion battery anode materials | Invention | Yixiang Graphite | PRC | 2021108481052 | July 27, 2021 |

### *(c) Domain Names*

As at the Latest Practicable Date, we have registered the following domain name(s) which we consider to be material to our business:

| No. | Domain name | Registered owner | Date of registration | Expiry date |
|---|---|---|---|---|
| 1. | yxxny.cn | Yixiang Graphite | January 7, 2014 | January 7, 2027 |

## C. FURTHER INFORMATION ABOUT OUR DIRECTORS AND SUBSTANTIAL SHAREHOLDERS

### 1. Disclosure of Interests

*(a) Interests and short positions of the Directors and the chief executives*

Immediately following completion of the [REDACTED], the Loan Consideration Capitalization and the [REDACTED] (assuming that the [REDACTED] is not exercised and without taking into account the Shares which may be issued upon any options granted or to be granted under the Share Option Scheme), so far as our Directors are aware, the interests or short positions of our Directors and chief executives in our Shares, underlying shares and debentures of our Company and our associated corporations (within the meaning of Part XV of the SFO) which will be required to be notified to our Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO) or which will be required, pursuant to Section 352 of the SFO, to be recorded in the register referred to therein, or which will be required, pursuant to the Model Code of Securities Transactions by Directors of the Listed Issuers as set out in Appendix 10 to the Listing Rules, to be notified to our Company and the Stock Exchange, in each case once our Shares are [REDACTED], will be as follows:

| Name of Director | Capacity/Nature of interest | Number of Shares held(1) | Approximate percentage of issued share capital(2) |
|---|---|---|---|
| Mr. Zhao Liang | Interest of controlled corporation(3) | [REDACTED] | [REDACTED] |

*Notes:*

(1) All interest stated are long positions.

(2) The calculation is based on the total number [REDACTED] Shares in issue immediately after the completion of the Loan Consideration Capitalization, the [REDACTED] and the [REDACTED] (assuming that the [REDACTED] is not exercised and without taking into account the Shares which may be issued upon any options granted or to be granted under the Share Option Scheme).

(3) Sandy Mining Limited is wholly-owned by Mr. Zhao Liang. Accordingly, Mr. Zhao Liang is deemed to be interested in such number of Shares held by Sandy Mining Limited for the purpose of Part XV of the SFO.

*(b) Interests of the substantial shareholders*

Save as disclosed in "Substantial Shareholders", our Directors are not aware of any other person, not being a Director or chief executive of our Company, who has an interest or short position in the Shares or the underlying Shares which, once the Shares are [REDACTED], would fall to be disclosed to our Company and the Stock Exchange under the provisions of Division 2 and 3 of Part XV of the SFO, or who is, directly or indirectly, interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of our Company.

**2. Particulars of service contracts**

Each of our executive Directors, has entered into a service agreement with our Company with an initial term of three years commencing from the [REDACTED], and will continue thereafter until terminated by not less than three months' notice in writing served by either party on the other (subject always to re-election as and when required under the Memorandum and Articles of Association). Each of our executive Directors are entitled to their respective basic salary set out below.

Each of our independent non-executive Directors will enter into a letter of appointment with our Company. The terms and conditions of each of such letters of appointment are similar in all material respects. Each of our independent non-executive Directors is appointed with an initial term of three years commencing from the [REDACTED] subject to termination in certain circumstances as stipulated in the relevant letters of appointment.

Save as aforesaid, none of our Directors has or is proposed to have a service contract with our Company or any members of our Group (other than contracts expiring or determinate by the employer within one year without the payment of compensation (other than statutory compensation)).

**3. Director's Remuneration**

The aggregate remuneration (including wages, salaries, contributions to pension schemes, share-based compensation expenses, discretionary bonuses and other allowances and other benefits in kind) incurred for each of the three years ended December 31, 2021 were approximately RMB0.7 million, RMB0.7 million and RMB1.5 million, respectively.

Save as disclosed above, no other amounts have been paid or are payable by any member of our Group to our Directors for each of the three years ended December 31, 2021.

Pursuant to the existing arrangements that are currently in force as at the date of this document, the amount of remuneration (including benefits in kind but excluding discretionary bonuses) payable to our Directors by our Company for the year ending December 31, 2022 is estimated to be approximately RMB2.4 million in aggregate.

**4. Agent fees or commissions received**

Save in connection with the [REDACTED], none of our Directors nor any of the parties listed in the paragraph headed "9. Qualifications of experts" in this Appendix had received any commissions, discounts, agency fees, brokerages or other special terms in connection with the issue or sale of any capital of our Company or any member of our Group within the two years preceding the date of this document.

**5. Disclaimers**

Save as disclosed in this document:

(a) none of our Directors has any interest or short position in the shares, underlying shares and debentures of our Company or our associated incorporation (within the meaning of Part XV of the SFO) which will have to be notified to us and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which he is taken or deemed to have under such provisions of SFO) or which will be required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or will be required, pursuant to the Model Code for Securities Transactions by Directors and Listed Issuers to be notified to us and the Stock Exchange, in each case once our Shares are [REDACTED] on the Stock Exchange;

(b) so far as is known to our Directors, no person has an interest or short position in the Shares and underlying Shares which would fall to be disclosed to us and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or is, directly or indirectly, interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of any other member of our Group;

(c) none of our Directors nor any of the parties listed in the paragraph headed "9. Qualifications of experts" in this Appendix is interested in our promotion, or in any assets which have, within the two years immediately preceding the date of this document, been acquired or disposed by or leased to our Company or any member of our Group, or are proposed to be acquired or disposed of by or leased to our Company or any member of our Group;

(d) save in connection with the [REDACTED], none of our Directors nor any of the parties listed in the paragraph headed "9. Qualifications of experts" in this Appendix is materially interested in any contract or arrangement subsisting at the date of this document which is significant in relation to the business of our Group;

(e) save in connection with the [REDACTED], none of the parties listed in the paragraph headed "9. Qualifications of experts" in this Appendix: (i) is interested legally or beneficially in any of our Shares or any shares in any member of our Group; or (ii) has any right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of our Group; and

(f) none of our Directors or their close associates (as defined under the Listing Rules) or any of our Shareholders (who to the knowledge of our Directors owns more than 5% of our issued share capital) has any interest in our five largest suppliers or our five largest customers.

## D. OTHER INFORMATION

### 1. Share Option Scheme

The following is a summary of the principal terms of the Share Option Scheme conditionally adopted by written resolutions of our Shareholder(s) passed on [●], 2022.

#### *(a) Purpose*

The Share Option Scheme is a share incentive scheme prepared in accordance with Chapter 17 of the Listing Rules and is established to grant options to Eligible Participants (as defined in paragraph (b) below) as incentives or rewards for their contribution to our Group. The Share Option Scheme will provide the Eligible Participants an opportunity to have a personal stake in our Company with the view to achieving the following objectives:

(i) motivate the Eligible Participants to optimize their performance efficiency for the benefit of our Group; and

(ii) attract and retain or otherwise maintain an on-going business relationship with the Eligible Participants whose contributions are or will be beneficial to the long-term growth of our Group.

#### *(b) Who may join*

The Board shall, at its discretion, in accordance with the provisions of the Share Option Scheme and the Listing Rules, be entitled but shall not be bound at any time within a period of 10 years commencing from the adoption of the Share Option Scheme offer to grant an option to the following persons (collectively the "**Eligible Participants**") to subscribe for such number of new Shares as the Board may determine at an exercise price determined in accordance with paragraph (f) below: (i) any full-time or part-time employees of our Company, any of its subsidiaries or any entity in which any member of the Group holds any equity interest ("**Invested Entity**"); (ii) any non-executive director (including independent non-executive directors) of our Company, any of its subsidiaries or any Invested Entity; (iii) any supplier of goods or services to any member of the Group or any Invested Entity; (iv) any customer of any member of the Group or any Invested Entity; (v) any person or entity that provides research, development or other technological support to any member of the Group or any Invested Entity; (vi) any shareholder of any member of the Group or any Invested Entity or any holder of any securities issued by any member of the Group or any Invested Entity; (vii) any advisor (professional or otherwise) or consultant to any area of business or business development of any member of the Group or any Invested Entity and (viii) any other group or classes of participants who have contributed or may contribute by way of joint venture, business alliance or other business arrangements to the development and growth of the Group.

*(c) Acceptance of an offer of options*

An option shall be deemed to have been granted and accepted by the Eligible Participants and to have taken effect when the duplicate offer document constituting acceptances of the options duly signed by the Eligible Participants, together with a remittance in favor of our Company of HK$1 by way of consideration for the grant thereof, is received by our Company on or before the relevant acceptance date. Such remittance shall in no circumstances be refundable. Any offer to grant an option to subscribe for Shares may be accepted in respect of less than the number of Shares for which it is offered provided that it is accepted in respect of a board lot for dealing in Shares on the Stock Exchange or an integral multiple thereof and such number is clearly stated in the duplicate offer document constituting acceptance of the option. To the extent that the offer to grant an option is not accepted by any specified acceptance date, it shall be deemed to have been irrevocably declined.

Subject to paragraphs (l), (m), (n), (o) and (p), an option shall be exercised in whole or in part and, other than where it is exercised to the full extent outstanding, shall be exercised in integral multiples of such number of Shares as shall represent one board lot for dealing in Shares on the Stock Exchange for the time being, by the grantee by giving notice in writing to our Company stating that the Option is thereby exercised and the number of Shares in respect of which it is exercised. Each such notice must be accompanied by a remittance for the full amount of the exercise price for our Shares in respect of which the notice is given. Within 21 days after receipt of the notice and, where appropriate, receipt of the certificate by the auditors to our Company or the approved independent financial advisers as the case may be pursuant to paragraph (r), our Company shall allot and issue the relevant number of Shares to the grantee credited as fully paid and issue to the grantee certificates in respect of our Shares so allotted and issued.

The exercise of any option shall be subject to our Shareholders in a general meeting approving any necessary increase in the authorized share capital of our Company.

*(d) Maximum number of Shares*

The maximum number of Shares in respect of which options may be granted under the Share Option Scheme and under any other share option schemes of our Company must not in aggregate exceed 10% of the total number of Shares in issue immediately following completion of the [REDACTED], the Loan Consideration Capitalisation and the [REDACTED] (assuming the [REDACTED] is not exercised), being [REDACTED] Shares, excluding for this purpose Shares which would have been issuable pursuant to options which have lapsed in accordance with the terms of the Share Option Scheme (or any other share option schemes of our Company). Subject to the issue of a circular by our Company and the approval of our Shareholders in general meeting and/or such other requirements prescribed under the Listing Rules from time to time, the Board may:

(i) renew this limit at any time to 10% of our Shares in issue as at the date of the approval by our Shareholders in general meeting; and/or

(ii) grant options beyond the 10% limit to Eligible Participants specifically identified by the Board. The circular sent by our Company to our Shareholders shall contain a generic description of the specified Eligible Participants who may be granted such options, the number and terms of the options to be granted, the purpose of granting options to the specified Eligible Participants with an explanation as to how the options serve such purpose, and/or other information required under the Listing Rules.

Notwithstanding any other provisions of the Scheme, the maximum number of Shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the Share Option Scheme and any other share option schemes of our Company at any time shall not exceed 30% of our Shares in issue from time to time. No options shall be granted under any schemes of our Company (including the Share Option Scheme) if this will result in the 30% limit being exceeded. The maximum number of Shares in respect of which options may be granted shall be adjusted, in such manner as the auditors of our Company or an approved independent financial advisor shall certify to be appropriate, fair and reasonable in the event of any alteration in the capital structure of our Company in accordance with paragraph (r) below whether by way of sub-division, consolidation, reclassification, reduction or reconstruction of the share capital of our Company but in no event shall exceed the limit prescribed in this paragraph.

***(e) Maximum number of options to any one individual***

The total number of Shares issued and which may fall to be issued upon exercise of the options granted under the Share Option Scheme and any other share option schemes of our Company (including both exercised and outstanding options) to each Eligible Participant in any 12-month period up to the date of grant shall not exceed 1% of our Shares in issue as at the date of grant. Any further grant of options in excess of this 1% limit shall be subject to:

(i) the issue of a circular by our Company containing the identity of the Eligible Participant, the number of and terms of the options to be granted (and options previously granted to such participant), and/or other information required under Rule 17.02 of the Listing Rules; and

(ii) the approval of our Shareholders in general meeting with such Eligible Participant and his/her close associates (as defined in the Listing Rules) (or his/her/its associates if the Eligible Participant is a core connected person) abstaining from voting. The number and terms (including the exercise price) of options to be granted to such participant must be fixed before our Shareholders' approval and the date of the Board meeting at which the Board proposes to grant the options to such Eligible Participant shall be taken as the date of grant for the purpose of calculating the subscription price of our Shares. The Board shall forward to such Eligible Participant an offer document in such form as the Board may from time to time determine (or, alternatively, documents accompanying the offer document which state), among others:

    (a) the name, address and position of the Eligible Participant;

(b) the offer date;

(c) the number of Shares in respect of which the offer is made and the subscription price for such Shares (including the manner of payment for the subscription price on and in consequence of the exercise of the option);

(d) the option period in respect of which the offer is made or, as the case may be, the option period in respect of separate parcels of Shares comprised in the offer;

(e) the last date by which the offer must be accepted (which may not be later than 21 days from the offer date);

(f) the procedure for acceptance of the offer;

(g) how the expiry date in relation to that option is ascertained;

(h) the method of exercise of the option which shall, unless the Board otherwise determines, be as set out in paragraph (c); and

(i) the performance target(s) (if any) that must be attained by the Eligible Participant before any option can be exercised;

(j) such other terms and conditions of the Offer as may be imposed by the Directors as are not inconsistent with the Share Option Scheme; and

(k) a statement requiring the Eligible Participant to undertake to hold the option on the terms on which it is to be granted and to be bound by the provisions of the Share Option Scheme including, without limitation, the conditions specified in the relevant provisions in the Share Option Scheme.

***(f) Price of Shares***

Subject to any adjustments made as described in paragraph (r) below, the subscription price of a Share in respect of any particular option granted under the Share Option Scheme shall be determined by the Board in its absolute discretion shall determine, save that such price must be at least the higher of:

(i) the closing price of our Shares as stated in the Stock Exchange's daily quotation sheets on the date of grant, which must be a day on which the Stock Exchange is open for the business of dealing in securities;

(ii) the average closing prices of our Shares as stated in the Stock Exchange's daily quotation sheets for the five business days immediately preceding the date of grant; and

(iii) the nominal value of a Share.

***(g) Granting options to connected persons***

Any grant of options to a director, chief executive or substantial shareholder (as defined in the Listing Rules) of our Company or any of their respective associates (as defined in the Listing Rules) is required to be approved by the independent non-executive Directors (excluding any independent non-executive Director who or whose associate is the grantee of the options). If the Board proposes to grant options to a substantial shareholder or any independent non-executive Director or their respective associates (as defined in the Listing Rules) which will result in the number of Shares issued and to be issued upon exercise of options granted and to be granted (including options exercised, cancelled and outstanding) to such person under the Share Option Scheme and any other share option schemes of our Company in the 12-month period up to and including the date of such grant:

(i) representing in aggregate over 1% or such other percentage as may be from time to time provided under the Listing Rules of our Shares in issue on the date of such grant; and

(ii) having an aggregate value in excess of HK$5 million or such other sum as may be from time to time provided under the Listing Rules, based on the official closing price of our Shares at the date of each grant,

such further grant of options will be subject to the issue of a circular by our Company and the approval of our Shareholders in general meeting on a poll at which the grantee, his/her/its associates and all core connected persons (as defined in the Listing Rules) of our Company shall abstain from voting in favor, and/or such other requirements prescribed under the Listing Rules from time to time.

The circular to be issued by our Company to our Shareholders pursuant to the above paragraph shall contain the following information:

(i) the details of the number and terms (including the exercise price) of the options to be granted to each selected Eligible Participant which must be fixed before our Shareholders' meeting and the date of Board meeting for proposing such further grant which shall be taken as the date of grant for the purpose of calculating the exercise price of such options;

(ii) a recommendation from the independent non-executive Directors (excluding any independent non-executive Director who is the grantee of the options) to the independent Shareholders as to voting;

(iii) the information required under Rules 17.02(2)(c) and (d) and the disclaimer required under Rule 17.02(4) of the Listing Rules; and

(iv) the information required under Rule 2.17 of the Listing Rules.

***(h) Restrictions on the times of grant of options***

A grant of options may not be made after inside information has come to the knowledge of our Company until it has been published pursuant to the requirements of the Listing Rules and the Inside Information Provisions of Part XIVA of the SFO. In particular, no options may be granted during the period commencing one month immediately preceding the earlier of

(i) the date of the Board meeting (as such date to first notified to the Stock Exchange in accordance with the Listing Rules) for the approval of our Company's annual results, half-year or other interim period (whether or not required under the Listing Rules); and

(ii) the deadline for our Company to publish an announcement of results for (i) any year or half-year period in accordance with the Listing Rules, and (ii) where the Company has elected to publish them, any quarterly or other interim period, and ending on the date of actual publication of the results announcement, and

the Director may not make any offer of options to an Eligible Participant who is a Director during the periods or times in which the Directors are prohibited from dealing in the Shares pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers prescribed by the Listing Rules or any corresponding code or securities dealing restrictions adopted by the Company.

***(i) Rights are personal to grantee***

An option is personal to the grantee and may be exercised or treated as exercised, as the case may be, in whole or in part. No grantee shall in any way sell, transfer, charge, mortgage, encumber or create any interest (legal or beneficial) in favor of any third party over or in relation to any option held by him/her or any other relating to the grant of an option made to him/her or attempt so to do (save that the grantee may nominate a nominee in whose name our Shares issued pursuant to the Share Option Scheme may be registered). Any breach of the foregoing shall entitle our Company to cancel any outstanding options or any part thereof granted to such grantee.

### *(j) Time of exercise of option and duration of the Share Option Scheme*

An option may be exercised in accordance with the terms of the Share Option Scheme at any time commencing the date upon which the option is deemed to be granted and accepted and prior to the expiry of 10 years from that date. The period during which an option may be exercised will be determined by the Board in its absolute discretion, save that no option may be exercised more than 10 years after it has been granted. Subject to earlier termination by our Company in general meeting or by the Board, the Share Option Scheme shall be valid and effective for a period commencing on the [REDACTED] and ending on the tenth anniversary of the [REDACTED] (both dates inclusive), after which no further options shall be offered but the provisions of the Share Option Scheme shall in all other respects remain in full force and effect to the extent necessary to give effect to the exercise of any options granted prior thereto or otherwise as may be required in accordance with the provisions of the Share Option Scheme. Options granted prior thereto but not yet exercised shall continue to be valid and exercisable in accordance with the Share Option Scheme.

### *(k) Performance target*

Options may be granted on such terms and conditions in relation to their vesting exercise or otherwise (such as by linking their exercise to achievement of performance targets by the grantee or the attainment or performance of milestones by the Company, subsidiaries of the Company, the Invested Entities, the grantee or any group of Eligible Participant).

### *(l) Rights on ceasing employment or death*

In the event of the grantee of an option ceasing to be an eligible employee under the Share Option Scheme for any reason other than on his/her death, ill-health, injury, permanent disability or retirement before exercising the option in full, his/her personal representative(s) or, as appropriate, the grantee may exercise the option up to his/her entitlement at the date of cessation of being an employee under the Share Option Scheme (to the extent not already exercised) in whole or in part within the period of one month (or such longer period as the Board may determine) following the date of such cessation (which date shall be, in relation to a grantee who is an Eligible Participant by reason of his/her employment with our Company or any of our subsidiaries, the last actual working day with our Company or the relevant subsidiary whether salary is paid in lieu of notice or not).

In the case of the grantee of an option ceasing to be an Eligible Participant by reason of death, ill-health, permanent disability or retirement (all evidenced to the satisfaction of the Board) and none of the events which would be a ground for termination of his/her relationship with our Company and/or any of our subsidiaries under paragraph (m) has occurred, the grantee or his/her personal representative(s) shall be entitled within a period of 12 months (or such longer period as the Board may determine) from the date of cessation of being an Eligible Participant or death to exercise the option in full (to the extent not already exercised).

***(m) Rights on dismissal***

In the event of the grantee of an option ceasing to be an Eligible Participant by reason of the termination of his/her relationship with our Company and/or any of our subsidiaries on any one or more of the following grounds:

(i) that he/she has been guilty of serious misconduct;

(ii) that he/she has been convicted of any criminal offence involving his/her integrity or honesty or in relation to an employee of our Company and/or any of our subsidiaries;

(iii) that he/she has become insolvent, bankrupt or has made arrangements or compositions with his/her creditors generally; or

(iv) on any other ground as determined by the Board that would warrant the termination of his/her employment at common law or pursuant to any applicable laws or under the grantee's service contract with our Company or the relevant subsidiary,

his/her option will lapse automatically and not be exercisable (to the extent not already exercised) from the date of cessation of being an Eligible Participant.

***(n) Rights on takeover***

If a general or a partial offer is made to all our Shareholders (or all such Shareholders other than the offeror and/or any person controlled by the offeror and/or any person acting in association or in concert with the offeror (as defined in the Takeovers Code)), our Company shall use its best endeavors to procure that such offer is extended to all the grantees (on the same terms mutatis mutandis, and assuming that they will become, by the exercise in full of the options granted to them, Shareholders). If such offer becomes or is declared unconditional or such scheme of arrangement is formally proposed to Shareholders, the grantee of an option (or his/her legal representative(s)) shall be entitled to exercise the option in full (to the extent not already exercised) at any time within 14 days after the date on which the offer becomes or is declared unconditional.

***(o) Rights on winding-up***

In the event a notice is given by our Company to its members to convene a general meeting for the purposes of considering, and if thought fit, approving a resolution to voluntarily wind-up our Company, our Company shall forthwith give notice thereof to all grantees and thereupon, each grantee (or in the case of the death of the grantee, his/her legal personal representative(s)) may exercise all or any of his/her options at any time not later than two business days prior to the proposed general meeting of our Company referred to above by giving notice in writing to our Company, accompanied by a remittance for the full amount of the aggregate subscription price for our Shares in respect of which the notice is given, whereupon our Company shall as soon as possible and, in any event, no later than the business day immediately prior to the date of the proposed general meeting, allot and issue the relevant Shares to the grantee credited as fully paid and register the grantee as holder thereof.

***(p) Rights on compromise or arrangement between our Company and its members or creditors***

If a compromise or arrangement between our Company and its members and/or creditors is proposed for the purposes of a scheme for the reconstruction of our Company or its amalgamation with any other companies pursuant to the Companies Act, our Company shall give notice to all the grantees of the options on the same day as it gives notice of the meeting to its members and/or creditors summoning the meeting to consider such a compromise or arrangement and thereupon each grantee shall be entitled to exercise all or any of his/her options in whole or in part at any time prior to 12 noon (Hong Kong time) on the business day immediately preceding the date of the meeting directed to be convened by the relevant court for the purposes of considering such compromise or arrangement and if there are more than one meeting for such purpose, the date of the first meeting. With effect from the date of such meeting, the rights of all grantees to exercise their respective options shall forthwith be suspended. Upon such compromise or arrangement becoming effective, all options shall, to the extent that they have not been exercised, lapse and determine. The Board shall endeavor to procure that the Shares issued as a result of the exercise of options in such circumstances shall for the purposes of such compromise or arrangement form part of the issued share capital of our Company on the effective date thereof and that such Shares shall in all respects be subject to such compromise or arrangement. If for any reason such compromise or arrangement is not approved by the relevant court (whether upon the terms presented to the relevant court or upon any other terms as may be approved by such court) the rights of the grantees to exercise their respective options shall with effect from the date of the making of the order by the relevant court be restored in full) as if such compromise or arrangement had not been proposed by our Company and no claim shall lie against our Company or any of its officers for any loss or damage sustained by any grantee as a result of the aforesaid suspension.

***(q) Ranking of Shares***

Our Shares to be allotted upon the exercise of an option will not carry voting rights until completion of the registration of the grantee (such other person nominated by the grantee) as the holder thereof. Subject to the aforesaid, Shares allotted and issued on the exercise of options will subject to all the provisions of the Articles and rank pari passu in all respects with and shall have the same voting, dividend, transfer and other rights, including those arising on liquidation as attached to the other fully-paid Shares in issue on the date of issue and rights in respect of any dividend or other distributions paid or made on or after the date of issue. Shares issued on the exercise of an option shall not rank for any rights attaching to Shares by reference to a record date preceding the date of allotment.

*(r) Effect of alterations to capital*

In the event of any alteration in the capital structure of our Company whilst any option may become or remains exercisable, whether by way of capitalisation issue, rights issue, open offer (if there is a price dilutive element), consolidation, sub-division or reduction of share capital of our Company, such corresponding alterations (if any) shall be made in the number of Shares subject to any options so far as unexercised and/or the subscription price per Share of each outstanding option as the auditors of our Company or an approved independent financial advisor shall (other than in respect of an adjustment made on a capitalisation issue) certify in writing to the Board to be in their/his/her opinion fair and reasonable in compliance with Rule 17.03(13) of the Listing Rules and the note thereto and the supplementary guidance issued by the Stock Exchange on September 5, 2005 and/or such other requirements prescribed under the Listing Rules from time to time and the note thereto. The capacity of the auditors of our Company or the approved independent financial advisor, as the case may be, in this paragraph is that of experts and not arbitrators and their certificate shall, in absence of manifest error, be final and conclusive and binding on our Company and the grantees.

Any such alterations will be made on the basis that a grantee shall have the same proportion of the issued share capital of our Company for which any grantee of an option is entitled to subscribe had he/she exercised all the options held by him/her before such alteration and the aggregate subscription price payable on full exercise of any option is to remain as nearly as possible the same (and in any event not greater than) as it was before such event. No such alteration will be made the effect of which would be to enable a Share to be issued at less than its nominal value. The issue of securities as consideration in a transaction is not to be regarded as a circumstance requiring any such alterations.

*(s) Expiry of option*

An option shall lapse automatically and not be exercisable (to the extent not already exercised) on the earliest of:

(i) the date of expiry of the option as may be determined by the Board;

(ii) the expiry of any of the periods referred to in paragraphs (l), (m), (n), (o) or (p);

(iii) the date on which the scheme of arrangement of our Company referred to in paragraph (p) becomes effective;

(iv) subject to paragraph (o), the date of commencement of the winding-up of our Company;

(v) the date on which the grantee ceases to be an Eligible Participant by reason of the termination of his/her relationship with our Company and/or any of its subsidiaries on any one or more of the grounds that he or she has been guilty of serious misconduct, or has been convicted of any criminal offence involving his/her integrity or honesty, or in relation to an employee of our Group, or has been insolvent, bankrupt or has made arrangements or compositions with his/her creditors generally or any other ground as determined by the Board that would warrant the termination of his or her employment at common law or pursuant to any applicable laws or under the grantee's service contract with our Group. A resolution of the Board or the board of directors of the relevant subsidiary to the effect that the relationship of a grantee has or has not been terminated on one or more of the grounds specified in this paragraph shall be conclusive; or

(vi) the date on which the Board shall exercise our Company's right to cancel the option at any time after the grantee commits a breach of paragraph (i) above or the options are cancelled in accordance with paragraph (u) below.

***(t) Alteration of the Share Option Scheme***

The Share Option Scheme may be altered in any respect by resolution of the Board except that:

(i) any alteration to the advantage of the grantees or the Eligible Participants (as the case may be) in respect of the matters contained in Rule 17.03 of the Listing Rules; or

(ii) any material alteration to the terms and conditions of the Share Option Scheme or any change to the terms of options granted (except any alterations which take effect automatically under the terms of the Share Option Scheme),

shall first be approved by our Shareholders in general meeting provided that the amended terms of the Share Option Scheme or the options shall remain in compliance with Chapter 17 of the Listing Rules, and if the proposed alteration shall adversely affect the terms of issue of any option granted or agreed to be granted prior to the date of alteration, or reduce the proportion of equity capital to which any person was entitled pursuant to such option prior to such alteration, such alteration shall be further subject to the grantees' approval in accordance with the terms of the Share Option Scheme.

***(u) Cancellation of options***

Any cancellation of options granted but not exercised must be approved by the grantees of the relevant options with the prior written consent of the grantee. For the avoidance of doubt, such approval is not required in the event any Option is cancelled pursuant to paragraph (i).

***(v) Termination of the Share Option Scheme***

Our Company may by resolution in general meeting or of the Board at any time terminate the Share Option Scheme and in such event no further option shall be offered but the provisions of the Share Option Scheme shall remain in force to the extent necessary to give effect to the exercise of any option granted prior thereto or otherwise as may be required in accordance with the provisions of the Share Option Scheme. Options granted prior to such termination but not yet exercised at the time of termination shall continue to be valid and exercisable in accordance with the Share Option Scheme.

***(w) Administration of the Board***

The Share Option Scheme shall be subject to the administration of the Board whose decision as to all matters arising in relation to the Share Option Scheme or its interpretation or effect (save as otherwise provided herein) shall be final and binding on all parties.

***(x) Conditions of the Share Option Scheme***

The Share Option Scheme is conditional on:

(i) the [REDACTED] of the Stock Exchange granting approval (whether subject to conditions or not) of this Scheme and any Options which may be granted hereunder, and the [REDACTED] of and permission to [REDACTED] which may fall to be issued pursuant to the exercise of options to be granted under the Share Option Scheme;

(ii) the passing of the necessary resolution to approve and adopt this Share Option Scheme and to authorize the Directors to grant Options to subscribe for Shares hereunder and to allot, issue and deal with Shares pursuant to the exercise of any Options granted under this Share Option Scheme in general meeting or by way of written resolution of the shareholder(s) of the Company;

(iii) the obligations of the [REDACTED] under the [REDACTED] becoming unconditional (including, if relevant, as a result of the waiver of any such condition(s) by the [REDACTED] acting for and on behalf of the [REDACTED]) and not being terminated in accordance with the terms of the [REDACTED] or otherwise; and

(iv) the commencement of [REDACTED] in our [REDACTED] on the [REDACTED].

If the conditions in paragraphs (i) to (iv) above are not satisfied on or before the date falling 30 days after the date of the Document:

(i) the Share Option Scheme shall forthwith determine; and

(ii) no person shall be entitled to any rights or benefits or be under any obligations under or in respect of the Share Option Scheme or any option granted thereunder.

***(y) Disclosure in annual and interim reports***

Our Company will disclose details of the Share Option Scheme in our annual and interim reports including the number of options, date of grant, exercise price, exercise period and vesting period during the financial year/period in the annual/interim reports in accordance with the Listing Rules in force from time to time.

***(z) Present status of the Share Option Scheme***

As at the Latest Practicable Date, no option had been granted or agreed to be granted under the Share Option Scheme.

**2. Estate duty and other indemnities**

*Estate Duty*

Our Directors have been advised that no material liability for estate duty is likely to fall on our Company or any member of our Group.

*Deed of Indemnity*

Mr. Zhao and Sandy Mining Limited (the "**Indemnifiers**") have entered into the Deed of Indemnity with and in favor of our Company (for itself and as trustee for and on behalf of each of its subsidiaries) whereby conditional on the conditions set out in "Structure and Conditions of the [REDACTED]" having been fulfilled, the Indemnifiers have given indemnities in connection with, among other matters:

(a) any duty which is, at the date of the Deed of Indemnity, or thereafter becomes payable by the members of the Group or any of them by virtue of section 35 and/or section 43 of the Estate Duty Ordinance (Chapter 111 of the Laws of Hong Kong) (or the equivalent thereof under the laws of any jurisdiction outside Hong Kong) by reason of the death of any person and by reason of the assets of the members of the Group or any of such assets being deemed for the purpose of Estate Duty to be included in the property passing on his death by reason of that person making or having made a transfer of any property other than an interest limited to cease on his death or property which he/she transferred in a fiduciary capacity being a transfer made on or before the Effective Date (as defined below) and such a transfer means any transaction of the kind described by the words "a transfer of any property other than an interest limited to cease on his death or property which he transferred in a fiduciary capacity" in section 35 of the Estate Duty Ordinance interpreted in accordance with the provisions contained in section 3 of the Estate Duty Ordinance ("**Relevant Transfer**") to the members of the Group or any of them at any time on or prior to the date on which the [REDACTED] becomes unconditional (the "**Effective Date**"); and/or

(b) any amount recovered (as at the date of the Deed of Indemnity or thereafter) against the members of the Group or any of them under the provisions of section 43(7) of the Estate Duty Ordinance in respect of any duty payable under section 43(1) or 43(6) of the Estate Duty Ordinance (or the equivalent thereof under the laws of any jurisdiction outside Hong Kong) by reason of the death of any person and by reason of the assets of the Group or any of such assets being deemed for the purpose of the estate duty payable under the Estate Duty Ordinance and the estate duty (or any similar tax or duty) payable under the laws and regulations of, or otherwise payable in, any other jurisdictions and which includes any interest, penalty or other liability arising in connection with the imposition or non-payment or delay in payment of such duty ("**Estate Duty**") to be included in the property passing on his death by reason of that person making or having made a Relevant Transfer to the members of the Group or any of them at any time on or prior to the Effective Date; and/or

(c) any amount of duty which the members of the Group or any of them is obliged to pay by virtue of section 43(1)(c) of the Estate Duty Ordinance (or the equivalent thereof under the laws of any jurisdiction outside Hong Kong) in respect of the death of any person in any case where the assets of another company or any of them are deemed for the purpose of Estate Duty to be included in the property passing on that person's death by reason of that person making or having made a Relevant Transfer to that other company and by reason of the members of the Group or any of them having received any distributed assets of that other company on their distribution within the meaning of the Estate Duty Ordinance, in each case at any time on or prior to the [REDACTED], but only to the extent to which the members of the Group or any of them are/is unable to recover an amount or amounts in respect of that duty from any other person under the provisions of section 43(7)(a) of the Estate Duty Ordinance; and/or

(d) any claim which has arisen or may arise wholly or partly in respect of or in consequence of any act or omission occurring on or before the [REDACTED].

The Indemnifiers agreed with each of the members of the Group that they will jointly and severally indemnify and at all times keep them and each of them fully and effectively indemnified on demand against Taxation (as defined in the Deed of Indemnity) and Taxation Claim (as defined in the Deed of Indemnity), together with all costs (including all legal and other professional costs), expenses, all interests, penalties or other liabilities which any of the members of the Group may incur in connection with (i) the investigation, assessment, contesting or any claim under the Deed of Indemnity; (ii) the settlement of any claim under the Deed of Indemnity; (iii) any legal proceedings in which any of the members of the Group claims under or in respect of the Deed of Indemnity and in which judgment is given for any of the members of the Group; or (iv) the enforcement of any such settlement or judgment referred to in (ii) and (iii) above, falling on any of the members of the Group, (i) resulting from or by reference to any income, profits or gains transactions, events, matters or things earned, accrued, received, entered into or occurring (or deemed to be so earned, accrued, received, entered into or occurring) on or before the Effective Date (ii) resulting from or by reference to any event or transaction occurring or deemed to occur on or before the Effective

Date whether alone or in conjunction with another event or transaction or other events or transactions; (iii) in respect of or in consequence of any act or omission of any members of the Group regarding the inter-companies transactions on or before the Effective Date; or (iv) in conjunction with any other circumstances whenever occurring and whether or not such Taxation or Taxation Claim is chargeable against or attributable to any other person, firm or company, including any and all Taxation resulting from the receipt by any members of the Group of any amounts paid by the Indemnifiers under the Deed of Indemnity.

The indemnity mentioned above shall not apply:

(a) to the extent that provision or reserve has been made for such Taxation in the audited accounts of any of the members of the Group for the years ended December 31, 2019, 2020 and 2021 which arises in the ordinary course of business of the Group as described in "Business"; or

(b) to the extent that such Taxation Claim or liability for such Taxation falls on any of the members of the Group in respect of its accounting period commencing on or after January 1, 2019 unless such Taxation or liability would not have arisen but for some act or omission of, or transaction voluntarily effected by, the Indemnifiers, the members of the Group or any of them (whether alone or in conjunction with some other act, omission or transaction, whenever occurring) otherwise than in the ordinary course of business or in the ordinary course of acquiring and disposing of capital assets, before the Effective Date;

(c) to the extent that such Taxation Claim or liability for such Taxation would not have arisen but for a voluntary act or transaction carried out or effected (other than pursuant to a legally binding commitment created on or before the date of the Deed of Indemnity) by the relevant member of the Group after the date of Deed of Indemnity;

(d) to the extent that such Taxation Claim or liability for such Taxation arises or is incurred as a result of the imposition of Taxation as a consequence of any retrospective change in the law, rules and regulations, or the interpretation or practice thereof by the Inland Revenue Department of the government of Hong Kong or the taxation authority of the PRC or any other relevant authority (whether in Hong Kong or the PRC, the British Virgin Islands or the Cayman Islands or any other part of the world) coming into force after the date of Deed of Indemnity or to the extent such Taxation Claim arises or is increased by an increase in rates of Taxation after the date of Deed of Indemnity with retrospective effect; or

(e) to the extent of any provision or reserve made for Taxation in the audited accounts of any of the members of the Group up to December 31, 2021 and which is finally established to be an over-provision or an excessive reserve in which case the Indemnifiers' liability (if any) in respect of such Taxation shall be reduced by an amount not exceeding such provision or reserve, provided that the amount of any such provision or reserve applied pursuant to this sub-paragraph (e) to reduce the Indemnifiers' liability in respect of Taxation shall not be available in respect of any such liability arising thereafter.

Without prejudice to provisions of the Deed of Indemnity, the Indemnifiers further agreed with each of the members of the Group that they will jointly and severally indemnify and at all times keep them and each of them fully and effectively indemnified on demand against any damages, losses, liabilities, claims, fines, penalties, payments, suits, settlement payment, fees, orders, expenses and costs, or loss of profits, benefits which are or become payable or suffered by any member of the Group directly or indirectly as a result of and in connection with any and all of the non-compliances with the applicable laws, rules or regulations by members of the Group on or before the Effective Date, or as a result of or in relation to all litigations, arbitration, claims (including counter-claims), actions, complaints, demands, judgements and/or legal proceedings by or against any of the members of the Group which was issued, accrued and/or arising from any act of any member of the Group at any time on or before the Effective Date, including but not limited to the non-compliances, legal proceedings and claims as disclosed in the section headed "Business — Non-Compliance Incidents" and in particular the failure to make contributions to the social insurance and housing provident fund for the employees of any members of the Group in accordance with the Law on Social Insurance of PRC (中華人民共和國社會保險法) and the Regulations on the Administration of Housing Provident Fund (住房公積金管理條例).

## 3. Litigation

As at the Latest Practicable Date, we were not engaged in any litigation, arbitration or claim of material importance and no litigation, arbitration or claim of material importance is known to our Directors to be pending or threatened by or against us, that would have a material adverse effect on our results of operations or financial conditions.

## 4. Sole Sponsor

The Sole Sponsor has made an [REDACTED] on our behalf to the [REDACTED] for the [REDACTED] of, and the permission to deal in, [REDACTED] as mentioned in this document (including the Shares which may be issued pursuant to the exercise of the [REDACTED]). The Sole Sponsor satisfies the independence criteria applicable to sponsors set out in Rule 3A.07 of the Listing Rules. The fees payable to the [REDACTED] in respect of its services as sponsor for the Listing are approximately [REDACTED] million and are payable by us.

## 5. Preliminary Expenses

The preliminary expenses of our Company are estimated to be approximately HK$54,288 and have been paid by our Company.

## 6. Promoter

Our Company has no promoter for the purposes of the Listing Rules. Within the two years immediately preceding the date of this document, no cash, securities or other benefit has been paid, allotted or given nor are any proposed to be paid, allotted or given to any promoters in connection with the [REDACTED] and the related transactions described in this document.

## 7. Bilingual Document

The English language and Chinese language versions of this document are being published separately, in reliance upon the exemption provided by section 4 of the Companies Ordinance (Exemption of Companies and Prospectus from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong).

**8. Binding Effect**

This document shall have effect, if an application is made in pursuance of it, of rendering all persons concerned bound by all of the provisions (other than the penal provisions) of sections 44A and 44B of the Companies (Winding Up and Miscellaneous Provisions) Ordinance so far as applicable.

**9. Qualifications of Experts**

The following are the qualifications of experts (as defined under the Listing Rules and the Companies Ordinance) who have given opinions or advice which are contained or referred to in this document:

| Name | Qualifications |
|---|---|
| Lego Corporate Finance Limited | Licensed corporation to carry out type 6 (advising on corporate finance) regulated activity under the SFO |
| SRK Consulting (Hong Kong) Limited | Independent technical consultant |
| PricewaterhouseCoopers | Certified Public Accountants under Professional Accountants Ordinance (Chapter 50 of the Laws of Hong Kong)<br><br>Registered Public Interest Entity Auditor under Financial Reporting Council Ordinance (Chapter 588 of the Laws of Hong Kong) |
| Tian Yuan Law Firm | Legal advisors to our Company as to PRC law |
| Appleby | Legal advisors to our Company as to Cayman Islands law |
| Frost & Sullivan (Beijing) Inc. Shanghai Branch Co. | Independent industry consultant |
| Roma Appraisals Limited | Independent property valuer |
| (Gavin) Heung Ngai Chan | Competent person (within the meaning of Chapter 18 of the Listing Rules) |
| Moore Advisory Services Limited | Internal control consultant |

## 10. Consent of Experts

Each of the experts as referred to in "9. Qualifications of Experts" in this Appendix has given and has not withdrawn their respective written consents to the issue of this document with the inclusion of their reports and/or letters and/or legal opinion (as the case may be) and references to their names included in the form and context in which it respectively appears.

None of the experts named above has any shareholders' interests in our Company or any member of our Group or the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for interests in our Company or any member of our Group.

## 11. No Material Adverse Change

Our Directors confirm that there has been no material adverse change in the financial or trading position or prospects of our Group since December 31, 2021 (being the date to which the latest audited consolidated financial statements of our Group were prepared).

## 12. Miscellaneous

(a) Save as disclosed in this document:

(i) within the two years immediately preceding the date of this document, neither our Company, nor any member of our Group has issued or agreed to issue any share or loan capital fully or partly paid up either for cash or for a consideration other than cash;

(ii) neither our Company, nor any member of our Group has granted or agreed to grant commissions, discounts, brokerages or other special terms in connection with the issue or sale of any share or loan capital;

(iii) within the two years immediately preceding the date of this document, no commission has been paid or payable (except commission to the [REDACTED]) to any persons for subscription, agreeing to subscribe, procuring subscription or agreeing to procure subscription of any shares of our Company or any member of our Group;

(iv) no founder, management or deferred shares of our Company or any member of our Group have been issued or agreed to be issued;

(v) our Company has no outstanding convertible debt securities or debentures;

(b) no share or loan capital of our Company, or any member of our Group is under opinion or is agreed conditionally or unconditionally to be put under option;

(c) none of the persons named in the paragraph headed "D. Other Information — 9. Qualifications of Experts" in this appendix is interested beneficially or otherwise in any shares of any member of our Group or has any right or option (whether legally enforceable or not) to subscribe for or nominate persons to subscribe for any securities in any member of our Group;

(d) there is no arrangement under which the future dividends are waived or to be waived;

(e) our Directors confirm that there has not been any interruption in the business of our Company which may have or have had a material adverse effect on the financial position of our Company in the 12 months immediately preceding the date of this document;

(f) our principal share register will be maintained by our principal share registrar, [REDACTED] in the Cayman Islands and our Hong Kong share register will be maintained by our [REDACTED]. All transfers and other documents of title of the Shares must be lodged for registration with and registered by our register in Hong Kong. All necessary arrangements have bee made to enable the Shares to be admitted to [REDACTED]; and

(g) none of the equity and debt securities of our Company, if any, is listed or dealt with in any other stock exchange nor is any [REDACTED] or permission to deal being or proposed to be sought.

## A. DOCUMENTS DELIVERED TO THE REGISTRAR OF COMPANIES OF HONG KONG

The documents attached to the copy of this document and delivered to the Registrar of Companies in Hong Kong for registration were, among other documents:

(a) a copy of the [REDACTED];

(b) the written consents referred to in paragraph headed "Appendix VI — Statutory and General Information — D. Other Information — 10. Consent of Experts" in this document; and

(c) copies of each of the material contracts referred to in paragraph headed "Appendix VI — Statutory and General Information — B. Further Information about Our Business — 1. Summary of material contracts" in this document.

## B. DOCUMENTS ON DISPLAY

Copies of the following documents will be available on display on the website of the Stock Exchange at **www.hkexnews.hk** and our website at **www.yxxny.cn** for a period of 14 days from the date of this document:

(a) the Memorandum of Association and the Articles of Association;

(b) the Accountant's Report for each of the three years ended December 31, 2021 from PricewaterhouseCoopers, the text of which is set out in "Appendix I — Accountant's Report" to this document;

(c) the audited financial statements of the Group for the three years ended December 31, 2021;

(d) the report on unaudited [REDACTED] financial information from PricewaterhouseCoopers, the text of which is set out in "Appendix II — Unaudited [REDACTED] Financial Information" to this document;

(e) the letter of advice prepared by Appleby summarizing certain aspects of the Cayman Islands company law as referred to in "Appendix V — Summary of the Constitution of our Company and Cayman Islands Company Law" in this document;

(f) the Companies Act;

(g) the Independent Technical Report, the text of which is set out in Appendix III to this document;

(h) the material contracts referred to in the paragraph headed "Appendix VI — Statutory and General Information — B. Further Information About Our Business — 1. Summary of the material contracts" in this document;

(i) the service contracts and letters of appointment with Directors, referred to in the paragraph headed "Appendix VI — Statutory and General Information — C. Further Information about Our Directors and Substantial Shareholders — 2. Particulars of Service Contracts" in this document;

(j) the Share Option Scheme;

(k) the written consents referred to in the paragraph headed "Appendix VI — Statutory and General Information — D. Other Information — 10. Consent of experts" in this document;

(l) the legal opinion prepared by Tian Yuan Law Firm, our PRC Legal Advisers, in respect of certain aspects of our Group and our property interests in the PRC;

(m) the industry report prepared by Frost & Sullivan referred to in the section headed "Industry Overview" of this document; and

(n) the property valuation report prepared by Roma Appraisals Limited, our independent property valuer, the text of which is set out in Appendix IV to this document.