OVERVIEW

We are a construction service provider based in Taiyuan, a city in Shanxi Province, China. We engage in the following businesses:

- **Specialized Industrial Construction:** Our specialized industrial construction business mainly include projects related to the following fields: power engineering (thermal power generation, new energy wind power generation, new energy photovoltaic power generation, new energy geothermal power generation, hydrogen power generation, power transmission and transformation); petrochemical engineering (oil and gas storage and transportation, petrochemical engineering, chemical engineering, pharmaceutical and chemical engineering); electromechanical installation engineering; metallurgical engineering (glass, coking, cement, non-ferrous metal, ferrous metal smelting, carbon, electrolytic aluminum, electrolytic copper, etc.); water conservancy and hydropower engineering (water conservancy engineering, hydropower engineering, pumped storage); urban rail transit engineering.; mining engineering (coal mines, iron ore, aluminum ore, copper ore, etc.). The Group provides services such as investment, design consulting, construction, operation and maintenance for these specialized industrial construction projects.

- **Specialized Auxiliary Construction:** Our specialized auxiliary construction business mainly include projects related to the following fields: standardized workshops, urban supporting works such as heating, water supply, drainage, gas, communication and lighting engineering, environmental protection engineering (waste heat utilization, waste water treatment, waste treatment, waste gas treatment), road bridge engineering, low-carbon green engineering, agricultural engineering, etc. The Company provides services such as investment, design consulting, construction, operation and maintenance for these specialized auxiliary construction projects.

- **Other Construction:** We also engage in the construction of residential, office and commercial buildings, science, education, culture and health buildings and other types of projects. The Group provides general contracting services for such projects.

- **Non-Construction Business:** We also generate revenue from non-construction business, which mainly includes sales revenue from LNG, provision of urban heating technical services, operating and interest income from PPP projects, trading income and others.

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our total revenue was approximately RMB10,148.6 million, RMB13,278.4 million, RMB12,844.8 million and RMB5,248.0 million, respectively; and our gross profit was RMB1,428.1 million, RMB1,747.9 million, RMB1,842.0 million and RMB786.0 million, respectively.

BASIS OF PRESENTATION

Our financial information includes the financial statements of our Company and its subsidiaries during the Track Record Period. The financial statements of the subsidiaries are prepared for the same reporting periods as our Company, with consistent accounting policies. The results of subsidiaries are consolidated from the date on which our Group obtained control, and continue to be consolidated until the date on which such control ceases.

Our financial information has been prepared in accordance with IFRSs. Our financial information has been prepared under the historical cost convention, except for investment properties which have been measured at fair value and financial guarantee contracts which have been recognized initially at fair value, and is presented in Renminbi.

FACTORS AFFECTING OUR RESULTS OF OPERATIONS

The following are the key factors that have affected and we expect, will continue to affect our business, financial condition, results of operations and prospects.

General economic conditions in China and government policies related to the PRC construction industry

General economic conditions in the PRC have affected and will continue to affect our business and results of operations. Our revenue directly correlates with the level of construction activities in the PRC (particularly in northern China). During the Track Record Period, most of our projects are located in northern China. Revenue from our construction projects located in northern China accounted for 76.4%, 78.0%, 79.9% and 64.4% of our total revenue in 2020, 2021 and 2022 and the six months ended June 30, 2023, respectively. Changes in national or local policies related to the PRC construction industry may affect the level of activities in this industry, as well as the supply of land for property development, project financing, taxation, local government budgets and regulation on private sector's participation in the infrastructure and auxiliary construction projects.

Timing of collection on construction projects and retention amounts

During the Track Record Period, a substantial amount of our revenue was derived from our specialized industrial construction and specialized auxiliary construction. In 2020, 2021 and 2022 and the six months ended June 30, 2023, our revenue derived from specialized industrial construction business was RMB5,421.6 million, RMB6,964.9 million, RMB7,591.1 million and RMB2,932.6 million, respectively, representing 53.4%, 52.5%, 59.1% and 55.9% of our total revenue. Our revenue from specialized auxiliary construction business was RMB2,639.5 million, RMB3,118.3 million, RMB2,091.1 million and RMB921.5 million, respectively, representing 26.0%, 23.5%, 16.3% and 17.6% of our total revenue. Our construction contracts include payment schedules, which required progress payment to be made over the construction period once certain milestones are reached. Our clients generally retain 3.0%-10.0% of contract value as a warranty for the completed contract for one to three years. This amount is included in the contract assets until the end of the retention period.

Cost fluctuations in construction projects

The major components of our construction project costs are raw material costs, labor costs, machinery utilization costs, subcontracting costs and others. In 2020, 2021 and 2022 and the six months ended June 30, 2023, raw material costs accounted for 41.6%, 51.1%, 52.4% and 45.3% of our cost of sales, respectively, and labor costs accounted for 21.3%, 26.0%, 25.1% and 29.8% of our cost of sales, respectively, machinery utilization costs accounted for 6.5%, 7.3%, 5.5% and 4.5% of our cost of sales, respectively, and subcontracting costs and others accounted for 30.6%, 15.6%, 17.0% and 20.4% of our cost of sales, respectively.

Our raw material costs rose steadily during the Track Record Period. According to Frost & Sullivan, in recent years, there has been an increase in the average annual wage in the construction industry in China. Further, prices of our principal raw materials used in construction projects such as steel and cement fluctuated in China in recent years as a result of changing demand and supply dynamics. According to Frost & Sullivan, during the Track Record Period, the price of steel has declined due to drop in steel demand resulting from outbreak of COVID-19 and economic instability, while the price of cement surged due to increase in market demand of cements products. The subcontracting cost consists of fees paid to our professional subcontractors for the service they provided. The fluctuation of subcontracting fees during the Track Record Period is mainly determined by scale and level of complexity of the projects we undertook.

We price our construction projects based on cost estimates, and under the terms of certain of our contracts, the prices we submit in our bid or negotiate in our contracts are fixed. Our cost estimate is based primarily on the availability and costs of raw materials and equipment, subcontracting costs, project schedule, labor costs, the geographical location and environmental conditions of the project site, as well as the complexity and scale of the construction project, among other factors. If we are unable to accurately estimate our costs when bidding or negotiating our contracts, our profitability may be adversely affected. In addition, the actual costs are likely to fluctuate during the course of implementation of the construction project. While most of our contracts build in price adjustment clauses, we may not be able to pass the full amount of any cost increase to our customers and our results of operations may be adversely affected.

Business lines and project mix

The business lines of our business segments have different profit margins and growth prospects and, as a result, any material changes in our project mix, whether due to changes in our growth strategies, projects investment scale, market conditions, customer demand or otherwise, may affect our financial condition and results of operations.

For the year ended December 31, 2022, our gross profit margin of business segments (namely, specialized industrial construction, specialized auxiliary construction, other construction and non-construction businesses) was 12.0%, 13.1%, 11.0% and 35.5%, respectively. Of which:

- the gross profit of specialized industrial construction was RMB910.3 million, accounting for 49.4% of the total gross profit

- the gross profit of specialized auxiliary construction was RMB273.1 million, accounting for 14.8% of the total gross profit;

- the gross profit of other construction was RMB209.3 million, accounting for 11.4% of the total gross profit; and

- the gross profit of non-construction business was RMB449.4 million, accounting for 24.4% of the total gross profit.

For the six months ended June 30, 2023, our gross profit margin of respective business segments was 11.3%, 16.8%, 13.3% and 31.6%, respectively. Of which:

- the gross profit of specialized industrial construction was RMB330.5 million, accounting for 42.0% of the total gross profit;

- the gross profit of specialized auxiliary construction was RMB154.7 million, accounting for 19.7% of the total gross profit;

- the gross profit of other construction was RMB102.2 million, accounting for 13.0% of the total gross profit; and

- the gross profit of non-construction business was RMB198.7 million, accounting for 25.3% of the total gross profit.

The revenue derived from our non-construction business segment with the highest gross profit margin is mainly consisted of the revenue from LNG sales, provision of urban heating technical services, the operating and interest income of PPP projects, trading income and others.

TAXATION

Since we operate in China and our earnings and profits are substantially derived from China, our results of operations and profitability are affected by changes in the tax rate in China. Our subsidiaries incorporated and have operations in China are subject to enterprise income tax, value-added tax and other local taxes, adjusted under the relevant income tax law of China, on the taxable income reported in their PRC statutory accounts.

In 2020, 2021 and 2022 and the six months ended June 30, 2023, our effective income tax rate calculated based on income tax expense divided by profit before tax was approximately 20.3%, 11.4%, 5.8% and 8.8%, respectively. The general corporate income tax rate in PRC is 25%, however, eligible enterprises in certain encouraged economic sectors are entitled to various preferential income tax rates. Since 2015, several members of the Group in China have been subject to a preferential income tax rate:

(i) Enterprises that qualified as "High and New Technology Enterprises" are entitled to a preferential tax rate of 15%. The qualification for High and New Technology Enterprise is valid for three years. Our Company has qualified as a High and New Technology Enterprise and enjoyed a preferential tax rate of 15% per annum during the Track Record Period, and we had renewed our High and New Technology Enterprises certificate on December 7, 2021. The qualification of a High and New Technology Enterprise is subject to review by the relevant PRC authorities every three years. In the event that the qualification as a High and New Technology Enterprise is not renewed after the expiration date (although it is less likely), we will be subject to a uniformed corporate income tax rate of 25% from the year of expiration, which in turn increases our income tax.

(ii) Shanxi Shan'an Bluesky Energy Conservation Technology Co., Ltd., one of the subsidiaries of our Company, has complied with the requirements under *Notice of the MOF and the SAT regarding the Policies of Value-added Tax, Business Tax and Enterprise Income Tax on Promoting the Development of Energy-saving Service Industry* (《財政部國家稅務總局關於促進節能服務產業發展增值稅營業稅和企業所得稅政策問題的通知》) (Cai Shui [2010] No. 110), which stipulated that qualified energy-saving service enterprises, from the tax year in which the first production and operation income is obtained, those qualified enterprises are exempted from enterprise income tax ("**EIT**") from the first year to the third year of profitability, and from the fourth year to the sixth year, halved. As the contract energy management project of Phase I and Phase II units of heat supply engineering by Shanxi Xingneng Power Generation Company Limited* (山西興能發電有限責任公司), which is operated by Shanxi Shan'an Bluesky Energy Conservation Technology Co., Ltd., satisfied the relevant conditions, it enjoyed such preferential tax treatment with a valid period from January 1, 2016 to December 31, 2021. Shan'an Bluesky has obtained the Certificates of High and New-Technology Enterprise jointly issued by Science and Technology Department of Shanxi Province, Shanxi Provincial Department of Finance (山西省財政廳) and Shanxi Provincial Taxation Bureau, State Administration of Taxation in December 2021, which is eligible to pay EIT at a preferential rate of 15% for a term of three years from December 7, 2021 to December 6, 2024.

(iii) Gaoping Xinshi Yangtian Solar Power Company Limited* (高平市鑫時陽田光伏發電有限公司), one of the subsidiaries of our Company, has complied with the requirements under *Notice of the MOF and the SAT regarding the Implementation of the Catalogue of Preferential Enterprise Income Taxes for Public Infrastructure Projects* (《財政部、國家稅務總局關於執行公共基礎設施項目企業所得稅優惠目錄

有關問題的通知》) (Cai Shui [2008] No. 46), which stipulated that enterprises that engaged in public infrastructure projects approved on January 1, 2008 and satisfied the relevant conditions and technical standards and the relevant national investment management regulations in the Catalogue, from the tax year in which the first production and operation income is obtained, the proceeds from investment in those qualified enterprises are exempted from corporate income tax from the first year to the third year of profitability, and from the fourth year to the sixth year, halved. As our Company's photovoltaic power generation projects fall under the preferential matters that "the proceeds from the investment and operation of key public infrastructure projects supported by the state shall be reduced or exempted from enterprise income tax on a regular basis" and has initiated the relevant filings, it enjoyed such preferential tax treatment valid from January 1, 2017 to December 31, 2022. Gaoping Xinshi Yangtian Solar Power Company Limited has obtained the Certificates of High and New-Technology Enterprise jointly issued by Science and Technology Department of Shanxi Province, Shanxi Provincial Department of Finance (山西省財政廳) and Shanxi Provincial Taxation Bureau, State Administration of Taxation in December 2021, which is eligible to pay EIT at a preferential rate of 15% for a term of three years from December 7, 2021 to December 6, 2024.

(iv) Shanxi Shan'an Biquan Haimian City Technology Company Limited* (山西山安碧泉海綿城市科技有限公司), Shanxi Shan'an Lide Environmental Technology Company Limited* (山西山安立德環保科技有限公司) and Shanxi Shan'an Maode Distributed Energy Technology Company Limited* (山西山安茂德分布式能源科技有限公司), the subsidiaries of our Company, have obtained the Certificate of High and New-Technology Enterprise jointly issued by Science and Technology Department of Shanxi Province, Shanxi Provincial Department of Finance* (山西省財政廳) and Shanxi Provincial Taxation Bureau, State Administration of Taxation in 2019, which entitled them to a preferential EIT rate of 15% for a term of three years from 2019 to 2022. In 2022, the Shanxi Shan'an Biquan Haimian City Technology Company Limited, and Shanxi Shan'an Maode Distributed Energy Technology Company Limited have further obtained the Certificates of High and New-Technology Enterprise, both of which are eligible to a preferential corporate income tax rate of 15% for a further term of three years from from December 12, 2022 to December 11, 2025. From November 25, 2022, Shanxi Shan'an Lide Environmental Technology Company Limited is no longer entitled to this preferential tax treatment.

(v) Our Group's operations in the PRC enjoyed an additional research and development allowance tax treatment in accordance to Enterprise Income Tax Law of the PRC.

An additional 50% deduction of the research and development expense incurred from the research and development of new technologies, new products, and new techniques on the basis of the actual expenditure where no intangible asset has been capitalized from the research and development. If intangible assets have been capitalized, an additional 150% deduction was allowed on the amortization of the intangible assets.

According to the announcement and notice issued by the Ministry of Finance of the PRC (中華人民共和國財政部) and the State Taxation Administration of the PRC (中華人民共和國國家稅務總局), additional deduction ratio of research and development expenses was increase from 50% to 75% and additional deduction ratio of amortization of the intangible assets was increase from 150% to 175% during the period from January 1, 2018 to December 31, 2023.

In September 2022, according to the announcement issued by the Ministry of Finance of the PRC, the State Taxation Administration of the PRC, and the Ministry of Science and Technology, additional deduction of research and development expenses was increased on the current deduction ratio from 75% to 100% and additional deduction ratio of amortization of the intangible assets was increased on the current deduction ratio from 175% to 200% since October 1, 2022.

The termination or expiry of any of our existing preferential tax treatments will adversely affect our future operating results. Changes in the taxes applicable to our business in China in the future will affect our tax expenses and profitability. Please see "Risk Factors – Risks Relating to Conducting Business in the PRC – Under the EIT Law, we may not be classified as a "high and new-technology enterprise" of the PRC. Such classification could result in unfavorable tax consequences." for details.

SEASONALITY

We experience seasonality in our various construction businesses. For example, the hoisting of our wind power projects is affected by the windy weather, the construction in the northwest region is affected by the cold wave, and the construction in the southern region is affected by the monsoon season. We typically record higher revenue in the second half of a year relative to revenue from the first half, and our revenue from the first quarter is typically lower than that from other quarters. This seasonality is largely due to decreased construction activities in the northern regions of the PRC in the winter and the effect of the Chinese New Year, during which some of our projects are halted for the holiday. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our revenue in northern China was RMB7,755.6 million, RMB10,352.2 million, RMB10,262.7 million and RMB3,378.4 million, respectively.

CRITICAL ACCOUNTING POLICIES, JUDGMENTS AND ESTIMATES

Our critical accounting policies and estimates are set forth in note 3.2 to the Accountants' Report set out in Appendix I in this document. IFRSs require that we adopt accounting policies and make estimates that our Directors believe are most appropriate under the circumstances for the purpose of giving a true and fair view of our results and financial position. Critical accounting policies, judgments and estimates are those that require management to exercise judgments, estimates and assumptions that affect the application of policies, reported amounts of revenues, expenses, assets and liabilities, their accompanying disclosures and the disclosure of contingent liabilities. We believe the most complex and sensitive judgments, because of their significance to our financial information, result primarily from the need to make estimates about the effects of matters that are inherently uncertain. Actual results in these areas may differ from our estimates.

We have identified below the accounting policies and estimates that we believe are the most critical to our financial information and that involve the most significant estimates and judgments. Our Directors confirm that the relevant estimates or underlying assumptions made in the past have been generally in line with actual results during the Track Record Period and that we have consistently applied these estimates or underlying assumptions during the Track Record Period. Our Directors further confirm that these estimates or underlying assumptions are unlikely to change in the future.

Revenue Recognition

Revenue is recognized when it is probable that the economic benefits will flow to us and when the revenue can be measured reliably, on the following bases:

(a) revenue from construction contracts, on the fulfillment progress basis, as further explained in the accounting policy for "construction contracts" below;

(b) revenue from the rendering of services, upon transfer of service control;

(c) rental income, on a time proportion basis over the lease terms;

(d) interest income, using the effective interest method in proportion of time, by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset; and

(e) dividend income, when the right of payment is obtained.

Construction Contracts

Revenue from construction contracts is recognized over time as our performance creates and enhances an asset that the customer controls. The progress towards complete satisfaction of a performance obligation is measured based on input method, i.e. the costs incurred up to date compared with the total budgeted costs, which depict our performance towards satisfying the performance obligation.

In addition to the fixed contract fee and amount from variation order, some contracts include bonus payments which we can earn by early completion. At inception of each contract, we begin by estimating the amount of the bonus to be received using the "best estimate" approach. This amount is then included in our estimate of the transaction price only if it is highly probable that a significant reversal of revenue will not occur once any uncertainty surrounding the bonus is resolved. In making this assessment, we consider its historical record of performance on similar contracts, whether we have access to the labor and materials resources needed to exceed the agreed-upon completion date, and the potential impact of other reasonably foreseen constraints.

Besides, claims to customers are amounts that we seek to collect from the customers as reimbursement of costs and margins for scope of works not included in the original construction contract. Claims are accounted for as variable consideration and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with the variable consideration is subsequently resolved. We use the expected value method to estimate the amounts of claims because this method best predicts the amount of variable consideration to which we will be entitled.

When the outcome of the contract cannot be reasonably measured, revenue is recognized only to the extent of contract costs incurred that are expected to be recovered.

If at any time the costs to complete the contract are estimated to exceed the remaining amount of the consideration under the contract, a provision is recognized in accordance with IAS 37.

We generally provide warranties for repairs to any construction defects and does not provide extended warranties in its construction contract with customers. As such, most existing warranties are considered as assurance-type warranties under IFRS 15, which are accounted for under IAS 37. Retention receivables, prior to expiration of retention period, are classified as contract assets. The relevant amount of contract asset is reclassified to trade receivables when the retention period expires.

Borrowing Cost

Borrowing costs incurred, net of any investment income earned on the temporary investment of the specific borrowings, for the acquisition, construction or production of any qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use. A qualifying asset is an asset which necessarily takes a substantial period of time to get ready for its intended use or sale. Other borrowing costs are expensed when incurred.

Borrowing costs are capitalized as part of the cost of a qualifying asset when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are being undertaken. Capitalization of borrowing costs ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Impairment of Trade Receivables

We maintain an allowance for estimated losses arising from the inability of our customers to make the required payments. We make our estimates based on the aging of our trade receivable balances, customers' creditworthiness, and historical write-off experience. If the financial condition of our customers deteriorates such that the actual impairment loss might be higher than expected, we would be required to revise the basis for making the allowance and our future results would be affected.

Accounting Treatment of PPP Projects

For our PPP projects, we review each of our service concession arrangement contract and generally classify our activities under such arrangements into two categories, namely (i) construction and renovation, and (ii) operation. During the construction or renovation of our PPP projects, we design the relevant facilities, procure the necessary equipment, and build and/or renovate the facilities. Upon the completion of the construction or renovation, we are granted the right to operate the facilities during a specified concession period, which typically lasts for 10 to 29 years, and are entitled to services fees during the concession period to recover our costs of investment, construction, operation and maintenance and to provide us with reasonable returns.

IFRIC 12 "Service Concession Arrangements" ("**IFRIC 12**") provides guidance on the accounting to operators for public-to-private service concession arrangements. IFRIC 12 applies to public-to-private service concession arrangements if the public sector entity, as the grantor of the service arrangement, (i) controls or regulates what services the private sector entity as the operator must provide with the infrastructure, to whom it must provide and at what price; and (ii) controls any significant residual interest in the infrastructure at the end of the term of the arrangement (through ownership, beneficial entitlement or otherwise).

Our Directors are of the view that all our PPP projects are within the scope of service concession arrangements under IFRIC 12 as our service concession arrangements contain the following:

- the grantors (i.e. local government authorities) control or regulate the services that we must provide with relevant infrastructure, to whom we must provide such services, and at prices agreed by the grantors;

- the grantors of the infrastructure controls, through ownership, any significant residual interest in the infrastructure at the end of the service concession agreement; and

- the grantors restrict our practical ability to sell or pledge the infrastructure that give us continuing right of use throughout the period of the arrangements.

Our PPP Projects are mainly under BOT arrangements with the public sector entities. A BOT arrangement is a project model under public-to-private service concession arrangement in which an entity is authorized by the public sector entity under the contract to finance, design, construct and operate an infrastructure for a definite period of time, and to transfer the infrastructure to the public sector entity at the end of the contract period, at which point the obligation of the entity to operate the designed and constructed infrastructure terminates. According to the PPP contracts entered between our Group and the public sector entities, in addition to the construction work, we are also required to operate and maintain the infrastructure for the PPP Projects. For details of the responsibilities borne by our Group for our PPP projects, please refer to "Construction investment – Public-Private Partnership Project" of this section in this document. Such responsibilities are considered as operation and maintenance service obligations under IFRIC 12. Under IFRIC 12, it is a common feature of BOT arrangements that the operator is responsible for at least some of the management of the infrastructure and related services and does not merely act as an agent on behalf of the grantor. Public sector entities would undertake to pay our Group a specified or determinable amount or the shortfall, if any, between amounts received from users of the public service and specified or determinable amounts, annually during the operation and maintenance period for the operation and maintenance services.

The operation and maintenance work of the PPP Projects is regarded as "operating the infrastructures" as we used the infrastructures to provide services to the public under which our Group, as the operator, undertook management work to operate the infrastructures for the benefit of the public (i.e. the infrastructure was under the control of us throughout the construction, operation and maintenance period until its transfer to the public sector entity). At the end of the operation and maintenance period, the control of the infrastructures will be transferred to the public sector entities. Having considered the aforementioned major features of the contractual arrangement, our PPP Projects are mainly thus regarded as BOT arrangements under IFRIC 12.

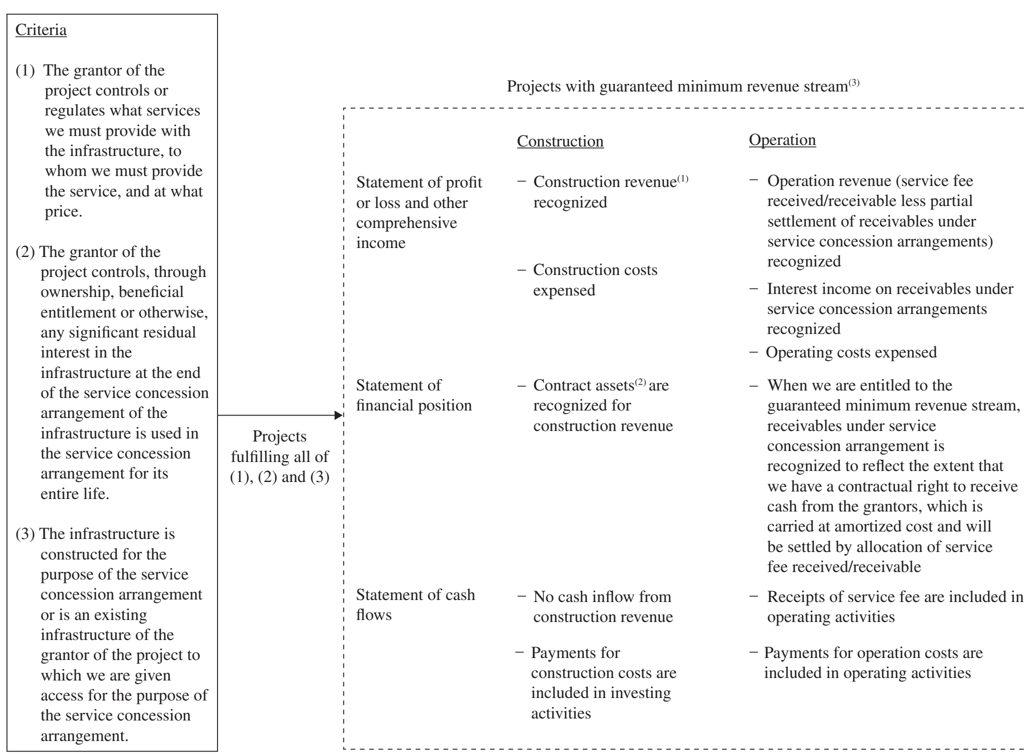
In accordance with IFRIC 12, we can:

- during the construction and renovation of the project, recognize construction revenue based on the construction costs plus a profit mark-up, and recognize an intangible asset or receivables under service concession arrangement; and

- during the operation of the project, recognize operation revenue, and amortize the intangible assets or recognize interest income on the receivables under service concession arrangements throughout the specified concession period.

The accounting treatment of service concession arrangements involves judgment and affects the presentation of our results of operations. Several key aspects of this accounting treatment are summarized below.

The following chart sets forth a summary of our accounting treatments for our concession projects.



Notes:

(1) On a cost-plus basis, which determined with reference to the gross profit margins agreed in the PPP contract or, in very exceptional case, the historical gross profit margins based on our experience of EPC projects.

(2) Our contract assets are initially measured as the present value of the guaranteed minimum payment that we are entitled to receive from the PPP project, and are assessed for indicators of impairment at the end of each reporting period. Impairments are made when there is objective evidence that, as a result of one or more events that occurred after their initial recognition.

(3) During the Track Record Period, all of the Group's PPP projects had a guaranteed minimum revenue.

Accounting treatment associated with the construction of our PPP projects

During the construction of our PPP projects, we recognize non-cash construction revenue in accordance with (i) the progress of construction projects (i.e. percentage-of-completion) which is determined based on the actual construction costs incurred up to date relative to the total budgeted costs and (ii) the gross profit margins agreed in the contract. We determined the mark-up with reference to the gross profit margins agreed in the contract or, in very exceptional case, the historical gross profit margins based on our experience of EPC projects. However, we do not receive payment for the construction work from the customer until the operation of project commences, and that the entire non-cash construction revenue recognised would be repaid by our customers throughout the operation period which generally has a time span of 10 to 29 years. Thus there is a mismatch between the recognition of construction revenue and cash flows for the construction work of our PPP projects. Details of the mismatch is set out in the section headed "Financial Information – Net Current Assets/(Liabilities) – Contract Assets and Receivables under Service Concession Arrangements".

For PPP projects with guaranteed minimum revenue, we treat the non-cash construction revenue as contract assets in our consolidated statement of financial position. The amount of contract asset is determined as the present value of such guaranteed minimum payment that we are entitled to receive, and is currently calculated using a discount rate of 6.0%-10.9%, which is determined with reference to the market interest rate and our credit risk exposure to the relevant customer. During the Track Record Period, all our PPP projects had guaranteed minimum revenue as construction revenue, being the total investment amount, which was pre-determined by the agreement of PPP projects. Such guaranteed minimum revenue associated with the construction work of PPP project is separated from the operating service revenue of the PPP projects. As such, when we receive payment from the customers, in form of service fees, during the operation period of the PPP project, we allocate the service fees as follows: (i) a portion to settle the balance of the relevant trade receivables of the PPP projects (i.e. the receivables under service concession arrangements transferred to trade receivables when the right to receive payment becomes unconditional); (ii) amortized interest income on the receivables under service concession arrangements (the amortization on interest income on the receivables under service concession arrangements is determined using effective interest rate method by applying the rate that exactly discounts the estimated future cash receipts to the receivables under service concession arrangements as at construction completion date over the expected life of the PPP projects); and (iii) the remainder to be recognized as operating fee income of PPP projects by considering the performance obligation of the rendered operation service according to the terms of PPP projects. The receivables under service concession arrangements and the contract assets for the PPP projects will be completely settled at the end of the concession period.

Pursuant to the contracts of PPP projects, the total investment amount of the PPP projects is specified in the relevant contracts, details of which are set out in the section head "Business – Construction Investment – Public-Private Partnership Project". Such construction revenue agreed in the contractual agreements for our PPP projects is recognized in line with the progress of construction projects (i.e. percentage-of-completion) or, in very exceptional case, where our management is of the view that the construction revenue determined solely based on terms such as the gross profit margins agreed in the contractual arrangement may not be sufficient, we will consider determining our construction revenue with reference to our historical gross profit margins of EPC projects which is 7.0%-8.0% based on the costs incurred (the "**GPM Method**"). During the Track Record Period, given that the management is of the view that the construction revenue is able to determine solely based on (i) the progress of construction projects (i.e. percentage-of-completion) determined based on the actual construction costs incurred up to date relative to the total budgeted costs and (ii) the contractual arrangement of our existing PPP projects when deciding the construction revenue of our projects, we have not deviated from determining the same based on the construction cost incurred and the contractual arrangements and had not made reference to the GPM Method.

We assess, at the end of each reporting period, whether there is an indication that the contract assets or receivables under service concession arrangements may be credit impaired. Possible indicators of asset impairment include physical damage to a project's facilities and material adverse changes in the market environment. Other objective evidence of impairment include (a) significant financial difficulty of the counterparty; (b) breach of contract, such as default or delinquency in payments; or (c) it becoming probable that the counterparty will enter bankruptcy or financial re-organization. If any such indication exists, or when an annual impairment assessment is required, we conduct an impairment test. During the Track Record Period, there was no indication that any contract assets or receivables under service concession arrangements were credit impaired. For the contract assets and receivables under the service concession arrangements, each of the Group's company closely monitors ageing analysis and calculate impairment, if applicable, to minimize any credit risk.

Our accounting policies regarding the impairment assessment on contract assets and/or receivables under service concession arrangements are set forth in the section headed "Impairment of financial assets, contract assets and receivables under service concession arrangements" under note 3.2 to the Accountants' Report set out in Appendix I to this document.

Accounting treatment associated with the operation of our PPP projects

Revenue from the operation of our PPP projects is recognized in the period in which services are rendered. For PPP projects where we are entitled to a guaranteed minimum fee, payment from customer are apportioned into (i) repayment of the relevant trade receivables of PPP projects (i.e. the receivables under service concession arrangements transferred to trade receivables when the right to receive payment becomes unconditional), (ii) amortised interest income on the receivables under service concession arrangements, and (iii) the remainder being recognized as operating fee income of PPP projects. The operation costs incurred were recognized in cost of sales and services during the operation of our PPP projects.

During the operation of our PPP projects, we received payment in form of service fees from our customers. Receipts of service fees and payments of operation costs are regarded as cash flows of our operating activities in the statements of cash flows during the operation of our PPP projects.

Income Tax

Income tax comprises current and deferred tax. Income tax relating to items recognized outside profit or loss is recognized outside profit or loss, either in other comprehensive income or directly in equity.

The current tax is based on taxable profit for the year. Taxable profit differs from profit before tax, because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. Our liability for current tax is measured based on tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is provided, using the liability method, on all temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the end of each year during the Track Record Period.

Deferred tax liabilities are recognized for all taxable temporary differences, except: (i) where the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and (ii) in respect of taxable temporary differences associated with investments in subsidiaries and associates, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carryforward of unused tax credits and unused tax losses can be utilized, except: (i) where the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and (ii) in respect of deductible temporary differences associated with investments in subsidiaries and associates, deferred tax assets are only recognized to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at the end of each year during the Track Record Period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at the end of each year during the Track Record Period and are recognized to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each year during the Track Record Period.

The carrying amount of deferred income tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rate (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred income tax liabilities and assets reflects the tax consequences that would follow from the manner in which we expect, at the end of the reporting period, to recover or settle the carrying amount of our assets and liabilities.

For the purposes of measuring deferred income tax for leasing transactions in which we recognize the right-of-use assets and the related lease liabilities, we first determine whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, we apply the relevant requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities will result in net deductible temporary differences.

Deferred income tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the relevant assets and liabilities relate to the income taxes levied on the same taxable entity by the same taxation authority.

Deferred tax assets and deferred tax liabilities are offset if and only if we have a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

SELECTED FINANCIAL INFORMATION

The following table sets forth certain items of our consolidated statements of profit or loss and other comprehensive income for the years/periods indicated:

	Year ended December 31,			For the six months ended June 30,	
	2020	2021	2022	2022	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
				(unaudited)	
Revenue	10,148,620	13,278,369	12,844,822	5,747,933	5,248,033
Cost of sales	(8,720,525)	(11,530,441)	(11,002,776)	(4,905,675)	(4,462,039)
Gross profit	1,428,095	1,747,928	1,842,046	842,258	785,994
Other income and gains, net	120,419	45,574	20,766	9,488	13,202
Change in fair value of investment properties	6,299	796	2,441	1,312	110
Selling and distribution expenses	(379)	(1,046)	(2,083)	(1,156)	(724)
Administrative and other operating expenses	(846,192)	(1,097,753)	(1,190,918)	(478,891)	(452,119)
[**REDACTED**]	[**REDACTED**]	[**REDACTED**]	[**REDACTED**]	[**REDACTED**]	[**REDACTED**]
Finance costs	(293,755)	(392,610)	(397,208)	(195,731)	(179,180)
Provision for expected credit losses on financial assets, net	(57,827)	(80,562)	(59,979)	(13,953)	(44,139)
Share of (loss)/profit of associates	(2,479)	(5,756)	5,521	6,095	2,310
Profit before tax	354,181	212,155	212,782	162,550	120,924
Income tax expense	(71,948)	(24,121)	(12,346)	(26,393)	(10,692)
Profit for the year/period	**282,233**	**188,034**	**200,436**	**136,157**	**110,232**
Other comprehensive income/(loss)					
Other comprehensive income/(loss) that will not be subsequently reclassified to profit or loss, net of tax:					
Fair value changes of equity investment at FVOCI, net of tax	1,384	(2,337)	13,703	10,110	842
Remeasurement of defined benefit provision plan, net of tax	–	–	(2,322)	–	323
Other comprehensive income that will be subsequently reclassified to profit or loss, net of tax:					
Exchange differences on translation of the financial statements of foreign operations	602	486	358	628	(30)
Other comprehensive income/(loss), net of tax	1,986	(1,851)	11,739	10,738	1,135
Total comprehensive income for the year/period	284,219	186,183	212,175	146,895	111,367
Profit for the year/period attributable to					
Equity holders of the Company	216,356	124,830	150,882	107,693	84,465
Non-controlling interests	65,877	63,204	49,554	28,464	25,767
	282,233	**188,034**	**200,436**	**136,157**	**110,232**

DESCRIPTION OF SELECTED COMPONENTS OF OUR CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

Revenue

Revenue by segment

We derive our revenue primarily from four business segments: (i) specialized industrial construction; (ii) specialized auxiliary construction, (iii) other construction and (iv) non-construction business. The following table sets forth our revenue by business segment for the years/periods indicated:

	Year ended December 31,						Six months ended June 30,			
	2020		2021		2022		2022		2023	
	Revenue *RMB'000*	% of revenue *(%)*	Revenue *RMB'000*	% of revenue *(%)*	Revenue *RMB'000*	% of revenue *(%)*	Revenue *RMB'000* *(unaudited)*	% of revenue *(%)*	Revenue *RMB'000*	% of revenue *(%)*
Segment										
Specialized industrial construction	5,421,639	53.4	6,964,903	52.5	7,591,132	59.1	3,187,051	55.4	2,932,571	55.9
Specialized auxiliary construction	2,639,530	26.0	3,118,317	23.5	2,091,063	16.3	1,111,367	19.3	921,500	17.6
Other construction	1,360,536	13.4	2,087,334	15.7	1,896,597	14.8	908,957	15.8	765,526	14.6
Non-construction business	726,915	7.2	1,107,815	8.3	1,266,030	9.8	540,558	9.5	628,436	11.9
Sales of LNG	*172,593*	*1.7*	*256,245*	*1.9*	*308,204*	*2.4*	*123,162*	*2.1*	*139,894*	*2.7*
Urban heating technical services income	*281,262*	*2.8*	*276,646*	*2.1*	*296,598*	*2.3*	*154,500*	*2.8*	*220,429*	*4.2*
Operating fee income of PPP projects	*70,368*	*0.7*	*77,518*	*0.6*	*90,199*	*0.7*	*47,537*	*0.8*	*52,842*	*1.0*
Interest income of PPP projects	*77,837*	*0.8*	*140,963*	*1.1*	*146,955*	*1.1*	*69,918*	*1.2*	*78,630*	*1.5*
Trading income	*21,189*	*0.2*	*147,993*	*1.1*	*300,654*	*2.3*	*91,706*	*1.7*	*79,559*	*1.5*
Others	*103,666*	*1.0*	*208,450*	*1.5*	*123,420*	*1.0*	*53,735*	*0.9*	*57,082*	*1.0*
Total	10,148,620	100.0	13,278,369	100.0	12,844,822	100.0	5,747,933	100.0	5,248,033	100.0

Specialized industrial construction. This business generates revenue primarily from provision of contracting services covering power engineering, petrochemical engineering, electromechanical installation engineering, metallurgical engineering, urban rail transit engineering, water conservancy and hydropower engineering, mine engineering and others. For the years ended December 31, 2020, 2021 and 2022 and for the six months ended June 30, 2023, the revenue from this segment accounted for 53.4%, 52.5%, 59.1% and 55.9% of our revenue, respectively.

Specialized auxiliary construction. This business generates revenue primarily from provision of contracting services covering standardized workshop, urban heating supporting works, agricultural engineering, urban roads and bridge engineering, water supply engineering, drainage engineering, gas engineering, communication and lighting engineering, environmental protection engineering (waste heat utilization, waste water treatment, waste treatment, waste gas treatment), low-carbon green engineering, etc. For the years ended December 31, 2020, 2021 and 2022 and for the six months ended June 30, 2023, the revenue from this segment accounted for 26.0%, 23.5%, 16.3% and 17.6% of our revenue, respectively.

Other construction. This business generates revenue primarily from provision of construction service covering residential, office and commercial buildings, science, education, culture and health buildings and other types of projects. For the years ended December 31, 2020, 2021 and 2022 and for the six months ended June 30, 2023, the revenue from this segment accounted for 13.4%, 15.7%, 14.8% and 14.6% of our revenue, respectively.

Non-construction business. This business generates revenue primarily from revenue from LNG sales, provision of urban heating technical services, operating and interest income from PPP projects, trading income and others. For the years ended December 31, 2020, 2021 and 2022 and for the six months ended June 30, 2023, the revenue from this segment accounted for 7.2%, 8.3%, 9.8% and 11.9% of our revenue, respectively.

During the Track Record Period, our Group had conducted business transactions with SSCO. In terms of revenue, we derived RMB519.3 million, RMB632.6 million, RMB687.8 million and RMB376.4 million from entities controlled by SSCO (excluding Shanxi CIG and its associates) for the years ended December 31, 2020, 2021 and 2022 and for the six months ended June 30, 2023, respectively.

Revenue by business model

EPC Projects

EPC refers to engineering, procurement and construction, which is a common form of contracting model whereby the contractor is commissioned by the project owner to carry out project work such as surveying, designing, procurement, construction, testing and commissioning of an engineering project, or any combination of the above. Our EPC projects involve specialized industrial construction, specialized auxiliary construction and other construction. The following table sets forth the breakdown of revenue of EPC projects by business segment during the Track Record Period:

	For the year ended December 31,						For the six months ended June 30			
	2020		2021		2022		2022		2023	
	Revenue	% of total revenue/ total revenue of the respective business segments	Revenue	% of total revenue/ total revenue of the respective business segments	Revenue	% of total revenue/ total revenue of the respective business segments	Revenue	% of total revenue/ total revenue of the respective business segments	Revenue	% of total revenue/ total revenue of the respective business segments
	RMB'000	%	*RMB'000*	%	*RMB'000*	%	*RMB'000* *(unaudited)*	%	*RMB'000*	%
Specialized industrial construction	5,137,448	94.8	6,801,687	97.7	7,537,942	99.3	3,140,376	98.5	2,915,791	99.4
Specialized auxiliary construction	2,183,935	82.7	2,866,116	91.9	1,996,405	95.5	1,107,432	99.6	799,555	86.8
Other construction	1,234,803	90.8	1,999,371	95.8	1,811,165	95.5	895,795	98.6	712,802	93.1
Total:	8,556,186	84.3	11,667,174	87.9	11,345,512	88.3	5,143,603	89.5	4,428,148	84.4

Our revenue derived from EPC projects amounted to RMB8,556.2 million, RMB11,667.2 million, RMB11,345.5 million and RMB4,428.1 million respectively for the years ended December 31, 2020, 2021, and 2022 and for six months ended June 30, 2023, representing 84.3%, 87.9%, 88.3% and 84.4% of our total revenue, respectively.

Our revenue generated from EPC projects increased by RMB3,111.0 million from RMB8,556.2 million for the year ended December 31, 2020 to RMB11,667.2 million for the year ended December 31, 2021, representing a year-on-year growth of 36.4%, which was mainly attributable to the organic growth of our construction business in general. During the year ended December 31, 2021, our revenue generated from EPC projects from specialized industrial construction, specialized auxiliary construction and other construction has respectively experienced year-on-year growth rate of 32.4%, 31.2% and 61.9%. In particular, we have several projects with substantive construction progress during the year ended December 31, 2021, which led to increase in our revenue generated from EPC projects, including our wind power plant construction project in Yuncheng, Shanxi (i.e. Project SIC-19), our photovoltaic power area and 35kV collector line construction project in Shijiazhuang, Hebei (i.e. Project SIC-20) and our urban heating engineering project in Aksu, Xinjiang (i.e. Project SAC-18), which we had recognized revenue in the sum of RMB489.6 million, RMB320.5 million and RMB196.9 million from respective projects during the year ended December 31, 2021.

For the year ended December 31, 2022, our revenue derived from EPC project slightly decreased by 2.8% in the sum of RMB321.7 million from RMB11,667.2 million for the year ended December 31, 2021 to RMB11,345.5 million for the year ended December 31, 2022. The decrease was mainly attributable to (i) the decrease in revenue generated from EPC projects of specialized auxiliary construction by RMB869.7 million, representing a year-on-year decrease of 30.3%; the reason for such decrease was that comparing with the year ended December 31, 2021, the number of projects recognizing a revenue of over RMB120 million of this segment decreased from eight to one, thereby causing a decline in revenue generated from the EPC projects in the specialized auxiliary construction segment; (ii) the decrease in revenue generated from EPC projects of other construction segments by RMB188.2 million, representing a year-on-year decrease of 9.4%; and (iii) partially offset by the increase in revenue generated from EPC projects of specialized industrial construction by RMB736.3 million, representing a year-on-year growth rate of 10.8%. The increase in our revenue generated from specialized industrial construction segment was primarily attributable to substantive construction progress of construction projects of larger scale, which included the 350MW low calorific value coal power generation EPC project in Hequ (河曲350MW低熱值煤發電EPC總承包項目) (i.e. Project SIC-27) and the 200MW Wind Power Phase II Project in Gujiao County (古交正溝200MW風電二期總承包項目) (i.e. Project SIC-37), which we had respectively recognized revenue of RMB1,166.1 million and RMB908.0 million there from during the year ended December 31, 2022.

For the six months ended June 30, 2023, our revenue derived from EPC project decreased by 13.9% when comparing with the corresponding period in 2022 from RMB5,143.6 million to RMB4,428.1 million. We recorded decrease in revenue derived from EPC projects in all three of our construction business segments, which: (i) our revenue derived from EPC projects of the specialized industrial construction segment decreased by RMB224.6 million from RMB3,140.4 million for the six months ended June 30, 2022 to RMB2,915.8 million for the six months ended June 30, 2023, representing a period-on-period decrease of 7.2%; (ii) our revenue derived from EPC projects of the specialized auxiliary construction segment decreased by RMB307.9 million from RMB1,107.4 million for the six months ended June 30, 2022 to RMB799.6 million for the six months ended June 30, 2023, representing a period-on-period decrease of 27.8%; and (iii) our revenue derived from EPC projects of the other construction segment decreased by RMB183.0 million from RMB895.8 million for the six months ended June 30, 2022 to RMB712.8 million for the six months ended June 30, 2023, representing a period-on-period decrease of 20.4%. The decrease in our revenue derived from EPC projects for the six months ended June 30, 2023 is due to the delay in several sizable projects during the six months ended June 30, 2023, including several wind power projects and photovoltaic power farm construction projects arising from, inter alia, the delay in application procedures for requisite permits to commence construction by project owners and change in design of construction layout.

PPP Projects

Public-Private-Partnership (PPP) project is a specific project cooperation model between a governmental body and a private-sector company, and all parties to the project share the responsibility and financing risk. Our PPP projects involve specialized industrial construction, specialized auxiliary construction and other construction. We recognize revenue in both the construction and operation stages of the concession period, in particular, the revenue recognized in the construction stage is aggregated into the revenue of each business segment, while the revenue and interest income recognized in the operation stage are aggregated into the revenue of non-construction business.

The following table sets forth a breakdown of our revenue generated from PPP projects by revenue type for the years/periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (*unaudited*)	*RMB'000*
Revenue type					
Construction income from PPP projects	865,519	503,380	233,280	63,772	191,449
Including:					
Specialized industrial construction	*284,191*	*163,216*	*53,190*	*46,675*	*16,780*
Specialized auxiliary construction	*455,595*	*252,201*	*94,658*	*3,935*	*121,945*
Other construction	*125,733*	*87,963*	*85,432*	*13,162*	*52,724*

	For the year ended December 31,			For the six months ended June 30,	
	2020	2021	2022	2022	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Non-construction income from PPP projects	148,205	218,481	237,154	117,455	131,472
Including:					
Operating fee income of PPP projects	*70,368*	*77,518*	*90,199*	*47,537*	*52,842*
Interest income of PPP projects	*77,837*	*140,963*	*146,955*	*69,918*	*78,630*
Total	1,013,724	721,861	470,434	181,227	322,921

Our total PPP project revenue decreased by 28.8% from RMB1,013.7 million for the year ended December 31, 2020 to RMB721.9 million for the year ended December 31, 2021. Such decrease was mainly due to the decrease in PPP project construction revenue by 41.8% from RMB865.5 million for the year ended December 31, 2020 to RMB503.4 million for the year ended December 31, 2021 due to the decrease in number of our PPP project in construction stage from six to five from 2020 to 2021, and was partially offset by increases in operating fee income from PPP projects and interest income from PPP projects of RMB7.2 million and RMB63.1 million.

Our total PPP project revenue decreased by 34.8% from RMB721.9 million for the year ended December 31, 2021 to RMB470.4 million for the year ended December 31, 2022. Such decrease was mainly due to a decrease in our revenue derived from construction income from PPP projects by 53.7% from RMB503.4 million for the year ended December 31, 2021 to RMB233.3 million for the year ended December 31, 2022. The year-on-year decrease in construction income and the continuous increase in operating fee income generated from our PPP projects were due to the fact that we had five and three PPP projects that were in construction stage for the years ended December 31, 2021 and 2022, respectively. Out of the five PPP projects that were in construction stage during the year ended December 31, 2021 and 2022, two of the projects (i.e. the PPP Project of (Fourth) Sewage Treatment Plant and Supporting Pipe Network Project of New Town in North of Linfen City the "**North of Linfen City PPP Project**" and the swimming pool portion of the PPP Project of Swimming Pool and Meixing Theatre of Qinshui County in Jincheng City, Shanxi Province (the "**Jincheng PPP Project**")) had entered into operation period in the second half of 2021 and the PPP project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County and the Meixing Theatre portion of the Jincheng PPP Project, both of which the construction were completed in May 2022), which was partly offset by the increase in our operating fee income from PPP projects by RMB12.7 million as construction of three of our PPP projects have completed and entered into operation period.

For the six months ended June 30, 2023, our total PPP project revenue increased by 78.2% when comparing with the corresponding period in 2022 from RMB181.2 million to RMB322.9 million. Such increase was primarily attributable to (i) the increase in our construction income from PPP projects from RMB63.8 million for the six months ended June 30, 2022 to RMB191.4 million for the six months ended June 30, 2023, representing a period-on-period increase of 200.2%, in particular due to increase in our construction income from specialized auxilary construction income from PPP projects; and (ii) the increase in both our operating fee income from RMB47.5 million for the six months ended June 30, 2022 to RMB52.8 million for the six months ended June 30, 2023, and our interest income of PPP projects from RMB69.9 million for the six months ended June 30, 2022 to RMB78.6 million for the six months ended June 30, 2023.

When the PPP projects enter into operation period, our construction revenue derived from such PPP projects will decrease due to completion of construction, meanwhile we will generate operating fee income through the operation of the relevant public facilities. Our operating fee income of PPP projects is mainly affected by, among others, the number of PPP projects completed and entered the operation period, and the duration of the operation of the PPP project during the relevant year. As of December 31, 2020, 2021 and 2022 and June 30, 2023, there were six, seven, nine and ten PPP projects under operation stage. The increase in operating fee income of PPP projects for the year ended December 31, 2021 when compared with that of 2020 was attributable to the increase in number of PPP projects under the operation stage, including the PPP project of Two Roads and Three Streets Widening and Reconstruction Project in Huguan County and the PPP Project of Underground Comprehensive Pipe Gallery Project in Xiyang Economic and Technological Development Zone, Xiyang County, Jinzhong City, both of which had entered the operation period since December 2020. As for the year ended December 31, 2022, another two of our PPP projects have entered into operation period (i.e. the PPP Project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County and the theatre portion of the Jincheng PPP project), thereby further contributing to the increase in our operating fee income generated from PPP projects. As for the six months ended June 30, 2023, the aforementioned two PPP projects which entered into operation period in 2022 only commenced formal operation after May 2022, accordingly, our operating fee income of PPP projects for the first half of 2023 has increased by 11.2% when comparing with that in the corresponding period in 2022.

Interest income from PPP projects is recognized on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts to the receivables under concession arrangements as at construction completion date over the expected life of the PPP project during the operation period. As a result, interest income likewise rises as our PPP project cycle enters the operation period.

Revenue by geographical locations

The following table sets forth our revenue by geographical locations for the years/periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	2021	2022	2022	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Mainland China	10,143,304	13,210,717	12,752,249	5,740,949	5,099,786
Bangladesh	–	–	39,308	6,984	30,663
Australia	6	3,437	–	–	–
Indonesia	5,310	64,215	53,265	–	117,584
Total	10,148,620	13,278,369	12,844,822	5,747,933	5,248,033

The following table sets forth a breakdown of our revenue attributable to Mainland China by province and autonomous regions for the years/periods indicated:

	For the year ended December 31,						For the six months ended June 30,			
	2020		2021		2022		2022		2023	
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000* *(unaudited)*	*%*	*RMB'000*	*%*
Shanxi province	6,999,679	69.0	8,690,664	65.8	8,708,172	68.3	3,620,572	63.1	2,841,696	55.7
Guangdong province	797,283	7.9	655,920	5.0	483,496	3.8	213,533	3.7	458,334	9.0
Hebei province	310,146	3.1	895,888	6.8	779,454	6.1	432,432	7.5	179,008	3.5
Inner Mongolia Autonomous region	295,113	2.9	493,244	3.7	439,698	3.4	284,281	5.0	289,068	5.7
Ningxia Hui Autonomous region	168,134	1.7	102,154	0.8	311,561	2.4	140,977	2.5	326,903	6.4
Others	1,572,949	15.4	2,372,847	17.9	2,029,868	16.0	1,049,154	18.2	1,004,777	19.7
	10,143,304	100.0	13,210,717	100.0	12,752,249	100.0	5,740,949	100.0	5,099,786	100.0

During the Track Record Period, Mainland China was our major market, accounting for over 97.2% of our total revenue. Our revenue from Mainland China increased by 30.2% from RMB10,143.3 million for the year ended December 31, 2020 to RMB13,210.7 million for the year ended December 31, 2021. For the year ended December 31, 2022, our revenue from Mainland China decreased by 3.5% from RMB13,210.7 million to RMB12,752.2 million. Our revenue from Mainland China decreased by 11.2% from RMB5,740.9 million for the six months ended June 30, 2022 to RMB5,099.8 million for the six months ended June 30, 2023, which is in line with the fluctuation trend of our overall revenue.

During the Track Record Period, our overseas revenue was derived from projects conducted in Bangladesh, Indonesia and Australia. For the year ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our overseas revenue amounted to RMB5.3 million, RMB67.6 million, RMB92.6 million and RMB148.2 million, respectively. Our revenue derived from overseas projects significantly increased by RMB62.3 million for the year ended December 31, 2021, representing a year-on-year growth of 1,175.5%, the growth was primarily attributable to the fact that our coke plant construction project in Indonesia (i.e. Overseas project-1) has entered into substantive construction stage and has recognized a revenue of RMB63.8 million during the year ended December 31, 2021 as compared to that of RMB5.3 million for the year ended December 31, 2020. During the year ended December 31, 2022, our revenue derived from overseas projects increased by RMB25.0 million from RMB67.6 million to RMB92.6 million, which was primarily attributable to (i) our construction project of a wind power plant in Bangladesh (i.e. Overseas project-4) commenced construction during the year ended December 31, 2022 and we have recognized a revenue of RMB39.3 million for such project during the year; (ii) the increase in revenue recognised in our gas purification facilities construction and installation project of a coke plant in Indonesia (i.e. Oversea project-3) by RMB52.9 million from RMB0.4 million for the year ended December 31, 2021 to RMB53.3 million for the year ended December 31, 2022; and such increase was partially offset by the decrease in our revenue derived from our coke plant construction project in Indonesia (i.e. Overseas project-1) due to a delay of the construction progress. During the six months ended June 30, 2023, our revenue derived from overseas projects amounted to RMB148.2 million, representing a period-on-period increase of 2,022.6% when comparing with the corresponding period in 2022. This was primarily attributable to fact that (i) Overseas project-1 has resumed construction; and (ii) substantive construction progress in our wind power plant construction project in Bangladesh (i.e. Overseas project-4) and the installation project of a coke plant in Indonesia (i.e. Overseas project-3) during the period.

The table below sets forth the breakdown of revenue by type of customer:

Type of customers	**For the year ended December 31**						**For the six months ended June 30**			
	2020		**2021**		**2022**		**2022**		**2023**	
	RMB'000	*% of total revenue*	*RMB'000*	*% of total revenue*	*RMB'000*	*% of total revenue*	*RMB'000* *(unaudited)*	*% of total revenue*	*RMB'000*	*% of total revenue*
State-owned and state-holding enterprises/ government authorities (excluding listed companies)	3,777,637	37.2%	5,182,552	39.0%	7,458,861	58.1%	2,567,932	44.7%	2,487,541	47.4%
Private enterprises (excluding listed companies)	5,850,046	57.7%	7,587,206	57.2%	4,944,332	38.5%	3,001,616	52.2%	2,596,205	49.5%
Listed companies	520,937	5.1%	508,611	3.8%	441,629	3.4%	178,385	3.1%	164,287	3.1%
	10,148,620	100%	13,278,369	100%	12,844,822	100%	5,747,933	100%	5,248,033	100%

The following table sets forth the breakdown of segment revenue in terms of Related Parties and Independent Third Parties:

	For the year ended December 31,						For the six months ended June 30,			
	2020		2021		2022		2022		2023	
	RMB'000	*% of total revenue*	*RMB'000*	*% of total revenue*	*RMB'000*	*% of total revenue*	*RMB'000 (unaudited)*	*% of total revenue*	*RMB'000*	*% of total revenue*
Connected parties controlled by Shanxi CIG										
Specialized industrial construction	3,576	0.1%	117,296	0.9%	223,026	1.7%	63,089	1.1%	158,735	3.0%
Specialized auxiliary construction	200,768	2.0%	284,813	2.1%	211,622	1.6%	65,731	1.1%	67,480	1.3%
Other construction	74,827	0.7%	67,662	0.5%	239,889	1.9%	44,257	0.8%	105,058	2.0%
Non-construction business income	21,842	0.2%	188,549	1.4%	174,561	1.4%	76,885	1.3%	57,466	1.1%
Sub-total	301,013	3.0%	658,320	4.9%	849,098	6.6%	249,962	4.3%	388,739	7.4%
Entities controlled by SSCO (Excluding Shanxi CIG and its associates)										
Specialized industrial construction	55,632	0.5%	126,152	1.0%	353,577	2.8%	66,636	1.2%	200,834	3.8%
Specialized auxiliary construction	120,683	1.2%	209,851	1.6%	9,303	0.1%	17,626	0.3%	6,047	0.1%
Other construction	61,328	0.6%	19,439	0.1%	50,237	0.4%	46,204	0.8%	16,172	0.3%
Non-construction business income	281,643	2.8%	277,192	2.1%	274,648	2.1%	155,702	2.7%	153,351	2.9%
Sub-total	519,286	5.1%	632,634	4.8%	687,765	5.4%	286,168	5.0%	376,404	7.1%
Other independent third parties										
Specialized industrial construction	5,362,431	52.9%	6,721,455	50.6%	7,014,529	54.6%	3,057,326	53.2%	2,573,002	49.0%
Specialized auxiliary construction	2,318,079	22.8%	2,623,653	19.8%	1,870,138	14.6%	1,028,010	17.9%	847,972	16.2%
Other construction	1,224,381	12.1%	2,000,233	15.1%	1,582,950	12.3%	818,496	14.2%	643,770	12.3%
Non-construction business income	423,430	4.1%	642,074	4.8%	816,243	6.3%	307,971	5.4%	417,620	8.0%
Sub-total	9,328,321	91.9%	11,987,415	90.3%	11,283,860	87.8%	5,211,803	90.7%	4,482,364	85.5%
The Group's investment entity*(Note)*										
Other construction	–	–	–	–	23,521	0.2%	–	–	–	–
Non-construction business income	–	–	–	–	578	0.0%	–	–	526	0.0%
Sub-total	–	–	–	–	24,099	0.2%	–	–	526	0.0%
Total	10,148,620	100%	13,278,369	100%	12,844,822	100%	5,747,933	100%	5,248,033	100%

Note: Investment entity refers to Shanxi Transformation Comprehensive Reform Demonstration Zone Shan'an Xiaohe Construction Industry Co., Ltd. (山西轉型綜合改革示範區山安瀟河建築產業有限公司) ("**Shan'an Xiaohe**"), which the Company holds 20% equity interest in its issued share capital but is neither a connected party controlled by Shanxi CIG nor an entity controlled by SSCO. The management of the Company confirmed that other than Shan'n Xiaohe, the Company does not have any equity interest in other entities under this category.

The following table sets forth the breakdown of our segment revenue for the years/periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (*unaudited*)	*RMB'000*
Power engineering (including New Energy Engineering)	3,859,726	4,617,320	4,952,325	1,987,622	1,674,907
Petrochemical Engineering	544,873	1,144,116	1,545,420	746,994	1,029,398
Other specialized industrial construction	1,017,040	1,203,467	1,093,387	452,435	228,266
Sub-total for specialized industrial construction:	5,421,639	6,964,903	7,591,132	3,187,051	2,932,571
Urban heating engineering	580,549	611,563	846,802	350,045	177,155
Standardized workshop engineering	857,348	1,136,495	644,351	428,027	477,742
Other specialized auxiliary construction	1,201,633	1,370,259	599,910	333,295	266,603
Sub-total for specialized auxiliary construction	2,639,530	3,118,317	2,091,063	1,111,367	921,500
Construction of public buildings	324,756	531,135	404,915	98,282	205,052
Residential buildings construction	324,756	969,321	510,896	293,982	229,718
Other construction works	711,024	586,878	980,786	516,693	330,756
Sub-total for other construction	1,360,536	2,087,334	1,896,597	908,957	765,526
Revenue from sales of LNG	172,593	256,245	308,204	123,162	139,894
Revenue from contract energy management (Revenue from urban central heating)	281,262	276,646	296,598	154,500	220,429
Other non-construction	273,060	574,924	661,228	262,896	268,113
Sub-total for non-construction:	726,915	1,107,815	1,266,030	540,558	628,436
Total:	10,148,620	13,278,369	12,844,822	5,747,933	5,248,033

The following table sets forth the revenue breakdown by sector that our customers are engaged in for the years/periods indicated:

	For the year ended December 31						For the six months ended June 30			
	2020		2021		2022		2022		2023	
Sectors that our customers are engaged in	RMB'000	% to our total revenue	RMB'000	% to our total revenue	RMB'000	% to our total revenue	RMB'000 (unaudited)	% to our total revenue	RMB'000	% to our total revenue
Government authorities (including PPP projects)	1,876,834	18.5%	2,108,308	15.9%	1,230,446	9.6%	541,204	9.4%	702,932	13.4%
Energy sector	*100,596*	*1.0%*	*102,857*	*0.8%*	*138,671*	*1.1%*	*62,141*	*1.1%*	*134,193*	*2.6%*
Infrastructure sector	*1,623,064*	*16.0%*	*1,862,866*	*14.0%*	*950,065*	*7.4%*	*418,592*	*7.3%*	*502,394*	*9.6%*
Others	*153,174*	*1.5%*	*142,585*	*1.1%*	*141,710*	*1.1%*	*60,471*	*1.0%*	*66,345*	*1.2%*
Non-government authorities										
Energy sector	5,144,123	50.7%	6,230,534	46.9%	6,782,713	52.8%	3,011,155	52.4%	2,413,896	46.0%
Infrastructure sector	2,146,307	21.1%	3,644,401	27.5%	2,509,964	19.5%	1,222,392	21.3%	788,123	15.0%
Others(Note)	981,356	9.7%	1,295,126	9.7%	2,321,699	18.1%	973,182	16.9%	1,343,082	25.6%
Total	10,148,620	100%	13,278,369	100%	12,844,822	100%	5,747,933	100%	5,248,033	100%

Note: Others include customers which are engaged in medical and chemical engineering sectors.

Our revenue from government authorities (including PPP projects) decreased by 41.6% from RMB2,108.3 million for the year ended December 31, 2021 to RMB1,230.4 million for the year ended December 31, 2022 was primarily due to the decrease in construction revenue derived from our PPP project which as aforementioned, out of the five PPP projects that were in construction stage during the year ended December 31, 2021, two of the projects had entered into operation in the second half of 2021 and therefore no longer contributing construction revenue for the year ended December 31, 2022. For the six months ended June 30, 2023, our revenue derived from government authorities increased by 29.9% when comparing with the corresponding period in 2022 from RMB541.2 million to RMB702.9 million. This is primarily attributable to the increase in revenue derived from our PPP projects.

Cost of sales, gross profit and gross profit margin

Our cost of sales primarily includes raw material costs, labor force, machinery utilization costs and subcontracting costs, etc. The following table sets forth a breakdown of our cost of sales by nature for the years/periods indicated:

	Year ended December 31,						For the six months ended June 30,			
	2020		2021		2022		2022		2023	
	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000* (unaudited)	*%*	*RMB'000*	*%*
Raw material	3,627,002	41.6	5,897,578	51.1	5,769,678	52.4	2,554,002	52.0	2,023,155	45.3
Labor force	1,859,150	21.3	2,995,053	26.0	2,766,714	25.1	1,329,103	27.1	1,328,703	29.8
Machinery utilization costs	567,755	6.5	841,263	7.3	600,945	5.5	236,103	4.8	201,025	4.5
Subcontracting costs	1,933,552	22.2	826,386	7.2	1,313,443	11.9	360,801	7.4	540,815	12.1
Others	733,066	8.4	970,161	8.4	551,996	5.1	425,666	8.7	368,341	8.3
Total	8,720,525	100.0	11,530,441	100.0	11,002,776	100.0	4,905,675	100.0	4,462,039	100.0

Our cost of sales increased by 32.2% from RMB8,720.5 million for the year ended December 31, 2020 to RMB11,530.4 million for the year ended December 31, 2021. Our cost of sales slightly decreased by 4.6% to RMB11,002.8 million for the year ended December 31, 2022 which was primarily attributable to the decrease in our raw material cost, labour force cost, machinery utilization costs and other cost by RMB127.9 million, RMB228.3 million, RMB240.3 million and RMB418.2 million respectively, and partially offset by the increase in subcontracting cost by RMB487.1 million. For the six months ended June 30, 2023, our cost of sales decreased by RMB443.7 million or 9.0% when comparing with the corresponding period in 2022 from RMB4,905.7 million to RMB4,462.0 million. This is primarily attributable to the decrease in our raw material costs, machinery utilization costs and other costs, which the fluctuation is in line with the decrease in our revenue.

Subcontracting Costs

Our subcontracting costs decreased RMB1,107.2 million during the year ended December 31, 2021 when compared to the year ended December 31, 2020. The decrease was primarily attributable to that substantive construction stage of several major construction projects which requires intensive subcontracting costs was completed in 2020, resulting in a decrease in the subcontracting costs in 2021. The representative projects include the PPP Project of Underground Comprehensive Pipe Gallery Project in Xiyang Economic and Technological Development Zone, Xiyang County, Jingzhong City, a wind power project of the Company in Gangdong Province (i.e. Project SIC-12) and a wind power project of the company in Dai County (i.e. Project SIC-1). Our subcontracting costs for the year ended December 31, 2022 increased by RMB487.1 million when compared to that for the year ended December 31, 2021 as a result of the commencement of several construction projects that requires substantive subcontracting costs input, representative projects of which include the 350MW low calorific value coal power generation EPC project in Hequ (i.e. Project SIC-27), the 200MW Wind Power Phase II Project in Gujiao County (i.e. Project SIC-37), and a construction project of a high priority polysilicon production plant in Shizuishan, Ningxia (i.e. Project SIC-36). For the six months ended June 30, 2023, our subcontracting cost increased by 49.9% when comparing with the corresponding period in 2022 from RMB360.8 million to RMB540.8 million. This is primarily attributable to the increase in subcontracting cost in several major projects, including the Taiyuan Talent Apartment Project (i.e. Project OC-19), which recognized a subcontracting cost of approximately RMB51.6 million during the six months ended June 30, 2023, as well as a commercial building construction project in Taiyuan, Shanxi (i.e. Project OC-22), which incurred a subcontracting cost of approximately RMB44.0 million. In addition, as part of our cost control measure, we subcontracted part of the construction in our installation project of a coke plant in Indonesia (i.e. Overseas project-3) to reduce costs of sending our employees overseas, thereby further increased our subcontracting cost during the six months ended June 30, 2023.

While most of our contracts contain price adjustment clauses, we may not be able to pass the full amount of any cost increase to our customers. For more details on the fluctuation of our cost of sales during the Track Record Period, please refer to the paragraph headed "Comparison of Results of Operations" in this section.

The following tables demonstrate the sensitivity to a reasonably possible change in the costs of raw material and labor force, with all other variables held constant, of our profit before tax during the Track Record Period:

	Year ended December 31,			Six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
				(unaudited)	
Costs of raw material increase/decrease by:					
+5%	(181,350)	(294,879)	(288,484)	(127,700)	(101,158)
+1%	(36,270)	(58,976)	(57,697)	(25,540)	(20,232)
-1%	36,270	58,976	57,697	25,540	20,232
-5%	181,350	294,879	288,484	127,700	101,158
Costs of labor force increase/decrease by:					
+5%	(92,958)	(149,753)	(138,336)	(66,455)	(66,435)
+1%	(18,592)	(29,951)	(27,667)	(13,291)	(13,287)
-1%	18,592	29,951	27,667	13,291	13,287
-5%	92,958	149,753	138,336	66,455	66,435

The following table sets forth a breakdown of our cost of sales by business segment for the years/periods indicated:

	Year ended December 31,						Six months ended June 30,			
	2020		2021		2022		2022		2023	
	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales	Cost of sales	% of cost of sales
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000* *(unaudited)*	*%*	*RMB'000*	*%*
Segment										
Specialized industrial construction	4,848,459	55.6	6,282,444	54.5	6,680,865	60.7	2,807,481	57.2	2,602,109	58.3
Specialized auxiliary construction	2,267,471	26.0	2,725,467	23.6	1,817,985	16.5	937,604	19.1	766,834	17.2
Other construction	1,174,262	13.5	1,955,876	17.0	1,687,338	15.4	823,486	16.8	663,336	14.9
Non-construction business	430,333	4.9	566,654	4.9	816,588	7.4	337,104	6.9	429,760	9.6
Total	**8,720,525**	**100.0**	**11,530,441**	**100.0**	**11,002,776**	**100.0**	**4,905,675**	**100.0**	**4,462,039**	**100.0**

Cost of PPP projects

The following table sets forth a breakdown of cost by PPP projects:

	Year ended December 31,			Six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Construction of PPP projects	596,687	407,585	158,316	20,963	158,930
Including:					
Specialized industrial construction	*215,738*	*114,927*	*37,546*	*27,775*	*12,782*
Specialized auxiliary construction	*282,386*	*210,277*	*47,877*	*(19,010)*	*104,232*
Other construction	*98,563*	*82,381*	*72,893*	*12,198*	*41,916*
Operating costs of PPP projects	57,700	56,530	63,134	30,846	36,371
Total	654,387	464,115	221,450	51,809	195,301

Costs of our PPP projects decreased by 29.1% from RMB654.4 million for the year ended December 31, 2020 to RMB464.1 million for the year ended December 31, 2021, and further decreased by 52.3% to RMB221.5 million for the year ended December 31, 2022. The decrease in our costs of PPP projects was mainly attributable to the decrease in cost of construction of PPP projects by 31.7% from RMB596.7 million for the year ended December 31, 2020 to RMB407.6 million for the year ended December 31, 2021, and further decreased by 61.2% to RMB158.3 million for the year ended December 31, 2022. For the six months ended June 30, 2023, cost of our PPP projects increased by 277.0% when comparing with the corresponding period in 2022 from RMB51.8 million to RMB195.3 million. This is primarily attributable to the commencement of construction of the PPP project of Infrastructure Improvement in Weibo Equipment Manufacturing starting Area of Yinying Industrial Park in Yangquan Economic and Technological Development Zone in the first half of 2023 and substantive progress in construction of the PPP project of Quality Improvement Project (New Party School, Qinshui East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province.

The decrease in construction cost of our PPP projects during the three years ended December 31, 2022 were due to the fact that we had six, five (including the PPP Project of (Fourth) Sewage Treatment Plant and Supporting Pipe network Project of New Town in North of Linfen City, the construction of which was completed in June 2021) and three PPP projects that were under the construction stage during each of the year ended December 31, 2020, 2021 and 2022, respectively. Accordingly, our construction costs of our PPP projects decreased in accordance with the decrease in number of PPP projects under construction stage during respective years.

For the six months ended June 30, 2023, our construction cost for PPP projects increased by 658.1% from RMB21.0 million for the six months ended June 30, 2022 to RMB158.9 million for the six months ended June 30, 2023. Such increase was primarily attributable to the commencement of construction of the PPP project of Infrastructure Improvement in Weibo Equipment Manufacturing Starting Area of Yinying Industrial Park in Yangquan Economic and Technology Development Zone and substantive progress in the PPP project of Quality Improvement Project (New Party School, Qinshui East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province.

Operating costs of our PPP projects amounted to RMB57.7 million, RMB56.5 million and RMB63.1 million for the years ended December 31, 2020, 2021 and 2022, respectively. Our operating costs of PPP projects is mainly affected by, among others, the number of PPP projects completed construction and entered into the operation period and the duration of the operation of the PPP project in that year upon completion. As of December 31, 2020, 2021 and 2022, there were six, seven and nine PPP projects under the operation period. Despite the increase in number of PPP projects under operation period, our operating costs of PPP projects for the year ended December 31, 2021 has slightly decreased by RMB1.2 million, representing 2.0% decreased. The decrease in operating costs of PPP for the year ended December 31, 2021 was mainly attributable to the decrease in cost of heating supply and electricity as a result of the implementation of cost saving plan by the Group in 2021 from the PPP Project of Central Heating Pipe Network in Cogeneration Urban Distract, Liulin County (the "**Liulin PPP**

Project"). Under the PPP Project of Central Heating Pipe Network in Cogeneration Urban Distract, Liulin County, the Company rented heating supply equipment from the relevant government authority of the Liulin County and the Company provided construction and operating services and charged its service fees from the same government authority. Pursuant to the contract of Liulin PPP Project, the operating fee income we were entitled to was determined mainly based on the actual scale of heating supplied during the year. For the year ended December 31, 2020, being the first full financial year of the operation of Liulin PPP Project, as we did not have an operating cost of the project as a reference, the operating cost of such project was relatively high. In 2021, after taking into account the actual operating cost of the Liulin PPP Project in 2020, we reviewed the overall operating cost structure, and negotiated the contract terms with our supplier. The contract was then modified from a purchase contract charging a purchase price with reference to the actual quantity of products supplied to a procurement contract at a fixed cost. Accordingly, the costs saved under the Liulin PPP Project amounted to approximately RMB2.2 million in the operating costs of PPP projects for year ended December 31, 2021 when compared to that of 2020.

For the year ended December 31, 2022, our operating costs of PPP projects increased by RMB6.6 million from RMB56.5 million to RMB63.1 million, representing a year-on-year growth rate of 11.7%. The increase in our operating cost was primarily attributable to the increase in number of PPP projects under operation period from seven for the year ended December 31, 2021 to nine for the year ended December 31, 2022. Two new projects entered the operation period in May 2022 (i.e. the PPP Project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County and the PPP Project of Swimming Pool and Meixing Theatre of Qinshui County in Jincheng City, Shanxi Province).

Our operation cost for PPP projects also increased by 17.9% from RMB30.8 million for the six months ended June 30, 2022 to RMB36.4 million for the six months ended June 30, 2023 due to the increase in number of PPP projects under operation stage when comparing with that in the corresponding period in 2022 as the PPP Project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County only entered into the operation period after its construction completion in May 2022.

Gross profit and gross profit margin

Gross profit and gross profit margin by business types

The following table sets forth a breakdown of gross profit and gross profit margin by business segment for the years/periods indicated:

	For the year ended December 31,									For the six months ended June 30,					
	2020			2021			2022			2022			2023		
	Gross profit	% of gross profit	Gross profit margin	Gross profit	% of gross profit	Gross profit margin	Gross profit	% of gross profit	Gross profit margin	Gross profit	% of gross profit	Gross profit margin	Gross profit	% of gross profit	Gross profit margin
	RMB'000	*%*	*%*	*RMB'000*	*%*	*%*	*RMB'000*	*%*	*%*	*RMB'000* *(unaudited)*	*%*	*%*	*RMB'000*	*%*	*%*
Segment															
Specialized industrial construction	573,180	40.1	10.6	682,459	39.0	9.8	910,267	49.4	12.0	379,570	45.1	11.9	330,462	42.0	11.3
Specialized auxiliary construction	372,059	26.1	14.1	392,850	22.5	12.6	273,078	14.8	13.1	173,763	20.6	15.6	154,666	19.7	16.8
Other construction	186,274	13.0	13.7	131,458	7.5	6.3	209,259	11.4	11.0	85,471	10.1	9.4	102,190	13.0	13.3
Non-construction business	296,582	20.8	40.8	541,161	31.0	48.8	449,442	24.4	35.5	203,454	24.2	37.6	198,676	25.3	31.6
Total	1,428,095	100.0	14.1	1,747,928	100.0	13.2	1,842,046	100.0	14.3	842,258	100.0	14.7	785,994	100.0	15.0

Our gross profit for the years ended December 31, 2020, 2021 and 2022 were respectively RMB1,428.1 million, RMB1,747.9 million and RMB1,842.0 million and our gross profit margin for the corresponding years were respectively 14.1%, 13.2% and 14.3%. Our gross profit has demonstrated a year-on-year increase of 22.4% and 5.4% respectively; whereas our gross profit margin has experienced a decrease by 0.9% from 2020 to 2021 and increased by 1.1% during the year ended December 31, 2022. For the six months ended June 30, 2023, our gross profit was RMB786.0 million, representing a decrease of RMB56.3 million in gross profit comparing with that for the six months ended June 30, 2022. Our gross profit margin for the six months ended June 30, 2023 was 15.0%, representing an increase of 0.3% in gross profit margin comparing with the corresponding period in 2022.

Despite the increase in our gross profit by RMB319.8 million from RMB1,428.1 million for the year ended December 31, 2020 to RMB1,747.9 million for the year ended December 31, 2021, our gross profit margin has slightly decreased by 0.9%. Such decrease in the gross profit margin was primarily attributable to the decrease in the gross profit margin of our other construction segment from 13.7% for the year ended December 31, 2020 to 6.3% for the year ended December 31, 2021, and was partially offset by the increase in the gross profit margin of our non-construction business segment from 40.8% for the year ended December 31, 2020 to 48.8% for the year ended December 31, 2021.

For the year ended December 31, 2022, our gross profit has increased by 5.4% from RMB1,747.9 million for the year ended December 31, 2021 to RMB1,842.0 million for the year ended December 31, 2022. On the other hand, our gross profit margin has increased by 1.1% from 13.2% to 14.3%. Such increase was primarily attributable to the increase in gross profit margin of our specialized industrial construction segment from 9.8% for the year ended December 31, 2021 to 12.0% for the year ended December 31, 2022.

For the six months ended June 30, 2023, our gross profit amounted to RMB786.0 million, representing a period-on-period decrease of 6.7% when comparing with the corresponding period in 2022, whereas our gross profit margin for the six months ended June 30, 2023 was 15.0%, representing an increase of 0.3% when comparing with the corresponding period in 2022. The decrease in our gross profit was primarily attributable to the decrease in gross profit in our specialized industrial construction segment, specialized auxiliary construction segment and non-construction segment, respectively by RMB49.1 million, RMB19.1 million and RMB4.8 million as compared to the six months ended June 30, 2022; and partially offset by the increase in gross profit in our other construction segment by RMB16.7 million. On the other hand, the increase in our gross profit margin was primarily attributable to the increase in our gross profit margin in our other construction business from 9.4% for the six months ended June 30, 2022 to 13.3% for the six months ended June 30, 2023.

Gross profit and gross profit margin of PPP projects

The table below sets forth a breakdown of our gross profit and gross profit margin by PPP projects for the years/periods indicated:

	For the year ended December 31,						For the six months ended June 30,			
	2020		2021		2022		2022		2023	
	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000* (*unaudited*)	*%*	*RMB'000*	*%*
Segment										
Construction of PPP projects	268,832	31.1	95,795	19.0	74,964	32.1	42,809	67.1	32,519	17.0
Including:										
Specialized industrial construction	*68,453*	*24.1*	*48,289*	*29.6*	*15,644*	*29.3*	*18,900*	*40.5*	*3,998*	*23.8*
Specialized auxiliary construction	*173,209*	*38.0*	*41,924*	*16.6*	*46,781*	*49.4*	*22,945*	*N/A(Note)*	*17,713*	*14.5*
Other construction	*27,170*	*21.6*	*5,582*	*6.3*	*12,539*	*14.6*	*964*	*7.3*	*10,808*	*20.5*
Non-construction of PPP projects	90,505	61.1	161,951	74.1	174,020	73.4	86,609	73.7	95,101	72.3
Including:										
Operation of PPP projects	*12,668*	*18.0*	*20,988*	*27.1*	*27,065*	*30.0*	*16,691*	*35.1*	*16,471*	*31.2*
Interest income of PPP projects	*77,837*	*100.0*	*140,963*	*100.0*	*146,955*	*100.0*	*69,918*	*100.0*	*78,630*	*100.0*
Total	**359,337**	**35.4**	**257,746**	**35.7**	**248,984**	**52.9**	**129,418**	**71.4**	**127,620**	**39.5**

Note: As a result of completion audit of construction projects, the gross profit recorded during the six months ended June 30, 2022 was higher than the revenue recognized with a deduction of cost recognized. Accordingly, the gross profit margin was not applicable.

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our gross profit of PPP projects was RMB359.3 million, RMB257.7 million, RMB249.0 million and RMB127.6 million, respectively.

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our gross profit margins of PPP projects were 35.4%, 35.7%, 52.9% and 39.5%, respectively.

Gross profit and gross profit margin of EPC projects

The table below sets forth a breakdown of our gross profit and gross profit margin of our EPC projects by our role as main contractor or subcontractor for the years/periods indicated:

	For the year ended December 31,						For the six months ended June 30,			
	2020		2021		2022		2022		2023	
	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000* *(unaudited)*	*%*	*RMB'000*	*%*
Main Contractor	838,614	10.0%	1,061,981	9.4%	1,224,323	11.7%	549,229	11.7%	522,446	13.2%
Subcontractor	24,067	14.7%	48,991	12.8%	93,317	10.3%	46,766	10.8%	32,353	7.1%

For the three years ended December 31, 2022 and the six months ended June 30, 2022 and 2023, our gross profit of main contractor for EPC project was RMB838.6 million, RMB1,062.0 million, RMB1,224.3 million, RMB549.2 million and RMB522.4 million, respectively. Our gross profit margin for EPC projects under which we served as a main contractor fluctuated between 9.4% and 13.2% during the Track Record Period. The fluctuation of our gross profit margin for projects we acted as main contractor was mainly due to the fact that our gross profit margin for projects we acted as main contractor slightly decreased compared with the year ended December 31, 2020 due to the increase in the raw material price and the increase in labor costs for the year ended December 31, 2021. Furthermore, for the six months ended June 30, 2023, we recorded a gross profit margin of 13.2%, which was higher than that for each of the three years ended December 31, 2022 and the corresponding period in 2022. Such increase was mainly due to the fact that some of the major projects in our specialized auxiliary construction segment recorded higher gross profit margin, including the construction project of a 50,000 ton high-purity polycrystalline silicon production plant (i.e. Project SAC-30), which was our largest project during the six months ended June 30, 2023 in terms of revenue with revenue contribution of 16.9% to our revenue for the specialized auxiliary construction segment. Such project had a gross profit margin of 17.4%, which was 1.8 percentage points higher than the overall gross profit margin of our specialized auxiliary construction segment for the six months ended June 30, 2022, thereby contributing to the increase in our overall gross profit margin for the six months ended June 30, 2023.

For the three years ended December 31, 2022 and the six months ended June 30, 2022 and 2023, our gross profit of subcontractor for EPC project was RMB24.1 million, RMB49.0 million, RMB93.3 million, RMB46.8 million and RMB32.4 million respectively. Our gross profit margin for EPC projects under which we served as a subcontractor fluctuated between 7.1% and 14.7% during the Track Record Period. The fluctuation of our gross profit margin for projects we acted as subcontractors was mainly attributable to the fact that we undertook several specialized industrial construction projects which required higher technical input, thus we can charge our customers at higher price with higher profit margin, thereby leading to a higher overall gross profit margin for the year ended December 31,2020. For the six months ended June 30, 2023, we recorded a gross profit margin of 7.1%, which was lower than that for each of the three years ended December 31, 2022 and the corresponding period in 2022. Such decrease was mainly due to the fact that during the six months ended June 30, 2023, several of our mechanical and electrical installation construction projects on the residential building generated lower gross profit margin due to those construction projects required low technical skills only, thereby leading to a decrease in our overall gross profit margin for the six months ended June 30, 2023.

For the year ended December 31, 2021 comparing with the year ended December 31, 2020

Our gross profit of PPP projects for the year ended December 31, 2021 decreased by RMB101.6 million from RMB359.3 million to RMB257.7 million when comparing with that for the year ended December 31, 2020, which was primarily due to the decrease in construction revenue derived from PPP projects of the specialized auxiliary construction segment by RMB203.4 million and was partially offset by the increase in interest income by RMB63.1 million, and increase in gross profit generated from operation of PPP projects by RMB8.3 million as there were three projects completed in 2020 and entered into the operation stage (i.e. the PPP Project of "Five Roads and One River" Project in the Gaoping City (which was completed in May 2020), the PPP Project of Two Roads and Three Streets Widening and Reconstruction Project in Huguan County (the "**Huguan PPP Project**") and the PPP Project of Underground Comprehensive Pipe Gallery Project in Xiyang Economic and Technological Development Zone, Xiyang County, Jinzhong City ("the **Xiyang PPP Project**"), both of which were completed in December 2020).

Our gross profit margin for PPP projects was 35.4% for the year ended December 31, 2020 and remained stable with a slightly increase by 0.3 percentage point to 35.7% for the year ended December 31, 2021, which is resulted from the combined effect of (i) the increase in proportion of interest income of PPP projects to the gross profit generated from PPP projects from 21.7% for the year ended December 31, 2020 to 54.7% for the year ended December 31, 2021. As the gross profit margin for interest income from PPP projects was 100%, the increase in proportion of gross profit derived from interest income will drive up the overall gross profit margin; and (ii) the decrease in the gross profit margin of our construction of PPP projects from

31.1% for 2020 to 19.0% for 2021. The decrease in our gross profit margin for construction of PPP projects was primarily attributable to the decrease in gross profit margin of construction of our PPP projects of the specialized auxiliary construction segment from 38.0% for 2020 to 16.6% for 2021; and the decrease in gross profit margin of our PPP projects of the other construction segment from 21.6% for 2020 to 6.3% for 2021. The fluctuation in the gross profit margin in the specialized auxiliary construction segment was mainly caused by the fluctuation in the gross profit margin of the Huguan PPP Project, which decreased from 65.7% for the year ended December 31, 2020 and further decreased to 28.2% for the year ended December 31, 2021. The high profit margin derived from such project for 2020 was because we were requested to conduct additional construction on the Huguan PPP project, which some ground works for the additional construction work had been completed under the original scope. Accordingly, we managed to realize cost saving measures while conducting such added construction that in turn enhanced our profit margin for 2020. While without the aforementioned effect, our profit margin for the 2021 returned to the normal level, thereby causing a decrease in our gross profit margin for the segment.

For the year ended December 31, 2022 comparing with the year ended December 31, 2021

Our gross profit of PPP projects for the year ended December 31, 2022 has slightly decreased by RMB8.8 million when comparing with that of 2021, which was primarily due to the decrease in gross profit generated from the construction of PPP project, in particular that from the specialized industrial construction segment, which decreased by RMB32.7 million from RMB48.3 million for the year ended December 31, 2021 to RMB15.6 million for the year ended December 31, 2022 as a result of the completion of construction of several PPP projects, including the PPP Project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County (the "**Xinjiang Fenhe PPP Project**") and the theatre portion of the PPP Project of Swimming Pool and Meixing Theatre of Qinshui County in Jincheng City Shanxi Province (the "**Jincheng PPP Project**").

Our gross profit margin has increased from 35.7% for 2021 to 52.9% for 2022, such increase was primarily attributable to (i) the increase in gross profit margin of our construction of PPP projects from 19.0% to 32.1%; and (ii) the increase in proportion of gross profit derived from non-construction of PPP projects, which has a relatively higher gross profit margin, from 62.8% to 69.9% as more of our PPP projects has entered the operation stage.

The substantial increase in the gross profit margin of construction of our PPP projects from 19.0% for the year ended December 31, 2021 to 32.1% for the year ended December 31, 2022 was resulted from the combined effect of (i) the fluctuation in gross profit margin in several PPP projects of our specialized industrial construction segment; (ii) the fluctuation of the gross profit margin in the Xiyang PPP Project from the specialized auxiliary construction segment; and (iii) the increase in gross profit margin of construction of our PPP projects of the specialized auxiliary construction segment and other construction segment with the commencement of construction of the PPP project of Quality Improvement Project (New Party School, Qinshui East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province (the "**Qinshui PPP Project**") during the year ended December 31, 2022.

Our gross profit margin of PPP projects of the specialized industrial construction segment was mainly affected by the fluctuations in the gross profit margin of the Xinjiang Fenhe PPP Project, the PPP Project of the Photovoltaic Industry Incubation and Entrepreneurship Base of the People's Government of Huangnian Town, a suburb of Changzhi City (the "**Huangnian PPP Project**") and the PPP Project for Small Water Network Ancillary Works in Jiexiu City ("**Jiexiu PPP Project**").

The gross profit margin of Xinjiang Fenhe PPP project increased from 14.1% for the year ended December 31, 2021 to 71.6% for the year ended December 31, 2022, which was mainly due to provision made for the flood in Xinjiang City in October 2021. There was a flood in Xinjiang City in October 2021 which affected the Xinjiang Fenhe PPP Project and resulted in additional cost to be incurred in such project. Accordingly, a provision was made in respect of the estimated additional costs incurred. An assessment of the actual costs of the project was subsequently conducted in 2022 and it was agreed between the relevant government authority to bear an additional cost of approximately RMB11.4 million incurred by us due to the flood, which resulted in an increase in our revenue recognized from the Xinjiang Fenhe PPP Project during the year ended December 31, 2022, thereby causing an increase in the gross profit margin for the year ended December 31, 2022.

As for the Huangnian PPP project, there was a reassessment of the unit price of components under this project during the second half of 2022. Such reassessment has led to a decrease in our gross profit by RMB4.5 million, which in turn, affected the gross profit margin for the relevant segment accordingly.

For the Jiexiu PPP Project, our gross profit margin decreased from 34.7% for the year ended December 31, 2021 to 11.1% for the year ended December 31, 2022. Such decrease was mainly due to the increase in actual cost of raw materials (i.e. information technology facilities) when compared with that of the budgeted cost. Such decrease in the gross profit margin has in turn netted off the effect of the Xinjiang Fenhe PPP Project and the Huangnian PPP Project in improving the gross profit margin for our specialized industrial construction segment, and accordingly, our gross profit margin of the specialized industrial construction segment recorded a slight decrease from 29.6% to 29.3%.

Our gross profit margin for construction of PPP projects of the specialized auxiliary construction segment increased from 16.6% for the year ended December 31, 2021 to 49.4% for the year ended December 31, 2022, which is primarily attributable to the fluctuation in the gross profit margin in the Xiyang PPP Project and commencement of the Qinshui-East Link Traffic Hub portion of the Qinshui PPP Project. For the Xiyang PPP Project, our gross profit margin increased for the year ended December 31, 2022 which is primarily caused by, inter alia, adjustment in our cost and revenue at the closing audit, and in particular, the transfer of additional costs incurred of approximately RMB11.5 million to our customers in accordance with pricing adjustment mechanism as stipulated in the contract we entered into with the government authority of Xiyang County in respect of the Xiyang PPP Contract. The actual purchase price of a concrete component, one of the major raw materials of the Xiyang PPP Project, has increased over the construction period as compared with the estimated price upon signing of the Xiyang PPP Contract. Construction of the Xiyang PPP Project was completed in December 2020 and the relevant cost and revenue had been recognized during the relevant financial period in accordance with the construction progress. Subsequently, an adjustment of the consideration under the Xiyang PPP Project was made and agreed between the government authority of the Xiyang County and us pursuant to the final audit during the year ended December 31, 2022. Accordingly, we have recognized additional revenue of approximately RMB11.5 million during year ended December 31, 2022 as we transferred the additional cost incurred due to the increase in price of the concrete component to our customer. Our cost incurred was further adjusted downwards by approximately RMB6.8 million at the final audit due to a reduction in our payment to subcontractors due to their substandard performance with the price adjustment mechanism. In addition, at the final audit, downward adjustment on both our revenue and cost were made respectively in the sum of RMB21.5 million and RMB20.4 million as a result of alteration in construction design, cancellation of certain part of the construction and a change of construction contractor of part of the construction work, which the contractor taking over and beared the construction cost of that part of the construction incurred by us. Accordingly, the reversal in costs has resulted in recognition of a negative cost for the project and our segmental results for specialized auxiliary construction for the year ended December 31, 2022. The net effect of such negative cost was that the net percentage decrease in our cost outweigh the decrease of our revenue, thereby further improved our overall gross profit margin for construction of PPP projects for the year ended December 31, 2022.

In addition, the Qinshui-East Link Traffic Hub portion of the Qinshui PPP Project has achieved substantive construction progress, which we have recognized gross profit of RMB24.2 million with a gross profit margin of 26.6%, which has significantly contributed to the increase in our gross profit margin of our specialized auxiliary construction segment for PPP projects.

Our gross profit margin for construction of PPP projects of the other construction segment increased from 6.3% for the year ended December 31, 2021 to 14.6% for the year ended December 31, 2022. Such increase was mainly attributable to the construction of new party school portion of the Qinshui PPP Project has achieved substantive construction progress, which we have recognized gross profit of RMB14.2 million with a gross profit margin of 20.9%, which was significantly higher than the gross profit margin of 6.3% of PPP projects of the other construction segment for the year ended December 31, 2021, thereby contributing to the increase in our gross profit margin for this segment.

For the six months ended June 30, 2023 comparing with the six months ended June 30, 2022

Our gross profit of PPP projects for the six months ended June 30, 2023 was RMB127.6 million, representing a decrease in the sum of RMB1.8 million when comparing with the corresponding period in 2022 and a period-on-period decrease of 1.4%. Such decrease was primarily due to the decrease in gross profit from our construction income of PPP project by RMB10.3 million from RMB42.8 million for the six months ended June 30, 2022 to RMB32.5 million for the six months ended June 30, 2023, representing a period-on-period decrease of 24.0%. In particular, our gross profit of our construction income of PPP project of the specialized industrial construction segment has decreased by RMB14.9 million from RMB18.9 million for the six months ended June 30, 2022 to RMB4.0 million, representing a period-on-period decrease of 78.8%.

Our gross profit margin of PPP projects for the six months ended June 30, 2023 has decreased by 31.9% when comparing with that for the six months ended June 30, 2022. Such decrease was primarily due to the decrease in our gross profit margin in construction of PPP projects from 67.1% for the six months ended June 30, 2022 to 17.0% for the six months ended June 30, 2023, in particular for PPP projects of the specialized industrial construction and specialized auxiliary construction segments, which was partially offset by the increase in proportion of our non-construction PPP income from 66.9% for the six months ended June 30, 2022 to 74.5% for the six months ended June 30, 2023, the gross profit margin of which was generally a higher.

Our gross profit margin for construction income derived from PPP projects for the six months ended June 30, 2022 was exceptionally high due to exceptional fluctuations in several of our PPP projects caused by completion-audit concluded during the six months ended June 30, 2022. When comparing the gross profit margin of the construction income of PPP projects for the six months ended June 30, 2023 with that for each of the three years ended December 31, 2022, gross profit margin of the construction income of PPP projects for the six months ended June 30, 2023 was relatively lower. This was attributable to the decrease in the gross profit margin of PPP projects of the specialized auxiliary construction segment. In particular, our gross profit margin for the PPP Project of (Fourth) Sewage Treatment Plant and Supporting Pipe Network Project of New Town in North of Linfen City was 6.9%, thereby lowered our overall gross profit margin for PPP projects of the specialized auxiliary construction segment.

Other income and gains

Our other income and gains mainly includes interest income from bank and loans to associates, government grants, gain on disposal of subsidiaries and gain on disposal of assets of disposal group classified as held for sale, etc. Among them, government grants refer to non-recurring incentives and/or subsidies related to production and operation in respect of high and new technology development, employee benefits, employee protection, and businesses promoted under relevant government policies. The requirements and conditions for the eligibility of such grants are, among others, achieving the high and new technology development qualification, successful listing of a subsidiary of the Company on NEEQ and connected with the level of input to research and development etc, and which fluctuates mainly due to changes in government policies.

The following table sets forth a breakdown of our other income and gains for the years/periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Other income and gains, net					
Government grants	7,281	3,804	2,062	199	4,126
Interest income	38,984	24,146	14,101	6,664	7,657
Non-operating income	1,808	134	433	–	17
Dividend income from financial assets measured at FVOCI	330	319	–	–	86
Gain on disposal of subsidiaries	3,662	9,093	–	–	–
Gain on disposal of investments in associates	–	5,506	–	–	–
Gain on disposal of financial assets measured at FVOCI	–	2,441	–	–	–
Gain on disposal of property, plant and equipment, net	216	131	4,170	2,625	1,316
Gains on disposal of assets of disposal group classified as held for sale	68,138	–	–	–	–
Total	120,419	45,574	20,766	9,488	13,202

Change in fair value of investment properties

Our change in fair value of investment properties were RMB6.3 million, RMB0.8 million, RMB2.4 million and RMB0.1 million for the years ended December 31, 2020 and 2021 and 2022 and the six months ended June 30, 2023, respectively. Such fluctuation is mainly because our investment properties are evaluated annually based on market conditions in the corresponding areas, and the change in fair value reflects the present property value.

Selling and distribution expenses

Our selling and distribution expenses principally consist of sales and transportation fees of LNG, employee compensation, travel expenses, depreciation expenses, advertising fees and others. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our selling and distribution expenses amounted RMB0.4 million, RMB1.0 million, RMB2.1 million and RMB0.7 million, respectively.

Administrative and other operating expenses

Our administrative and other operating expenses consist principally of research and development costs, employee benefits expenses, training and consulting fees, depreciation and amortization and office expenses. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our administrative and other operating expenses amounted RMB846.2 million, RMB1,097.8 million, RMB1,190.9 million and RMB452.1 million, respectively. The table below sets forth a breakdown of the major components of our administrative and other operating expenses for the years/periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Research and development costs	427,327	562,038	678,720	262,220	185,266
Employee benefits expenses	240,362	322,145	290,711	139,772	168,270
Training and consulting fees	28,897	35,521	46,545	14,838	31,567
Depreciation and amortization	14,609	19,463	19,247	9,826	9,231
Office expenses	22,783	17,331	23,753	10,181	15,440
Traveling and transportation expense	17,212	17,096	7,544	2,947	4,877
Finance charges	3,912	2,164	6,851	3,958	3,780
Provision for expected credit losses on contract assets	2,453	19,427	42,986	8,482	3,472
Provision for expected credit losses on receivables under service concession arrangements	1,265	12,833	15,373	2,584	1,369
Other expenses	87,372	89,735	59,188	24,083	28,847
Total	846,192	1,097,753	1,190,918	478,891	452,119

Research and development costs

Our research and development costs for the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023 amounted to RMB427.3 million, RMB562.0 million, RMB678.7 million and RMB185.3 million, respectively. The increase during the three years ended December 31, 2022 was mainly due to the growth of in number of our research and development projects of 161 projects in 2020, 166 projects in 2021 and 222 projects in 2022. Due to our effective cost control measurees, our research and development costs substantially decreased from RMB262.2 million for the six months ended June 30, 2022 to RMB185.3 million for the six months ended June 30, 2023. During the six months ended June 30, 2023, we have a total of 205 research and development projects. Our research and development area covers winder power engineering technology, photovoltaic construction technology and assembly building construction technology, etc.

Employee benefits expenses

Employee benefits expenses represent the cost of salaries, bonuses, other benefits and social insurance paid by us for our employees. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our employee benefits expenses amounted to RMB240.4 million, RMB322.1 million, RMB290.7 million and RMB168.3 million, respectively. Such expenses have increased during the year ended December 31, 2021 when compared to that for the year ended December 31, 2020 was mainly due to increase in the number of employees and our policy of continuously increasing compensation levels to motivate our employees. Our employee benefits expenses decreased during the year ended December 31, 2022 when compared to that of 2021 was primarily due to our effort in streamlining our corporate structure. For the six months ended June 30, 2023, our employee benefits expenses increased by RMB28.5 million when comparing with that for the six months ended June 30, 2022, representing a period-on-period increase of 20.4%. Such increase is primarily due to revision of employee benefit package as part of our employee motivation policy.

Training and consulting fees

Training and consulting fees include training fees, which are fees paid for employee training and external seminars, and consulting fees, which are consulting fees paid to the third-party institutions in the pre-project stage. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our training and consulting fees amounted to RMB28.9 million, RMB35.5 million, RMB46.5 million and RMB31.6 million, respectively.

Depreciation and amortization

Depreciation represents depreciation of right-of-use assets, building and structure and office equipment. Amortization refers to amortization of intangible assets such as patents. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our depreciation and amortization amounted to RMB14.6 million, RMB19.5 million, RMB19.2 million and RMB9.2 million, respectively.

Office expenses

Office expenses refer to books and newspapers, stationery printing, telephone, internet communication and other expenses. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our office expenses amounted to RMB22.8 million, RMB17.3 million, RMB23.8 million and RMB15.4 million, respectively.

Other expenses

Other expenses refer to other expenses such as insurance premium, repair and maintenance costs, utilities, leasing costs, sewage costs, safety costs, intergroup service costs, meeting costs etc., which are consolidated into other expenses due to the small percentage of each breakdown.

Finance costs

Our finance costs mainly represent interest on bank borrowings and other borrowings, interest on lease liabilities and financial charge on factoring. Change in finance costs is mainly attributable to the increased interest rate in 2021, followed by a stable interest rate in 2022.

According to Frost & Sullivan, it is an industry practice that some projects require staged capital investment, and our granted credit keeps increasing as we strengthen cooperation with financial institutions, which leads to the continuous increase in scale of borrowing by financial institutions.

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our finance costs were RMB293.8 million, RMB392.6 million, RMB397.2 million and RMB179.2 million, respectively.

The table below sets forth the components of our finance costs for the periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	2021	2022	2022	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Interest on bank borrowings and other borrowings	296,208	391,050	394,134	198,775	182,366
Interest on lease liabilities	3,392	3,552	3,733	1,505	1,924
Financial charge on factoring	–	–	9,534	–	–
Actuarial interest adjustment	–	–	158	–	490
Less: capitalized interest	(5,845)	(1,992)	(10,351)	(4,549)	(5,600)
Total finance costs	293,755	392,610	397,208	195,731	179,180

Provision for expected credit losses on financial assets

Our provision for expected credit losses on financial assets represent expected credit losses on our trade receivables and bills receivable and deposits and other receivables. During the Track Record Period, we apply an internal expected credit loss model (the "**ECL Model**") developed by the management of the Group in calculating expected credit losses and recognizes provision for expected credit losses. The expected credit loss rate reflects the recoverability and historical settlement results on trade receivables and bills receivable and deposits and other receivables at the end of each reporting period without the use of hindsight. Any reduction on or addition to the expected credit losses on our trade receivables and bill receivables and deposits and other receivables at the end of each year is credited or charged to profit or loss. For details of the ECL Model, please refer to "trade receivables and bills receivable" in this section. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, we had expected credit loss provision on financial assets of RMB57.8 million, RMB80.6 million, RMB60.0 million and RMB44.1 million, respectively.

Share of loss/profit of associates

Our major associated companies are principally engaged in the exploitation and utilization of renewable energy sources, technology consulting for industrial installation engineering, steel structure engineering construction and technological development and consulting of energy-saving products. Our share of loss/profit of associates are the loss or profit attributable to us from our associates pursuant to our equity interests in such associates. An associate is an entity over which we have significant influence to participate in financial and operating policy decisions, but not control or joint control. For years ended December 31, 2020 and 2021, our share of loss of associates were respectively RMB2.5 million and RMB5.8 million; whereas we recorded a share of profit of associates of RMB5.5 million for the year ended December 31, 2022. For the six months ended June 30, 2023, we recorded a share of profit of associates of RMB2.3 million.

Profit before tax

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our profit before tax was RMB354.2 million, RMB212.2 million, RMB212.8 million and RMB120.9 million, respectively.

Income tax expense

Our income tax expense for a given period includes payments and provisions made for corporate income tax and land appreciation tax. The following table sets forth a breakdown of our tax expenses for the years/periods indicated.

	For the year ended December 31,			**For the six months ended June 30,**	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
				(unaudited)	
Current income tax	54,288	39,257	52,568	27,369	19,916
Over provision in prior years	(821)	–	–	–	–
Deferred income tax	18,481	(15,136)	(40,222)	(976)	(9,224)
Income tax expense	**71,948**	**24,121**	**12,346**	**26,393**	**10,692**

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our income tax expense was RMB71.9 million, RMB24.1 million, RMB12.3 million and RMB10.7 million, respectively. Our income tax expense decreased for the year ended December 31, 2022 as compared to the year ended December 31, 2021, which was mainly attributable to increase in revenue contribution from the Company which is eligible to pay enterprise income tax at a preferential rate of 15% and increase in research and development cost that enjoyed additional tax deduction as announced by the Ministry of Finance of the PRC and partly offset by increase in deferred income tax as a result of an increase in the temporary difference from PPP interest expense recognised under PPP Projects in 2022.

During the Track Record Period, our residential properties appreciation values do not exceed 20% of the sum of the total deductible items and hence no land appreciation tax is provided.

During the Track Record Period and up to the Latest Practicable Date, we have no material disputes or pending matters with the relevant tax authorities.

Profit for the year/period

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our profit for the year were RMB282.2 million, RMB188.0 million, RMB200.4 million and RMB110.2 million, respectively, and our net profit margin for the corresponding year/period were 2.8%, 1.4%, 1.6% and 2.1%, respectively.

Profit attributable to non-controlling interests

Non-controlling interests represent interests in subsidiaries that are not directly or indirectly attributable to the Company. For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, our profit attributable to non-controlling interests were RMB65.9 million, RMB63.2 million, RMB49.6 million and RMB25.8 million, respectively.

COMPARISON OF RESULTS OF OPERATIONS

Six months ended June 30, 2022 compared to six months ended June 30, 2023

Revenue

Our total revenue decreased by 8.7% from RMB5,747.9 million for the six months ended June 30, 2022 to RMB5,248.0 million for the six months ended June 30, 2023. Such decrease was mainly due to the decrease in our revenue derived from our EPC projects of the specialized industrial construction segment, specialized auxiliary construction segment and other construction segment.

Specialized industrial construction

Segmental revenue of our specialized industrial construction decreased by RMB254.5 million, representing a period-on-period decrease of 8.0% from RMB3,187.1 million for the six months ended June 30, 2022 to RMB2,932.6 million for the six months ended June 30, 2023. Such decrease was mainly attributable to (i) the decrease in our construction revenue derived from PPP projects of the specialized industrial construction segment from RMB46.7 million for the six months ended June 30, 2022 to RMB16.8 million for the six months ended June 30, 2023, representing a period-on-period decrease of 64.0%, mainly attributable to the construction of the PPP Project for Small Water Network Ancillary Works in Jiexiu City was approaching completion, which led to a decrease in construction income from PPP projects;

and (ii) the decrease in our revenue from EPC projects of the specialized industrial construction segment, in particular from our power engineering business, of which our revenue derived therefrom decreased from RMB1,987.6 million for the six months ended June 30, 2022 to RMB1,674.9 million for the six months ended June 30, 2023, representing a period-on-period decrease of 15.7%. Such decrease is primarily attributable to the absence of comparable large-scale construction projects during the six months ended June 30, 2023 when comparing with that in the corresponding period in 2022, such as the 350MW low calorific value coal power generation project in Hequ (i.e. Project SIC-27) and the Guosheng 100MW Photovoltaic Power Project in Huozhou, which we have recognized RMB491.5 million and RMB286.4 million respectively thereunder during the six months ended June 30, 2022; whereas the largest EPC project in the specialized industrial construction segment for the six months ended June 30, 2023 was a power grid construction project in Lianijan, Guangdong (i.e. Project SIC-40), under which we have recognized revenue of RMB283.1 million during the six months ended June 30, 2023. On the other hand, due to the delay in several sizable projects during the six months ended June 30, 2023, including several wind power projects and photovoltaic power farm construction projects arising from, inter alia, the delay in application procedures for requisite permits to commence construction to be obtained by project owners, change in design of construction layout and etc..

Specialized auxiliary construction

Revenue from our specialized auxiliary construction segment decreased by RMB189.9 million, representing a period-on-period decrease of 17.1%, from RMB1,111.4 million for the six months ended June 30, 2022 to RMB921.5 million for the six months ended June 30, 2023. Such decrease was mainly attributable to the decrease in our revenue from EPC projects of the specialized auxiliary construction segment from RMB1,107.4 million for the six months ended June 30, 2022 to RMB799.6 million for the six months ended June 30, 2023, in particular our (i) urban heating engineering business, which our revenue derived therefrom decreased by RMB172.9 million during the six months ended June 30, 2023 when comparing with the corresponding period in 2022 and (ii) standardized workshop engineering business, which our revenue derived therefrom increased from RMB428.0 million for the six months ended June 30, 2022 to RMB477.7 million for the six months ended June 30, 2023, representing a period-on-period decrease of 11.6%. Such decrease was partially offset by our construction income from PPP projects of specialized auxiliary construction segment. Our construction income from PPP projects of specialized auxiliary construction segment increased from RMB3.9 million for the six months ended June 30, 2022 to RMB121.9 million for the six months ended June 30, 2023, representing a period-on-period increase of 2,999.0%. Such increase was attributable to the commencement of construction of the PPP project of Infrastructure Improvement in Weibo Equipment Manufacturing Starting Area of Yinying Industrial Park in Yangquan Economic and Technological Development Zone and substantive construction progress of the Qinshui-East Link Traffic Hub portion of the Qinshui PPP Project during the six months ended June 30, 2023.

Other construction

Revenue from our other construction segment decreased by RMB143.4 million, representing a period-on-period decrease of 15.8% from RMB909.0 million for the six months ended June 30, 2022 to RMB765.5 million for the six months ended June 30, 2023. Such decrease was mainly attributable to the decrease in our revenue from EPC projects of the other construction segment from RMB895.8 million for the six months ended June 30, 2022 to RMB712.8 million for the six months ended June 30, 2023, representing a period-on-period decrease of 20.4% and was partially offset by the increase in our construction income from PPP projects of the other construction segment. The decrease in our revenue derived from EPC projects of the other construction segment was primarily attributable to the decrease in our electronic and intelligent engineering business, under which our revenue derived therefrom has decreased by 97.7% from RMB110.6 million for the six months ended June 30, 2022 to RMB2.5 million for the six months ended June 30, 2023, and that from our prefabricated construction business, of which our revenue derived therefrom decreased from RMB197.5 million for the six months ended June 30, 2022 to RMB112.7 million for the six months ended June 30, 2023, representing a period-on-period decrease of 42.9%. On the other hand, our construction income from PPP projects of other construction segment increased from RMB13.2 million for the six months ended June 30, 2022 to RMB52.7 million for the six months ended June 30, 2023, representing a period-on-period increase of 300.6%. Such increase was attributable to the substantive construction progress in the New Party School portion of the PPP project of Quality Improvement Project (New Party School, Qinshui- East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province during the six months ended June 30, 2023.

Non-construction business

Revenue from our non-construction business segment increased by RMB87.9 million, representing a period-on-period increase of 16.3%, from RMB540.6 million for the six months ended June 30, 2022 to RMB628.4 million for the six months ended June 30, 2023. Such increase was mainly attributable to the increase in our non-construction income from PPP projects, comprising (i) the increase in our interest income from PPP projects from RMB69.9 million for the six months ended June 30, 2022 to RMB78.6 million for the six months ended June 30, 2023, representing period-on-period increase of 12.5%; and (ii) the increase in our operating fee income of PPP projects from RMB47.5 million for the six months ended June 30, 2022 to RMB52.8 million for the six months ended June 30, 2023, representing period-on-period increase of 11.2%. The increase in our non-construction income from PPP projects was primarily attributable to the fact that we have one additional PPP project entering into the operation stage during the six months ended June 30, 2023. In addition, we have recorded increase in our urban heating technical services income of 42.7% as a result of the completion in construction of an additional heating supply projects in the second half of 2022 and increase in revenue from sales of LNG of 13.6% during the six months ended June 30, 2023 when comparing with the corresponding period in 2022, resulting in an increase in our overall non-construction income.

Cost of sales, gross profit and gross profit margin

Our cost of sales decreased by RMB443.6 million, representing a period-on-period decrease of 9.0%, from RMB4,905.7 million for the six months ended June 30, 2022 to RMB4,462.0 million for the six months ended June 30, 2023. Such decrease was mainly attributable to the overall decrease in our cost incurred in our specialized industrial construction segment, specialized auxiliary construction segment and other construction segment with period-on-period decrease of 7.3%, 18.2% and 19.4%, respectively. Such decrease in our cost of sales was generally in line with the decrease in revenue in the same period. On the other hand, the decrease in our overall cost was partially offset by the increase in cost of our non-construction business, which was primarily driven by the increase in our cost for our urban heating technical service business.

For the six months ended June 30, 2022 and 2023, our gross profit was RMB842.3 million and RMB786.0 million, and our gross profit margin was 14.7% and 15.0%, respectively, which remained relatively stable.

Specialized industrial construction

The cost of sales of our specialized industrial construction decreased by RMB205.4 million, representing a period-on-period decrease of 7.3%, from RMB2,807.5 million for the six months ended June 30, 2022 to RMB2,602.1 million for the six months ended June 30, 2023. The decrease in cost of sales of our specialized industrial construction segment was mainly due to the fact that during the six months ended June 30, 2022, the Group undertook construction projects of larger scale such as the 350MW low calorific value coal power generation EPC project in Hequ (河曲350MW低熱值煤發電EPC總承包項目) (i.e. Project SIC-27), which attained substantive progress in the first half of 2022 and incurred more costs on equipment purchases. The decrease in the cost of specialized industrial construction was mainly attributable to the absence of large-scale projects of with similar scale during the six months ended June 30, 2023 due to the delay in several sizable projects including several wind power projects and photovoltaic power farm construction projects arising from, inter alia, the delay in application procedures for requisite permits to commence construction, change in design of construction layout and etc..

For the six months ended June 30, 2022 and 2023, gross profit of our specialized industrial construction segment was RMB379.6 million and RMB330.5 million, and segment gross profit margin was 11.9% and 11.3%, respectively, which remained relatively stable.

Specialized auxiliary construction

The cost of sales of our specialized auxiliary construction decreased by RMB170.8 million, representing a period-on-period decrease of 18.2% from RMB937.6 million for the six months ended June 30, 2022 to RMB766.8 million for the six months ended June 30, 2023. Such decrease was mainly attributable to the reduction in the number of large-scale projects undertaken by the Group during the six months ended June 30, 2023 when comparing with the corresponding period in 2022. During the six months ended June 30, 2023, the Group undertook 15 projects under the specialized auxiliary construction segment with costs of more than RMB10 million as compared to that of 25 in the corresponding period in 2022. Accordingly, our cost incurred for specialized auxiliary construction segment decreased during the six months ended June 30, 2023.

For the six months ended June 30, 2022 and 2023, gross profit of our specialized auxiliary construction segment were RMB173.8 million and RMB154.7 million, and segment gross profit margin was 15.6% and 16.8%, respectively. Particularly, the gross profit margins for some of the major projects in our specialized auxiliary construction segment recorded higher gross profit margin, including a construction project of a 50,000 ton high-purity polycrystalline silicon production plant (i.e. Project SAC-30), the project recorded highest revenue during the six months ended June 30, 2023 which had a revenue contribution of 16.9% to our revenue for the specialized auxiliary construction segment. Such project had a gross profit margin of 17.4%, which was 1.8 percentage points higher than the overall gross profit margin of our specialized auxiliary construction segment for the six months ended June 30, 2022, thereby contributing to the increase in our overall gross profit margin of our specialized auxiliary construction segment for the six months ended June 30, 2023.

Other construction

The costs of sales from our other construction decreased by RMB160.1 million, representing a period-on-period decrease of 19.4% from RMB823.5 million for the six months ended June 30, 2022 to RMB663.3 million for the six months ended June 30, 2023. Such decrease was mainly attributable to the decrease in construction volume in our other construction segment as a result of the reduction in the number of large-scale projects undertaken by the Company during the six months ended June 30, 2023 when comparing with the corresponding period in 2022. During the six months ended June 30, 2023, the Group undertook 17 projects under the other construction segment with costs of more than RMB10 million as compared to that of 26 projects in the corresponding period in 2022.

For the six months ended June 30, 2022 and 2023, gross profit from our other construction segment were RMB85.5 million and RMB102.2 million, respectively, while the gross profit margin were 9.4% and 13.3%, respectively. The increase in our gross profit margin is mainly due to the increase in our gross profit margin for SECH Building projects, of which we recorded a negative gross profit margin in the six months ended June 30, 2022 due to the effect of completion audit. Our gross profit margin from the SECH Buildings resumed to normal level during the six months ended June 30, 2023, thereby contributing to the increase in overall gross profit margin in our other construction segment.

Non-construction business

The cost of sales from our non-construction business increased by RMB92.7 million, representing a period-on-period increase of 27.5%, from RMB337.1 million for the six months ended June 30, 2022 to RMB429.8 million for the six months ended June 30, 2023. Such increase was generally in line with the increase in revenue of the non-construction business segment during the period. Such increase is primarily attributable to the increase in costs of our urban heating technical service business.

For the six months ended June 30, 2022 and 2023, gross profits from our non-construction business were RMB203.5 million and RMB198.7 million, respectively, while the gross profit margin were 37.6% and 31.6%, respectively. The decrease in gross profit margin is mainly due to the decrease in gross profit margin for our sales of LNG, which decreased from 19.6% for the six months ended June 30, 2022 to 5.1% for the six months ended June 30, 2023. Since 2023, the price of LNG declined and due to the time lag between the timing of our procurement of LNG and timing of sales, the decline in the price of LNG had affected our gross profit margin.

Other income and gains

Our other income and gains increased by 38.9% from RMB9.5 million for the six months ended June 30, 2022 to RMB13.2 million for the six months ended June 30, 2023. The increase was mainly attributable to the increase in (i) the government grants we received increased from RMB0.2 million for the six months ended June 30, 2022 to RMB4.1 million for the six months ended June 30, 2023; and (ii) our interest income from RMB6.7 million for the six months ended June 30, 2022 to RMB7.7 million for the six months ended June 30, 2023.

Selling and distribution expenses

Our selling and distribution expenses decreased by 37.4% from RMB1.2 million for the six months ended June 30, 2022 to RMB0.7 million for the six months ended June 30, 2023. The decrease was mainly attributable to the decrease in our marketing expenses.

Administrative expenses and other operating expenses

Our administrative and other operating expenses slightly decreased by 5.6% from RMB478.9 million for the six months ended June 30, 2022 to RMB452.1 million for the six months ended June 30, 2023, mainly due to the decrease in our research and development cost from RMB262.2 million for the six months ended June 30, 2022 to RMB185.3 million for the six months ended June 30, 2023, representing a period-on-period decrease of 29.3%, and was partially offset by the increase in our employee benefits expenses, and training and consulting fee. The decrease in our research and development cost was primarily attributable to our cost control measures.

Finance costs

Our finance costs decreased by 8.5% from RMB195.7 million for the six months ended June 30, 2022 to RMB179.2 million for the six months ended June 30, 2023, mainly due to (i) the decrease in loan prime rate in the market from 3.70% in June 2022 to 3.65% in June 2023; and (ii) the repayment of loan throughout the period.

Share of profit of associates

For the six months ended June 30, 2022 and 2023, we recorded share of profit of associates of RMB6.1 million and RMB2.3 million respectively.

Provision for expected credit losses on financial assets

Our provision for expected credit losses on financial assets amounted to RMB14.0 million and RMB44.1 million for the six months ended June 30, 2022 and 2023, respectively, which was mainly attributable to the downward trend of the ageing profile of our trade receivables as of June 30, 2023 when compared with the ageing profile as of December 31, 2022. As such, the addition to the overall expected credit loss allowance to the trade receivables that charged to profit or loss as the provision for expected credit losses on financial assets has increased.

Income tax expense

Our income tax expense decreased by 59.5% from RMB26.4 million for the six months ended June 30, 2022 to RMB10.7 million for the six months ended June 30, 2023, primarily due to the decrease in our profit before tax and an increase in amount of tax losses not recognized for the six months ended June 30, 2023 when comparing with the corresponding period in 2022.

Profit for the period

As a result of the foregoing, our profit for the period decreased by 19.0% from RMB136.2 million for the six months ended June 30, 2022 to RMB110.2 million for the six months ended June 30, 2023.

Year ended December 31, 2021 Compared to year ended December 31, 2022

Revenue

Our total revenue slightly decreased by 3.3% from RMB13,278.4 million for the year ended December 31, 2021 to RMB12,844.8 million for the year ended December 31, 2022. Such decrease was mainly due to the decrease in revenue derived from our specialized auxiliary construction business by RMB1,027.3 million, and partially offset by the increase in revenue derived from our specialized industrial construction business by RMB626.2 million.

Specialized industrial construction

Segment revenue of our specialized industrial construction increased by 9.0% from RMB6,964.9 million for the year ended December 31, 2021 to RMB7,591.1 million for the year ended December 31, 2022. Such increase was mainly attributable to increase in revenue we derived from power engineering constructions and petrochemical engineering constructions undertaken during the period.

Revenue from power engineering increased by 7.3% from RMB4,617.3 million for the year ended December 31, 2021 to RMB4,952.3 million for the year ended December 31, 2022. The increase in revenue derived from power engineering projects is mainly attributable to substantive construction progress of construction projects of larger scale, which include the 350MW low calorific value coal power generation EPC project in Hequ (河曲350MW低熱值煤發電EPC總承包項目) (i.e. Project SIC-27) and the 200MW Wind Power Phase II Project in Gujiao County (古交正溝200MW風電二期總承包項目) (i.e. Project SIC-37).

Revenue from petrochemical engineering increased by 35.1% from RMB1,144.1 million for the year ended December 31, 2021 to RMB1,545.4 million for the year ended December 31, 2022, which is mainly attributable to substantive construction progress in construction projects of larger scale, including a construction project of a high priority polysilicon production plant (i.e. Project SIC-36) and a construction project of a petrochemical styrene plant in Jieyang, Guangdong (i.e. Project SIC-30).

Specialized auxiliary construction

Revenue from our specialized auxiliary construction segment decreased by 32.9% from RMB3,118.3 million for the year ended December 31, 2021 to RMB2,091.1 million for the year ended December 31, 2022. In particular, our revenues derived from construction of PPP projects of specialized auxiliary construction has decreased by RMB157.5 million from RMB252.2 million for the year ended December 31, 2021 to RMB94.7 million for the year ended December 31, 2022, representing a year-on-year decline rate of 62.5%; whereas our revenue derived from EPC projects of the specialized auxiliary construction has decreased by RMB869.7 million from RMB2,866.1 million to RMB1,996.4 million, representing a year-on-year decline rate of 30.3%. Such decrease was mainly due to significant construction progress in certain projects was recognized in 2021, which led to the significant decrease in the revenue of standardized workshop engineering, drainage engineering and water supply engineering in 2022.

The revenue from standardized workshop engineering decreased by 43.3% from RMB1,136.5 million for the year ended December 31, 2021 to RMB644.4 million for the year ended December 31, 2022, which was mainly due to the significant progress of several standardized workshop engineering projects was recognised in 2021, including our construction project in Weilan Valley Prefabricated Building Intelligent Manufacturing Industrial Park (i.e. Project SAC-12) and our construction project of a production plant and outdoor storage yard (i.e. Project SAC-11), thus the number of project with significant progress of project recognized in 2022 for standardized workshop engineering has decreased.

The revenue from water supply engineering decreased by 94.2% from RMB150.8 million for the year ended December 31, 2021 to RMB8.8 million for the year ended December 31, 2022, which was mainly due to the significant progress of relocation construction project of water pipe in Wuhu City (i.e. Project SAC-21) was recognised in 2021 and there is no comparable significant progress of project in 2022 for water supply engineering.

The revenue from drainage engineering decreased by 83.7% from RMB280.4 million for the year ended December 31, 2021 to RMB45.7 million for the year ended December 31, 2022, which was mainly due to the significant progress of Jincheng Qingshan Street Road Project (i.e. Project SAC-19), Dingxiang County Mumahe Street Phase III Project and Jingle Sewage Purification Project was recognised in 2021 and there is no significant progress of project recognised in 2022 for drainage engineering.

Other construction

Revenue from our other construction segment decreased by 9.1% from RMB2,087.3 million for the year ended was December 31, 2021 to RMB1,896.6 million for the year ended December 31, 2022, which was mainly due to the revenue of residential building construction decreased by 47.3% from RMB969.3 million for the year ended December 31, 2021 to RMB510.9 million for the year ended December 31, 2022 and partially offset by the increase in our revenue derived from other construction works in the segment from RMB586.9 million for the year ended December 31, 2021 to RMB980.8 million for the year ended December 31, 2022, representing a year-on-year growth rate of 67.1%. The growth in our other construction works was mainly attributable to revenue generated from commercial building construction, in particular we have recognized a revenue in the sum of RMB124.6 million for a commercial building construction project in Taiyuan, Shanxi (i.e. Project OC-22) and a revenue in the sum of RMB115.0 million for a commercial building construction project in Baodi, Tianjin (i.e. Project OC-34) in 2022.

Non-construction business

Revenue from our non-construction business segment increased by 14.3% from RMB1,107.8 million for the year ended December 31, 2021 to RMB1,266.0 million for the year ended December 31, 2022. Such increase was mainly due to increase in trading revenue by 103.2% from RMB148.0 million for the year ended December 31, 2021 to RMB300.7 million for the year ended December 31, 2022 as a result of increased sales of engineering raw materials, including concrete, wind turbine towers and construction modules. The reason for such increase is that the sales volume of concrete and wind turbine towers has increased when compared to that of 2021.

Cost of sales, gross profit and gross profit margin

Our cost of sales decreased by 4.6% from RMB11,530.4 million for the year ended December 31, 2021 to RMB11,002.8 million for the year ended December 31, 2022. The slight decrease in our cost of sales was generally in line with the slight decrease in revenue in the same year. The fluctuation of our cost of sales is largely dependent on specific project needs. During the year ended December 31, 2022, the majority of our major cost component has decreased, which our raw material costs, labour force costs, machinery utilization costs and other costs have respectively decreased by RMB127.9 million, RMB228.3 million, RMB240.3

million and RMB418.2 million, and was partially offset by the increase in our subcontracting costs by 58.9% from RMB826.4 million for the year ended December 31, 2021 to RMB1,313.4 million for the year ended December 31, 2022.

For the years ended December 31, 2021 and 2022, our gross profit was RMB1,747.9 million and RMB1,842.0 million, and our gross profit margin was 13.2% and 14.3%, respectively, which remained relatively stable.

Specialized industrial construction

The cost of sales of our specialized industrial construction increased by 6.3% from RMB6,282.4 million for the year ended December 31, 2021 to RMB6,680.9 million for the year ended December 31, 2022. The increase in cost of sales from our specialized industrial construction segment was mainly due to the growth of our specialized industrial construction business and the growth rate was generally in line with the increase in our revenue generated from the specialized industrial construction segment.

For the years ended December 31, 2021 and 2022, gross profit of our specialized industrial construction segment was RMB682.5 million and RMB910.2 million, and segment gross profit margin was 9.8% and 12.0%, respectively.

Specialized auxiliary construction

The cost of sales of our specialized auxiliary construction decreased by 33.3% from RMB2,725.5 million for the year ended December 31, 2021 to RMB1,818.0 million for the year ended December 31, 2022. The decrease in cost of sales from our specialized auxiliary construction, mainly due to decrease in line with the 32.9% decrease in revenue derived from specialized auxiliary construction.

For the years ended December 31, 2021 and 2022, gross profit of our specialized auxiliary construction segment was RMB392.8 million and RMB273.1 million, and segment gross profit margin was 12.6% and 13.1%, respectively. Despite specific fluctuations in gross profit margin of certain projects were observed, their effects were netted off and our overall segmental gross profit margin for specialized auxiliary construction segment has remained stable. Particularly, the gross profit margins for urban heating engineering and standardized workshop engineering have increased during the year ended December 31, 2022. Such increase in gross profit margin was mainly due to the fact that our cost of sale has decreased especially for our installation work of an LNG production plant in Inner Mongolia (i.e. Project SAC-4), construction project of comprehensive service area in Shanxi (i.e. Project SAC-17) and installation of steel structures in Taiyuan (i.e. Project SAC-23) and etc., for the year ended December 31, 2022 as compared with that of the year ended December 31, 2021. The decrease in cost of sales was mainly attributable to the decrease in the usage of raw materials due to some of our construction projects have entered into installation stage in 2022 and which was partially off-set by the increase in our subcontracting cost.

Other construction

The costs of sales from our other construction decreased by 13.7% from RMB1,955.9 million for the year ended December 31, 2021 to RMB1,687.3 million for the year ended December 31, 2022. Such decrease was in line with the decrease in revenue derived from this segment.

For the years ended December 31, 2021 and 2022, gross profit from our other construction segment were RMB131.5 million and RMB209.3 million respectively, while the gross profit margin were 6.3% and 11.0%, respectively. The increase in our gross profit margin of our other construction segment was mainly due to increase in gross profit margin of our commercial building construction projects from 9.3% for 2021 to 14.1% for 2022, and increase in gross profit margin of our projects of construction of public buildings from 9.0% for 2021 to 16.2% for 2022.

Non-construction business

The cost of sales from our non-construction business increased by 44.1% from RMB566.7 million for the year ended December 31, 2021 to RMB816.6 million for the year ended December 31, 2022. Such increase was mainly due to the increase in the cost of LNG during the period.

For the years ended December 31, 2021 and 2022, gross profits from our non-construction business were RMB541.2 million and RMB449.4 million, respectively, while the gross profit margin were 48.8% and 35.5%, respectively. The decrease in gross profit margin is mainly due to increase in the cost of LNG, thus resulted in decrease in gross profit and gross profit margin for sales of LNG.

Other income and gains

Our other income and gains decreased by 54.4% from RMB45.6 million for the year ended December 31, 2021 to RMB20.8 million for the year ended December 31, 2022. The decrease was mainly attributable to (i) interest income decreased by 41.5% from RMB24.1 million for the year ended December 31, 2021 to RMB14.1 million for the year ended December 31, 2022, which was due to the decrease in interest received on the principal of borrowings from associates, the principal of which has been repaid in full during the year ended December 31, 2022; and (ii) the absence of gain on disposal of subsidiaries and investments in associates during the year ended December 31, 2022.

Selling and distribution expenses

Our selling and distribution expenses increased by 110.0% from RMB1.0 million for the year ended December 31, 2021 to RMB2.1 million for the year ended December 31, 2022.

Administrative and other operating expenses

Our administrative and other operating expenses increased by 8.5% from RMB1,097.8 million for the year ended December 31, 2021 to RMB1,190.9 million for the year ended December 31, 2022, mainly due to our endeavors to strengthen our research and development efforts and the provision made of RMB10.4 million for the delay in progress in respect of the Australia project; which was partially offset by the decrease in our other expenses by RMB30.5 million, representing a year-on-year decrease of 34.0% as we had a non-recurring office renovation expenses in 2021. Our Group conducted project research and development according to the needs of engineering construction, including 222 R&D projects such as research and application of combined garbage pit heating system technology, research and application of ventilation pipe installation technology under large-span grid frame, research and application of super-high chimney steel inner tube welding technology, resulting in an increase in research and development expenses. For further details of our invention patents, see "Statutory and General Information – B. Further Information about Our Business – 2. Our Material Intellectual Property Rights" in Appendix VI to this document.

Finance costs

Our finance costs recorded a slight increase by 1.2% from RMB392.6 million for the year ended December 31, 2021 to RMB397.2 million for the year ended December 31, 2022. Finance costs were incurred due to certain projects required capital injection by phases and accordingly, led to the increase in the scale of our borrowings and interest expenses. For the year ended December 31, 2022, our Company also incurred financial charge on factoring in the sum of RMB9.5 million, thereby increasing our finance cost. For further details, please refer to the disclosure in the paragraph headed "Continuing Connected Transactions – Financial Services Framework Agreement".

Share of losses/profit of associates

For the year ended December 31, 2021, our share of loss of associates were RMB5.8 million, while for the year ended December 31, 2022, we recorded share of profit of associates of RMB5.5 million, where such share of profit of associate was primarily attributable to the income of long-term equity investment taking into account of our equity interest in the relevant associates.

Provision for expected credit losses on financial assets

Our provision for expected credit loss on financial assets amounted to RMB80.6 million and RMB60.0 million for the years ended December 31, 2021 and 2022, respectively which was mainly attributable to the fact that the aging profile of our trade receivables as of December 31, 2022 was slightly improved when compared with the aging profile as of December 31, 2021. As such, the addition to the overall expected credit loss allowance to the trade receivables that charged to profit or loss as the provision for expected credit losses on financial assets decreased.

Income tax expense

Our income tax expense decreased by 49.0% from RMB24.1 million for the year ended December 31, 2021 to RMB12.3 million for the year ended December 31, 2022, primarily due to the fact that the increase in the revenue contribution from the parent company, which is eligible to pay earned income tax at a preferential rate of 15% and increase in research and development cost that enjoyed additional tax deduction as announced by the Ministry of Finance of the PRC.

Profit for the year

As a result of the foregoing, our profit for the year increased by 6.6% from RMB188.0 million for the year ended December 31, 2021 to RMB200.4 million for the year ended December 31, 2022.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2021

Revenue

Our total revenue increased by 30.8% from RMB10,148.6 million for the year ended December 31, 2020 to RMB13,278.4 million for the year ended December 31, 2021. Such increase was mainly due to increase in revenue from our specialized industrial construction, specialized auxiliary construction and other construction.

Specialized industrial construction

Segment revenue of our specialized industrial construction increased by 28.5% from RMB5,421.6 million for the year ended December 31, 2020 to RMB6,964.9 million for the year ended December 31, 2021. As we had 20 specialized industrial construction projects with recognized revenue over RMB100 million for the year ended December 31, 2021, while we only had eight projects of this size for the year ended December 31, 2020, with representative projects such as the 25MW distributed wind power project in Yuncheng, Shanxi (i.e. Project SIC-19) which recognized revenue of RMB489.6 million in 2021.

Power engineering increased by 19.6% from RMB3,859.7 million for the year ended December 31, 2020 to RMB4,617.3 million for the year ended December 31, 2021. The representative projects include the 25MW distributed wind power project in Yuncheng, Shanxi (i.e. Project SIC-19), photovoltaic bidding power generation project in Shijiazhuang, Hebei (i.e. Project SIC-20).

Petrochemical engineering increased by 110.0% from RMB544.9 million for the year ended December 31, 2020 to RMB1,144.1 million for the year ended December 31, 2021. The representative projects include the caprolactam expansion project in Cangzhou (i.e. Project SIC-29), a comprehensive pipeline corridor project of an industrial ecological park.

Specialized auxiliary construction

Revenue from our specialized auxiliary construction segment increased by 18.1% from RMB2,639.5 million for the year ended December 31, 2020 to RMB3,118.3 million for the year ended December 31, 2021. Such increase was mainly due to increase in revenue from standardized workshop engineering construction projects and water supply engineering construction projects and better result from market development, enabling us to take on more quality specialized auxiliary construction projects, such as the Coal to Electricity Heating Demonstration Transformation Project in Township of Keping County (i.e. Project SAC-18), which had a recognized revenue of RMB196.9 million for the year ended December 31, 2021.

Revenue from standardized workshops increased by 32.6% from RMB857.3 million for the year ended December 31, 2020 to RMB1,136.5 million for the year ended December 31, 2021. The representative projects include design and general construction contracting for a standardized workshop construction project in Weilan Valley Prefabricated Building Intelligent Manufacturing Industrial Park (i.e. Project SAC-12).

Water supply increased from RMB0.4 million for the year ended December 31, 2020 to RMB150.8 million for the year ended December 31, 2021. The representative projects include a relocation construction project of water pipe in Wuhu City (i.e. Project SAC-21).

Other construction

Revenue from our other construction segment increased by 53.4% from RMB1,360.5 million for the year ended December 31, 2020 to RMB2,087.3 million for the year ended December 31, 2021. Our revenue generated from housing construction projects increased by 198.5% from RMB324.8 million for the year ended December 31, 2020 to RMB969.3 million for the year ended December 31, 2021, which is mainly due to additional large housing construction projects undertaken, such as the Taiyuan Talent Apartment Project, a construction project for apartment in Taiyuan (i.e. Project OC-19) with a recognized revenue of RMB420.3 million for the year ended December 31, 2021.

Non-construction business

Revenue from our non-construction business segment increased by 52.4% from RMB726.9 million for the year ended December 31, 2020 to RMB1,107.8 million for the year ended December 31, 2021. Such increase was mainly due to (i) the increase of the PPP interest income from RMB77.8 million to RMB141.0 million as more PPP projects entered into operation; (ii) the increase of LNG sales by 48.5% from RMB172.6 million to RMB256.2 million as the LNG market has recovered, which is consistent with the understanding of Frost & Sullivan; and (iii) the increase of revenue from trading from RMB21.2 million to RMB148.0 million due to increase in sales of construction raw material.

Cost of sales, gross profit and gross profit margin

Our cost of sales increased by 32.2% from RMB8,720.5 million for the year ended December 31, 2020 to RMB11,530.4 million for the year ended December 31, 2021. The increase in our cost of sales was generally in line with the increase in revenue in the same period. The increase is mainly due to (i) the increase of machinery utilization costs from RMB567.8 million to RMB841.3 million as business continued to expand and grow; (ii) the increase in raw materials costs from RMB3,627.0 million to RMB5,897.6 million as there was an increase in the market price of raw materials such as steel, concrete, tower tube and photovoltaic modules and the increase in raw material required for our expansion of business; and (iii) the increase in labor costs from RMB1,859.2 million to RMB2,995.1 million due to our expanded business.

For the years ended December 31, 2020 and 2021, our gross profit was RMB1,428.1 million and RMB1,747.9 million, and our gross profit margin was 14.1% and 13.2%, respectively.

Specialized industrial construction

The cost of sales of our specialized industrial construction increased by 29.6% from RMB4,848.5 million for the year ended December 31, 2020 to RMB6,282.4 million for the year ended December 31, 2021. The increase in cost of sales from our specialized industrial construction segment was mainly due to (i) the corresponding increases in raw material required, such as threaded-steel, concrete and cement, for our expansion of business, which was generally in line with the increase in revenue of specialized industrial construction during the period; (ii) the increase in the raw material prices and (iii) the increase in labor cost.

For the years ended December 31, 2020 and 2021, gross profit of our specialized industrial construction segment was RMB573.2 million and RMB682.5 million, and segment gross profit margin was 10.6% and 9.8%, respectively.

Specialized auxiliary construction

The cost of sales of our specialized auxiliary construction increased by 20.2% from RMB2,267.5 million for the year ended December 31, 2020 to RMB2,725.5 million for the year ended December 31, 2021. The increase in cost of sales from our specialized auxiliary construction, mainly due to (i) the corresponding increase in raw material required for our specialized auxiliary projects, which was generally in line with the increase in segment revenue during the period; and (ii) increase in labor costs.

For the years ended December 31, 2020 and 2021, gross profit of our specialized auxiliary construction segment was RMB372.1 million and RMB392.8 million, and segment gross profit margin was 14.1% and 12.6%, respectively. Such decrease in gross profit margin was mainly due to the fact that (i) we undertook more projects with higher technical requirement, and thus with higher gross profit margin for the year ended December 31, 2020 compared to that for the year ended December 31, 2021; (ii) the increase in the raw material price; and (iii) the increase in labor costs, resulting in a decrease in our gross profit margin.

Other construction

The costs of sales from our other construction increased by 66.6% from RMB1,174.3 million for the year ended December 31, 2020 to RMB1,955.9 million for the year ended December 31, 2021. Such increase was mainly due to (i) the corresponding the increase in raw material required for our other construction projects, which was generally in line with the increase in revenue of other constructions during the period; (ii) the increase in the raw material price; and (iii) the increase in labor cost.

For the years ended December 31, 2020 and 2021, gross profit from our other construction segment was RMB186.3 million and RMB131.5 million, respectively, while the gross profit margin was 13.7% and 6.3%, respectively. The decrease in our gross profit margin is mainly due to increase in revenue from housing projects, resulting in a lower gross profit margin during the Track Record Period, as pricing of such projects is more competitive according to Frost & Sullivan.

Most of our top projects (in terms of revenue) in other construction segment for the year ended December 31, 2021 are livelihood projects. As a state-owned enterprise, we are obliged to fulfill our social responsibility and effectively play the role of state-owned economy in safeguarding people's livelihood and stabilizing growth, especially projects such as Taiyuan City Talent Apartment which helps the government to introduce talents and serve social and economic development, although the gross profit margin for such project is low, we still engaged in similar projects as the key projects of other construction to promote the implementation of such policies.

Non-construction business

The cost of sales from our non-construction business increased by 31.7% from RMB430.3 million for the year ended December 31, 2020 to RMB566.7 million for the year ended December 31, 2021. Such increase was generally in line with the increase in revenue of the non-construction business segment during the period.

For the years ended December 31, 2020 and 2021, gross profits from our non-construction business were RMB296.6 million and RMB541.2 million, respectively, while the gross profit margin were 40.8% and 48.8%, respectively. The increase in gross profit margin is mainly due to (i) increase in PPP interest as more PPP projects entered into operation; and (ii) the LNG market for the year ended December 31, 2021 has shown significant growth and much better performance than that of for the year ended December 31, 2020, resulting in a significant increase in gross profit and gross profit margin for LNG sales for the year ended December 31, 2021 as sales price of LNG increased significantly.

Other income and gains

Our other income and gains decrease by 62.2% from RMB120.4 million for the year ended December 31, 2020 to RMB45.6 million for the year ended December 31, 2021. The decrease was mainly attributable to (i) the decrease in interest income by 38.1% from RMB39.0 million for the year ended December 31, 2020 to RMB24.1 million for the year ended December 31, 2021, which was mainly due to principal recovery of loans from our associates in 2021; and (ii) there was no disposal of assets of disposal group classified as held for sale in 2021, thus the gain on disposal of assets of disposal group classified as held for sale decreased by RMB68.1 million from 2020. The reason for disposal of assets in 2020 was that Xishan Coal and Electricity (Group) Co., Ltd. (西山煤電(集團)有限責任公司) repurchased the assets held under two heat supply energy management projects awarded to us in 2015 and 2016 to abide with national policy.[Note]

Selling and distribution expenses

Our selling and distribution expenses increased from RMB0.4 million for the year ended December 31, 2020 to RMB1.0 million for the year ended December 31, 2021.

Administrative expenses and other operating expenses

Our administrative and other operating expenses increased by 29.7% from RMB846.2 million for the year ended December 31, 2020 to RMB1,097.8 million for the year ended December 31, 2021, mainly due to (i) our continuous research and development efforts, which led to an increase in relevant research and development costs. We engaged in several research and development projects in 2021 that requires significant research and development costs,

Note: Under the relevant contracts of the two heating supply projects, we were responsible for the procurement and installation of the heating facilities under both projects, and we were granted the rights to operate the relevant heating facilities for an agreed operation period after construction completion. Based on the terms and conditions of the relevant contracts for both heating supply projects, upon construction completion, the assets under the heating supply projects were owned by our Company, and upon fulfillment of the obligation under the operation period of the respective projects, we will transfer the relevant heating facilities back to Xishan Coal and Electricity (Group) Co., Ltd. at nil consideration. According to the unified requirements and deployment under the Guidance on the Separation and Transfer of Three Supply and One Service in the Residential Areas of State-owned Enterprise Employees (Guo Ban Fa No. 45 [2016]) (《國務院辦公廳轉發國務院國資委、財政部關於國有企業職工家屬區「三供一業」分離移交工作指導意見的通知》) issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) and the Ministry of Finance, separation and transfer of water supply, power supply and heat supply (gas supply) projects and property management service (collectively, "Three Supply and One Service") in the residential areas for employees of state-owned enterprises (including central government-owned enterprises and local state-owned enterprises) across the country shall be implemented from 2016. As specified in the document, it is required to carry out necessary maintenance and transformation of relevant equipment and facilities of "Three Supply and One Service" in the said employees' residential areas to reach the average level of urban infrastructure, and set up a meter for each household, charge fees by household, transfer those functions to specialized enterprises or institutions to operate under social management model. Since only specialized enterprises and institutions are qualified for holding the relevant projects, in order to comply with the aforesaid policies and guidelines, we have transferred the two heating supply projects in the residential areas back to Xishan Coal and Electricity (Group) Co., Ltd., which was the designated specialized enterprise to hold the relevant heating supply projects under the relevant policy. Upon the implementation of the Three Supply and One Service policy, the construction of the two heat supply energy management projects were completed and both projects under operation period, the operation period of the two projects were both 10 years. At the time when the projects were transferred to Xishan Coal and Electricity (Group) Co., Ltd., the remaining term of the operation periods of the projects were six years and seven years respectively. Save for the two heat supply energy management projects mentioned hereinabove, the management of the Company confirmed that during the Track Record Period and up to the Latest Practicable Date, no other projects of the Group falls within the scope of water supply, power supply and heat supply (gas supply) projects and property management service in the residential areas for employees of state-owned enterprises, and were required to be transferred under the Three Supply and One Service policy.

such as research on prefabricated pile construction technology for solar photovoltaic panels with a budget of RMB18.8 million; (ii) increase in employee benefits expenses as we adopted employee salary growth plans with an increase in average salary of 8.8%; and (iii) increase in depreciation expenses due to our additional building and structure fixed assets in 2021.

Finance costs

Our finance costs increased by 33.7% from RMB293.8 million for the year ended December 31, 2020 to RMB392.6 million for the year ended December 31, 2021, mainly due to the fact that some of our projects require capital investment in stages, and project financing obtained by us from various financial institutions continues to increase, resulting in an increase in the amount of our borrowings and interest expenses.

Share of losses of associates

For the year ended December 31, 2020, our share of losses of associates were RMB2.5 million, while for the year ended December 31, 2021, our share of losses of associates were RMB5.8 million.

Provision for expected credit losses on financial assets

Our expected credit loss provision on financial assets amounted to RMB57.8 million and RMB80.6 million for the years ended December 31, 2020 and 2021, respectively. This was primarily due to (i) the significant increase in our revenue in 2021 and the consequential increase in trade receivables and bills receivable; and (ii) the downward trend of the ageing profile of our trade receivables due to the extended collection progress resulted from the COVID-19 situation. As such, the expected credit losses on the balance of the trade receivables has increased in 2021, resulted in an addition of expected credit loss allowance to the trade receivables and such addition was charged to profit or loss as a provision for expected credit losses on financial assets for the year ended December 31, 2021.

Income tax expense

Our income tax expense decreased from RMB71.9 million for the year ended December 31, 2020 to RMB24.1 million for the year ended December 31, 2021, primarily due to the decrease in deferred income tax due to temporary differences in taxable amounts resulting from provisions and construction income from PPP projects, etc.

Profit for the year

As a result of the foregoing, our profit for the year decreased by 33.4% from RMB282.2 million for the year ended December 31, 2020 to RMB188.0 million for the year ended December 31, 2021.

LIQUIDITY AND CAPITAL RESOURCES

We have historically met our working capital requirements through cash flows from operations and borrowings. Our primary liquidity requirements are to finance working capital, fund the payment of interest and principal due on our indebtedness, and growth of our operations. We expect these sources to continue to be our principal sources of liquidity, and we may use a portion of the [**REDACTED**] from the [**REDACTED**] to finance a portion of our working capital requirements.

We manage our cash flow and working capital by closely monitoring and managing, among other things, (i) the level of our account payables and receivables as well as amounts of contract assets, receivables under service concession arrangements and contract liabilities; and (ii) our ability to obtain external financing. We also diligently review future cash flow requirements and assess our ability to meet debt repayment schedules, and if necessary, adjust our investment, financing and dividend payout plans to ensure we maintain sufficient working capital.

Taking into account the estimated [**REDACTED**] from the [**REDACTED**], our available banking facilities and cash flows from our operations, our Directors are of the opinion that we have sufficient working capital to meet our financial requirements for at least the next 12 months from the date of this document.

Consolidated Statement of Cash Flows

The following table sets forth a summary of our consolidated statement of cash flows for the years/periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2020	**2021**	**2022**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Net cash generated from operating activities	976,331	67,515	45,244	72,156	48,874
Net cash used in investing activities	(1,061,091)	(659,418)	(445,296)	(288,061)	(347,885)
Net cash generated from financing activities	16,671	817,668	740,365	511,848	615,236
Net increase/(decrease) in cash and cash equivalents	(68,089)	225,765	340,313	295,943	316,225
Cash and cash equivalents at the beginning of year/period	882,903	814,814	1,040,579	1,040,579	1,380,892
Cash and cash equivalents at the end of year/period	814,814	1,040,579	1,380,892	1,336,522	1,697,117

Net cash generated from operating activities

Cash flow from operating activities reflects (i) profit before tax adjusted for non-cash and non-operating items, such as depreciation and amortization and impairment allowances; (ii) the effects of movements in working capital, such as changes in trade receivables and bills receivable, prepayments, deposits and other receivables, and inventories; and (iii) other cash items, such as income tax paid.

For the six months ended June 30, 2023, our net cash generated from operating activities was RMB48.9 million, and was derived primarily from the following amounts plus a profit before tax of RMB120.9 million including: (i) an increase in trade payables and bills payable of RMB370.4 million; (ii) an increase in other payables and accruals of RMB164.5 million, which was offset by (i) the decrease in contract liabilities of RMB455.4 million, (ii) the increase in contract assets of RMB345.7 million; and (iii) increase in inventories of RMB271.1 million.

For the year ended December 31, 2022, our net cash generated from operating activities was RMB45.2 million, and was derived primarily from the following amounts plus a profit before tax of RMB212.8 million (i) an increase in trade payables and bills payable of RMB1,576.1 million; (ii) an increase in contract liabilities of RMB758.9 million, which was partially offset by (i) the increase in contract assets of RMB1,445.0 million; and (ii) increase in trade receivables and bills receivable by RMB870.5 million.

For the year ended December 31, 2021, our net cash generated from operating activities was RMB67.5 million, and was derived primarily from the following amounts plus a profit before tax of RMB212.2 million (i) an increase in trade payables and bills payable of RMB2,750.0 million; and (ii) the increase in contract liabilities of RMB302.1 million, which was partially offset by (i) the increase in trade receivables and bills receivable of RMB1,285.1 million; and (ii) the increase in contract assets of RMB1,384.8 million. The increase in trade and bills receivables and payables was in line with the increase in business volume.

For the year ended December 31, 2020, our net cash generated from operating activities was RMB976.3 million, and was derived primarily from the following amounts plus a profit before tax of RMB354.2 million (i) the increase in other payables and accruals of RMB1,939.7 million; and (ii) the increase in trade payables and bills payable of RMB1,063.9 million, which was partially offset by (i) the increase in contract assets of RMB1,047.0 million; (ii) the increase in trade receivables and bills receivable of RMB941.8 million; and (iii) the decrease in contract liabilities of RMB298.3 million. The increase in trade and bills receivables and payables was in line with the increase in business volume.

Net cash used in investing activities

For the six months ended June 30, 2023, our net cash used in investing activities was RMB347.9 million, mainly including (i) the capitalized expenditure for purchase of service concession arrangements of RMB216.0 million; and (ii) increase in purchase of property, plant and equipment of RMB115.5 million.

For the year ended December 31, 2022, our net cash used in investing activities was RMB445.3 million, mainly including (i) the capitalized expenditures for purchase of service concession arrangements of RMB254.7 million; and (ii) substantial increase in investment in associates of RMB131.7 million.

For the year ended December 31, 2021, our net cash used in investing activities was RMB659.4 million, mainly including the capitalized expenditures for purchase of service concession arrangements of RMB519.0 million, and the purchase of property, plant and equipment of RMB149.5 million.

For the year ended December 31, 2020, our net cash used in investing activities was RMB1,061.1 million, mainly including the capitalized expenditures for purchase of service concession arrangements of RMB1,043.4 million.

Net cash generated from financing activities

For the six months ended June 30, 2023, our net cash generated from financing activities was RMB615.2 million, mainly including (i) the proceeds from interest-bearing bank borrowings and other borrowings of RMB1,874.4 million; and (ii) the proceeds from borrowings of RMB89.2 million from related parties. These cash inflows were partially offset by (i) the repayment of interest-bearing bank borrowings and other borrowings of RMB809.9 million; and (ii) the repayment of borrowings from related parties of RMB355.1 million.

For the year ended December 31, 2022, our net cash generated from financing activities was RMB740.4 million, mainly including (i) the proceeds from interest-bearing bank borrowings and other borrowings of RMB2,648.3 million; and (ii) the proceeds from borrowings from related parties of RMB518.4 million. These cash inflows were partially offset by (i) the repayment of interest-bearing bank borrowings and other borrowings of RMB1,601.6 million; and (ii) the repayment of borrowings from related parties of RMB434.0 million.

For the year ended December 31, 2021, our net cash generated from financing activities was RMB817.7 million, mainly including (i) the proceeds from interest-bearing bank borrowings and other borrowings of RMB2,187.0 million; and (ii) the proceeds from borrowings from related parties of RMB862.8 million. These cash inflows were partially offset by (i) the repayment of interest-bearing bank borrowings and other borrowings of RMB1,327.9 million: and (ii) repayment of borrowings from related parties of RMB550.2 million.

For the year ended December 31, 2020, our net cash generated from financing activities was RMB16.7 million, mainly including the proceeds of interest-bearing bank borrowings and other borrowings of RMB1,638.8 million and proceed from borrowings from related parties of RMB153.4 million. These cash inflows were partially offset by the repayment of interest-bearing bank borrowings and other borrowings of RMB1,657.1 million.

Cash and cash equivalents

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, we had a net decrease in cash and cash equivalents of RMB68.1 million, a net increase in cash and cash equivalents of RMB225.8 million, a net increase in cash and cash equivalents of RMB340.3 million, and a net increase in cash and cash equivalents of RMB316.2 million, respectively. The fluctuation of the net increase/decrease in our cash and cash equivalents was mainly because it is typically in the construction industry that a substantial sum of construction expenses is paid at the early stage of the project, and the cash inflow occurred after the completion and acceptance of a project, therefore causing the mismatch of cash flow.

SELECTED ITEMS OF CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

The following consolidated statements of financial position as at the end of each year covered by the Track Record Period is extracted from the accountants' report set out in Appendix I to this document:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Non-current assets				
Property, plant and equipment	748,458	823,100	972,349	1,068,584
Investment properties	182,748	183,679	186,120	186,230
Right-of-use assets	119,657	173,774	170,662	186,363
Intangible assets	604	1,436	1,219	954
Goodwill	15,000	15,000	15,000	15,000
Contract assets	1,538,069	931,545	1,163,796	1,146,261
Receivables under service concession arrangements	969,838	2,104,580	2,405,701	2,475,562
Investments in associates	32,609	46,137	183,327	193,941
Other non-current assets	15,262	11,714	7,571	3,903
Deferred tax assets	43,018	63,955	100,064	107,760
Financial assets measured at FVOCI	135,441	122,692	138,813	139,803
	3,800,704	**4,477,612**	**5,344,622**	**5,524,361**
Current assets				
Inventories	154,971	141,622	146,240	417,324
Contract assets	1,772,362	3,744,227	5,168,704	5,528,445
Receivables under service concession arrangements	78,803	308,791	330,658	365,608
Properties under development	91,703	–	–	–
Trade receivables and bills receivable	4,345,030	5,549,574	6,371,366	6,188,411
Prepayments, deposits and other receivables	2,051,044	1,983,573	1,956,437	1,914,734
Restricted bank deposits	269,646	328,983	748,105	597,762
Cash and cash equivalents	814,814	1,040,579	1,380,892	1,697,117
	9,578,373	**13,097,349**	**16,102,402**	**16,709,401**

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Current liabilities				
Trade payables and bills payable	4,844,502	7,594,503	9,170,618	9,541,048
Contract liabilities	1,105,325	1,407,394	2,166,314	1,710,956
Employee benefits payable	50,620	60,041	81,096	80,625
Other payables and accruals	2,012,577	1,770,919	1,865,853	1,902,173
Short-term borrowings	954,804	1,550,582	2,201,325	2,984,022
Tax payable	32,753	15,808	32,704	19,730
Current portion of non-current liabilities	320,983	431,702	514,901	828,045
	9,321,564	**12,830,949**	**16,032,811**	**17,066,599**
Non-current liabilities				
Long-term payable	300,000	300,000	300,000	–
Long-term borrowings	1,832,557	2,285,492	2,687,191	2,692,764
Lease liabilities	70,213	68,329	66,300	70,733
Deferred income	–	–	23,000	21,954
Employee benefits payable	–	–	30,790	29,090
Deferred tax liabilities	70,660	76,118	74,012	72,690
	2,273,430	2,729,939	3,181,293	2,887,231
Net current assets/ (liabilities)	256,809	266,400	69,591	(357,198)
Net assets	**1,784,083**	**2,014,073**	**2,232,920**	**2,279,932**
Equity				
Share capital	800,000	1,000,000	1,000,000	1,000,000
Reserves	679,646	675,545	809,316	823,238
Equity attributable to equity holders of the Company	1,479,646	1,675,545	1,809,316	1,823,238
Non-controlling interests	304,437	338,528	423,604	456,694
Total equity	**1,784,083**	**2,014,073**	**2,232,920**	**2,279,932**

Property, plant and equipment

Property, plant and equipment mainly consist of fixed assets, construction in progress and other temporary facilities that are not current assets. As of December 31, 2020, 2021 and 2022 and June 30, 2023, our property, plant and equipment amounted to approximately RMB748.4 million, RMB823.1 million, RMB972.3 million and RMB1,068.6 million, respectively.

Our property, plant and equipment increased from RMB972.3 million as of December 31, 2022 to RMB1,068.6 million as of June 30, 2023. The increase was mainly due to increase in construction in progress, including the increase in construction progress of the Chaha'er Youyi Houqi Heat-Power Generation concession project and the increase in construction progress in a solid waste recycling project in Xiaohe.

Our property, plant and equipment increased by 18.1% from RMB823.1 million as at December 31, 2021 to RMB972.3 million as at December 31, 2022. The increase was mainly due to the increase in construction in progress, including (i) the increase of RMB76.0 million in the construction in progress on the waste recycling project in Shanxi Transformation Comprehensive Reform Demonstration Zone Xiaohe Industrial Park of Shan'an Lide; and (ii) the increase of RMB111.9 million in energy management project under construction of Shan'an Deyu 160t/h CDQ and waste heat generation contract in the sum of RMB139.6 million.

Our property, plant and equipment increased by 10.0% from RMB748.4 million as of December 31, 2020 to RMB823.1 million as of December 31, 2021. The increase was mainly due to the combined effects of (i) the increase of RMB118.3 million in the construction in progress on the waste recycling project in Shanxi Transformation Comprehensive Reform Demonstration Zone Xiaohe Industrial Park of Shan'an Lide, (ii) the increase of RMB5.4 million in the construction of gas station at Xinshui Town in Ningyang, Shanxi; and (iii) the increase of RMB5.0 million in energy management project under construction of Shan'an Deyu 160t/h CDQ and waste heat generation contract, partially offset by the accrued depreciation of RMB92.5 million.

Investment properties

Our investment properties are mainly our properties held for generating rental income and/or for capital appreciation. As of December 31, 2020, 2021 and 2022 and June 30, 2023, our investment properties amounted to RMB182.7 million, RMB183.7 million, RMB186.1 million and RMB186.2 million, respectively. The slight increase in each year is mainly due to the increase in fair value of investment properties at the end of each year during the Track Record Period.

Right-of-use assets

Our right-of-use assets are mainly our operating leasehold properties and land, as well as the land leased from our wholly-owned subsidiary, Gaoping Xinshiyangtian, and the pipeline network leased from our subsidiary, Shan'an Bluesky. Our right-of-use assets amounted to

RMB119.7 million, RMB173.8 million, RMB170.7 million and RMB186.4 million, as of December 31, 2020, 2021 and 2022 and June 30, 2023, respectively. Our right-of-use assets increased by RMB54.1 million from as of December 31, 2020 to as of December 31, 2021. The increase was mainly due to our acquisition of six pieces of land from Shanxi CIG. Our right-of-use assets decreased by RMB3.1 million from as of December 31, 2021 to as of December 31, 2022, which was mainly attributable to the depreciation of RMB9.3 million and partially offset by the addition of lease for our office during the year ended December 31, 2022. Our right-of-use assets increased from RMB170.7 million as of December 31, 2022 to RMB186.4 million as of June 30, 2023 as a result of entering into new leases by our subsidiaries for respective operation needs during the six months ended June 30, 2023.

Goodwill

Our goodwill of RMB15.0 million primarily resulted from the acquisition of 51% equity of Shanxi Ningyang Energy Co., Ltd. ("**Shanxi Ningyang**") from two independent third parties on April 3, 2018. As of December 31, 2020, 2021 and 2022 and June 30, 2023, our goodwill amounted to RMB15.0 million, RMB15.0 million, RMB15.0 million and RMB15.0 million, respectively.

Our Company conducted impairment assessment of goodwill at the end of each of the years/period during Track Record Period by engaging independent professional valuers to evaluate the recoverable amount of the entire shareholders' equity interest of Shanxi Ningyang, and issued the asset evaluation reports. The value in use calculation is used for valuation of the recoverable amount. The assessment is based on the estimated cash flow forecast in the next 5 years based on the financial budget approved by our management. The terminal growth rate of the cash flow forecast adopted in the following years is 0% for prudence sake. The pre-tax discount rate adopted as of December 31, 2020, 2021 and 2022 and June 30, 2023 were 12.77%, 12.36%, 11.23% and 11.23%, respectively. Our management prepared the above financial budgets based on past performance and its expectations for market development. The present value of future cash flows reflects the risk relative to the segment concerned.

Based on the results of the impairment assessment of goodwill, the recoverable amounts of CGU of approximately RMB355.7 million, RMB419.0 million, RMB376.3 million and RMB276.9 million is greater than its carrying amounts of approximately RMB271.9 million, RMB265.0 million, RMB251.2 million and RMB244.7 million as of December 31, 2020, 2021 and 2022 and June 30, 2023, respectively. Based on the results of the impairment testing of goodwill, in the opinion of our management of the Group, no impairment provision is considered necessary for our Group's goodwill as of December 31, 2020, 2021 and 2022 and June 30, 2023. Our management believes that any reasonably possible changes to the key assumptions applied would not lead to impairment of goodwill as of December 31, 2020, 2021 and 2022 and June 30, 2023.

The sensitivity analysis as of December 31, 2020, 2021 and 2022 and June 30, 2023 set forth below has been determined based on the exposure to the pre-tax discount rate and five-year period growth rate, representing the key inputs to the determination of the recoverable amounts.

Our management performed the sensitivity analysis assuming the abovementioned key assumptions have been changed. Had the estimated key assumptions been changed as below, the headroom would be increased/(decreased) by:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Five-year period growth rate increased by 2%	45,099	46,870	56,221	32,176
Five-year period growth rate decreased by 2%	(45,101)	(46,876)	(52,469)	(30,477)
Pre-tax discount rate decreased by 0.5%	11,758	16,311	16,771	11,843
Pre-tax discount rate increased by 0.5%	(10,927)	(15,073)	(15,354)	(10,846)

Financial Assets Measured at FVOCI

Our financial assets measured at FVOCI (non-recycling) mainly include our non-listed equity investments held for long-term strategic purposes. As of December 31, 2020, 2021, and 2022 and June 30, 2023, our financial assets measured at FVOCI were approximately RMB135.4 million, RMB122.7 million, RMB138.8 million and RMB139.8 million, respectively and were classified at level 3 fair value measurement. Our financial assets measured at FVOCI decreased by 9.4% from RMB135.4 million as of December 31, 2020 to RMB122.7 million as of December 31, 2021. The decrease was mainly attributable to the Group's disposal of equity interest Shanxi Jiantong Technology Company Limited (山西建通科技有限公司). Our financial assets measured at FVOCI increased by 13.1% from RMB122.7 million as of December 31, 2021 to RMB138.8 million as of December 31, 2022. This increase was mainly due to the increase in our investments in Shanxi Shuitou Biyuan Water Treatment Company Limited (山西水投碧源水處理有限公司), Shanxi Jiantou Decoration Industry Co., Ltd. (山西建投裝飾產業有限公司), Shanxi Jiantou South East Jin Construction Industry Co., Ltd. (山西建投晉東南建築產業有限公司). As of June 30, 2023, our financial assets measured at FVOCI slightly increased from RMB138.8 million to RMB139.8 million, such increase was in line with market fluctuation and within normal range. The fair value of these equity investments were evaluated and confirmed by a valuer independent from our Group.

Our management team had engaged independent valuers (the "**Valuers**") to determine the fair values of the financial assets at FVOCI measured at level 3 fair value measurement (the "**Valuation**").

In respect of the assessment of fair value of the equity investments, with reference to the guidance under the "Guidance Note on Directors' Duties in the Context of Valuations in Corporate Transactions" issued by the SFC in May 2017 applicable to directors of companies listed on the Stock Exchange, our Directors have undertaken the following key actions: (i) considering available information in assessing the financial forecast and assumptions including but not limited to the historical financial performance, market prospects, comparable companies' conditions, economic, political and industry conditions; (ii) engaging the Valuers to assist our management to assess the fair value; (iii) considering the independence, reputation, capabilities and objectivity of the Valuers to ensure the suitability of such Valuers; (iv) reviewing and discussing with our management and the Valuers on the valuation models and approaches; and (v) reviewing the valuation work papers and results prepared by the Valuers. Valuation techniques are verified by the independent and recognized international business valuer before being implemented for valuation and are calibrated to ensure that outputs reflect market conditions. In respect of the Valuation of our equity investments, details and the quantitative information about the significant unobservable inputs used in level 3 fair value measurements are set forth in Notes 25 and 51 to the Accountants' Report set out in Appendix I to this document.

The Reporting Accountants has carried out necessary audit works in accordance with Hong Kong Standard on Investment Circular Reporting Engagement 200 "Accountants' Reports on Historical Financial Information in Investment Circulars" issued by the Hong Kong Institute of Certified Public Accountants for the purpose of expressing an opinion on the Group's historical financial information for the Track Record Period as a whole in Appendix I to this document. The Reporting Accountants' opinion on the historical financial information of the Group for the Track Record Period as a whole is set out on page I-2 of Appendix I to this document.

The Joint Sponsors have conducted relevant due diligence work, including (i) obtaining information on the credentials of the Valuers and the background, qualifications and work experience of its core team members; (ii) obtaining and reviewing the valuation reports issued by the Valuers; (iii) understanding from the Valuers the key basis and assumptions for the Valuation of financial assets categorized as level 3 fair value measurements; (iv) reviewing relevant notes in the Accountants' Report as contained in Appendix I to this document; and (v) understanding from the management of the Company and the Reporting Accountants the work they have performed in relation to the valuation of the level 3 financial instruments for the purpose of reporting on the historical financial information of the Group for the Track Record Period as a whole. Having considered the work done by the management of the Company and the Reporting Accountants, and the relevant due diligence work done as stated above, nothing material has come to the Joint Sponsors' attention that indicates that the management of the Company have not undertaken sufficient investigation and due diligence, or that the Company management's reliance on the work products of the Valuers is unreasonable.

NET CURRENT ASSETS/(LIABILITIES)

As of December 31, 2020, 2021, 2022, June 30, 2023 and September 30, 2023, we had net current assets of RMB256.8 million, RMB266.4 million, RMB69.6 million, net current liabilities of RMB357.2 million and RMB605.3 million, respectively.

The following table sets forth our current assets, current liabilities and net current assets/(liabilities) as of the dates indicated:

	As of December 31,			As of June 30,	As of September 30,
	2020	**2021**	**2022**	**2023**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*
Inventories	154,971	141,622	146,240	417,324	813,278
Contract assets	1,772,362	3,744,227	5,168,704	5,528,445	6,153,543
Receivables under service concession arrangements	78,803	308,791	330,658	365,608	380,707
Properties under development	91,703	–	–	–	–
Trade receivables and bills receivable	4,345,030	5,549,574	6,371,366	6,188,411	5,712,383
Prepayments, deposits and other receivables	2,051,044	1,983,573	1,956,437	1,914,734	1,629,759
Restricted bank deposits	269,646	328,983	748,105	597,762	726,097
Cash and cash equivalents	814,814	1,040,579	1,380,892	1,697,117	1,101,873
Total current assets	9,578,373	13,097,349	16,102,402	16,709,401	16,517,640
Trade payables and bills payable	4,844,502	7,594,503	9,170,618	9,541,048	9,978,655
Contract liabilities	1,105,325	1,407,394	2,166,314	1,710,956	2,013,433
Employee benefits payable	50,620	60,041	81,096	80,625	83,527
Other payables and accruals	2,012,577	1,770,919	1,865,853	1,902,173	1,896,714
Short-term borrowings	954,804	1,550,582	2,201,325	2,984,022	2,339,986
Tax payable	32,753	15,808	32,704	19,730	36,006
Current portion of non-current liabilities	320,983	431,702	514,901	828,045	774,673
Total current liabilities	9,321,564	12,830,949	16,032,811	17,066,599	17,122,994
Net current assets/(liabilities)	256,809	266,400	69,591	(357,198)	(605,354)

Our net current assets decreased from RMB69.6 million as of December 31, 2022 to a net current liabilities of RMB357.2 million as of June 30, 2023, which was mainly due to the increase in our short-term borrowings by RMB782.7 million from RMB2,201.3 million as of December 31, 2022 to RMB2,984.0 million and an increase in our trade payables and bills payable by RMB370.4 million from RMB9,170.6 million as of December 31, 2022 to RMB9,541.0 million.

Our net current liabilities as of June 30, 2023 further decreased from RMB357.2 million to RMB605.4 million as of September 30, 2023, mainly due to RMB285.0 million decrease in prepayments, deposits and other receivables.

Our net current assets decreased from RMB266.4 million as of December 31, 2021 to RMB69.6 million as of December 31, 2022, which was mainly due to the increase in trade payables and bill payable by RMB1,576.1 million, increase in contract liabilities by RMB758.9 million and increase in short-term borrowings by RMB650.7 million, which was partially offset by the increase in contract assets by RMB1,424.5 million, increase in trade receivables and bills receivable by RMB821.8 million and increase in restricted bank deposits by RMB419.1 million.

Our net current assets increased from RMB256.8 million as of December 31, 2020 to RMB266.4 million as of December 31, 2021, which was mainly due to the increase in contract assets of RMB1,971.9 million, the increase in trade receivables and bills receivable of RMB1,204.5 million, the decrease in other payables and accruals of RMB241.7 million, which was partially offset by the increase in trade payables and bills payable of RMB2,750.0 million, the increase in contract liabilities of RMB302.1 million, and the increase in short-term borrowings of RMB595.8 million.

To improve our net current liabilities position, we will continue to review regularly and update our liquidity and funding policies to ensure that it is aligned with our business plan and financial position. We seek to improve our operating cash flow through (i) focusing on quality projects to enhance our profitability; (ii) to continue to maintain effective cost control measures and regularly review the progress of recovery of our trade receivables and (iii) to restructure our short-term and long-term borrowings portfolio, thereby reducing our current liabilities. We seek to continue to engage in quality infrastructure and new energy projects/opportunities in regions/areas which are established/fast-growing. We seek to secure quality private sector projects. As confirmed by Frost & Sullivan, the private sector is trending towards the operation model that integrates investment, construction and operation. Private entities seek to cooperate with other private entities in investing in and building privately-owned facilities and generate profit through the operation of such facilities. We seek for market opportunities through the aforementioned operation model and will seek to further cultivate our new energy segment business through this model. Through such initiative, we expect to generate more revenue from these quality projects, thereby enhancing our profitability.

On the other hand, we also adopted various measures since the commencement of the second half of 2022 to further enhance our cashflow management, including continuing to strengthen our overall budgetary management, and control expenditures in fixed assets investment, equity investment and infrastructure investment in a targeted manner, keeping a close eye on the management of trade receivables by having a team of personnel specializing in and responsible for the confirmation, reconciliation and recovery of trade receivables and follow up on the payment status of trade receivables due from customers.

In addition, we expect to receive the [**REDACTED**] from the [**REDACTED**], which the Directors believe will help to further improve our net current liabilities position. For further details of the measures adopted to improve our financial position, please refer to the section headed "Business – Business Sustainability" of this document.

Inventories

Our inventories consist of raw materials and finished goods, which mainly consisted of raw materials for our operation, LNG and partition walls, etc. The following table sets forth details of our inventories as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Raw materials	117,099	116,028	137,128	406,848
Finished goods	37,872	25,594	9,112	10,476
Total	**154,971**	**141,622**	**146,240**	**417,324**

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our inventory balance was RMB155.0 million, RMB141.6 million, RMB146.2 million and RMB417.3 million, respectively. The decrease in our inventory balance as of December 31, 2021 when compared to that of 2020 was mainly attributable to the fact that there was a delay in construction progress due to the outbreak of COVID-19 pandemic in 2020, and as a result, the raw materials such as wind turbines and towers we purchased for the new energy projects could not be discharged from the warehouse and caused accumulation of inventories; while in 2021, with the situation mitigating, the wind power projects resumed with a large amount of raw materials discharged from the warehouse. As of December 31, 2022, our inventories increased by RMB4.6 million, representing a year-on-year increase of 3.3% when comparing with that as of December 31, 2021. Such increase is primarily attributable to (i) the commencement of heating supply in the Chaha'er Youyi Houqi Heat-Power Generation concession project has led to the increase in our stock in thermal coal to ensure stable heating supply, our stock of which has accounted for RMB15.4 million of our inventories of raw materials as of December 31, 2022; and (ii) the procurement of contour plate in the sum of RMB3.1 million for our relocation construction project in Hebei, thereby resulting in an increase in our inventories as of December 31, 2022. Such increase was partially offset by the decrease in finished goods in the sum of RMB16.5 million, which was mainly attributable to the utilization of our pavement modules and aluminum mold as part of our inventories as of December 31, 2021. As of June 30, 2023, our inventories increased by RMB271.1 million from RM146.2 million as of December 31, 2022 to RMB417.3 million, representing an increase of 185.4%. The reason for such increase was because of our seasonality of our business operation which our Group had increased stock for inventories, in particular construction raw materials to prepare for the construction works in the second half of the year.

The following table sets forth the aging analysis of our inventories:

	As of December 31,			As at June 30,
	2020	**2021**	**2022**	**2023**
	(RMB'000)	*(RMB'000)*	*(RMB'000)*	*(RMB'000)*
Raw materials				
– Within 1 year	86,944	88,057	75,552	310,527
– 1-2 years	3,958	5,017	61,390	94,377
– 2-3 years	26,197	1,510	2	1,847
– 3 year or above	–	21,444	184	97
Sub-total:	117,099	116,028	137,128	406,848
Finished goods				
– Within 1 year	5,579	25,454	7,301	6,676
– 1-2 years	14	140	1,811	2,305
– 2-3 years	32,279	–	–	1,495
Sub-total:	37,872	25,594	9,112	10,476
Total:	**154,971**	**141,622**	**146,240**	**417,324**

As of the Latest Practicable Date, RMB323.0 million representing 77.4% of our inventories as of June 30, 2023 have been utilized.

The following table sets forth the average inventory turnover days for the periods indicated:

	For the Year ended December 31,			For the six months ended June 30,
	2020	2021	2022	2023
Inventory turnover days(1)	6	5	5	11

(1) Inventory turnover days for the Track Record Period is calculated based on the average of the beginning and ending balances of inventory for that period divided by cost of sales for that period and then multiplying by 365 days for the years ended December 31, 2020, 2021 and 2022 and 181 days for the six months ended June 30, 2023.

The majority of our revenue derives from our specialized industrial construction business, which is different from manufacturing business, particularly in terms of the low inventory levels we maintain. Therefore, inventory turnover days are not indicative of our operations and are excluded from our analysis.

Trade receivables and bills receivable

Our trade receivables and bills receivable mainly represent the credit sales of our products or services to be paid by our customers. The following table sets forth details of our trade receivables and bills receivable as of the dates indicated:

	As of December 31,			As of June 30,
	2020	2021	2022	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Trade receivables	4,200,013	5,494,045	6,377,191	6,250,184
Expected credit losses	(179,061)	(254,612)	(302,072)	(340,405)
Trade receivables, net	4,020,952	5,239,433	6,075,119	5,909,779
Bills receivable	325,293	312,036	299,367	280,930
Expected credit losses	(1,215)	(1,895)	(3,120)	(2,298)
Bills receivable, net	324,078	310,141	296,247	278,632
Total	4,345,030	5,549,574	6,371,366	6,188,411

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our trade receivables and bills receivable amounted RMB4,345.0 million, RMB5,549.6 million, RMB6,371.4 million and RMB6,188.4 million, respectively.

The following is an aging analysis of trade receivables (based on invoice date) and bills receivable (based on bills receipt date) (net of expected credit losses):

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Within 1 year	3,174,186	3,991,906	4,676,720	3,587,277
1 to 2 years	682,967	938,598	1,032,153	1,622,206
2 to 3 years	341,061	357,775	396,423	468,520
3 to 4 years	87,720	214,366	209,197	390,609
4 to 5 years	59,096	46,929	56,873	119,799
Total	4,345,030	5,549,574	6,371,366	6,188,411

We have made provisions for the impairment of certain long overdue trade receivables and bills receivable in order to ensure the quality of our assets. As of December 31, 2020, 2021 and 2022 and June 30, 2023, our aggregate expected credit losses of trade receivables amounted to RMB179.1 million, RMB254.6 million, RMB302.1 million and RMB340.4 million, representing 4.3%, 4.6%, 4.7% and 5.4% of the aggregate amount of our trade receivables, respectively. As of December 31, 2020, 2021 and 2022 and June 30, 2023, our aggregate expected credit losses of bill receivables amounted to RMB1.2 million, RMB1.9 million, RMB3.1 million and RMB2.3 million, representing 0.4%, 0.6%, 1.0% and 0.8% of the aggregate amount of our bills receivable, respectively.

The following table sets forth an ageing breakdown and subsequent settlement of trade receivables and bills receivable by state-owned and non-state-owned customers for the year indicated (net of expected credit losses):

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
State-owned customers				
– Within 1 year	1,494,658	2,100,757	2,910,590	1,950,254
– 1-2 years	344,669	493,081	579,432	1,108,139
– 2-3 years	250,498	242,425	313,338	301,564
– 3-4 years	32,753	193,156	104,244	279,825
– 4-5 years	25,355	17,617	41,268	86,343
	2,147,933	3,047,036	3,948,872	3,726,125

	As of December 31, 2020	As of December 31, 2021	As of December 31, 2022	As of June 30, 2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Non-state-owned customers				
– Within 1 year	1,355,450	1,581,008	1,469,883	1,358,390
– 1-2 years	338,298	445,517	452,721	514,068
– 2-3 years	90,563	115,350	83,085	166,956
– 3-4 years	54,967	21,210	104,953	110,784
– 4-5 years	33,741	29,312	15,605	33,456
	1,873,019	2,192,397	2,126,247	2,183,654
Trade receivables	4,020,952	5,239,433	6,075,119	5,909,779
Bills receivable	324,078	310,141	296,247	278,632
Total	4,345,030	5,549,574	6,371,366	6,188,411

	Net carrying amount as of June 30, 2023	Subsequent settlement up to the Latest Practicable Date
	RMB'000	*RMB'000*
State-owned customers		
– Within 1 year	1,950,254	1,022,052
– 1-2 years	1,108,139	593,849
– 2-3 years	301,564	105,435
– 3-4 years	279,825	227,556
– 4-5 years	86,343	67,777
– Over 5 years *(Note)*	–	4,894
	3,726,125	2,021,563
Non-state-owned customers		
– Within 1 year	1,358,390	807,850
– 1-2 years	514,068	241,776
– 2-3 years	166,956	130,803
– 3-4 years	110,784	13,267
– 4-5 years	33,456	24,714
– Over 5 years *(Note)*	–	200
	2,183,654	1,218,610
Trade receivables	5,909,779	3,240,173

Note: The Group's trade receivables with nil net carrying amount as of June 30, 2023 because the net carrying amount is net of the expected credit loss allowance, which has been fully impaired. Nevertheless, such trade receivable has been subsequently settled after Track Record Period.

As of the Latest Practicable Date, RMB3,240.2 million representing 54.8% of our trade receivables as of June 30, 2023 have been received.

Our trade receivables aged for over two years amounted to approximately RMB662.5 million as of December 31, 2022 and approximately RMB978.9 million as of June 30, 2023. Such receivables resulted from constructions/services we provided for projects that are of regional/national developmental relevance, but of which, for various reasons, our counterparties are not able to settle the sum owed in time. The deteriorating aging and low settlement of our trade receivables was mainly due to an increase in long-aged trade receivables remains outstanding. According to the aging profile, when compared December 31, 2022 with June 30, 2023, there is a general increase in the trade receivables outstanding balance for each age-band from two years onwards, whereas the total trade receivables balance remains relatively stable. This has reflected a situation where long-aged trade receivables remains outstanding, and at the same time non-aged trade receivables were relatively effectively settled.

In view of the deteriorating aging profile, our Group has enhanced our efforts in collection of trade receivables, including engaging third-party debt collectors, liaising with debtors to settle the receivables by instalments. In the event that there is sufficient evidence demonstrating that the relevant outstanding receivables cannot be settled or we cannot identify any other recoverability means, our Group would seek legal advice to consider taking appropriate legal actions, including but not limited to issue legal letters to initiate legal proceedings.

As we see supporting the regional/national development as part of our social responsibility, we provided the construction/services while amounts outstanding for these projects remain outstanding, and having performed the assessment under the expected credit loss model, the management of our Group considered that, among others, (i) the background of the relevant customers; (ii) we generally have longer-term relationship with such counterparties; (iii) we are not aware of any news of these customers that might adversely affect the recoverability of these trade receivables and the position of the expected credit loss allowance; and (iv) these customers do not have any default payment history, we expect to collect such receivables. As such, we generally provide expected credit loss allowance based on the age band of the respective trade receivables, and we did not and do not intend to write-off such outstanding amounts in the near term. For details of the average expected credit loss rates applied to trade receivables under various age band, please refer to "Net Current Assets – trade receivables and bills receivable – trade receivables" in this section. We closely monitor our receivables aged over two years and seek to collect such receivables as soon as feasible.

Our Group shall recognize a loss allowance, calculated by applying the ECL Model, for financial assets carried at amortized cost under IFRS 9. At each of the periods of the Track Record Period, our Group shall measure the loss allowance for a financial instrument at an amount equal to 12-months of ECL. A loss allowance equal to lifetime ECLs will be recognized if the credit risk on that financial instrument has increased significantly since it was initially recognized. To make that assessment to determining significant increases in credit risk, our Group shall compare the risk of a default occurring on the financial instrument as at the end of each of the period of the Track Record Period with that as at the date of initial recognition and consider reasonable and supporting information, that is available without undue cost or effort, that is indicative of significant increases in credit risk since initial recognition.

Trade receivables

The following table is an aging analysis of the net carrying amount of the trade receivables (based on invoice date) together with the expected credit loss rate during the Track Record Period:

	As of December 31,						As of June 30,	
	2020		2021		2022		2023	
	Trade receivables	Expected credit loss rate	Trade receivables	Expected credit loss rate	Trade receivables	Expected credit loss rate	Trade receivables	Expected credit loss rate
	RMB'000		*RMB'000*		*RMB'000*		*RMB'000*	
Within 1 year	2,850,108	0.45%	3,681,765	0.75%	4,380,473	1.20%	3,308,645	1.13%
1 to 2 years	682,967	2.92%	938,598	2.36%	1,032,153	3.96%	1,622,206	3.05%
2 to 3 years	341,061	11.18%	357,775	7.24%	396,423	7.17%	468,520	6.01%
3 to 4 years	87,720	15.68%	214,366	19.98%	209,197	15.17%	390,609	10.21%
4 to 5 years	59,096	12.63%	46,929	29.43%	56,873	40.30%	119,799	22.61%
Over 5 years	–	100.00%	–	100.00%	–	100.00%	–	100.00%
Total	**4,020,952**	**4.26%**	**5,239,433**	**4.63%**	**6,075,119**	**4.74%**	**5,909,779**	**5.45%**

Our Group applied a simplified approach for the impairment assessment of trade receivables. The management of our Group developed the ECL model to calculate the lifetime ECLs by establishing a provision matrix, which is set as below:

In devising a provision matrix, our Group observes the historical loss pattern of customers across the different industries based on then respective experience and historical trend at the end of each period of the Track Record Period to determine the relationship between the age of trade receivables and the risk of non-payment. A fixed expected loss rates are applied on trade receivables depending on its age bands.

In addition, the Group assesses expected credit losses for trade receivables, bills receivable, contract assets and receivable concession arrangements based on provision matrix, and the expected loss rates are based on the historical settlement experience as well as the corresponding historical credit losses. The Group considered the contract assets and receivable concession arrangements share the similar risk profile with the corresponding trade receivables of the same project and apply the expected loss rate of corresponding trade receivables as proxy to derive at the expected loss rate of the contract assets and receivable concession arrangements.

Historical loss rate

Our Group summarizes the trade receivables into appropriate age bands for the last 36 months (the historical back-testing dates) to calculate the historical loss rate representing the percentage of trade receivables in each age band that was ultimately written off. In calculating the average historical loss rate of the each age band, our Group applies a roll rates on each age band which represents the percentage of trade receivables that are not received in the age band and rolled to the next time band and ultimately written-off.

In determining trade receivables that are ultimately written off, our Group considers that the trade receivables is credit-impaired or has no reasonable expectation of recovery when one or more events of default that bear a detrimental impact on the estimated future cash flows of that financial asset have occurred including but not limited to:

(a) significant financial difficulty of the customer;

(b) a breach of contract, such as a default or past due event;

(c) it is becoming probable that the customer will enter into bankruptcy or other financial reorganization; or

(d) the disappearance of an active market for that financial asset because of financial difficulties.

The roll rate on each age band is carefully considered, taking into account, among others, (i) the historical loss pattern based on actual settlement record of the customers; (ii) historical amount of bad debt written off from the trade receivables (if any); (iii) the percentage of trade receivable balances in one age band rolled to the next age band; (iv) the relevant credit rating, background and existence of any negative news affecting the credibility of an individual customer; and (v) other forward looking macroeconomic factors.

Forward looking adjustment

Our Group adjust the historical loss rate taking into account forward looking factors. Our Group has applied multiple factor regression model for determine the forward looking factors adjustment. The adjustment determined by the multiple factor regression model is significantly affected by the COVID-19 pandemic and some significant changes in the market indexes during the Track Record Period, the current market conditions and future economic environment. The macro-economic factors include the GDP Price Index, construction industrial index and Money Supply data in the PRC are considered relevant in calculating the adjustment as most of the customers and projects are carried out in the PRC.

According to the ECL Model, the ECL allowance of the Group for trade receivables of RMB179.1 million, RMB254.6 million, RMB302.1 million and RMB340.4 million was recognized as at each of December 31, 2020, 2021 and 2022 and June 30, 2023.

As at December 31, 2021, we recorded a high expected credit loss rate for the age bands of 2 to 3 years, 3 to 4 years and 4 to 5 years of 7.24%, 19.98% and 29.43%, respectively, which is because one of our non-state-owned customers (**"Non-SOC B"**) had filed for debt restructuring and was approved by the court in 2021. After assessment by the recoverability of the aggregate trade receivables balance of RMB41.1 million (with an age of 2 to 3 years: RMB10.1 million; with an age of 3 to 4 years: RMB22.6 million; and with an age of 4 to 5 years: RMB8.4 million) from the Non-SOC B was fully impaired. The relevant balances from Non-SOC B had not been settled as of December 31, 2022 and thus the balance of RMB10.01 million under the age bands of 2 to 3 years, the balance of RMB22.6 million under the age bands of 3 to 4 years and the balance of RMB8.4 million under the age bands of 4 to 5 years as at December 31, 2021 had been rolled over to the next age band as at December 31, 2022, which had an effect of the rolled rate applied to the relevant age band. As a result of the above, the expected credit loss rate of 19.98% under the age band of 3 to 4 years as at December 31, 2021 is higher than that of 15.17% recorded as at December 31, 2022 and the expected credit loss rate of 29.43% under the age band of 4 to 5 years as at December 31, 2021 is lower than that of 40.30% recorded as at December 31, 2022. Meanwhile, the Group has performed the individual assessment under the ECL Model and considered that there is no significant increase in credit risk on its customer since initial recognition for the ageing balance under the age bands of 2 to 3 years, 3 to 4 years and 4 to 5 years as at December 31, 2022.

The gross balance of trade receivables aged over two years for state-owned customers of the Group as of December 31, 2022 amounted to RMB545.7 million, and our Group have applied the average ECL rates of 7.17%, 11.54%, 21.77% and 100.00% under the age bands of 2-3 years, 3-4 years, 4-5 years and over 5 years, respectively. Deducting (i) the aggregate ECL allowance of RMB86.9 million for trade receivables aged over two years for the state-owned customers of the Group as of December 31, 2022; and (ii) the aggregate balance of the subsequent settlement of RMB327.6 million up to May 21, 2023, the net exposure (being the net carrying amount remained outstanding) of the trade receivables aged over two years of the state-owned customers of the Group as of December 31, 2022 was RMB148.7 million.

The gross balance of trade receivables aged over two years of the non-state-owned customers of our Group as of December 31, 2022 amounted to RMB323.2 million. We applied the average ECL rates of 7.17%, 18.48%, 63.29% and 100.00% under the age bands of 2-3 years, 3-4 years, 4-5 years and over 5 years respectively for these non-state-owned customers. Deducting (i) the aggregate ECL allowance of RMB119.5 million for trade receivables aged over two years for the non-state-owned customers of the Group as of December 31, 2022; and (ii) the aggregate balance of the subsequent settlement of RMB55.0 million up to May 21, 2023, the net exposure of the trade receivables aged over two years of the non-state-owned customers of the Group as of December 31, 2022 was RMB150.3 million.

The gross balance of trade receivables aged over two years for state-owned customers of our Group as of June 30, 2023 amounted to RMB667.8 million, and our Group have applied the average ECL rates of 6.0%, 10.2%, 17.2% and 100.00% under the age bands of 2-3 years, 3-4 years, 4-5 years and over 5 years, respectively. Deducting (i) the aggregate ECL allowance of RMB120.6 million for trade receivables aged over two years for the state-owned customers of the Group as of June 30, 2023; and (ii) the aggregate balance of the subsequent settlement of trade receivables aged over two years of RMB178.0 million up to August 31, 2023, the net exposure (being the net carrying amount remained outstanding) of the trade receivables aged over two years of the state-owned customers of the Group as of June 30, 2023 was RMB489.7 million.

The gross balance of trade receivables aged over two years of the non-state-owned customers of our Group as of June 30, 2023 amounted to RMB311.2 million. We applied the average ECL rates of 6.0%, 10.1%, 33.8% and 100.00% under the age bands of 2-3 years, 3-4 years, 4-5 years and over 5 years respectively for these non-state-owned customers. Deducting (i) the aggregate ECL allowance of RMB130.1 million for trade receivables aged over two years for the non-state-owned customers of the Group as of June 30, 2023; and (ii) the aggregate balance of the subsequent settlement of RMB10.2 million up to August 31, 2023, the net exposure of the trade receivables aged over two years of the non-state-owned customers of the Group as of June 30, 2023 was RMB301.0 million.

In particular, based on the facts that:

(a) as of the Latest Practicable Date, RMB574.6 million of trade receivables aged over two years as of June 30, 2023 have been received representing 58.7% of our carrying amount aged over two years as of June 30, 2023; and

(b) in relation to the trade receivables from non-state-owned customers under the age band of 3-4 years and 4-5 years, the net carrying amount of such age band as of June 30, 2023 was RMB110.8 million and RMB33.5 million respectively, and the subsequent settlement up to the Latest Practicable Date was RMB13.3 million and RMB24.7 million respectively, representing 12.0% and 73.9% of the respective net carrying amount. Despite the minimal recovery rate of the trade receivables of 3-4 years and 4-5 years age bands, our management is of the view that there is no recoverability issue in this regard as the trade receivables of this age band primarily comprises the receivables under certain construction contracts with a customer of the Group, pursuant to which, the Group had undertaken to conduct construction work for such customer. While the Group had completed its obligation under the contract, the customer had not fulfilled its payment obligation.

In or around August 2021, the Group had made a petition to the Intermediate People's Court of Taiyuan, praying for, among others, (i) the rescission of the contract and other supplemental contract thereto; and (ii) the payment of approximately RMB75.5 million and interests from the aforementioned customer in respect of the construction work done by the Group. In December 2021, the court had given a judgment in favour of the Group and had ordered the aforementioned customer to pay the Group an amount of approximately RMB75.5 million with interests (the "**Judgment Sum**"). As at the Latest Practicable Date, the judgment is being enforced and the court had proposed that the Judgment Sum shall be satisfied by the proceeds from a bidding of the aforementioned customer's assets. Based on a valuation report prepared by a valuer who is independent from the Group, as of December 31, 2022, the market value of the assets being the subject of the bidding was estimated at RMB616.4 million, which is approximately eight times of the Judgment Sum. As such, the Company is of the view that there are no material difficulties in the recovery of such trade receivables. Our Company has inquired with the court and was informed that the court is currently undergoing the administrative procedures for the bidding of the said customer's assets, and it is expected that our Company will be able to recover the Judgment Sum in approximately one year from the commencement of the bidding.

Our Company performed assessment under the ECL model and our management considered a number of factors including, inter alia, (i) the background of the relevant customers; (ii) the duration of relationship with the respective customers; (iii) the Group is not aware of any news of these customers that might adversely affect the recoverability of these trade receivables and the position of the ECL allowance; and (iv) these state-owned and non-state-owned customers did not have any default payment history that might adversely affect the position of the ECL allowance, and we expect to collect such receivables in future.

Having taken into account the above factors, the Directors are of the view, and the Joint Sponsors concurred with the Directors' view, that the Group's aggregate ECL allowance for the trade receivables aged over two years as of June 30, 2023 was sufficient.

The management of our Company is of the view that the low subsequent settlement rate of our trade receivables was mainly caused by (i) the COVID-19 outbreak, which led to a delay in progress on receipt of government subsidies, project-specific loans and/or special debt funding by the relevant customers which often require joint audits and on-site communication with government departments and in turn, had delayed the settlement progress of the Group's receivables; (ii) due to the nature of the construction industry, most of our projects were subject to completion audit, which is an industry practice for the certification of revenue and costs, and the progress of settlement of the Company's trade receivables may be prolonged as a result of delay in completion and/or settlement audit due to various reasons such as negotiations between the parties and progress of the audit. Accordingly, our subsequent settlement rate will be hindered as the timing of settlement would be held up.

In light of the fact that: (i) the diminishing impact of the COVID-19 pandemic in the business operation across the nation in general; (ii) the management of our Company have conducted a review and assessment of our ECL model taking into account of the background, payment history of and our business relationship with the relevant customers in our trade receivables portfolio, and have concluded that our current ECL model is sufficient to address the relevant loss allowance; and (iii) conducting completion audit is in line with the industry practice; the management of the Company is of the view that there is no recoverability issue in respect of our trade receivables.

Contract assets and receivables under service concession arrangements

Contract assets represent the services provided to the customers (i.e. the right to consideration in exchange for services has transferred to the customer) and recognized as revenue, but some conditions are yet to be fulfilled, including achievement of the agreed payment schedule as stated in the contracts with the customers. Our Group would reclassify from contract assets to receivables under service concession arrangements when PPP projects are under operation phase, which is contingent on our Group ensuring that the facilities meet specified requirements. Our Group considered the contract assets and receivables under service concession arrangements share the similar risk profile with the corresponding trade receivables of the same project and apply the expected loss rate of corresponding trade receivables as proxy to derive at the expected loss rate of the contract asset.

Accordingly, the ECL allowances of the Group for contract assets of RMB14.1 million, RMB33.5 million, RMB76.5 million and RMB80.0 million and receivables under concession arrangements of RMB4.5 million, RMB17.3 million, RMB32.7 million and RMB34.0 million were recognized as at each of December 31, 2020, 2021 and 2022 and June 30, 2023.

ECL allowance for other financial assets at amortized cost

Other receivables

Measurement of the 12-months ECLs or lifetime ECLs of other receivables is determined by a probability-weighted estimate of credit losses over the expected life time of the other receivables. In calculating the ECLs for other receivables, the management of the Group would make periodic collective and individual assessment on the recoverability of other receivables based on historical settlement records and past experience as well as external information and makes adjustment based on the weighted probability of forward-looking information including operating default rate of the debtors.

Accordingly, the ECL allowance of the Group for other receivables of RMB21.9 million, RMB26.2 million, RMB37.5 million and RMB44.1 million has recognized as at each of December 31, 2020, 2021 and 2022 and June 30, 2023.

Restricted bank deposits and cash and cash equivalents

The credit risk for restricted bank deposits and cash and cash equivalents is considered to be immaterial, as the counterparts are banks/financial institutions with high credit ratings by international credit rating agencies.

Bills receivable

Our Group's exposure to credit risk arising from bills receivable is limited because the counterparties are mainly banks and financial institutions with sound credit ratings, for which our Group considers them to have low credit risk. By further considering our Group has received commercial acceptance bills from some large corporates in the PRC, given the bill receivables share similar risk profile with the corresponding trade receivables of the same project, the Group has considered the ECL allowance shall apply the expected loss rate within 1 year of trade receivables as proxy to derive at the expected loss rate of the bill receivables as most of the bills receivable would be released within 1 year.

Accordingly, the ECL allowance of the Group for bills receivable of RMB1.2 million, RMB1.9 million, RMB3.1 million and RMB2.3 million was recognized as at December 31, 2020, 2021 and 2022 and June 30, 2023.

Financial guarantee contracts

For financial guarantee contracts, the date that our Group become a party to the irrevocable commitment is considered to be the date of initial recognition for the purposes of assessing the financial instrument for impairment. Our Group have considered the changes in the risk that the specified debtor will default on the contract. Given the low default rate and sound financial condition of relevant related parties, the Directors are of the view that the fair value of these financial guarantee contracts at initial recognition and at the end of each period of the Track Record Period is insignificant.

Based on the above, the Directors are of the view, which the Joint Sponsors concur, that the provision is sufficient by considering the above ECL Model and no further impairment is necessary.

The following table sets forth the turnover days of our trade and bills receivables (excluding retention fee) for the periods indicated:

	For the year ended December 31,			For the six months ended June 30,
	2020	**2021**	**2022**	**2023**
Turnover days of our trade receivables and bills receivable[(1)]	140	136	169	217

(1) Turnover days of our trade receivables and bills receivable for the Track Record Period is calculated based on the average of the beginning and ending balances of our trade receivables and other bills receivable (excluding the balances of retentions (current portion)) for that period divided by revenue for that period and multiplied by 365 days in 2020, 2021, and 2022 and 181 days in the six months ended June 30, 2023.

Turnover days of our trade receivables and bill receivable decreased from 140 days for the year ended December 31, 2020 to 136 days for the year ended December 31, 2021. Turnover days of our trade receivables and bills receivable increased from 136 days for the year ended December 31, 2021 to 169 days for the year ended December 31, 2022, mainly due to (i) relevant counterparty's project-specific loans or government subsidies, special debt funds have not yet been in place; (ii) COVID-19 outbreak in multiple places across the country led to restricted personnel activities, hence the delayed settlement by our customers; (iii) project loan compliance procedures require joint audits and on-site communication with multiple relevant government departments, leading to a delay in the process, which then affects the availability of project loan facilities, and in turn has an impact on the collection of payments by us.

For the six months ended June 30, 2023, turnover days of our trade receivables and bills receivable increased from 169 days for the year ended December 31, 2022 to 217 days. The increase was primarily attributable to lower revenue recognized for the six months ended June 30, 2023. Our revenue for the year ended December 31, 2022 amounted to RMB12,844.8 million whereas our revenue for the six months ended June 30, 2023 was RMB5,248.9 million. The lower revenue recognized for the six months ended June 30, 2023 was mainly attributable to seasonality of our construction work, which during the Chinese New Year period, most of our projects and constructions are suspended. The balance of our trade receivables for the six months ended June 30, 2023 was RMB5,909.8 million, which was relatively stable as compared with the corresponding balance of RMB6,075.1 million for the year ended December 31, 2022.

Contract Assets and Receivables under Service Concession Arrangements

Contract assets represent the right to receive the corresponding consideration for the constructions completed as well as revenues associated with the provision of construction services at the reporting date. Contract assets are recognized when revenue is recognized before the Group is unconditionally entitled to the consideration in accordance with the payment terms set out in the contract (e.g. upon completion of settlement auditing). Contract assets are transferred to trade receivables when the right to receive consideration becomes unconditional. Our Group would reclassify from contract assets to receivables under service concession arrangements when PPP projects are under operation phase, which is contingent on our Group ensuring that the facilities meet specified requirements.

The following table sets forth a breakdown of our contract assets and receivables under service concession arrangements as at the dates indicated:

	As at December 31,			As at June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Contract assets arising from construction contracts				
– Contract assets on PPP projects	1,725,663	901,296	764,296	820,601
– EPC projects	1,468,470	3,521,803	5,090,635	5,433,806
	3,194,133	4,423,099	5,854,931	6,254,407
Retention receivable	130,367	286,169	554,051	500,253
Expected credit losses	(14,069)	(33,496)	(76,482)	(79,954)
	3,310,431	4,675,772	6,332,500	6,674,706
Less: Non-current portion of contract assets	(1,538,069)	(931,545)	(1,163,796)	(1,146,261)
	1,772,362	3,744,227	5,168,704	5,528,445
Receivables under service concession arrangements	1,053,098	2,430,661	2,769,022	2,875,202
Expected credit losses	(4,457)	(17,290)	(32,663)	(34,032)
	1,048,641	2,413,371	2,736,359	2,841,170
Less: Non-current portion of receivables under service concession arrangements	(969,838)	(2,104,580)	(2,405,701)	(2,475,562)
	78,803	308,791	330,658	365,608

For our construction contracts, we recognize revenue over time using the input method, which is measured based on the actual costs associated with the total budgeted construction costs as a percentage of the total contract value of the corresponding projects. During the Track Record Period, there was no material difference between our budgeted costs and the actual costs incurred for our construction projects. In general, during the construction period, we are contractually entitled to issue construction progress bills to our customers in accordance with the construction schedule, which is based on the percentage of progress confirmed by the customers upon completion of settlement review as stipulated in the relevant construction contracts, and the remaining portion of the completion value (being the customers' certified works performed by us which are yet to become unconditionally entitled for billing under the terms of contract) is recognized as contract assets and will be reclassified as trade receivables and recovered from customers upon completion of the settlement review.

Upon completion and acceptance of the construction works, we commence the settlement review process with our customers in accordance with the terms of the contract. During the Track Record Period, upon completion of the project, the time required for us to complete the settlement review and issue the final settlement value (excluding 3%-10% of the retention money) balance reached approximately one to three years.

According to the Frost & Sullivan Report, prolonged settlement review process is common in the construction industry in China mainly due to, among others, (i) careful acceptance by multiple responsible personnel from different parties, especially for large and complex projects or projects obtained from state-owned enterprises; (ii) extension of negotiations for final settlement, including determination of scope of works, resolution of quality issues and discussion of adjustments in the process of fulfilling the relevant contracts; (iii) the involvement of the customer's management and/or the lengthy internal approval process of the finance department, particularly for some of our customers, such as government-related entities; and (iv) some of the larger and/or complex projects require a longer period of time for inspection, which results in the need of a longer period of time to complete settlement review.

Our contract assets increased by RMB1,365.3 million from RMB3,310.4 million as of December 31, 2020 to RMB4,675.8 million as of December 31, 2021, increased by RMB1,656.7 million to RMB6,332.5 million as of December 31, 2022 and further increase by RMB342.2 million to RMB6,674.7 million as of June 30, 2023, the increase was primarily due to (i) our revenue recognised from our construction projects; (ii) the cumulative effect of contract asset balances for some of our construction projects that have a longer duration; (iii) the overall economic downturn as a result of the COVID-19 pandemic in the last two years, during which the capital flow of our customer was generally tight, resulting in the certification and billing process lagging behind and (iv) increase in the retention receivable.

The following tables set out (a) a breakdown of the Group's contract assets and receivables under service concession arrangements by project type and (b) carrying amount of the Group's contract assets and receivables under service concession arrangements for the PPP projects and (c) ageing analyses of the Group's contract assets of EPC projects, respectively, as of the end of each of the years/period indicated:

Breakdown of contract assets and receivables under service concession arrangements, net of expected credit loss, by project type:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Contract assets:				
PPP projects	1,718,359	894,885	755,280	810,887
EPC projects	1,592,072	3,780,887	5,577,220	5,863,819
	3,310,431	4,675,772	6,332,500	6,674,706
Receivables under service concession arrangements	1,048,641	2,413,371	2,736,359	2,841,170
Total	4,359,072	7,089,143	9,068,859	9,515,876

There is a causal relationship between the contract assets and receivables under service concession arrangements and the number of PPP and EPC projects secured and commenced construction by the Group. Once the Group had secured a PPP/EPC project and commenced construction of such projects. The increase in contract assets recorded for each of our PPP and EPC projects was mainly attributable to the increase in number of such projects being obtained and commenced construction by the Group. The increase in receivables under service concession arrangements recorded for each of our PPP projects was mainly attributable to the increase in the number of PPP projects being commenced operation by the Group.

Carrying amount of PPP projects:

The following table sets forth the carrying amount of contract assets and receivables under service concession arrangements by PPP Projects as of June 30,2023:

	Project	Project Status	Contract assest			Receivables under service concession arrangements		
			Current portion (Note 2)	Non-current portion	Total	Current portion (Note 1)	Non-current portion	Total
			RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
1	PPP project of Quality Improvement Project (New Party School, Qinshui-East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province	Construction phase	65,616	316,171	381,787	–	–	–
2	PPP Project of Underground Comprehensive Pipe Gallery Project in Xiyang Economic and Technological Development Zone, Xiyang County, Jinzhong City	Operation phase	–	–	–	57,741	411,196	468,937
3	PPP project of Infrastructure Improvement in Weibo Equipment Manufacturing Starting Area of Yinying Industrial Park in Yangquan Economic and Technological Development Zone	Construction phase	–	6,229	6,229	–	–	–
4	PPP Project for Small Water Network Ancillary Works in Jiexiu City	Construction phase	94,305	328,566	422,871	–	–	–
5	PPP Project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County	Operation phase	–	–	–	1,691	447,269	448,960
6	PPP project of the Photovoltaic Industry Incubation and Entrepreneurship Base of the People's Government of Huangnian Town, a suburb of Changzhi City	Operation phase	–	–	–	27,446	160,073	187,519

	Project	Project Status	Contract assest			Receivables under service concession arrangements		
			Current portion (Note 2)	Non-current portion	Total	Current portion (Note 1)	Non-current portion	Total
			RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
7	PPP Project of Central Heating Pipe Network in Cogeneration Urban District, Liulin County	Operation phase	–	–	–	65,403	301,299	366,702
8	PPP Project of Swimming Pool and Meixing Theater of Qinshui County in Jincheng City, Shanxi Province	Operation phase	–	–	–	59,152	290,871	350,023
9	PPP Project of Two Roads and Three Streets Widening and Reconstruction Project in Huguan County	Operation phase	–	–	–	22,166	240,071	262,237
10	PPP Project of Extension Project of Wangchuan Street, Qishan South Road and Huangwei East Street in Lingchuan County	Operation phase	–	–	–	26,924	176,337	203,261
11	PPP Project of "Five Roads and One River" Project in Gaoping City	Operation phase	–	–	–	64,731	285,055	349,786
12	PPP Project of South Extension Viaduct Project of Binhe East Road, Xiantangshan Tourist Highway in Xiangyuan County	Operation phase	–	–	–	22,540	90,049	112,589
13	PPP Project of (Fourth) Sewage Treatment Plant and Supporting Pipe Network Project of New Town in North of Linfen City	Operation phase	–	–	–	17,814	73,342	91,156
14	PPP Project of Urban Flood Control and Drainage and Comprehensive Treatment of Ecological Environment in Zhangzi County, Changzhi City	Not yet commence construction	–	–	–	–	–	–
			159,921	650,966	810,887	365,608	2,475,562	2,841,170

Notes:

1. Current portion of receivables under services concession arrangements includes construction, operating and interest income of PPP projects under "Operation phase", where the Group expected such income will be received within 12 months, which is based on contractually agreed milestone; and

2. Current portion of contract assets includes other non-construction income generated from the auxiliary services by sub-contractors, of which the Company acted as an agent for such auxiliary services of the PPP project under "Construction Phase".

Ageing analysis of EPC projects:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Current portion:				
Within 1 year	1,535,017	3,645,982	4,979,809	5,368,524
Non-current portion:				
Within 1 year	57,003	132,634	504,599	363,787
1 to 2 years	52	2,271	92,812	77,257
2 to 3 years	–	–	–	54,251
Sub-total	57,055	134,905	597,411	495,295
Total	1,592,072	3,780,887	5,577,220	5,863,819

Increase in contract and receivables under service concession arrangements assets for PPP projects

During construction phase of the PPP projects, contract asset for PPP projects is recognized when we recognize the non-cash construction revenue of PPP projects. The amount of the contract asset in relation to the construction work is determined as the present value of the guaranteed minimum payment that we are entitled to receive, and that the contract asset on PPP projects and receivables under service concession arrangements shall be settled by our customers to our Group throughout the operation period which generally has a time span of 10 to 29 years and classified as non-current. Our Group would reclassify from contract assets to receivables under service concession arrangements, when PPP projects are under operation phase, which is contingent on our Group ensuring that the facilities meets specified requirements. During the operation phase of the PPP projects, the portion of the receivables under service concession arrangements due within 12 months from the end of the respective year is classified as current asset as at the reporting date and the remaining balance is classified as the non-current portion. The current portion of the receivables under service concession arrangements for PPP projects due within 12 months from the end of the respective year represents the portion that our Group becomes unconditionally entitled to in accordance with contractual agreements for the PPP projects and such current portion of the receivables under service concession arrangements will be transferred as trade receivables; whereas the non-current portion under the relevant aged groups merely represent the age of recognition of such contract assets and receivables under service concession arrangements since the recognition of the non-cash construction revenue of PPP projects due more than 12 months. For details of the accounting treatment, please refer to "Accounting treatment associated with the construction of our PPP projects" in this section.

Hence, the movement of the aging profile of contract assets and receivables under service concession arrangements for PPP projects during the Track Record Period and the lower percentage of contract assets and receivables under service concession arrangements transferred as trade receivables (i.e. at the time when the right to receive payment becomes unconditional and subsequently became trade receivable as illustrated above) are mainly due to the cashflow mismatch of the PPP projects of the Group as we could generally only receive payments for the construction work from our customers throughout the operation period which usually have a time span of 10 to 29 years, and it is not an indication of a deterioration in ageing of contract assets and receivables under service concession arrangements for PPP projects during the Track Record Period. As of December 31, 2020, 2021 and 2022 and June 30, 2023, our contract assets and receivables under concession arrangements from PPP projects amounted to RMB2,767.0 million, RMB3,308.3 million, RMB3,491.6 million and RMB3,652.1 million, which represents period-on-period increase of approximately 19.6%, 5.5% and 4.6%. The increase in contract assets and receivables under service concession arrangements for our PPP projects was primarily attributable to the increase in number of PPP projects secured and the revenue recognised for some of our PPP projects in accordance with the progress of construction (i.e. percentage-of-completion). Representative PPP projects obtained and commenced construction which had contributed to the increase in contract assets and receivables under concession arrangements for our PPP projects are set out below:

During the year ended December 31, 2020:

- PPP Project of "Five Roads and One River" Project in Gaoping City
- PPP Project of Central Heating Pipe Network in Cogeneration Urban District, Liulin County

During the year ended December 31, 2021:

- PPP Project of (Fourth) Sewage Treatment Plant and Supporting Pipe Network Project of New Town in North of Linfen City
- PPP Project of Two Roads and Three Streets Widening and Reconstruction Project in Huguan County

During the year ended December 31, 2022:

- PPP Project for Small Water Network Ancillary Works in Jiexin City
- PPP Project of Quality Improvement Project (New Party School, Qinshiu-East Link Traffic Hub Project) of Qinshiu County, Jincheng City, Shanxi Province

During the six months ended June 30, 2023

- PPP Project of Quality Improvement Project (New Party School, Qinshiu-East Link Traffic Hub Project) of Qinshiu County, Jincheng City, Shanxi Province
- PPP project of Infrastructure Improvement in Weibo Equipment Manufacturing Starting Area of Yinying Industrial Park in Yangquan Economic and Technological Development Zone

Furthermore, the increase in our contract assets and receivables under service concession arrangements for PPP projects from RMB3,308.3 million as of December 31, 2021 to RMB3,491.6 million as of December 31, 2022 and the further increase to RMB3,652.1 million as of June 30, 2023 were mainly attributable to the revenue contribution of the PPP Project of Quality Improvement Project (New Party School, Qinshiu-East Link Traffic Hub Project) of Qinshiu County, Jincheng City, Shanxi Province in the sum of RMB159.2 million and the PPP Project for Small Water Network Ancillary Works in Jiexin City in the sum of RMB37.6 million for the year ended December 31, 2022 and that of the PPP Project of Quality Improvement Project (New Party School, Qinshui-East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province in the sum of RMB160.4 million for the six months ended June 30, 2023.

As of the Latest Practicable Date, RMB181.6 million representing 34.6% of the current portion of our contract asset and receivables under service concession arrangements for PPP projects as of June 30, 2023 were subsequently certified by and billed to our customers in accordance with the terms of our construction contracts after the settlement review as confirmed by our customers.

Increase in contract assets for EPC projects

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our contract assets for EPC projects amounted to RMB1,592.1 million, RMB3,780.9 million, RMB5,577.2 million and RMB5,863.8 million, which represents period-on-period increase of approximately 137.5%, 47.5% and 5.1% respectively. The increase in contract assets for our EPC projects was primarily attributable to the increase in number of EPC projects secured and the revenue recognised for the EPC projects in accordance with the progress of construction. Representative EPC projects obtained and commenced construction which had contributed to the increase in contract assets for our EPC projects are set out below:

During the year ended December 31, 2020:

- Demonstration Area Incubation Base Scientific and Technological Achievements Exhibition Center Supporting Talent Apartments and Service Facilities project;

- Valley Prefabricated Building Intelligent Manufacturing Industrial Park Standardized Workshop project in Weilan; and

- Subway Line Network Electromechanical Equipment in Weilan project

During the year ended December 31, 2021:

- The Coal to Electricity Heating Demonstration Transformation Project in Keping County;

- The Huludao Xulan Nanpiao 80MW photovoltaic power generation project; and

- Equipment Manufacturing and New Material High-end Plant Construction project equipment in the Shanxi Transformation Comprehensive Reform Demonstration Zone Industrial Park project.

During the year ended December 31, 2022:

- 350MW low calorific value coal power generation project in Hequ;

- 100MW multi-energy complementary project in Yuanqu County

- 100MW agricultural and complementary photovoltaic power generation project in Ruicheng County.

During the six months ended June 30, 2023

- Gujiao Hekou 100MW Wind Power Project (古交河口100MW風力發電項目)

- Coalbed Methane Liquefaction project of 600,000 Nm^3/day (60萬Nm^3/日煤層氣液化項目)

- Lianjiang City Liangdong 80MW Fishery and Photovoltaic Complementary power generation Project (廉江市良垌80兆瓦漁光互補光伏項目)

The non-current portion of our contract assets for EPC projects as of December 31, 2022 amounted to RMB597.4 million mainly represented the retention receivables which will generally be returned to us in full at the end of the defects liability period. Increase in the non-current portion of our contract assets for EPC projects was mainly attributable to increase the retention receivable due to increase the number of EPC projects completion during the year ended December 31, 2022. The non-current portion of our contract assets for EPC projects as of June 30, 2023 amounted to RMB495.3 million, representing a decrease of RMB102.1 million comparing with that as of December 31, 2022. Such decrease was primarily attributable to the collection of our retention receivables upon expiry of the relevant defect liability period. As of the Latest Practicable Date, RMB3,067.8 million representing 57.1% of the current portion of our contract assets for EPC projects as of June 30, 2023 were subsequently certified by and billed to our customers in accordance with the terms of our construction contracts after the settlement review as confirmed by our customers.

Reversal of contract Assets

For the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023, we had reversal of contract asset in the sum of RMB3.7 million, RMB32.9 million, RMB46.9 million and RMB7.6 million, which accounted for 0.1%, 0.8%, 0.7% and 0.1% of the total contract asset of the prior financial year. The reversal of contract asset for the years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023 respectively arose from two, nine, 27 and 15 projects, which accounted for 0.3%, 1.3%, 3.7% and 1.7% of the total number of projects undertaken by our Company during respective year. The reversal of contract assets for the year ended December 31, 2020, stems from projects with original contract value that ranged between RMB21.3 million, RMB179.4 million, and ranged between RMB8.0 million and RMB1,440.9 million for 2021, between RMB1.1 million and RMB519.2 million for 2022, and between RMB3.6 million and RMB1,194.1 million for the six months ended June 30, 2023.

Turnover days of our contract assets

The following table sets forth the turnover days of our contract assets for the years/period indicated:

	As of December 31,			For the six months ended June 30,
	2020	**2021**	**2022**	**2023**
Turnover days of our contract assets*(Note)*	101	110	158	227

Note: Turnover days of our contact assets for the Track Record Period is calculated based on the average of the beginning and ending balances of contract assets for that period divided by revenue for that period and multiplied by 365 days in 2020, 2021 and 2022 and 181 days for the six months ended June 30, 2023.

Turnover days for our contract assets increased from 101 days for the year ended December 31, 2020 to 110 days for the year ended December 31, 2021, Such increase was mainly attributable to the progress of several projects had substantive progress, yet the progress of the completion audit was comparatively slower, thereby resulting in an increase in contract asset for the period ended December 31, 2021, which representative projects include the PPP Project of Comprehensive Renovation Engineering of Fenhe Urban Section of Xinjiang County, Coal to Electricity Heating Demonstration Transformation Project in Keping County, Huludao Xulan Nanpiao 80MW photovoltaic power generation project and the Equipment Manufacturing and New Material High-end Plant Construction project equipment in the Shanxi Transformation Comprehensive Reform Demonstration Zone Industrial Park project.

Turnover days for our contract assets further increased to 158 days for the year ended December 31, 2022 as a result of (i) the delay in completion audit in several projects due to the COVID-19 pandemic in the PRC, the representative projects of which include 350MW low calorific value coal power generation project in Hequ, 100MW agricultural and complementary photovoltaic power generation project in Ruicheng County and 100MW multi-energy complementary project in Yuanqu County; and (ii) substantive progress in our PPP projects yet the certification of revenue is pending for completion audit, representative projects of which include the PPP Project of South Extension Viaduct Project of Binhe East Road, Xiantangshan Tourist Highway in Xiangyuan County and the PPP project of Quality Improvement Project (New Party School, Qinshui-East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province.

Turnover days for our contract assets for the six months ended June 30, 2023 increased to 227 days, which was primarily caused by an increase in closing balances of contract assets as of the year of December 31, 2022 from RMB6,332.5 million to RMB6,674.7 million and also a decrease in unbilled revenue in the corresponding period mainly due to the cut-off time for billing of our construction work. The increase in contract assets was primarily due to us completing a substantial portion of construction for major projects in the first six months of 2023 including the Lianjiang City Liangdong 80MW Fishery and Photovoltaic Complementary power generation Project (廉江市良垌80兆瓦漁光互補光伏項目) (i.e. Project SIC-40) and Gujiao Hekou 100MW Wind Power Project (古交河口100MW風力發電項目) (i.e. Project SIC-38), thus a higher level of revenue recognition and the relevant customers' confirmation at a later time of the corresponding construction.

Due to the nature of the construction industry, most of our projects were subject to completion audit, which is an industry practice for the certification of revenue and costs, and the progress of transfer of our contract assets to trade receivables may be prolonged as a result of delay in completion and/or settlement audit due to various reasons such as negotiations between the parties and progress of the audit. Having considered that (i) the management of the Company has reviewed and assessed the ECL model we currently adopted, and have concluded that sufficient provision is made under such model; and (ii) the practice of conducting settlement audit is in line with the industry standard, the management of the Company is of the view that there is no recoverability issue in respect of its contract asset despite the low subsequent certification rate of our contract assets.

Contract Liabilities

Contract liabilities are recognized when the customers pay the consideration before we recognize the related revenues. Contract liabilities will also be recognized if we have an unconditional right to consideration before the related revenues are recognized. In this case, the corresponding receivables will also be recognized. For a single contract entered into with a customer, net contract assets or net contract liabilities are presented. For multiple contracts, contract assets and contract liabilities for unrelated contracts are not presented on a net basis.

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our contract liabilities balance was approximately RMB1,105.3 million, RMB1,407.4 million, RMB2,166.3 million and RMB1,711.0 million, respectively. As we negotiate relevant prepayment arrangements on a case-by-case basis with our customers, there has been no change in the payment terms of our projects, our settlement procedures and revenue recognition policies during or before the Track Record Period. The fluctuations in our contract liabilities during the Track Record Period were due to the fact that we received payments in proportion to the prepayments agreed in the landlords' contracts, which was a normal change.

As of the Latest Practicable Date, RMB699.4 million representing 40.9% of our contract liabilities as of June 30, 2023 have been utilized.

Prepayments, deposits and other receivables

Our prepayments, deposits and other receivables mainly include deposits and other receivables, prepayments to suppliers and value-added tax receivables. Prepayment refers to the advance payment for, including but not limited to, procuring installation parts and materials (such as steel, cement, wind turbine, photovoltaic modules, electric cable and etc.), service fees (such as prepayment for subcontracting service arrangements and labour cost, as well as consultation fees paid to professional consultants depending on type of the project involved or as agreed in the contract); whereas deposits and other receivables mainly refer to the amount paid to our customers as security deposit for our construction projects, amount due from related parties, other receivables and loans to associates. The following table sets forth details of our prepayments, deposits and other receivables as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Deposits and other receivables				
– Reserves	*3,040*	*14,349*	*6,443*	*13,301*
– Security deposits	*223,767*	*147,918*	*159,073*	*139,901*
– Deposits	*17,062*	*19,390*	*27,555*	*28,301*

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
– Loans to associates	*–*	*–*	*54,684*	*15,741*
– Loans to former associates	*199,839*	*85,633*	*50,439*	*45,439*
– Amount due from related parties	*686,789*	*469,736*	*566,129*	*444,338*
– Other receivables	*297,045*	*221,953*	*198,327*	*188,799*
	1,427,542	958,979	1,062,650	875,820
Less: Expected credit losses	(21,927)	(26,202)	(37,496)	(44,124)
Deposits and other receivables, net	1,405,615	932,777	1,025,154	831,696
Other contract costs	16,938	18,867	20,084	11,111
Prepayments	462,004	701,224	500,176	516,900
Prepayments to associates	–	–	22,300	16,688
Prepayments to related parties	1,365	86,668	31,096	17,351
Tax recoverable	38	45	38	21
Value-added tax receivables	165,084	243,992	357,589	520,967
Prepayments, deposits and other receivables, net	2,051,044	1,983,573	1,956,437	1,914,734

During the Track Record Period, our prepayments, deposits and other receivables fluctuated, primarily reflected prepayments to suppliers and subcontractors, associates and key management personnel. Prepayments to suppliers fluctuated in line with actual production and operation.

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our prepayments, deposits and other receivables amounted to RMB2,051.0 million, RMB1,983.6 million, RMB1,956.4 million and RMB1,914.7 million respectively. For the year ended December 31, 2021, we recorded a slight decrease in our prepayments, deposits and other receivables by 3.3% when compared to the year ended December 31, 2020.

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our deposit and other receivables amounted to RMB1,427.5 million, RMB959.0 million, RMB1,062.7 million and RMB875.8 million, representing a decrease of 32.8% for the year ended December 31, 2021, an increase of 10.8% for the year ended December 31, 2022 and a decrease of 17.6% for the six months ended June 30, 2023. Our deposit and other receivables mainly comprise the amount paid to our customers as security deposits for our construction projects, amount due from related parties, other receivables and loans to associates. The fluctuation in our deposit and other receivables was primarily caused by the fluctuations in our security deposits and amount due from related parties.

The decrease in our deposit and other receivables of approximately RMB468.6 million from as of December 31, 2020 to as of December 31, 2021, representing a year-on-year decrease of 32.8% was primarily a result of (i) the decrease in our security deposit of approximately 33.9% in the sum of RMB75.8 million with the decrease in security deposit due to fewer project awarded in open tenders; (ii) decrease in loans to former associates in the sum of RMB114.2 million with the repayment from Yu'an Hengchuang and Shanxi Jianfa Comprehensive Energy Development Co., Ltd.* (山西建發綜合能源開發有限公司); and (iii) the decrease in amount due from related parties in the sum of approximately RMB217.1 million as a result of repayment from Shanxi CIG.

As of December 31, 2022, our deposits and other receivables increased by approximately RMB103.7 million, representing an increase of 10.8% when compared to that as of December 31, 2021, which was primarily attributable to deposits we placed in connection with the land and properties to be applied to our power projects.

As of June 30, 2023, our deposits and other receivables decreased by RMB186.9 million, representing a 17.6% decrease when compared to that as of December 31, 2022, which was due to (i) repayment of the loan to associates in the sum of RMB2.0 million by Shanxi Jiantong Construction Industry Co., Limited (山西建投建築產業有限公司); and (ii) collection of construction fee of RMB21.3 million due from a related party during the six months ended June 30, 2023.

As at December 31, 2020, 2021 and 2022 and June 30, 2023, our expected credit loss allowance for deposits and other receivables amounted to RMB21.9 million, RMB26.2 million, RMB37.5 million and RMB44.1 million, respectively, representing 1.5%, 2.7%, 3.5% and 5.0% of the aggregate amount of deposits and other receivables, respectively.

The increase in the expected credit loss allowance during Track Record Period was mainly driven by the expected credit loss by individual assessment of RMB5.8 million, RMB9.9 million, RMB12.4 million and RMB14.0 million as of December 31, 2020, 2021 and 2022 and June 30, 2023, respectively, on the balances of security deposits of RMB36.0 million paid for the construction work of pharmaceutical and photovoltaic project in 2016 in accordance with the contractual requirement under the relevant contract, and such project is in dispute.

In June 2016, our Group had entered into a cooperation agreement with Pingyao County Government (the "**Pingyao Government**") for a cooperation development plan of a pharmaceutical and photovoltaic project with a total investment amount of approximately RMB4.5 billion (the "**Cooperation Agreement**"). Pursuant to the Cooperation Agreement, our Group was required to pay a deposit of RMB20.0 million to the Pingyao Government for financing of the preparation work to be conducted for the construction project. On the other hand, as the project involve land circulation procedures, our Group had entrusted such handling procedures to another co-developer of the project under an entrustment agreement (the "**Entrustment Agreement**"). A prepayment was made by the Company in the amount of RMB16.0 million to such co-developer under the Entrustment Agreement.

In July 2017, our Group was informed that Pingyao Government was not able to fulfil the conditions set forth in the Cooperation Agreement as it had failed to obtain the approval of the project before the time limit. Such failure had caused suspension in the project and our Group had requested that the Pingyao Government and the co-developer to refund the deposit and the prepayment under the Cooperation Agreement and the Entrustment Agreement and other upfront costs and had filed a lawsuit against Pingyao Government and the co-developer for, among others, the termination of the Cooperation Agreement, the return of the details and payment of compensation in the amount of RMB40.0 million and the return of the prepayment under the Entrustment Agreement in the sum of RMB16.0 million. A judgment in favour of our Group for termination of the Cooperation Agreement and the refund of the deposit and the entrustment prepayment in the aggregate sum of RMB36.0 million (the "**Judgment Sum**") had been given in March 2021 from the Intermediate People's Court of Lvliang City. Our Group had filed appeals in September 2021 and December 2022 for other investment losses in respect of the project which our Group had been advised that it is highly probable that the appeal court will rule in favour of our Group.

As of the Latest Practicable Date, Pingyao Government had not paid the Judgment Sum to our Group as the appeals are still on-going. Our Directors are of the view that once the judgment of the appeals had been handed down, Pingyao Government will settle the Judgment Sum and other relevant costs as adjudicated by the appeal court.

The credit risk of the balance of RMB36.0 million (being the sum of RMB20.0 million of security deposit paid to the Pingyao Government and the RMB16.0 million paid to the co-developer) had been measured by adopting a (i) lifetime probability of default and (ii) loss allowance for lifetime expected credit losses. Our Group had engaged an independent valuer to assess the risk or probability that a credit loss occurs by reflecting the possibility that a credit loss occurs and the possibility that no credit loss occurs in accordance with IFRS9 and applied the measurement of expected credit loss using probability-weighted loss default approach.

Having considered (i) the background of Pingyao Government, which is a government body belonging to People's Government of Shanxi Province and has the highest credit rating in accordance with international credit rating agencies; (ii) the co-developer was involved in certain litigations and no financial information of the co-developer was made available for assessment, as a prudent approach, a low credit rating level was applied and the estimated credit loss rates of 36.3%, 61.6%, 77.4% and 79.2% was applied as of each of December 31, 2020, 2021 and 2022 and June 30, 2023; and (iii) the aforementioned judgment from the court in favour of our Group in March 2021, our Group has provided expected credit loss by individual assessment of RMB5.8 million, RMB9.9 million, RMB12.4 million and RMB14.0 million on the balances of RMB36.0 million as at December 31, 2020, 2021, 2022 and June 30, 2023, respectively, our Directors are of the view that such expected credit loss allowance is sufficient.

As of December 31, 2020, 2021 and 2022 and June 30, 2023, our prepayments amounted to RMB462.0 million, RMB701.2 million, RMB500.2 million and RMB516.9 million. Our prepayments mainly comprise cost of procuring installation parts and materials, service fees, construction fees and equipment fees. The fluctuation in prepayment were mainly attributable to the difference in prepayments paid for installation parts and subcontracting services arrangements and labour cost, which varied in accordance with and largely depends on the construction needs during the relevant financial year and construction progress of our on-going projects. In particular, prepayments required for some of the installation parts and materials in our construction projects, such as wind turbine tower and power generator for our wind power plant construction projects, and photovoltaic modules for our photovoltaic construction projects, require a higher portion and more significant amount of prepayments at early stages of construction.

For December 31, 2021, our prepayments increased by approximately 51.8% when compared to that as of December 31, 2020, which primarily due to an increase in prepayments for raw materials, as we have made prepayments for photovoltaic module in the sum of approximately RMB102.2 million. The photovoltaic modules were applied in power engineering projects including our photovoltaic power generation project in Liaoning, Huludao (i.e. Project SIC-21).

For the year ended December 31, 2022, our prepayment decreased by 28.7% to RMB500.2 million, which was primarily attributable to the fact that several of our on-going projects have entered into construction stage, including a 80MW photovoltaic project in Huludao (葫蘆島80MW光伏項目), a 50MW distributed rooftop photovoltaic power generating project in Lutai (蘆台50MW屋頂分佈光伏發電項目), the prepayments made thereof were utilized and the relevant project costs were recognised as our cost of sales, thereby reducing the amount of our prepayment for the year ended December 31, 2022.

For the six months ended June 30, 2023, our prepayment increased by 3.3% from RMB500.2 million as of December 31, 2022 to RMB516.9 million. Such increase was primarily attributable to the increase in prepayment for procurement of construction raw materials from suppliers for our construction projects. As of the Latest Practicable Date, the subsequent utilization rate of our prepayment, deposits and other receivables as of June 30, 2023 was 55.4%.

The purpose of provision of loans to its associates and former associates was mainly for financing some construction projects, which our Group also invested in through shareholders loan to the relevant project companies which the Company has equity interests in.

For the provision for ECL allowance on loans to associates and former associates, our Group considers a broader range of information when assessing credit risk and measuring ECL, including past events, current conditions, reasonable and supportable forecasts that affect the expected collectability of the future cash flows of the associates and former associates.

Our management would make periodic individual assessment on the recoverability of associates and former associates based on historical settlement records and past experience as well as current external information and makes adjustment based on the weighted probability of forward-looking information including operation default rate of associates and former associates.

In particular, regarding to assess the credit risk, our management has considered the financial statements of the former associates during the Track Record Period, which has shown that they have strong financial position as at December 31, 2020, 2021 and 2022 and June 30, 2023. In addition, the former associates are the indirect wholly-owned subsidiaries of Shanxi CIG as at December 31, 2020, 2021 and 2022 and June 30, 2023, of which Shanxi CIG has undertaken the balances of loans to former associates as at December 31, 2020, 2021 and 2022 and June 30, 2023 to compensate to the Group in full for any failure of repayment. In view of the strong financial position of Shanxi SIG, no provision for ECL allowance is required on loans to former associates as at December 31, 2020, 2021 and 2022 and June 30, 2023.

Regarding to the loans to associates as at December 31, 2022 and June 30, 2023, our management also has assessed the credit risk on associates by considering the financial statements of the associates, which has shown they have strong financial position as at December 31, 2022 and June 30, 2023. In addition, the balances of loans to associates of RMB47.0 million and RMB15.7 million are provided to the associates, which are wholly-owned subsidiary of Shanxi CIG as at December 31 , 2022 and June 30, 2023, respectively, of which Shanxi CIG has undertaken the balances of loans to associates as at December 31, 2022 and June 30, 2023 to compensate to us in full for any failure of repayment. In view of the strong financial position of Shanxi SIG, no provision for ECL allowance on the balances of loans to associates of RMB47.0 million and RMB15.7 million is required as at December 31, 2022 and June 30, 2023, respectively. Meanwhile, as at December 31, 2022, the remaining balance of loan to an associate of RMB7.7 million aged within 1 year and the associate is a state-owned enterprise, which is considered to have the relative high credit rating. As such, the credit risk for the associate is considered to be minimal and no provision for ECL allowance is required on loans to associates as at December 31, 2022. As of June 30, 2023, the remaining balance of loan to the associate was RMB15.7 million. As of the Latest Practicable Date, RMB13.0 million of such balance has been settled.

As advised by the PRC Legal Advisor, although our Company did not comply with the provisions of the "General Principles on Loans" (《貸款通則》) when providing interest bearing loans to our affiliated companies and former affiliated companies, in view of the fact that (1) the loan contracts signed between our Group and the affiliated companies and former affiliated companies do not fall within any of the circumstances that would render the loan contracts invalid as stipulated in the "Provisions of the Supreme People's Court on Several

Issues Concerning the Application of Law in the Trial of Private Loan Cases (Second Revision in 2020)" (《最高人民法院關於審理民間借貸案件適用法律若干問題的規定(2020第二次修訂)》); and (2) as of the Latest Practicable Date, our Group has not received any investigation or penalty in relation to the aforementioned loans, our PRC Legal Advisor is of the view that the possibility that our Group will be subject to penalty from the People's Bank of China as a result of the aforementioned loan is low, and therefore such non-compliances will not have a material impact on the [**REDACTED**].

For details of loans to associates and former associates, and amount due from related parties, please refer to section headed "Related Party Transactions" under notes 49 in the Accountants' Report set out in Appendix I to this document.

Trade payables and bills payable

Our trade payables and bills payable mainly represent payables to our suppliers and subcontractors. The following table sets forth our trade payables and bills payable as of the dates indicated:

	As of December 31,			**As of June 30,**
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Trade payables and bills payable	4,844,502	7,594,503	9,170,618	9,541,048
Total	**4,844,502**	**7,594,503**	**9,170,618**	**9,541,048**

Our trade payables and bills payable increased from RMB4,844.5 million as of December 31, 2020 to RMB7,594.5 million as of December 31, 2021 and further increased to RMB9,170.6 million as of December 31, 2022. Such increase was mainly a result of a growth in our construction projects in line with our growing business, particularly in the area of (i) petrochemical engineering, which our segmental revenue generated therefrom has increased by approximately 35.1% for the year ended December 31, 2022 when compared to that with the year ended December 31, 2020; and (ii) power engineering (including new energy engineering), which experienced rapid growth in segmental revenue with a year-on-year growth rate of 19.6% from 2020 to 2021, and a period-on-period growth rate of 7.3% from 2021 to 2022. In turn, such effort is a reflection of our growing business to support the regional/national development in the respective industries. And as the number of our construction projects increased our trade payables increased accordingly. Our trade payables and bills payable as of June 30, 2023 increased by RMB370.4 million to RMB9,541.0 million as a result of (i) increase in settlement to suppliers through bills; and (ii) increase in procurement volume of raw materials. Based on our Directors' knowledge after making all reasonable enquries, as of August 31, 2023, the amount in dispute with our creditors in respect of our trade payables and bill payables amounted to RMB41.8 million, representing 0.4% of our trade payables and bill payables as of June 30, 2023. The disputed amounts were mainly arising from disputes over quality of the products delivered to us and/or the delays in payment by our customers to us, which subsequently led to delays in our payments to upstream suppliers. Given that the amount in dispute with our creditors is minimal which only amounted to less than 0.4% of our trade payables and bill payables as of June 30, 2023, the Directors are of the view, and the Reporting Accountants and Joint Sponsors concur, that it will not have a material impact on the Group's financial position.

As of the Latest Practicable Date, RMB3,039.8 million representing 31.9% of our trade payables and bills payable as of June 30, 2023 have been paid.

The following table sets forth an aging analysis of our trade payables and bills payable, based on the invoice date, as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Within 1 year	4,084,771	6,486,571	6,483,009	5,858,573
1 to 2 years	484,286	660,791	1,863,195	2,523,132
2 to 3 years	163,622	231,062	637,570	920,611
Over 3 years	111,823	216,079	186,844	238,732
Total	4,844,502	7,594,503	9,170,618	9,541,048

The following table sets forth turnover days of our trade payables and bills payable for the periods indicated:

	For the year ended December 31,			For the six months ended June 30,
	2020	**2021**	**2022**	**2023**
Turnover days of our trade payables(1)	181	197	278	380

(1) Turnover days of our trade payables and bills payables for the Track Record Period is calculated based on the average of the beginning and ending balances of the trade payables and bills payables for that period divided by cost of sales for that period and multiplied by 365 days in 2020, 2021 and 2022, and 181 days for the six months ended June 30, 2023.

Turnover days of our trade payables and bills payable increased from 181 days for the year ended December 31, 2020 to 197 days for the year ended December 31, 2021 increased to 278 days for the year ended December 31, 2022 and further increased to 380 days for the six months ended June 30, 2023, mainly due to our increased trade receivables and bills receivable restricted our cash flow and limited our ability to settle trade payables. The further increase from 278 days to 380 days for the six months ended June 30, 2023 was attributable to lower costs of sales due to seasonality. During the Chinese New Year period, most of our projects and constructions are suspended, thus we generally incurred relatively less costs of sales. Our Directors confirm that we had no material defaults in payment of trade payables and bills payable during the Track Record Period.

Our accounts payable increased from RMB4,844.5 million as of December 31, 2020 to RMB9,170.6 million in as of December 31, 2022, and further increased to RMB9,541.0 million as of June 30, 2023 mainly because of our scheduled payments for raw materials and equipment. In turn, purchase of raw material and equipment accounted for 57.2%, 61.5%, 60.8% and 66.7% of our accounts payable for 2020, 2021 and 2022 and the six months ended June 30, 2023, respectively. The aforementioned increase reflected the payment schedule in accordance with the delivery/testing events, as relevant, of the raw materials and equipment. Moreover, as the larger/sizable equipment have longer payment schedules, our accounts payable increased correspondingly in time.

Other payables and accruals

Our other payables and accruals mainly comprise other tax payables, other payables, amount due to related parties and endorsed bills payable. The following table sets forth the components of our other payables and accruals as of the dates indicated:

	As of December 31,			As of June 30,
	2020	2021	2022	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Accrued expenses	117,547	96,135	84,355	80,369
Security deposits received	58,564	43,180	32,026	32,956
Amount due to related parties	563,360	360,000	605,877	615,108
Other payables	540,121	410,649	294,964	242,850
Withholding of tax and social insurance for employee	10,437	39,843	4,400	7,909
Dividend payable	69,770	–	–	71,678
Other tax payable	653,295	882,063	889,536	975,866
Endorsed bills payable	299,483	239,049	254,695	175,437
Less: long-term payable (current and non-current portion)	(300,000)	(300,000)	(300,000)	(300,000)
Total	2,012,577	1,770,919	1,865,853	1,902,173

Our other payables and accruals decreased from RMB2,012.6 million as of December 31, 2020 to RMB1,770.9 million as of December 31, 2021, primarily due to the decrease in amount due to related parties upon the repayment of the borrowing of RMB250.0 million in August 2021 obtained from Shanxi CIG in June 2020. Our other payables and accruals increased from RMB1,770.9 million as of December 31, 2021 to RMB1,865.9 million as of December 31, 2022, primarily due to the increase in amount due to related parties as we increased the borrowings from Shanxi CIG by RMB95.3 million. For the six months ended June 30, 2023, our other payables and accruals increased from RMB1,865.9 million as of December 31, 2022 to RMB1,902.2 million, which is primarily attributable to (i) the declaration of dividend in April 2023 leading to a dividend payable in the sum of RMB71.7 million; and (ii) increase in other tax payable by RMB86.3 million, which was partially offset by the decrease in endorsed bill payable by RMB79.3 million.

The dividends payable mainly consist of dividends to be distributed in accordance with the principle of "same share, same profit" in accordance with the approval of Shanxi CIG. For the Group's dividend distribution in 2019, as approved by our board of directors on July 30, 2020.

For details of the amount due to related parties, please refer to section headed "Related Party Transactions" under notes 49 in the Accountants' Report set out in Appendix I to this document.

INVESTMENT IN ASSOCIATES

Our investment in associates reflects the investments in entities of which we have the power to participate in the financial and operating policy decisions. The table below sets forth details of our investments in associates as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Investment in associates	32,609	46,137	183,327	193,941

Our investments in associates increased by 5.8% from RMB183.3 million as of December 31, 2022 to RMB193.9 million as of June 30, 2023, which was due to (i) addition investment of RMB8.3 million in Zhangzi Jinjian Flood Control and Drainage Project Management Company Limited (長子晉建防洪排澇項目管理有限公司); and (ii) the share of associates' profits of RMB2.3 million.

Our investments in associates increased by 297.4% from RMB46.1 million as of December 31, 2021 to RMB183.3 million as of December 31, 2022, which was due to (i) additional investment of RMB116.0 million in Shanxi CIG International Investment Company

Limited and Shanxi Jinjian Shan'an Equity Investment Partnership (Limited Partnership), both of which are associates of the Company; and (ii) the share of associates' profits of RMB5.5 million recognized under the equity method.

Our investments in associates increased by 41.5% from RMB32.6 million as of December 31, 2020 to RMB46.1 million as of December 31, 2021, which was due to (i) additional investment of RMB17.3 million in Shanxi Jianfa Comprehensive Energy Development Co., Ltd., Shanxi CIG International Investment Company Limited, Shanxi Jiantou Cloud Data Technology Co., Ltd. and Shanxi Jiantou Linfen Construction Industry Co., Ltd., all of which are associates of the Company; (ii) the share of associates' losses of RMB5.8 million recognized under the equity method; (iii) gains from conversion of the former subsidiary Yu'an Hengchuang into an associate of RMB8.8 million; and (iv) losses on disposal of Jincheng Danhe Huada Real Estate Development Co., Ltd. and Jincheng Danhe Huasheng Real Estate Development Co., Ltd. of RMB6.9 million.

Deferred tax liabilities/assets

Our deferred tax liabilities/assets are provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. The table below sets forth details of our deferred tax liabilities/assets as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Deferred tax assets	43,018	63,955	100,064	107,760
Deferred tax liabilities	(70,660)	(76,118)	(74,012)	(72,690)
Net deferred tax (liabilities)/assets	(27,642)	(12,163)	26,052	35,070

Our net deferred tax liabilities decreased from RMB27.6 million as of December 31, 2020 to RMB12.2 million as at December 31, 2021. As of December 31, 2022, we recorded a net deferred tax assets of RMB26.1 million. Our net deferred tax position varied mainly due to provisions and accruals, changes in fair value of investment properties, changes in fair value of investments in equity instruments, deferred tax arising from companies for PPP projects, and taxable temporary differences in realizing internal profit or loss. As of June 30, 2023, we recorded a net deferred tax assets of RMB35.1 million, representing an increase of RMB9.0 million comparing with that as of December 31, 2022. Such increase was primarily attributable to provisions and accruals regarding to expected credit loss on trade receivables and other receivables in the sum of RMB6.6 million and the deferred tax arising from companies for PPP projects in the amount of RMB2.5 million.

RECEIVABLES UNDER SERVICE CONCESSION ARRANGEMENTS

Our receivables under service concession arrangements reflect the outstanding receivables arising from our projects accounted for under service concession arrangements adjusted by operation services and interest income after deducting the payments accrued throughout a concession period. The table below sets forth details of our receivables under service concession arrangements as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Receivables of PPP projects construction income	39,259	32,347	33,971	16,970
Receivables of PPP projects operating fee	68,882	72,355	54,614	35,134
Interest receivables of PPP projects	35,988	35,738	6,158	13,066
Receivables under service concession arrangements	144,129	140,440	94,743	65,170

Our receivables under service concession arrangements decreased from RMB144.1 million as of December 31, 2020 to RMB140.4 million as of December 31, 2021 and decrease to RMB94.7 million as of December 31, 2022, mainly reflecting the receivables under service concession arrangements of PPP projects. Our receivables under service concession arrangements further decreased to RMB65.2 million as of June 30, 2023.

As of the August 31, 2023, we have received RMB24.9 million of the receivables under our PPP project concession arrangements as of June 30, 2023 in accordance with the terms of such arrangements.

INDEBTEDNESS

The following table sets forth details of our bank borrowings, other borrowings and long-term payable:

	As of December 31,			As of June 30,	As of September 30,
	2020	2021	2022	2023	2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000* (*unaudited*)
Current					
Bank borrowings – unguaranteed	55,868	455,364	1,740,290	2,884,642	2,256,296
Bank borrowings – guaranteed	560,737	411,558	130,000	–	–
Bank borrowings – secured	5,000	110,000	–	–	–
Other borrowings – unguaranteed	207,984	523,660	305,117	40,000	50,747
Other borrowings – secured	125,215	50,000	25,918	59,380	32,943
	954,804	1,550,582	2,201,325	2,984,022	2,339,986
Current portion of long-term borrowing					
Bank borrowings – unguaranteed	15,210	–	–	–	–
Bank borrowings – guaranteed	44,780	64,781	28,782	39,763	43,989
Bank borrowings – secured	83,812	109,815	155,379	166,408	161,732
Other borrowings – secured	171,387	253,506	326,239	316,034	262,079
	315,189	428,102	510,400	522,205	467,800

	As of December 31, 2020	As of December 31, 2021	As of December 31, 2022	As of June 30, 2023	As of September 30, 2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*
Non-current liabilities					
Bank borrowings – unguaranteed	–	–	200,000	200,000	200,000
Bank borrowings – guaranteed	77,280	124,809	161,541	165,509	147,013
Bank borrowings – secured	1,689,000	2,033,537	2,048,694	2,198,830	2,462,884
Other borrowings – secured	66,277	127,146	276,956	128,425	106,459
	1,832,557	2,285,492	2,687,191	2,692,764	2,916,356
	3,102,550	4,264,176	5,398,916	6,198,991	5,724,142
Long-term payable (current and non-current portion)	300,000	300,000	300,000	300,000	300,000

The following table sets forth the maturity profile of our bank borrowings and other borrowings as of the dates indicated:

	As of December 31, 2020	As of December 31, 2021	As of December 31, 2022	As of June 30, 2023	As of September 30, 2023
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*
Bank borrowings payable:					
Within one year	765,407	1,151,518	2,054,451	3,090,813	2,462,017
Second year	37,400	64,675	201,048	230,122	230,520
Third to fifth year (both years inclusive)	158,830	145,325	800,242	937,181	975,220
After the fifth year	1,570,050	1,948,346	1,408,945	1,397,036	1,604,157
	2,531,687	3,309,864	4,464,686	5,655,152	5,271,914

	As of December 31,			As of June 30,	As of September 30,
	2020	**2021**	**2022**	**2023**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
					(unaudited)
Other borrowings payable:					
Within one year	504,586	827,166	657,274	415,414	345,768
Second year	53,164	87,351	167,045	82,012	66,442
Third to fifth year (both years inclusive)	13,113	39,795	109,911	46,413	40,018
	570,863	954,312	934,230	543,839	452,228
	3,102,550	4,264,176	5,398,916	6,198,991	5,724,142

The following table sets forth the actual interest rate range of our bank borrowings, other borrowings and long-term payable as of the dates indicated:

	As of December 31,			As of June 30,	As of September 30,
	2020	**2021**	**2022**	**2023**	**2023**
	%	%	%	%	%
					(unaudited)
Bank borrowings	3.85-9.00	3.85-6.18	1.45-6.15	1.45-6.15	1.45-6.15
Other borrowings	4.50-11.06	4.50-10.79	4.50-10.79	5.30-10.79	7.04-10.79
Long-term payable	9.7	9.7	9.7	9.7	9.7

During the Track Record Period, our other borrowings arose from 22 lenders who are independent third parties, in which the loan principals due from each lender vary from RMB0.8 million to RMB511.6 million and an aggregate of RMB3,538.0 million. As of June 30, 2023, borrowings from 10 lenders remained outstanding with an outstanding balance of approximately RMB543.9 million, and a balance ranging from RMB0.8 million to RMB144.9 million. These lenders include financial institutions and business corporations, and their principal businesses include financial leasing service, factoring service and financial service. Despite the higher actual interest rates, we obtain loans from these lenders instead of licensed banks in some cases due to simpler procedures and requirements, as well as shorter drawdown period, which in turn can address our timely financial needs in our course of business.

The following table sets forth the carrying amounts of assets that we had pledged to secure general banking facilities as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Trade receivables and bills receivable	460,998	702,624	828,866	813,665
Contract assets	1,543,849	773,523	18,894	619,386
Receivables under service concession arrangements	804,138	1,945,932	2,266,484	2,057,946
Restricted bank deposits	269,646	328,983	748,105	597,762
Total	3,078,631	3,751,062	3,862,349	4,088,759

The following table sets forth the guaranteed portions of our bank borrowings and other borrowings:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Guaranteed by:				
Controlling shareholder	560,000	411,000	130,000	–
Affiliates	15,000	–	–	–
Total	575,000	411,000	130,000	–

We plan to gradually reduce the amount of our guaranteed borrowings. The guarantee by our Controlling Shareholder will be released before [**REDACTED**].

Our bank borrowings and other borrowings increased by RMB800.1 million from RMB5,398.9 million as of December 31, 2022 to RMB6,199.0 million as of June 30, 2023, primarily attributable to the increase was primarily attributable to an increase in (i) our usage of bill factoring, and (ii) financing for the PPP Project of Quality Improvement Project (New Party School, Qinshui-East Link Traffic Hub Project) of Qinshui County, Jincheng City, Shanxi Province as it entered into a major construction stage.

Our bank borrowings and other borrowings increased by RMB1,134.7 million from December 31, 2021 to December 31, 2022, primarily because of the increased borrowings as we have expanded our business, and the demand for working capital have increased accordingly.

Our bank borrowings and other borrowings increased by RMB1,161.6 million from December 31, 2020 to December 31, 2021, primarily because (i) as we have expanded our business in 2021, the demand for working capital have increased accordingly, and (ii) we have further strengthened our cooperation with financial institutions.

As of the Latest Practicable Date, we had unutilized bank borrowing facility of RMB5,907.2 million out of a credit line of RMB13,065.4 million.

As at September 30, 2023, the Group had lease liabilities amounting to approximately RMB80.4 million. Lease liabilities of our Group for the three years ended December 31, 2020, 2021 and 2022 and the six months ended June 30, 2023 have respectively amounted to RMB73.6 million, RMB71.9 million, RMB70.8 million and RMB75.5 million. Our lease liabilities decreased by RMB1.7 million for the year ended December 31, 2021 when compared to that of the previous year, and the decrease was primarily attributable to (i) the disposal of Yu'an Hengchuang, which led to decrease in lease liability by RMB0.6 million; and (ii) the rental payment by Shan'an Bluesky in respect of the leasing of heating pipeline network, leading to the decrease in lease liabilities by RMB1.1 million. As for the year ended December 31, 2022, our lease liabilities have further decreased by RMB1.1 million as a result of further payments of our rental fees based on the payment schedule as stipulated in the relevant contracts, thus leading to a decrease in our lease liabilities. For the six months ended June 30, 2023, our lease liabilities increased to RMB75.5 million, which was primarily attributable to the entering into of a new lease of a piece of land by Jinzhong Shan'an Lide Solid Waste Utilization Technology Company Limited (晉中山安立德固廢利用科技有限公司).

As of the Latest Practicable Date, we were not subject to any material restrictive covenant in our borrowings. Our Directors confirm that we did not have any material defaults in payment of bank borrowings and other debt financing obligations or breaches of any restrictive covenants during the Track Record Period. Except for incurring additional bank borrowings, we currently have no material external debt financing plan before or shortly after the [**REDACTED**].

Save as disclosed above, we did not have outstanding indebtedness or any loan capital issued and outstanding or agreed to be issued, bank overdrafts, loans or similar indebtedness, liabilities under acceptance (other than normal trade bills), acceptance credits, debentures, mortgages, charges, finance leases or hire purchase commitments, guarantees or other material contingent liabilities as of the Latest Practicable Date.

Financial guarantees

As of December 31, 2020, 2021 and 2022 and June 30, 2023, we have provided financial guarantees to our subsidiaries and related parties amounting to approximately RMB3,912.7 million, RMB2,569.5 million, RMB3,237.5 million and RMB3,772.6 million respectively. Amongst which, as of December 31, 2022 and June 30, 2023, we provided the financial guarantees to related parties as a joint guarantor with other shareholders of the project company for the bank loans procured for the financing of a construction project of a sewage treatment plant in Gaoping City. Given that such guarantees have been provided by us on (i) normal commercial terms; (ii) in proportion to our equity interest in the project company under the Listing Rules; (iii) on several basis; and (iv) the other shareholders of the project company are not connected persons of our Company, the transaction will constitute a financial assistance to affiliated companies under the Listing Rules upon [**REDACTED**]. Upon [**REDACTED**], as the highest applicable percentage ratios (as defined under the Rule 14.07 of the Listing Rules) in respect of the guarantees are less than 5%, the transaction will be exempted from announcement, circular and shareholders' approval requirements under Chapter 14 of the Listing Rules. As of June 30, 2023, the outstanding balance of the relevant financial guarantees amounted to RMB8.1 million. Such financial guarantees issued by our Group are expected to be released upon maturity and full repayment of the relevant bank loans, and will not be released prior to or upon [**REDACTED**]. As of December 31, 2020, 2021 and 2022 and June 30, 2023, the unutilized balances of financial guarantees amounted to approximately RMB1,446.2 million, nil, RMB802.3 million and RMB1,218.2 million, respectively. Based on the low default rate and good financial position of the relevant subsidiaries and related party, our Directors consider the fair value of the financial guarantee contracts at initial recognition and at the end of each reporting period to be immaterial.

CONTINGENT LIABILITIES

A number of lawsuits and claims arising from the normal course of business were lodged against our Group which remain outstanding as at the end of the Track Record Period. For the details of the material on-going litigation against our Group in respect of these lawsuits, please refer to the section headed "Business – Legal and Regulatory Compliance – Legal Proceedings" in this document.

CAPITAL EXPENDITURES

In the past, we incurred capital expenditures primarily for property, plant and equipment, right-of-use assets and intangible assets. The following table sets forth the components of our capital expenditures for the periods indicated:

	Year ended December 31,			Six months ended June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Property, plant and equipment	162,806	203,128	247,115	138,958
Right-of-use assets	38,209	62,381	6,193	22,907
Intangible assets	264	1,282	511	74
Total	201,279	266,791	253,819	161,939

COMMITMENTS

Operating lease commitments

As lessor

We lease out certain investment properties under operating lease arrangements. As of the dates indicated, we had contracted with tenants for the following future minimum lease payments:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Within one year	7,964	10,226	7,284	4,370
In the second to fifth year	15,945	10,298	2,402	1,389
	23,909	20,524	9,686	5,759

As lessee

We rent certain buildings as production facilities and office premises under short-term lease arrangements. We had commitments for future minimum lease payments under non-cancellable short-term leases as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Within one year	2,614	2,708	1,701	3,673

Capital commitments

In addition to the operating lease commitments, we had the following commitments as of the dates indicated:

	As of December 31,			As of June 30,
	2020	**2021**	**2022**	**2023**
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Contracted, but not provided for:				
Property, plant and equipment	46,965	31,005	30,200	39,626
Commitment to contribute capital to associates	–	86,660	104,460	123,835
	46,965	117,665	134,660	163,461

OFF-BALANCE SHEET ARRANGEMENTS

As of June 30, 2023, being the date of our most recent financial statements, we did not have any off-balance sheet arrangements.

Financial Ratios

The table below sets forth a summary of our key financial ratios as of the dates or for the years/periods indicated:

	As of or for the year ended December 31,			As of or for the six months ended June 30,
	2020	2021	2022	2023
Current ratio (time)(1)	1.0	1.0	1.0	1.0
Quick ratio (time)(2)	1.0	1.0	1.0	1.0
Gearing ratio (%)(3)	173.9	211.7	241.8	271.9
Net debt to equity ratio (%)(4)	113.1	143.7	146.4	171.2
Return on assets (%)(5)	2.1	1.1	0.9	0.5
Return on equity (%)(6)	14.6	7.5	8.3	4.6

Notes:

(1) Current ratio is calculated based on the total current assets divided by the total current liabilities as of the end of the respective year/period.

(2) Quick ratio is calculated as total current assets less inventories divided by the total current liabilities as at the end of the respective year/period.

(3) Gearing ratio is calculated by dividing total interest-bearing borrowings by total equity as at the end of the respective year/period and multiplied by 100%.

(4) Net debt represents total interest-bearing borrowings net of cash and cash equivalents and restricted bank deposits, divided by total shareholders' equity as at the end of the respective year/period multiplied by 100%.

(5) Return on assets is calculated based on the profit for the relevant year/period divided by total assets as at the end of the respective year/period multiplied by 100%.

(6) Return on equity is calculated based on the profit attributable to owners of our Company for the relevant year/period divided by equity attributable to owners of our Company as at the end of the respective year/period multiplied by 100%.

Current ratio

Current ratio represents current assets divided by current liabilities at the end of each year. Our current ratio remained stable during the Track Record Period.

Quick ratio

Quick ratio represents current assets (excluding inventory) divided by current liabilities at the end of each year. Our quick ratio remained stable during the Track Record Period.

Gearing ratio

Gearing ratio represents total interest-bearing borrowings divided by total equity at the end of each year. Our gearing ratio increased from 241.8% as of December 31, 2022 to 271.9% as of June 30, 2023 mainly due to increase in our interest-bearing borrowings for our daily operation. Our gearing ratio increased from 173.9% as of December 31, 2020 to 211.7% as of December 31, 2021, and further increased to 241.8% as of December 31, 2022, which was mainly due to increase in borrowings by RMB1,161.6 million as of December 31, 2021, and RMB1,134.7 million as of December 31, 2022, respectively.

Net debt to equity ratio

Net debt represents total interest-bearing borrowings net of cash and cash equivalents and restricted bank deposits, divided by total shareholders' equity at the end of each year. Our net debt to equity ratio increased from 113.1% as of December 31, 2020 to 143.7% as of December 31, 2021, mainly due to the increase in the Company's borrowings. Our net debt to equity ratio increased from 143.7% as of December 31, 2021 to 146.4% as of December 31, 2022 mainly due to increase in borrowings during such period, which was partially offset by (i) the increase in profit for the year which led to the increase in total equity; and (ii) increase in cash and cash equivalent. Our net debt to equity ratio increased from 146.4% as of December 31, 2022 to 171.2% as of June 30, 2023 mainly due to (i) our balance for interest-bearing borrowings increased in order to finance our daily operation; and (ii) the declaration of cash dividend of RMB71.7 million during the six months ended June 30, 2023.

Return on assets

Return on assets is our profit for the relevant year/period divided by our total assets for each year/period. Our return on asset decreased from 2.1% in 2020 to 1.1% in 2021, mainly because profit for the year in 2021 decreased by RMB94.2 million compared with 2020. Our return on assets decreased from 1.1% in 2021 to 0.9% in 2022 mainly because our net assets has increased from RMB2,014.1 million in 2021 to RMB2,232.9 million in 2022, thus slightly diluting the return on assets ratio. Our return on asset for the six months ended June 30, 2023 was 0.5%.

Return on equity

Return on equity is our profit attributable to owners of our Company for the relevant year/period divided by equity attributable to owners of our Company as at the end of the year/period. Our return on equity decreased from 14.6% in 2020 to 7.5% in 2021, primarily because profit attributable to owners of our Company for the year in 2021 decreased by RMB91.5 million compared with 2020 and the share capital has increased from RMB800 million to RMB1 billion. Our return on equity increased from 7.5% in 2021 to 8.3% in 2022, which is primarily attributable to an increase of profit for the year by RMB12.4 million and the increase of equity attributable to equity holders of the Company by RMB133.8 million from 2021 to 2022. Our return on equity for the six months ended June 30, 2023 was 4.6%.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to various types of market risks in the ordinary course of our business, including interest rate risk, credit risk and liquidity risk. We manage our exposure to these and other market risks through regular operating and financial activities.

For details, please see notes 52 in the Accountants' Report included in Appendix I to this document.

PROPERTY INTEREST AND PROPERTY VALUATION

As of June 30, 2023, we did not have any property interests with a carrying amount representing 15% or more of our total consolidated assets. Accordingly, this document is exempted from compliance with the requirement of submitting valuation reports for all property interests of the Group in buildings set out in section 34(2)of Schedule III to the Companies (Winding Up and Miscellaneous Provisions) Ordinance referred to in the section 38(1) of the Companies (Winding Up and Miscellaneous Provisions) Ordinance in accordance with Chapter 5 of the Listing Rules and section 6(2) of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong).

DIVIDEND

The PRC laws require that dividends be paid only out of the profit for the year calculated according to PRC accounting principles. Distributions from us and our subsidiaries may also become subject to any restrictive covenants in bank facilities or other agreements that we or our subsidiaries may enter into in the future.

The amount of dividend actually distributed to our Shareholders will depend upon our earnings and financial condition, operating requirements, capital requirements and any other conditions that our Directors may deem relevant and will be subject to approval of our Shareholders. Our Board has the absolute discretion to recommend any dividend.

In each of 2020 and 2021, we declared and paid cash dividends of RMB99.7 million and RMB113.5 million, respectively. Our Group declared dividends of RMB28.8 million to our Shareholders on March 2, 2022, and we have settled such dividend distributions in cash. During the six months ended June 30, 2023, we declared dividends of RMB71.7 million to our Shareholders. During the Track Record Period, our method and factors taken into account when deciding on distribution of dividends have complied with the spirit of the Notice of the State-owned Assets Supervision and Administration Commission of the People's Government of Shanxi Province on the Preparation of the Proposed Draft State-owned Capital Operating Budget of Provincial Enterprises for the Year 2020 (Jin Guozi Capital Letter [2019] No. 395) and the assessment requirements of the SCIG Group[Note].

The decision to declare or pay any dividends in the future and the amount of any dividends will depend on, among other things, our results of operations, cash flows, financial condition, our articles of association, statutory and regulatory restrictions and other factors deemed to be relevant. There is no assurance that dividends of the relevant amount or any amount will be declared or paid in each or any year. The declaration, payment and amount of any future dividends are subject to our constitutional documents (including our memorandum of association and articles of association) and, if required, shareholder approval. Investors should note that past dividend distributions are not indicative of our dividend distribution policy in the future.

DISTRIBUTABLE RESERVES

As of June 30, 2023, our Company had reserves available for distribution to our shareholders in an aggregate amount of RMB823.2 million.

Related-Party Transactions

We enter into transactions with our related parties from time to time. Our Directors believe that each of the related-party transactions set out in note 49 in the Accountants' Report in Appendix I to this document was conducted in the ordinary course of business on an arm's-length basis between the relevant parties and was entered into on normal commercial terms. Our Directors are also of the view that our related-party transactions during the Track Record Period would not distort our track record results or make our historical results not indicative of our future performance.

Note: SCIG Group stipulated the profit distribution provisions of the Company in accordance with the Company Law of the PRC (《中華人民共和國公司法》), Notice of Printing and Distributing the Interim Measures for the Administration of the Collection of State-owned Capital Income from Provincial Enterprises by the General Office of the People's Government of Shanxi Province (《山西省人民政府辦公廳關於印發省級企業國有資本收益收取管理暫行辦法的通知》) (Jin Zheng Ban Fa [2011] No. 52) and the Articles of Association, while the specific preparation measures for the proposed operating budget were prepared in accordance with the Notice of the State-owned Assets Supervision and Administration Commission of the People's Government of Shanxi Province on the Preparation of the Proposed Draft State-owned Capital Operating Budget of Provincial Enterprises for the Year 2020 (Jin Guozi Capital Letter [2019] No. 395). The Company shall comply with the Notice of Printing and Distributing the Administrative Measures for Profit Distribution of Shanxi Construction Investment Group Co., Ltd. (《關於印發山西建設投資集團有限公司利潤分配管理辦法的通知》) (Jin Jian Tou Cai Fa [2021] No. 69 Document) for its dividend distribution. The notice had set out the assessment requirements including that the profit distribution shall not exceed the distribution profits for the year, and in accordance with the business development plan and working capital situation of the Group. In addition to the notices mentioned above, our dividend distribution during the Track Record Period was implemented under the profit distribution in accordance with the Company Law of the PRC (《中華人民共和國公司法》) and the Articles of Association, and was in line with the requirements under the relevant PRC laws and regulations.

NO MATERIAL ADVERSE CHANGE

Our Directors confirm that they have performed sufficient due diligence to ensure that, up to the date of this document, save as disclosed in the section headed "Summary – Recent Development" in this document, there has been no material adverse change in our financial or trading position since June 30, 2023 (being the date to which our latest consolidated audited financial results were prepared) and there is no event since June 30, 2023, which would materially affect the information shown in the Accountants' Report in Appendix I to this document.

Unaudited [REDACTED] Adjusted Consolidated Net Tangible Assets

For details of our unaudited [**REDACTED**] adjusted consolidated net tangible assets, see Appendix II to this document.

Disclosure Required under the Listing Rules

Our Directors have confirmed that, as of the Latest Practicable Date, they were not aware of any circumstances that would give rise to a disclosure requirement under Rules 13.13 to Rules 13.19 of the Listing Rules.

[REDACTED] Expenses

We estimate that our total [**REDACTED**] expenses in relation to this [**REDACTED**] will be approximately RMB[**REDACTED**] million representing [**REDACTED**]% of the [**REDACTED**] from the [**REDACTED**], (including [**REDACTED**] approximately RMB[**REDACTED**] million, representing [**REDACTED**]% of the [**REDACTED**] from the [**REDACTED**], and [**REDACTED**] expenses of approximately RMB[**REDACTED**] million, representing [**REDACTED**]% of the [**REDACTED**] from the [**REDACTED**], which consist of fees and expenses for legal advisors and accountants of approximately RMB[**REDACTED**] million, representing [**REDACTED**]% of the [**REDACTED**] from the [**REDACTED**], and other fees and expenses of approximately RMB[**REDACTED**] million, representing [**REDACTED**]% of the [**REDACTED**] from the [**REDACTED**]) (based on the midpoint of our [**REDACTED**] range for the [**REDACTED**] and assuming that the [**REDACTED**] is not exercised), of which a total amount of RMB[**REDACTED**] million is directly attributable to the issue of our H Shares and will be deducted from equity. The remaining RMB[**REDACTED**] million had been and will be charged to the consolidated statement of comprehensive income. Among which, we incurred [**REDACTED**] expenses in relation to the [**REDACTED**] of RMB[**REDACTED**] million during the Track Record Period, and the rest will be charged to the consolidated statement of comprehensive income for the year ending December 31, 2023.