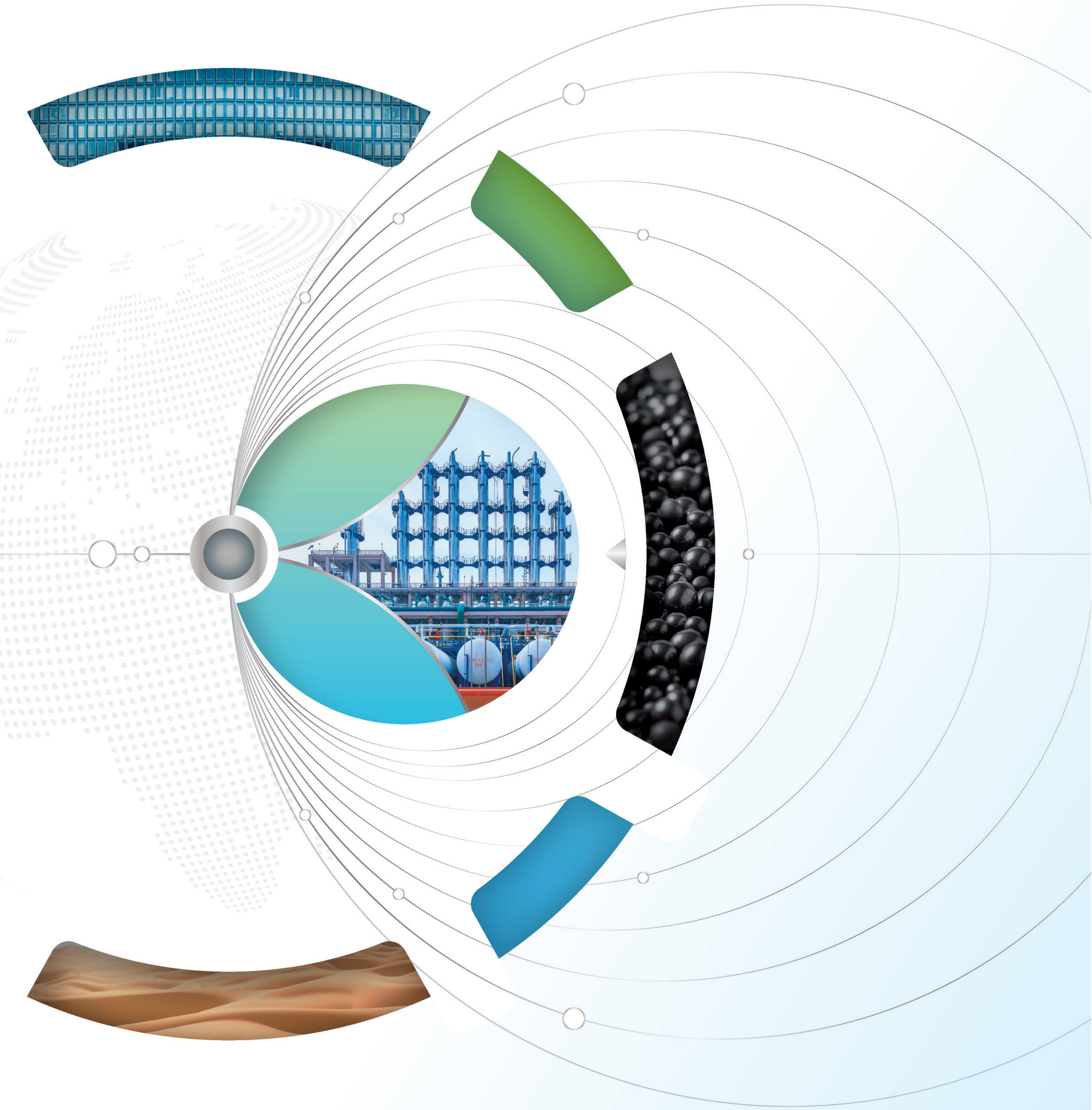
GCL Technology Holdings Limited
協鑫科技控股有限公司

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 3800)

2023

ANNUAL REPORT



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FIVE-YEAR FINANCIAL SUMMARY

	For the year ended 31 December				
	2019 RMB'000 (Restated)	2020 RMB'000 (Restated)	2021 RMB'000 (Restated)	2022 RMB'000 (Restated)	**2023** **RMB'000**
Continuing operations					
Revenue	13,197,634	9,685,547	16,868,378	35,930,485	**33,700,479**
Profit (loss) before tax	(464,633)	(5,099,238)	5,782,613	18,302,602	**4,301,910**
Income tax (expense) credit	(29,285)	45,866	(543,992)	(1,880,020)	**(974,806)**
Profit (loss) for the year from continuing operations	(493,918)	(5,053,372)	5,238,621	16,422,582	**3,327,104**
Profit (loss) for the year from discontinued operations	604,753	(1,217,879)	(537,614)	(942,631)	**—**
Profit (loss) for the year from continuing and discontinued operations	110,835	(6,271,251)	4,701,007	15,479,951	**3,327,104**
Profit (loss) for the year from continuing and discontinued operations attributable to:					
Owners of the Company	(197,207)	(5,667,864)	5,083,952	16,030,307	**2,510,076**
Non-controlling interests	308,042	(603,387)	(382,945)	(550,356)	**817,028**
	110,835	(6,271,251)	4,701,007	15,479,951	**3,327,104**

	At 31 December				
	2019 RMB'000	2020 RMB'000	2021 RMB'000	2022 RMB'000	**2023** **RMB'000**
Total assets	100,436,959	80,502,897	64,097,914	85,564,468	**82,768,172**
Total liabilities	73,715,551	60,111,692	31,796,309	40,009,557	**34,450,463**
	26,721,408	20,391,205	32,301,605	45,554,911	**48,317,709**
Equity attributable to owners of the Company	22,250,159	16,589,119	29,026,013	42,682,274	**42,587,016**
Non-controlling interests	4,471,249	3,802,086	3,275,592	2,872,637	**5,730,693**
	26,721,408	20,391,205	32,301,605	45,554,911	**48,317,709**

PERFORMANCE HIGHLIGHTS

	For the year ended 31 December			
	2023 RMB'000	2022 RMB'000 (Restated)	Change RMB'000	% of change
Continuing operations				
Revenue				
Sales of wafer	**11,637,962**	14,045,577	(2,407,615)	(17.1)%
Sales of electricity	**213,987**	216,970	(2,983)	(1.4)%
Sales of polysilicon	**17,435,147**	17,661,338	(226,191)	(1.3)%
Processing fees	**1,389,369**	2,793,280	(1,403,911)	(50.3)%
Others	**3,024,014**	1,213,320	1,810,694	149.2%
	33,700,479	35,930,485	(2,230,006)	(6.2)%
Profit for the year from continuing and discontinued operations attributable to owners of the Company	**2,510,076**	16,030,307	(13,520,231)	(84.3)%
	RMB Cents	RMB Cents	Change RMB Cents	% of change
Continuing operations				
Earnings per share				
— Basic	**9.47**	61.34	(51.87)	(84.6)%
— Diluted	**9.46**	61.21	(51.75)	(84.6)%
Continuing and discontinued operations				
Earnings per share				
— Basic	**9.47**	59.98	(50.51)	(84.2)%
— Diluted	**9.46**	59.86	(50.40)	(84.2)%
	RMB million	RMB million	Change RMB million	% of change
Continuing operations				
Adjusted EBITDA*	**12,660**	21,057	(8,397)	(39.9)%

* Definition of adjusted EBITDA is disclosed in the "Management Discussion and Analysis" Section.

	As at 31 December			
	2023 RMB'000	2022 RMB'000	Change RMB'000	% of change
Extracts of consolidated statement of financial position				
Equity attributable to owners of the Company	**42,587,016**	42,682,274	(95,258)	(0.2)%
Total assets	**82,768,172**	85,564,468	(2,796,296)	(3.3)%
Bank balances and cash, pledged and restricted bank and other deposits#	**9,174,433**	10,430,194	(1,255,761)	(12.0)%
Indebtedness##	**15,939,071**	13,670,889	2,268,182	16.6%
Key financial ratios				
Current ratio	**1.57**	1.09	0.48	44.0%
Quick ratio	**1.44**	1.02	0.42	41.2%
Net debt to equity attributable to owners of the Company	**15.9%**	7.6%	8.3%	109.2%

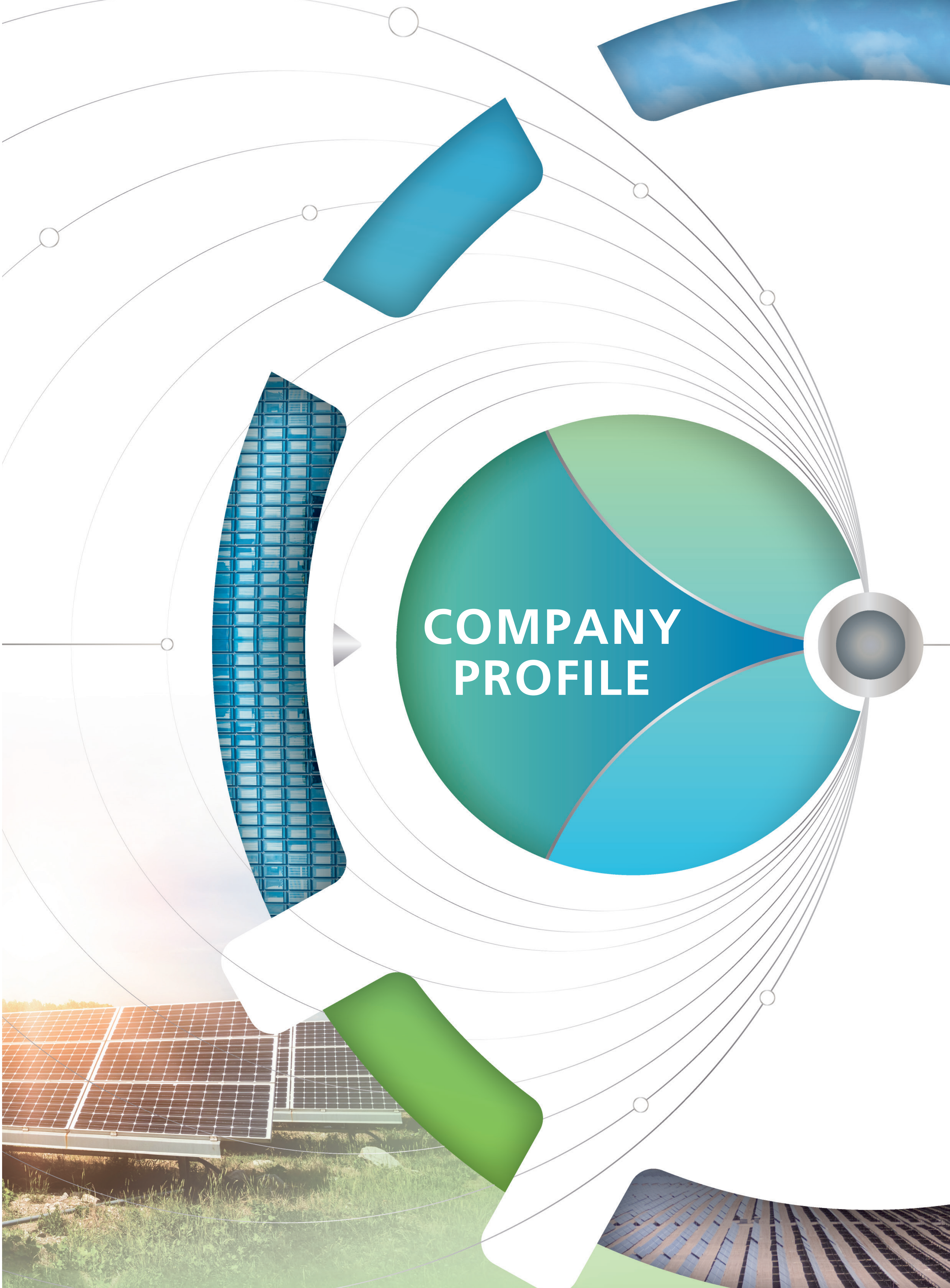
Amount includes bank balances and cash, pledged bank and other deposits.

Indebtedness includes bank and other borrowings, lease liabilities and other financial liabilities.

GCL Technology Holdings Limited was established in 2006 and listed on the Main Board of the Hong Kong Stock Exchange in 2007 (stock code: 3800. HK), is a constituent stock of the Hang Seng Composite Index, a constituent stock of the Hang Seng China (Hong Kong-listed) 100 Index, and a constituent stock of the MSCI China All-Stock Index of MSCI, an international authoritative index agency. The Company has operations mainly in the United States, Hong Kong, Suzhou, Xuzhou, Leshan, Baotou, Zhongwei.

Shouldering the mission of "focusing on green development and continuously improving human living environment" and as the leading R&D and manufacturer of high-efficiency solar materials in world, the Company continues to break through the key technologies of the industry, promote the progress of the industry with technologies, lead the development direction of high-efficiency solar material technology, and has maintained a technology driver position in the polysilicon industry. The fluidized bed reactor (FBR)-based granular silicon technology with independent intellectual property rights developed by the Company after ten years of hard work has multiple advantages such as low cost, high quality and low carbon footprint, setting a record for the lowest silicon carbon footprint at home and abroad, and has become a green energy to promote deep carbon control and emission reduction in the photovoltaic industry.

COMPANY PROFILE



MAJOR EVENTS 2023

JANUARY

January 3rd, the list of outstanding labor relations and harmonious enterprises at the provincial level in Jiangsu Province for the year 2022 was announced, and Jurong GCL Photovoltaic Technology Co., Ltd. was honored to be on the list.

January 6th, the "Huaxia Institutional Investors Annual Conference and the 16th Golden Cicada Award Ceremony" was held, and GCL Technology won the "2022 Outstanding Listed Company Governance Award".

January 10th, the Jiangsu Provincial Department of Industry and Information Technology announced the list of candidates for the 2022 Jiangsu Green Factory, and Suzhou GCL Photovoltaic Technology Co., Ltd. was honored to be on the list, selected as a provincial "Green Factory".

January 13th, the First Session of the 13th People's Congress of Ningxia Hui Autonomous Region was grandly opened in Yinchuan. Ding Wei, Vice President of Ningxia GCL Crystal Technology Development Co., Ltd., a subsidiary of GCL Technology, was newly elected as a representative of the Autonomous Region People's Congress, providing suggestions and ideas for local development.

January 15th, Liu Fafa, a cleaning assistant engineer at Jiangsu GCL Silicon Material Technology Development Co., Ltd. Wafer Slicing Branch, attended the First Session of the 14th Jiangsu Provincial People's Congress as a provincial People's Congress representative.

January 19th, Song Lewei, Secretary of the Xuzhou Municipal Party Committee, presented the "2022 Economic Person of the Year" award to Lan Tianshi, Joint Chief Executive Officer of GCL Technology Holding Co., Ltd. and General Manager of Jiangsu Zhongneng Silicon Industry Technology Development Co., Ltd.

FEBRUARY

February 2nd, GCL Technology held a talent inventory meeting for its management organization's business chain. The meeting was guided by "value creation" and comprehensively reviewed the capabilities and value contributions of various professional talents. It focused on implementing the important speech spirit of the chairman's 2023 economic work conference and the requirements of GCL group's human resources work conference.

February 13th, GCL Technology launched its "Craftsmanship Micro-Carving, Honest Quality" 2023 Quality Year, fully promoting the strategic implementation in silicon materials, silicon powder, ingot & wafer slicing, and infrastructure business units, creating a quality atmosphere, enhancing corporate cohesion and product competitiveness, and establishing the company's high-quality brand image.

February 14th, according to information disclosed by the Hong Kong Stock Exchange in January, the internationally renowned asset management giant BlackRock has always been paying attention to China's new energy industry in the "dual carbon" track. The institution increased its holdings on GCL Technology, with a shareholding ratio of 5.01%.

February 14th, the first steel structure of 100,000 tons of granular silicon project of Inner Mongolia Xinhuan Silicone Energy Technology Co., Ltd. was successfully hoisted, marking the project's construction entering the steel structure installation phase.

MARCH

March 22nd, Ningxia GCL's 5GW granular silicon N-type monocrystalline demonstration project was officially put into full production. The project adheres to the first driving force of scientific and technological innovation, coupled with the core support of information system technologies such as AI and MES, focuses on creating an FBR granular silicon monocrystalline manufacturing demonstration base, and helps the country achieve its "dual carbon" strategic goals.

March 22nd, Funing GCL Photovoltaic Technology Co., Ltd. was named as the pilot demonstration unit for Jiangsu Province's 2022 Happy Enterprise Construction.

March 31st, GCL Technology's 2022 annual results conference was held in Hong Kong, China. The day before, GCL Technology released its 2022 financial report. During the reporting period, the company achieved revenue of RMB35.93 billion and a net profit attributable to the parent company of RMB16.03 billion, representing a year-on-year increase of 215.3%, especially noteworthy is that the company disclosed the granular silicon manufacturing cost of the Xuzhou base for the first time in the announcement, which was RMB43.73/kg, reaching the industry-leading level.

APRIL

April 25th, the production and manufacturing department of Xuzhou Photovoltaic was awarded the honorary title of "Worker Pioneer" in Jiangsu Province.

April 27th, the 2023 celebration of the International Labor Day and the National May Day Labor Award Granting; and the National Worker Pioneer Award Commendation Conference was grandly held at the Great Hall of the People in Beijing. Jiangsu Zhongneng Silicon Industry Technology Development Co., Ltd. was awarded the National May Day Labor Award Certificate and received the award in Beijing.

April 30th, the world's largest silane reaction tower for the 100,000-ton granular silicon project of Inner Mongolia Xinhuan was successfully installed, marking the project entering the critical equipment installation period.

MAY

May 9th, the "2023 7th China Listed Company Brand Value List Announcement Ceremony" sponsored by the China Enterprise Research Center of Tsinghua University's School of Economics and Management and initiated by the Economic Daily was held in Beijing. GCL Technology ranked 50th on the vitality list with a brand value of RMB21.1 billion.

May 10th, GCL Technology's "Polaris Plan" - the recruitment project for R&D doctors was launched simultaneously at the Suzhou GCL Energy Center and the Xuzhou GCL Energy Museum.

May 10th, GCL Technology's Inner Mongolia Xinhuan 100,000-ton granular silicon project bank consortium meeting was held in Hohhot, marking the formation of the largest loan consortium for a single transaction within GCL Group.

May 11th, Jiangsu Province's "5G+ Industrial Internet" Top Ten Benchmark Application Case List was officially released, and Suzhou GCL Photovoltaic Technology Co., Ltd.'s "5G+ Silicon Wafer Intelligent Manufacturing Industrial Internet Project" was successfully selected as the first batch of benchmark application cases.

May 30th, GCL Technology's "GCL Torch" digital transformation project was officially launched in its industrial base in Xuzhou.

JUNE

June 2nd, the "2023 China College Students' Favorite Employers List" activity jointly launched by China's authoritative human resources service provider, Zhaopin, and the exclusive job-seeking website for college students, and GCL Technology independently topped the list for the first time.

June 7th, General Secretary Xi Jinping inspected and investigated in Inner Mongolia and visited the Inner Mongolia Xinhuan project exhibition board at the Zhonghuan Industrial City.

June 13th, the "Financial Focus" program once again focused on Inner Mongolia Baotou Xinyuan granular silicon project. GCL's granular silicon was the only one with its multidimensional advantages such as low cost, high quality, and low carbon footprint, which attracted the attention of the whole society. After achieving mass production of tens of thousands of tons last year, it frequently appeared on CCTV News and financial channels.

June 29th, the Interface News 2023 China Listed Company Annual Professional Manager List was officially released, and GCL Technology's Joint CEO, Lan Tianshi, along with 50 industry leaders such as Tencent Holding CEO Liu Chiping, Alibaba CEO Zhang Yong, Gree Electric Appliances Chairman Dong Mingzhu, and Vanke Chairman Yu Liang, were on the list.

JULY

July 11th, the "Starlight Plan" and International Project Talent Reserve Training Camp of GCL Technology in 2023 set sail in Xuzhou, Jiangsu.

AUGUST

August 6th, the new national standard "Granular Silicon by Fluidized Bed Method" led by GCL Technology was officially released and will soon be implemented. On that day, the national standard information public service platform was updated, and the new version of the national standard "Granular Silicon by Fluidized Bed Method" was officially released. The new version of the national standard for granular silicon will completely replace the current 2017 version national standard and will be implemented on March 1, 2024.

August 8th, the front page of the "Science and Technology Daily" focused on GCL Technology, analyzing the company's ten years of hard work, adherence to the original aspiration, and successful research and development of FBR granular silicon innovation implementation and experience.

August 29th, GCL Technology released its 2023 interim financial report, with a revenue of RMB 20.946 billion, a year-on-year increase of 41.8%, gross profit of RMB 8.778 billion, a year-on-year increase of 23.9%, and net profit attributable to shareholders of RMB 5.518 billion.

August 30th, GCL Technology held its earnings result conference in Hong Kong. Lan Tianshi, Joint-CEO, said at the event that in addition to the rapid increase in production, what made the company most pleased was the significant improvement in quality. Currently, in the continuous production process of N-type ingots, with multiple feedings, the drop in crystal silicon head's minority carrier lifetime is significantly better than that produced using rod silicon dense material during the same period.

SEPTEMBER

September 21st, GCL Technology's Inner Mongolia Xinhuan Silicon Energy Technology Co., Ltd. with a production capacity of 100,000 tons of granular silicon was officially put into operation, producing granular silicon of quality fully consistent with the production needs of N-type products. Hohhot Base is the company's fourth granular silicon production base after Xuzhou, Leshan, and Baotou. The project officially started construction on November 21, 2022, with a construction period of 10 months, setting the "world's fastest" record for the construction speed of a 100,000-ton polysilicon project.

OCTOBER

October 23rd, the 2023 Jiangsu Province Quality Credit Rating results were released, and Jiangsu GCL Silicon Material Technology Development Co., Ltd. and Funing GCL Photovoltaic Technology Co., Ltd. were both rated as "2023 Jiangsu Province Quality Credit AAA-rated enterprises."

October 23rd, the Jiangsu Provincial Party Committee and Provincial Government officially commended "Outstanding Enterprises in Jiangsu Province," and GCL Group Co., Ltd. and Jiangsu Zhongneng Silicon Material Technology Development Co., Ltd. were both on the list.

NOVEMBER

November 20th, at the 2023 China 5G+ Industrial Internet Conference, the official list of "2023 5G Factory Directory" was released, with a total of 300 projects selected, and Suzhou GCL Photovoltaic Technology Co., Ltd.'s "5G Full-Connection Factory" project was included in the list.

DECEMBER

December 17th, CCTV Comprehensive Channel and News Channel reported extensively on GCL's "black technology" granular silicon from the morning's "Morning News" to "News 30 Minutes," "Oriental Time," and "News Live Room" and to the evening's "News Broadcast."

December 21st, the GCL Technology Global Silicon-based Materials Research Institute unveiled its plaque in Xuzhou. In the future, the research institute will aim to "create a world-class new energy silicon-based materials technology innovation platform," focusing on upgrading granular silicon technology, improving product quality, and breaking through upstream and downstream supporting technology bottlenecks. At the same time, actively reserve the second curve technology of photovoltaic and silicon-based materials.

December 27th, GCL Perovskite held a groundbreaking ceremony for a gigawatt-scale (1.2m x 2.4m) perovskite tandem module production base in Kunshan High-tech Zone, Suzhou City, Jiangsu Province, marking the official entry of GCL's perovskite into the era of gigawatt-scale commercial operation.

The global energy transition is accelerating, with traditional energy undergoing upgrades. Representative new energy sources such as wind, solar, hydrogen and storage are rapidly rising, gradually showing signs of replacement. The global energy industry landscape is being reshaped, and the advent of Artificial Intelligence for Generative Content (AIGC) is igniting the technology sector, leading to significant changes in human production, lifestyles, and even life itself.

Industries and technologies are converging at the crossroads of a major transformation era, with new energy once again at the forefront. This time, AI is driving it to new heights. Recently, Jensen Huang, the founder of NVIDIA, publicly stated that the endgame of AI lies in photovoltaics and energy storage. From the popular ChatGPT last year to the trending Sora this year, OpenAI is revitalizing the landscape. According to the evolution theory of Artificial General Intelligence (AGI) and AI large models, within 2-3 years, specialized technologies will revolutionize numerous industries, reaching ordinary households. While the world's attention is focused on artificial intelligence, visionaries such as Sam Altman, CEO of OpenAI, see an energy crisis - the next wave of generative AI systems consuming far more electricity than anticipated, posing challenges to energy systems.

Attention to computational power necessitates consideration of electricity, which in turn requires the construction of a modern energy system. Building a modern energy system cannot avoid the integration of photovoltaics and energy storage. According to related models, by 2030, computational power will consume one-fifth of the world's electricity. Furthermore, if new energy sources are not considered, future computational power could consume several times the traditional energy sources of the Earth.

The era of carbon-based energy is gradually fading, and the silicon-based energy era is opening its curtain. The combination of electricity and computational power empowers new qualitative productivity. In the future, computational power and energy will become two key "currencies" that can be mutually converted. As for application forms, integrated solutions such as source-grid-load-storage, wind-solar-hydrogen storage integration, and light-energy storage-charging-discharge-cloud coupling become the common choices of the "AI Great Voyage Era" and the energy revolution era.

The industries of new energy, new materials, and next-generation information technology are all racing forward, but they share one destination: a new world of low-carbon/zero-carbon formed by the convergence of technology, digitalization, and green premiums. The foundation of this low-carbon/zero-carbon new world lies in silicon energy. Based on the premise of green low-carbon silicon materials, GCL Technology's granular silicon is honored to be the gatekeeper of the low-carbon/zero-carbon world.

Against this backdrop, it is more accurate to say that GCL Technology's granular silicon has seized the moment, rather than being born at the right time. All efforts made over the past 13 years for granular silicon by GCL Technology have been aimed at facilitating the industry to obtain the pass for a greener, zero-carbon future in a more convenient and friendly manner.

Within the coordinate system established by technology, cost, time, and space, GCL Technology has twice pierced the sky of the photovoltaic era with the light of innovation: it first proposed the "GCL method for polycrystalline silicon production," reducing the unit electricity consumption in the production process from over 170 kWh to 55 kWh, thus promoting the transition of China's photovoltaic industry from high prices to parity and low prices. The rising star, granular silicon, further reduced the electricity consumption index to 13.8 kWh per kilogram. In 2011, GCL Technology initiated the silicon fluidized bed technology project, successfully producing granular silicon in 2013, acquiring SunEdison-related assets in 2016 to propel granular silicon to its peak, achieving modular production of 20,000 tons in 2021, and obtaining the "ID card" of the lowest carbon footprint in the global industry both internationally and domestically.

In 2023, GCL's long-accumulated granular silicon underwent a comprehensive transformation. Its four major bases in Jiangsu, Inner Mongolia, and Sichuan achieved full production capacity of 420,000 tons, capable of saving 18.6 billion kWh of electricity annually compared to Siemens' method, resulting in a reduction of approximately 10.59 million tons of CO2 emissions per year. The focus was on elevating total metal impurities to meet the 18-element quality control requirement, with product quality reaching semiconductor-grade standards. Over 90% of GCL's granular silicon 901A products can be applied to N-type applications. The top enterprises achieved 100% coverage. The annual production cost decreased by 27%, with single-module capacity increasing from 20,000 tons to 60,000 tons, and unit investment further reduced by 30% on top of a 30% reduction based on traditional processes.

Behind the advancements in technology, environmental friendliness, and digitization lies a more focused, dedicated, pragmatic, and stringent business philosophy and actions, essentially driven by strategic insights and selective decisions. In 2023, GCL Technology proactively bid farewell to Siemens' polycrystalline silicon capacity, holding key technological advantages, and focusing on flagship products guided by customer demand. It firmly embarked on the path of driving low-carbon core products represented by granular silicon, along with a green hardcore technology matrix represented by perovskite and CCz, through multiple rounds of advancement.

This is just the beginning. Adhering to the business formula of "quality + cost = market," GCL Technology continuously increases its research and development investment, establishing the Global Silicon Research Institute and focusing on tackling industry pain points. Upgrading and optimizing key technologies such as silane synthesis, reaction distillation, and fluidized bed upgrading, GCL Technology further highlights the green and low-carbon advantages of granular silicon through comprehensive digital application, whole-process energy management, and full-business carbon chain tracing. The green premium effect continues to expand, with continuous growth in order demand, establishing global recognition of its value. By the end of 2024, GCL's granular silicon production capacity will be increased to 500,000 tons, while its globally largest-scale silane production capacity will also increase from 500,000 tons to 600,000 tons annually. By the end of 2025, GCL's existing granular silicon production bases will be fully upgraded to near-zero carbon technology parks and digital parks, interpreting green value in the form of carbon-neutral demonstration parks.

GCL Technology, lightly armed and bearing the mission of granular silicon, aims to green and reduce pollution and carbon emissions. Rough estimates suggest that from 2024 to 2040, global photovoltaic electricity generation will experience a growth of over 20 times, from 2 trillion kWh to nearly 40 trillion kWh, accounting for around 70% of the total. As the world's only low-carbon photovoltaic new technology, granular silicon's potential knows no bounds.

Adhering to standards to lead and promote the high-quality development of the industry has been a consistent pursuit of GCL Technology. Making GCL Technology an internationally influential Chinese manufacturing brand is the company's unwavering goal. We have led or participated in the formulation of a total of 78 standards, including four SEMI international standards and 15 national standards. Among them, the new version of the "Fluidized Bed Method for Granular Silicon" national standard (in both Chinese and English) led by GCL Technology was officially implemented on March 1, 2024. Additionally, we have proactively collaborated with downstream partners to establish carbon data models and utilize blockchain technology to establish a transparent carbon data channel for GCL's photovoltaic supply chain. We strive to follow future trends, international requirements, and stringent standards, aiming to drive the global photovoltaic industry towards innovation and sustainability with excellent quality, low costs, and high standards.

Led by technology, GCL's granular silicon has continuously outperformed expectations in 2023, surpassing the quality improvement process of traditional Siemens methods by half a century within a year, while continuously pushing the limits of industry costs. In the era of N-type technology, the differentiated advantages of granular silicon have become prominent, achieving full coverage of top-tier customers by implementing three "first-class" principles: first-class quality, first-class attitude, and first-class service.

CCz technology represents the next-generation "GCL solution" in the field of mono crystal pulling. In 2023, our CCz technology made significant breakthroughs in adapting to the continuous pulling of large-diameter silicon rods in mono crystal furnaces. Currently, CCz has achieved levels of average minority carrier lifetime and oxygen content comparable to those of RCz pulling processes of the same period, which is beneficial for further reducing non-silicon costs at the crystal pulling end, optimizing the existing crystal pulling landscape, and promoting the automation and intelligence of the photovoltaic industry.

High conversion efficiency in the photovoltaic industry is key, and perovskite tandem modules are leading the way. Currently, we have successfully achieved a conversion efficiency of 19.04% for the globally largest 1m x 2m perovskite single-junction module and 26.34% for the 0.2㎡ perovskite tandem module. These achievements accompanied the successful launch of the Zhuque II Y-3 rocket into space for testing. Additionally, the world's largest commercial-scale megawatt-level perovskite module photovoltaic demonstration project at the Huaneng Qinghai Gonghe Photovoltaic Power Station has been fully operational. This marks the acceleration of GCL's perovskite industrialization process.

Research and development (R&D) is fundamental to driving industry benchmarking. Continuous investment in R&D is not only a crucial driver for commercializing new photovoltaic technologies but also the core guarantee for leading the new technological revolution in the photovoltaic industry. In 2023, the company's R&D expenditure amounted to 1.873 billion yuan, representing an increase of 11.10% compared to the previous year. During the reporting period, we actively promoted intellectual property work, with a total of 219 new patent applications, including 88 invention patents and 131 utility model patents. We obtained 110 patent grants, including 18 invention patents and 92 utility model patents. Strengthening intellectual property rights further enhances the company's technical strength and market competitiveness, providing strong support for the company's future innovative development.

Pioneering the carbon chain, GCL is aiding the deep decarbonization of the new energy industry. In the global efforts to address climate change, the European Union's Carbon Border Adjustment Mechanism (CBAM) has emerged as a crucial environmental governance measure, aiming to establish a global carbon market and setting a benchmark for global trade. Proactively raising low-carbon requirements, GCL, conservatively estimated its granular silicon carbon footprint at "37 kilograms of carbon dioxide equivalent" certified by the French Agency for Environment and Energy Control. Building on significant carbon reduction efforts, the company is driving the entire photovoltaic industry chain to further reduce carbon emissions by 28%, weakening international barriers and injecting momentum into product export.

In 2023, leveraging its role as a leading player in the supply chain, the company took the lead in exploring carbon emission accounting and verification, assisting the industry in establishing a carbon footprint management system. Collaborating with downstream partners, GCL established carbon data models for pilot bases such as silicon powder, silicon materials, and crystal cutting, delving into production operations to calculate the actual carbon emission factors for each product and establishing a transparent carbon data channel for GCL's photovoltaic supply chain. Combined with blockchain technology, carbon footprint data reporting and updates are digitized and decentralized, ensuring the accuracy and tamper resistance of carbon data. Against the backdrop of energy transition and net zero goals, GCL's entire portfolio of hardcore technologies, including granular silicon, CCz technology, and perovskite technology, demands absolute leadership in carbon footprint reduction. This effort helps downstream customers obtain zero-carbon credentials and maximizes carbon premiums, striving to create a sample of a low-carbon and zero-carbon photovoltaic industry chain.

Ecological empowerment builds a strong technological moat. Amid market fluctuations, the stability of industry ecosystems and collaborative efficiency directly impacts resilience against market cycles. We focus on both internal and external aspects. On one hand, leveraging technological "hard power" and relying on "patents + vertically integrated upstream materials + cost advantages," we enhance the autonomy and controllability of the industrial supply chain. Simultaneously, by improving organizational, financial, talent, and safety management levels, as well as strengthening institutional standardization and internal mechanism guarantees, process management tracking, we continuously refine granularity to enhance the company's "soft power". On the other hand, we strengthen cooperation with industry-leading enterprises, striving to create an industry "ecosystem" centered on "co-creation and sharing", forming a solid and secure, autonomous and controllable industrial moat through internal and external linkage.

Setting sail for overseas markets, we contribute to a new business card for Chinese manufacturing. Currently, China's photovoltaic industry leads globally, and venturing abroad has become an inevitable trend for industry development. After two years of careful planning, our polysilicon project in the Middle East is expected to commence construction in 2024. This strategic move aims to utilize low-carbon, low-cost, high-quality granular silicon technology as the core, to propel the ascent of Chinese manufacturing to the high end of the value chain. Through global deployment, we aim to gradually enhance brand international influence and reputation, contributing Chinese strength to accelerate global energy transition.

Forge ahead and embark on a new journey in the digital era. We are committed to digital transformation, leveraging digital technologies to improve operational efficiency and create a more comprehensive, efficient, and intelligent management model. In 2023, the company focused on promoting top-level design for digital transformation, based on digital transformation strategies and pain points, combined with excellent practical experience, and outputted high-quality digital transformation planning reports covering enterprise digital business blueprints, digital control frameworks, and change systems, as well as cultivating a team of digital talents.

"Data intelligence, wise decision-making." We have completed the construction of a secure, stable, efficient, scalable, multi-site, and multi-system integrated data warehouse platform and strengthened data linkage and sharing among businesses, constructing digital operational capabilities and systems at the plate level. The company's database is becoming more perfect, realizing visibility and accessibility, entering a new era of digital reform.

Responsibility is paramount, ushering in a new era of ESG comprehensively. The construction of the ESG system is the cornerstone of the company's sustainable development. Through various levels of regulatory frameworks, we have initially formed a closed-loop ESG management system from decision-making, communication, implementation, to execution. In 2023, under the ESG committee, the company established a Sustainable Development Management Committee composed of heads of various bases and functional departments, and officially established a Sustainable Development Center. We improved the three-level ESG governance framework composed of the governance layer, management layer, and execution layer, promoting the deep integration of ESG work and operations. We plan to focus comprehensively on ESG special work, promote the construction of indicator systems, carbon footprint assessments, carbon reduction planning, sustainable supply chain-related work, comprehensively enhance the company's ESG management and overall soft power, and support the company's globalization development.

Collaborating with stakeholders for progress is the long-term driving force behind the company's sustainable development. We actively listen to the suggestions from various sectors of society and continuously optimize, establishing long-term and effective communication mechanisms with external stakeholders. In 2023, the company's ESG rating in the capital market steadily improved, with MSCI ESG rating successfully upgraded to B, and DJSI CSA rating elevated to the top 35% in the industry.

In 2023, the company's ESG performance was repeatedly recognised externally, with fruitful achievements in multiple areas such as ESG, corporate governance, environmental protection, and low-carbon. We were honored to be listed on the Fortune China ESG Influence List and the Wall Street Journal's "Zero Carbon Future · ESG Innovation Practice List". Additionally, we received outstanding awards such as the Golden Cicada Award for Annual Outstanding Listed Company Governance and the Ernst & Young Sustainable Development Annual Best Practices Award. In the future, the company will continue to strive for excellent ESG performance to give back to stakeholders, leading the industry to jointly create a path towards green and sustainable development.

Putting people first and solidifying the company's soft power. In 2023, the human resources rapidly responded to external environmental changes and company strategic needs, continuously strengthening the construction of the human resources system, and optimizing human resources management efficiency to safeguard the company's sustainable development. Adhering to the GCL culture, we enriched corporate cultural activities, improved the work environment, and enhanced employee care plans and welfare systems, increasing employees' sense of participation, happiness, and identification. With value creation as the core, we innovated the assessment mechanism, stimulated employee creativity through short and long-term incentives such as salary strategies, welfare systems, and equity incentives, and established a high-level talent pool.

In terms of talent introduction, the company continues to attract and retain four core types of talents: "technical research and development talents, international talents, composite management talents with expertise in multiple fields, and high-skilled industrial workers." Additionally, through major thematic projects such as "Polar Star Research Ph.D.," "Global Management Trainee," "Capability Level Assessment and Appointment," and "Young Cadre Talent Pool Construction," we improved the internal talent supply chain and made early talent layout preparations around key projects such as building core organizational capabilities.

Return to Shareholders and enhance the Company's long-term value. We have the confidence and patience to achieve our strategic goals, enhance our long-term value and achieve strong shareholder returns. In 2023, the Company distributed cash dividends of RMB1,440 million and repurchased and cancelled 138.5 million shares. In response to demands from the market, to protect legitimate interests of Shareholders and investors of the Company by enhancing their return, the Company will conduct share buy-back and cancellation with a total consideration of no less than RMB680 million during the year ending 31 December 2024. The Company will conduct share buy-back and cancellation and/or make dividend payment with a total value of up to 60% of the sum of the net profits attributable to owners of the Company for the three years from the years of 2023 to 2025, and not less than RMB2.5 billion during the years of 2024 to 2026, and to achieve the growth target of making GCL Technology strong, enriching employees, and receiving the praise from society.

What is next for GCL Technology? The answer lies in the "Three GCL" strategy of Technological GCL, Digital GCL, and Green GCL, where there will be continuous improvement in quality control, cost reduction, and technological advancement. As a flagship product of the global carbon reduction era, GCL Granular Silicon will steadfastly go global, paving the way for internationalization and bringing Granular Silicon to the world. By contributing to the industry with industrial strength, fulfilling social responsibilities, improving the ESG system, and fully repaying shareholders to enhance the company's long-term value, we aim to create a greener future.

Sincere thanks to the Company's board of directors, management, and all employees for their efforts, dedication, and contributions in 2023. We also extend our heartfelt gratitude to the shareholders and partners for their long-standing trust and support. My team and I will actively listen to suggestions from all sectors of society regarding GCL Technology, establish long-term and effective communication mechanisms with external parties, and work together with global partners to create value through practical actions, collaborating with stakeholders to shape a green future.

OVERVIEW

In 2023, the price of polysilicon decreased sharply throughout the year due to the reversal of supply and demand of polysilicon and had since been lingering at the bottom. Profit contribution from the solar materials business for the year ended 31 December 2023 was significantly lower than that for the year ended 31 December 2022. The shift from P-type products to N-type products in the photovoltaic industry resulted in structural imbalance. As a result, the market exit of P-type product accelerated, and N-type product could still guarantee good return. The Company's production capacity has fully shifted to granular silicon products during the year, which resulted in an improvement in average production costs and an increase in product sales volumes. Benefited from the comprehensive advantage of the Company's granular silicon, the Company still maintained relatively leading position in terms of profitability.

RESULTS OF THE GROUP

The operation of GCL New Energy Holdings Limited ("GNE") Group was presented as a discontinued GNE operation in the consolidated financial statements for the year ended 31 December 2022. For detailed information, please refer to "Discontinued Operation" section of this annual report.

For the year ended 31 December 2023, the revenue and gross profit of the Group from continuing operations were approximately RMB 33,700 million and RMB 11,692 million, respectively, representing a decrease of 6.2% and 33.2% respectively as compared with approximately RMB35,930 million and RMB17,496 million for the year ended 31 December 2022.

As stated in the Company's announcement dated 29 December 2023 and supplemental announcement dated 17 January 2024, relating to, among other things, the proposed dividend distribution and capital reduction by Xinjiang Goens Energy Technology Co., Ltd.* (新疆戈恩斯能源科技有限公司) ("Xinjiang Goens"), an associated company of the Group (the "Xinjiang Goens Transaction"), a loss of approximately RMB3.9 billion for the year ended 31 December 2023 was recorded by the Group as a result of the completion of such transaction.

The Group recorded a profit attributable to the owners of the Company from continuing operations of approximately RMB 2,510 million in 2023, as compared to the profit attributable to owners of the Company from continuing operations of approximately RMB16,394 million in 2022.

BUSINESS REVIEW

The Group is principally engaged in manufacturing and the sales of polysilicon and wafers and developing, owning and operation of solar farm. The Group has identified the following continuing operation reportable segments:

Solar material business	—	mainly manufactures and sales of polysilicon and wafer product to companies operating in the solar industry.
Solar farm business	—	operates solar farms located in the USA and the PRC.

Solar material business

Production

The Group's solar material business belongs to the upstream of the solar industry chain, which primarily supplies polysilicon and wafer to downstream solar companies. Polysilicon is the primary raw material used in the solar wafer production. In the solar industry chain, wafers are further processed by downstream manufacturers to produce solar cells and modules.

Polysilicon

As at 31 December 2023, the Group's nominal production capacity of polysilicon amounted to 420,000MT, with an effective production capacity of 340,000MT, representing an increase of 200,000 MT compared to that at the beginning of the year. Currently, the Inner Mongolia Hohhot Xinhuan ("Xinhuan") Project is still in the stage of production capacity ramping up and is expected to become fully operational by June 2024.

For the year ended 31 December 2023, the Group produced a total of 232,256 MT of polysilicon, which increased by 122% compared with 104,723 MT of polysilicon produced in the same period in 2022, including 203,561 MT of granular silicon, up 346% as compared to that of 45,599 MT in 2022.

Ingot and Wafer

As at 31 December 2023, the Group had an annual mono-silicon crystal pulling capacity of 12 GW and an annual wafer production capacity of 58.5 GW.

As of 31 December 2023, the Group produced a total of 51,077 MW of wafer (including 22,294 MW of OEM wafer), representing a year-on-year increase of 9.5% from the total output of 46,661 MW of wafer (including 27,789 MW of OEM wafer) in 2022. The utilization rate of the Company's wafer slicing capacity was 87%, which reached a leading level in the industry.

Sales and Revenue

During the reporting period, the Group shipped 226,123 MT of polysilicon (including internal sales of 18,450 MT), and sold 51,891 MW of wafers (including OEM wafer of 23,224 MW), representing an increase of 141% and 12%, respectively, as compared with 93,900 MT of polysilicon and 46,312 MW of wafers for the corresponding year in 2022.

For the year ended 31 December 2023, the average external selling prices of the Company's polysilicon was approximately RMB76.8 (equivalent to US$10.9) per kilogram.

Revenue from external customers of the solar materials business amounted to approximately RMB 33,486 million for the year ended 31 December 2023, representing a decrease of 6.2% from RMB35,714 million in 2022.

Steady increase in product quality led to the conversion efficiency leap in the industry

In 2023, the Company's granular silicon quality ushered in a real explosive period in the process of continuous improvement, achieving a qualitative leap and continuing to obtain unanimous recognition from customers.

In 2023, the sales volume of granular silicon to the top five customers are 64,401 metric tons, 36,588 metric tons, 16,949 metric tons, 15,462 metric tons and 13,680 metric tons, respectively, accounting for 76% of total sales volume of granular silicon.

Changes in total metal impurity content of granular silicon products in 2023

In 2023, the Company's product quality improved constantly and achieved further breakthroughs. At present, it still maintains an industry-leading level in the control of metal impurities. The overall proportion of the Company's products with a total metal impurity content of 5 elements of ≤1ppbw has maintained at approximately 90%; At the same time, the overall proportion of the Company's products with a total metal impurities content of 5 elements of ≤0.5ppbw increased to approximately 75%, and some production bases have achieved nearly 90%. Such products can fully benchmark against the quality standards of N-type dense compound feeding materials in the market. In order to provide customers with better product quality and a better product experience, the Company's internal requirements for total metal impurities has raised to 18 elements. The proportion of the products with total metal impurities of 18 elements of ≤1ppbw in granular silicon increased from 23% in the second quarter of 2023 to 43% in the fourth quarter of 2023, increasing by nearly 90%, with remarkable results.

Metal 5 elements	2023 Q1	2023 Q2	2023 Q3	2023 Q4
≤0.5	/	43%	74%	75%
0.5~1	27%	33%	15%	16%
Others	73%	24%	11%	9%

Metal 18 elements	2023 Q1	2023 Q2	2023 Q3	2023 Q4
≤1	/	23%	34%	43%
1~3	/	55%	46%	42%
Others	/	22%	20%	15%

Changes in turbidity levels of granular silicon products in 2023

Turbidity is still being continuously optimized, and the proportion of the products with turbidity <120 NTU is already close to 95% (excluding new bases that were ramping up). Meanwhile, the proportion of granular silicon products with turbidity below 100 NTU reached 70%, and the unit production yield issue of downstream N-type customers continued to be improved effectively. At the same time, the Company has achieved a small batch delivery of granular silicon with turbidity of less than 30 NTU through more advanced process and technology, which will further promote the level of unit production yield of downstream customers in the future.

Turbidity<120	July 2023	August 2023	September 2023	October 2023	November 2023	December 2023
Zhongneng	35.0%	53.0%	76.0%	80.7%	86.9%	91.5%
Leshan	67.0%	47.3%	32.1%	56.9%	81.0%	91.3%
Xinyuan	43.1%	36.4%	52.6%	65.7%	74.9%	96.6%
Xinhuan	—	—	—	39.4%	46.8%	71.6%
Overall level	**49.0%**	**46.3%**	**53.2%**	**67.5%**	**81.0%**	**93.1%**

Cost and Segment Gross Profit

The gross profit of polysilicon was greatly affected by market fluctuations and other factors. However, leveraging on the technological edges, GCL Technology maintained its profit competitiveness against its peers during the downward cycle of the industry.

In 2023, the average production cost of granular silicon decreased by 27% as compared with that at the end of last year, which was the leading level in the industry, and still maintained a downward trend. The average production cost of granular silicon in the fourth quarter at the Xinyuan base was already as low as RMB35.9 per kilogram. The cost will continue to drop as the production of granular silicon will make breakthrough constantly and the technology will continuously optimize, coupled with growing synergy created with our own upstream materials.

Solar farm business

Overseas Solar Farms

As at 31 December 2023, the solar farm business includes 18 MW of solar farms in the USA. Besides, there were 150 MW solar farms in South Africa, which was partnered with CAD Fund and with the total effective ownership of 9.7% owned by the Group.

PRC Solar Farms

As at 31 December 2023, the Solar Farm business also includes 5 solar farms in the PRC, with both installed capacity and attributable installed capacity at 133.0 MW.

Sales Volume and Revenue

For the year ended 31 December 2023, the electricity sales volume of the solar farm business overseas and in the PRC were 25,212 MWh and 183,742 MWh, respectively (2022: 26,920 MWh and 196,918 MWh, respectively).

For the year ended 31 December 2023, revenue for the solar farm business was approximately RMB214 million (2022: RMB217 million).

Group's Outlook

The Group's outlook and likely future developments of the Group's business are set out in the "Chairman's Statement and CEO's Review of Operations and Outlook" section of this annual report.

FINANCIAL REVIEW

Continuing operations

Revenue

Revenue for the year ended 31 December 2023 amounted to approximately RMB33,700 million, representing a decrease of 6.2% as compared with approximately RMB35,930 million for the corresponding period in 2022. The slight decrease was mainly due to the combined effect of decrease in average selling price of solar material products during the year and increase in sales volume of granular silicon products due to the continuous release of granular silicon production capacity in Leshan and Baotou bases.

Gross Profit Margin

The Group's overall gross profit margin for the year ended 31 December 2023 was 34.7%, as compared with 48.7% for the corresponding year in 2022.

Gross profit margin for the solar material business decreased from 48.7% for the year ended 31 December 2022 to 34.6% for the year ended 31 December 2023.

The gross profit margin for the solar farm business decreased from 52.7% for the year ended 31 December 2022 to 46.7% for the year ended 31 December 2023.

Distribution and Selling Expenses

Distribution and selling expenses increased from approximately RMB143 million for the year ended 31 December 2022 to approximately RMB251 million for the year ended 31 December 2023. The increase was mainly due to increase in sales volume of our polysilicon products.

Administrative Expenses

Administrative expenses amounted to approximately RMB2,274 million for the year ended 31 December 2023, representing an increase of 33.3% from approximately RMB1,706 million for the corresponding year in 2022. The increase was mainly due to commencement of production in Hohhot during the year of 2023, and the full complete year of operation of Leshan and Baotou base and increase of salary and wages expenses during the year.

Finance Costs

Finance costs amounted to approximately RMB418 million for the year ended 31 December 2023, representing a increase of 74.2% from approximately RMB240 million for the corresponding year in 2022. The increase was mainly due to the increase of average bank and other borrowings balances during the year.

Reversal of impairment losses under expected credit loss model, net

The Group recognised approximately RMB137 million reversal gain under expected credit loss model, net of impairment losses, for the year ended 31 December 2023 (2022: RMB236 million).

The reversal of impairment losses under expected credit loss model, net for the year ended 31 December 2023 mainly comprised of reversal of impairment losses of trade related receivables of approximately RMB9 million (2022: RMB301 million) and net of reversal of impairment loss on non-trade related receivables of approximately RMB128 million (2022: impairment losses of approximately RMB65 million).

Other Expenses, Gains and Losses, Net

For the year ended 31 December 2023, net losses of approximately RMB5,859 million in other expenses, gains and losses were recorded as compared to net losses of approximately RMB2,344 million for the year ended 31 December 2022. The increase of net losses was mainly due to the loss on disposal of and impairment loss on interest in an associate (the Group's 38.5% equity interest in Xinjiang Goens), increase of research and development cost, increase of impairment loss on property, plant and equipment. The net losses mainly comprises of:

(i) loss on disposal of and impairment loss on interest in an associate (the Group's 38.5% equity interest in Xinjiang Goens) of approximately RMB3,190 million (2022: Nil)

(ii) research and development costs of approximately RMB1,873 million (2022: RMB1,686 million)

(iii) impairment loss on property, plant and equipment of approximately RMB1,128 million (2022: RMB804 million).

(iv) gain on disposal/partial disposal/deemed disposal of associates of approximately RMB202 million (2022: RMB202 million)

(v) gain on fair value change of derivative financial instruments and loss on fair value change of convertible bonds to a non-controlling shareholder of a subsidiary approximately RMB71 million (2022: gain on fair value change of approximately RMB8 million)

(vi) gain on fair value change of investments at FVTPL of approximately RMB54 million (2022: loss on fair value change of approximately RMB81 million)

(vii) gain on disposal of property, plant and equipment of approximately RMB31 million (2022: loss on disposal of RMB165 million)

(viii) gain on disposal of subsidiaries of nil (2022: RMB41 million)

Share of Profits of Associates

The Group's share of profits of associates for the year ended 31 December 2023 was approximately RMB203 million, mainly contributed by following associates:

- Share of profit of approximately RMB0.7 billion from Xinjiang Goens Energy Technology Co., Ltd.* ("**Xinjiang Goens**") (新疆戈恩斯能源科技有限公司) for the period from 1 January to 29 December 2023; and

- Share of losses of approximately RMB0.5 billion from Xuzhou Zhongping GCL Industrial Upgrading Equity Investment Fund LLP* (徐州中平協鑫產業升級股權投資基金(有限合夥)) ("**Xuzhou Fund**") (including share of losses of approximately RMB0.7 billion related to the Xinjiang Goens Transaction).

Income Tax Expense

Income tax expense for the year ended 31 December 2023 was approximately RMB975 million as compared with approximately RMB1,880 million of income tax expense for the year ended 31 December 2022. The decrease in income tax expenses was mainly due to decrease in profit for the year during the year.

Profit attributable to Owners of the Company

As a result of the above factors, profit attributable to owners of the Company from continuing operations amounted to approximately RMB2,510 million for the year ended 31 December 2023 as compared with a profit of approximately RMB16,394 million for the corresponding period in 2022.

The loss attributable to owners of the Company from discontinued operations amounted to approximately RMB363 million for the year ended 31 December 2022.

The profit attributable to owners of the Company from both continuing operations and discontinued operation amounted to approximately RMB2,510 million for the year ended 31 December 2023 as compared with a profit of approximately RMB16,030 million for the year ended 31 December 2022.

NON-IFRS FINANCIAL MEASURES — ADJUSTED EBITDA

Adjusted EBITDA is earnings before finance costs, income taxes, depreciation and amortization, adjusted by major non-cash items, non-operating or non-recurring items and other one-off expenses. Adjusted EBITDA is not a measure of performance under International Financial Reporting Standards (IFRS).

To supplement the consolidated results of the Group prepared in accordance with IFRS, certain additional non-IFRS financial measures such as adjusted EBITDA have been presented in this annual report. These unaudited non-IFRS financial measures should be considered in addition to, not as a substitute for, measures of the Group's financial performance prepared in accordance with IFRS. In addition, these non-IFRS financial measures may be defined differently from similar terms used by other companies. The Company believes that these non-IFRS measures provide useful information to help investors and others understand and evaluate the Company's consolidated results of operations in the same manner as management and in comparing financial results across accounting periods and to those of our peer companies by excluding certain non-cash, non-operating or non-recurring items and other one-off expenses.

The following table sets forth a quantitative reconciliation of adjusted EBITDA for the years ended 31 December 2023 and 2022 to its most directly comparable IFRS measurement and profit before tax:

Continuing operations:	2023 RMB'million	2022 RMB'million
For the year ended 31 December:		
Profit for the year	3,327	16,423
Adjust: non-operating or non-recurring items:		
— Impairment loss of property, plant and equipment (note a)	1,128	804
— (Gain)/Loss on fair value change of derivative financial instruments and held for trading investments, net (note b)	(82)	3
— Gain on disposal of subsidiaries, net (note c)	—	(41)
— Loss/(gain) on fair value of convertible bonds to a non-controlling shareholder of a subsidiary (note b)	12	(12)
— Gain on disposal/partial disposal/deemed disposal of associates (note c)	(202)	(202)
— (Gain)/loss on fair value change of investments at FVTPL (note b)	(54)	81
— Exchange losses/(gains), net (note b)	25	(140)
— (Reversal of impairment losses)/Impairment losses under expected credit loss model, net of reversal (non-trade related) (note b)	(128)	65
— Loss on disposal of and impairment loss on interest in associates (Xinjiang Goens and Xuzhou Fund) (note c)	3,892	—
	7,918	16,981
Add:		
Finance costs	418	240
Income tax expense	975	1,880
Depreciation and amortisation	3,349	1,956
Adjusted EBITDA	12,660	21,057

Note a:

Impairment loss of property, plant and equipment recognised for the year ended 31 December 2023 was considered as non-cash items. We consistently presented the comparative amount for the year ended 31 December 2022.

Note b:

These items were considered as non-operating in nature. All fair value changes related to derivative financial instruments, held for trading investments, convertible bonds to a non- controlling shareholder of a subsidiary, investments at FVTPL and exchange (gains)/losses were considered as not related to principal business and core operation of the Group, therefore all these changes were considered as non-operating.

For impairment losses under expected credit loss model, net of reversal for non-trade related balances, as they are not related to normal business of the Company, we consider treating it as non-operating in nature.

Note c:

These items were considered as non-recurring in nature, therefore when assessing company financial performance, non-recurring items were excluded.

For disposal or deemed disposal of subsidiaries associate or joint venture, are one-off transactions and we consider them as non-recurring items.

Property, Plant and Equipment

Property, plant and equipment increased from approximately RMB26,531 million as at 31 December 2022 to approximately RMB34,784 million as at 31 December 2023. Increase in property, plant and equipment was mainly attributable to capital investment in granular silicon production base partially offset by impairment loss made and depreciation charged during the year.

Interests in Associates

Interests in associates decreased from RMB15.0 billion as at 31 December 2022 to RMB5.8 billion as at 31 December 2023. The decrease was mainly due to disposal of and impairment loss on interest in an associate (Xinjiang Goens) and change in fair value of perpetual note classified as financial assets at fair value through other comprehensive income during the year, partially offset by share of profits of associates during the year.

Interests in associates as at 31 December 2023 mainly consists of below:

- The Group has 40.27% equity interest in Xuzhou Fund of approximately of RMB2 billion;
- The Group has 6.42% equity interest in Inner Mongolia Zhonghuan Crystal of approximately RMB0.9 billion;
- The Group equity interest in Leshan Zhongping Polysilicon Photovoltaic Information Industry Investment Fund Partnership (Limited Partnership)* (樂山市仲平多晶硅光電信息產業基金合夥企業 (有限合夥)) and Leshan Zhongping Nengxin Enterprise Management Consultancy Partnership (Limited Partnership)* 樂山市中平能鑫企業管理諮詢合夥企業 (有限合夥) of approximately RMB82 million and RMB0.4 billion respectively;
- The Group has 24.55% equity interest in Jiangsu Xinhua of approximately RMB0.6 billion;
- The Group's 49.92% equity interest in Xuzhou Risheng Low Carbon Industry Investment Partnership (Limited Partnership)* ("**Xuzhou Risheng**") (徐州日晟低碳產業投資合夥企業 (有限合夥)) of approximately RMB0.6 billion; and
- The Group has 7.44% equity interests in GNE Group of approximately RMB1.2 billion which include perpetual note classified as financial assets at fair value through other comprehensive income.

* *English name for identification only*

Trade and Other Receivables

Trade and other receivables decreased from approximately RMB23,621 million as at 31 December 2022 to approximately RMB17,901 million as at 31 December 2023. The decrease was mainly due to decrease of bill receivables in trade nature balances of solar material business.

Trade and Other Payables

Trade and other payables decreased from approximately RMB19,581 million as at 31 December 2022 to approximately RMB14,246 million as at 31 December 2023. The decrease was mainly due to an decrease in trade payables during the year.

Balances with related companies

The related companies included associates, joint ventures and shareholders of non-controlling interest of the Group and companies controlled by Mr. Zhu Gongshan and his family members which hold in aggregate approximately 23.80% (2022: 23.62%) of the Company's share capital as at 31 December 2023 and exercise significant influence over the Company.

Amounts due from related companies increased from approximately RMB789 million as at 31 December 2022 to approximately RMB5,045 million as at 31 December 2023. The increase was mainly due to increase in dividend receivable from Xinjiang Goens during the year.

Amounts due to related companies decreased from approximately RMB3,496 million as at 31 December 2022 to approximately RMB1,361 million as at 31 December 2023. The decrease was mainly due to repayment to associates during the year.

Liquidity and Financial Resources

As at 31 December 2023, the total assets of the Group were about RMB82.8 billion, of which the aggregate restricted and unrestricted cash and bank balances and other deposits amounted to approximately RMB9.2 billion.

For the year ended 31 December 2023, the Group's main source of funding was cash generated from operating activities and financing activities.

Utilization of Proceeds from Placing

The Company completed three rounds of fund raising in 2021, including (i) a placement of 3,900,000,000 new shares of the Company at a price of HK$1.08 per share with net proceeds of approximately HK$4.148 billion in January 2021 (the "**January 2021 Placing**"); (ii) a placement of 2,036,588,000 new shares of the Company at a price of HK$2.49 per share with net proceeds of approximately HK$4.994 billion in the December 2021 (the "**December 2021 Placing**"); and (iii) a top-up placing and subscriptions of 2,000,000,000 new shares of GNE at a price of HK$0.455 per share with net proceeds of approximately HK$895 million (the "**February 2021 Top-up Placing**").

As at 31 December 2023, the utilization of net of proceeds above are as following:

For January 2021 Placing, the net proceeds was used for (i) reduction of existing borrowing levels and gearing level and adjustment of the debt structure of approximately HK$1.674 billion; (ii) development of FBR based granular silicon production business and production capacity of approximately HK$1.95 billion; and (iii) general corporate purposes of approximately HK$524 million. All of the proceeds have been fully utilized as at 31 December 2023.

For February 2021 Top-up Placing, all of the net proceeds was used for repayment of borrowings.

For the December 2021 Placing, the net proceeds was used for capital expenditure and general working capital purposes of approximately HK$4.549 billion and HK$445 million respectively. All of the proceeds have been fully utilized as at 31 December 2023.

The proceeds from the January 2021 Placing, February 2021 Top-up Placing and December 2021 Placing were used according to the intentions disclosed previously.

On 4 August 2022, the Company and GNE completed a top-up placing and subscription of 2,275,000,000 shares at HK$0.138 per share to no less than six independent placees, raising net proceeds of approximately HK$310,000,000 after deducting placing commission and related expenses (the "**2022 Placing**"). There are no changes to the intended use of net proceeds from the 2022 Placing. As at 31 December 2023, approximately HK$133 million was used as intended and approximately HK$177 million was deposited to the bank account of the GNE pending its application.

Indebtedness

Details of the Group's indebtedness are as follows:

	As at 31 December 2023 RMB million	As at 31 December 2022 RMB million
Current liabilities		
Bank and other borrowings — due within one year	5,316	9,419
Other financial liabilities	525	294
Lease liabilities — due within one year	70	105
	5,911	9,818
Non-current liabilities		
Bank and other borrowings — due after one year	9,951	3,806
Lease liabilities — due after one year	76	46
	10,027	3,852
Total indebtedness	15,938	13,670
Less: Bank balances and cash and pledged and restricted bank and other deposits	(9,174)	(10,430)
Net debt	6,764	3,240

Below is a table showing the bank and other borrowings structure and maturity profile of the Group.

	2023 RMB million	2022 RMB million
Secured	**10,795**	8,605
Unsecured	**4,472**	4,620
	15,267	13,225
Maturity profile of bank and other borrowings		
On demand or within one year	**5,316**	9,419
After one year but within two years	**1,102**	1,424
After two years but within five years	**7,257**	2,194
After five years	**1,592**	188
Group's total bank and other borrowings	**15,267**	13,225

As at 31 December 2023, RMB bank and other borrowings carried floating interest rates with reference to the Benchmark Borrowing Rate of The People's Bank of China. USD bank and other borrowings carried interest rates with reference to the Secured Overnight Financing Rate.

Key Financial Ratios of the Group

	As at 31 December 2023	As at 31 December 2022
Current ratio	**1.57**	1.09
Quick ratio	**1.44**	1.02
Net debt to equity attributable to owners of the Company	**15.9%**	7.6%

Current ratio = Balance of current assets at the end of the year/balance of current liabilities at the end of the year

Quick ratio = (Balance of current assets at the end of the year — balance of inventories at the end of the year)/balance of current liabilities at the end of the year

Net debt to total equity attributable to owners of the Company = (Balance of total indebtedness at the end of the year — balance of bank balances and cash and pledged and restricted bank and other deposits at the end of the year)/balance of equity attributable to owners of the Company at the end of the year

Policy risk

Policies made by the Chinese Government have a pivotal role in the solar power industry. Any alternation in the preferential tax policies, on-grid tariff subsidies, generation dispatch priority, incentives, upcoming issuance of green certificates, laws and regulations would cause substantial impact on the solar power industry. Although the Chinese Government has been supportive in aiding the growth of the renewable industry by carrying out a series of favourable measures, it is possible that any material adverse adjustment of such measures may have an impact on the Group's operating condition and profitability. In order to minimize risks, the Group will follow rules set out by the government strictly, and will pay close attention to policy makers in order to reduce the adverse impact of policy changes on the Group.

Credit Risk

Each major operating business of the Group has a policy of credit control in place under which credit evaluations of customers are performed on all customers requiring credit.

In order to minimize the credit risk on sales of polysilicon and wafer products, the Group reviews the recoverable amount of each individual trade receivables periodically to ensure that adequate expected credit losses are made. Credit risk of sales of electricity is not significant as most of the revenue is due from the local grid companies in various provinces in PRC.

Risk related to interest rate

Interest risk may result from fluctuations in bank loan rates. Given the Group highly relies on external financing in order to obtain investment capital for new project development and plants and equipment, any interest rate changes will have impact on the capital expenditure and finance costs of the Group, which in turn affect our operating results.

Foreign currency risk

Most of the Group's businesses are located in the PRC and the presentation currency of the consolidated financial statements of the Company is RMB. Substantially all of the Group's revenue, cost of sales and operating expenses are denominated in RMB, and the majority of the Group's assets and liabilities are denominated in RMB, while the rest are mainly denominated in US dollar and Hong Kong dollar. Any depreciation/appreciation of RMB against US dollar or any other foreign currencies may result in a change in value of the monetary assets and liabilities that are denominated in foreign currencies and affect the earnings and value of the net assets of the Group.

The Group continues to adopt a conservative approach on foreign exchange exposure management and ensure that its exposure to fluctuations in foreign exchange rates is minimised. The majority of the Group's borrowings are denominated in RMB. Foreign currency forward contracts will be utilised when it is considered as appropriate to hedge against foreign currency risk exposure.

Risk related to disputes with joint venture partners

The Group's joint venture partners may involve risks associated with the possibility that our joint venture partners may have financial difficulties or have disputes with us as to the scope of their responsibilities and obligations. We may encounter problems with respect to our joint venture partners which may have an adverse effect on our business operations, profitability and prospects.

Risk related to supplier concentration

The Group's wafer business are exposed to concentration risk of reliance on our major suppliers for the supply of the semi solar products, and any shortage of, or delay in, the supply may significantly impact our business and results of operation.

However, the largest supplier was associate of the Group, the Group was able to exercise significant influence on the operation of the associate, this enable the Group to monitor the above risks continually.

Pledge of or restrictions on assets

As at 31 December 2023, the following assets were pledged for certain bank and other borrowings, lease liabilities, or restrictions on assets, issuance of bills, short-term letters of credit for trade and other payables granted to the Group and bank and other borrowings of a joint venture of the Group:

— Property, plant and equipment of RMB1.4 billion (31 December 2022: RMB3.2 billion)

— Right-of-use assets of approximately RMB0.2 billion (31 December 2022: RMB0.5 billion)

— Investment properties of approximately RMB0.4 billion (31 December 2022: RMB0.4 billion)

— Trade receivables and other receivables of approximately RMB3.6 billion (31 December 2022: RMB8.2 billion)

— Pledged and restricted bank and other deposits of approximately RMB2.2 billion (31 December 2022: RMB3.8 billion)

In addition, lease liabilities of approximately RMB0.1 billion are recognised with related right-of-use assets of approximately RMB0.1 billion as at 31 December 2023 (31 December 2022: lease liabilities of approximately RMB0.15 billion are recognised with related right-of-use assets of approximately RMB0.14 billion).

Capital and other Commitments

As at 31 December 2023, the Group's capital commitments in respect of purchase of property, plant and equipment contracted for but not provided amounted to approximately RMB3,667 million respectively (2022: RMB10,225 million) and other commitments to contribute share capital to investments of approximately RMB473 million (2022: RMB226 million).

Contingencies

Financial guarantees contracts

As at 31 December 2023 and 31 December 2022, the Group provided guarantees to its investments at fair value through profit or loss for certain of their bank and other borrowings in proportional to the Group's interest in those investments with amount of approximately RMB71 million.

As at 31 December 2023 and 31 December 2022, the Group provided a total guarantee with maximum amount of approximately RMB2,500 million (31 December 2022: RMB2,500 million) to several banks and financial institutions in respect of banking and other facilities of a subsidiary of an associate of the Group. As at 31 December 2023 and 31 December 2022, the loan balances of a subsidiary of an associate of the Group were RMB846 million and RMB1,270 million, respectively.

Contingent liability

Save as disclosed in above, the Group and the Company did not have other significant contingent liabilities as at 31 December 2023 and 2022.

Material acquisitions and disposals

On 29 December 2023, the board of directors of Xinjiang Goens Energy Technology Co., Ltd.* (新疆戈恩斯能源科技有限公司), an associated company of the Group, approved to:

(1) distribute dividends to some (but not all) Xinjiang Goens Shareholders, including Jiangsu Zhongneng; and

(2) reduce the registered capital held by some (but not all) Xinjiang Goens Shareholders, including Jiangsu Zhongneng,

For the year ended 31 December 2023, a loss of approximately RMB3.9 billion was recorded by the Group upon completion of such transaction. It was comprised of (1) a loss of approximately RMB3.2 billion was recognised as loss on disposal of and impairment loss on the interest in an associate of Group's 38.5% equity interest in Xinjiang Goens; (2) share of a loss of approximately RMB 0.7 billion from an associate of Xuzhou Fund (徐州基金) as a result of the completion of such transaction.

Following completion of the Transaction, Jiangsu Zhongneng ceased to hold any direct equity interest in Xinjiang Goens.

Save as disclosed in above, there were no other significant acquisitions during the year ended 31 December 2023, or plans for material acquisitions as at the date of this report, nor were there other material acquisitions and disposals of subsidiaries during the year ended 31 December 2023.

SIGNIFICANT EVENTS AND BUSINESS DEVELOPMENT AFTER REPORTING PERIOD

The Group entered into various continuing connected transactions (the "CCTs") after the year ended 31 December 2023. For the details of the CCTs, please refer to the announcements of the Company dated 15 March 2024.

Apart from the above, there were no significant event after the year ended 31 December 2023 and up to the date of this annual report.

EMPLOYEES

We consider our employees to be our most important resource. As at 31 December 2023, the Group had approximately 12,446 employees (31 December 2022: 11,527 employees), in the PRC and overseas. Employees are remunerated with reference to individual performance, working experience, qualification and the prevailing industry practice. Apart from basic remuneration and the statutory retirement benefit scheme, employee benefits include but are not limited to discretionary bonuses, with share options granted to eligible employee.

MAJOR INVESTOR RELATIONS ACTIVITIES

The management firmly believes that effective investor relations will help enhance investors' understanding on the Company, improve corporate governance, and create shareholder value.

In 2023, we organized and executed a total of 50 investor events across various production bases, including Suzhou, Xuzhou, Leshan, Baotou, and Hohhot. We participated in the investor conference of 50 well-known broker research institutions, and held 129 group meetings and 28 1-on-1 meetings, and conducted 54 teleconference and online con-calls. The total number of investors communicated online reached 3,171, and we had face-to-face meetings with 2,253 investors. Throughout the year, we participated in a total of 486 various investor activities and roadshows, and the number of investors communicated totaled 5,424.

Also, on the basis of investor relations and various investor activities, we enhanced industry research and benchmarking analysis reports in 2023, periodically sent analysis reports and daily trading recap tracking reports to the Company's management, and provided weekly and monthly recap reports. We also strengthened our analysis of market institutional investment strategies as well as of investors. A total of 22 broker research reports were published during the year, and 31 articles on industry analysis and research were generated internally. We established a complete investor communication ledger and introduced IRM system tools such as "Get Started with Finance" and "On Roadshow" for communication management and meeting organization, building a more comprehensive and improved investor relations ecosystem.

In addition, we actively participated in social media interactions, using various new media to communicate with a large number of investors, enabling them to understand the latest developments of the Company on a real time basis.

CORPORATE ENVIRONMENTAL POLICIES AND PERFORMANCE

Adhering to the mission of "focusing on green development and continuously improving the living environment of mankind", the Company unswervingly seizes the opportunities of clean technology, actively responds to the national "dual carbon" goal by implementing the concept of environmental protection development, optimizing production technology and implementing green operations, promote the transformation and upgrading of global energy, and is committed to creating a "zero-carbon world"of GCL for a better life for mankind.

In order to improve the essence of ESG management, GCL Technology formally established the Sustainable Development Management Committee and the Sustainable Development Center in 2023 to form a whole-process management from top-level decision-making and communication, implementing ESG concepts throughout the business value chain and improve ESG management. In addition, the Company has been actively creating diversified communication channels to enhance positive interaction with stakeholders, comprehensively using regular and non-scheduled communication methods to understand the concerns of government departments/regulatory authorities, shareholders/investors, customers, employees, partners, community/non-governmental organizations and media and other stakeholders, and promoting effective responses to the opinions of all stakeholders with practical actions.

The Company insists on taking good and stable quality and services as the foundation for creating business and social value, focuses on the five major quality development directions of process standard, lean management, quality first, continuous improvement and customer satisfaction, adheres to the customer-oriented service spirit, and establishes a quality management system with both internal and external development. During the Reporting Period, the Company continued to increase investment in research and development funds and talents, and successfully set a new global record of carbon emissions per kilogram of granular silicon. The average manufacturing cost of FBR-based granular silicon decreased by 27% compared with the end of 2022, bringing huge cost and carbon emission advantages, and contributing to GCL's strength to accelerate the low-carbon development of new energy around the world.

Focusing on the concept of environmental protection and green development, the Company improved the environmental management system, implemented the environmental management responsibility system, strengthened the prevention and control of environmental risks, actively carried out ecological environmental protection, and reduced the impact of operations on the environment, so as to improve the Company's environmental performance. The Company integrates the concept of circular economy and resource conservation into the whole process of production and operation. By formulating management measures and clarifying management responsibilities, the Company encourages all bases to continuously optimize processes and carry out energy-saving technological transformation projects to improve the efficiency of resource utilization. In the face of the impact of global climate change on corporate strategic planning and business operations, the Company promoted climate change risk management in accordance with the framework and recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), carried out Scope 1, 2 and 3 greenhouse gas inspections, and fully implemented the special work on climate change response.

The Company strictly complies with national and regional laws and regulations, including but not limited to the Company Law, Labor Law, Production Safety Law, Occupational Disease Prevention Law, Environmental Protection Law, Pollution Prevention Law, Anti-monopoly Law and Advertising Law. The Company continuously deepens the requirements for its overall governance level, optimizes the support for the growth and development of employees, strengthens internal risk control and compliance management capabilities, consolidates the Company's data and information security protection, abides by business ethics, and promotes the overall formation of a clean and transparent business atmosphere in the industrial ecosystem.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Please refer to the separately published "Environmental, Social and Governance Report" for more details.

EXECUTIVE DIRECTORS

ZHU Gongshan (Chairman), aged 66, is the founder of the Company. He has been an Executive Director and the Chairman of the Company since July 2006. Mr. Zhu Gongshan is also a member of the Strategy and Investment Committee of the Company. He is also a director of GCL System Integration Technology Co., Ltd. (協鑫集成科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002506) and GCL Energy Technology Co., Ltd. (協鑫能源科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002015). Mr. Zhu Gongshan is also an executive director and the chairman of GCL New Energy Holdings Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 00451). Mr. Zhu Gongshan is the father of Mr. Zhu Yufeng. Mr. Zhu Gongshan acted as a member of the 12th National Committee of the Chinese People's Political Consultative Conference (the "CPPCC"), a member of the 12th Jiangsu Province Committee of the CPPCC, the chairman of Global Green Energy Industry Council, the chairman of Asian Photovoltaic Industry Association, the deputy director of the Green and Low Carbon Development Promotion Committee of China Enterprise Confederation, the executive vice president of the Energy Storage and Electric Vehicle Branch of China Electricity Council. He concurrently serves as the executive chairman of ICC China Environment and Energy Committee, the vice chairman of China Overseas Chinese Entrepreneurs Association, the vice chairman of China Fortune Foundation Limited, the vice chairman of China Industrial Overseas Development & Planning Association, the honorary chairman of Jiangsu Residents Association in Hong Kong, the honorary chairman of the Federation of HK Jiangsu Community Organisations, the honorary chairman of Suzhou Federation of Industry and Commerce and the chairman of SNEC Hydrogen Energy Industry Alliance Council. Mr. Zhu Gongshan has been given the "New China 70th New Energy Industry 10 Outstanding Contributors" award and the medals of "Chinese Enterprise Reform, Figure of Energy Revolution and Leading Energy Entrepreneur of 40 Years Reform and Opening". Mr. Zhu Gongshan graduated from Nanjing Electric Power College* (南京電力專科學校) in July 1981 and obtained a diploma in electrical automation.

ZHU Yufeng (Vice Chairman), aged 42, has been an Executive Director of the Company since September 2009 and is a member of the Remuneration Committee of the Company. Mr. Zhu Yufeng has been appointed as a Vice Chairman of the Board since September 2022. Mr. Zhu Yufeng is also a director of several subsidiaries of the Company. Mr. Zhu Yufeng is the son of Mr. Zhu Gongshan. Mr. Zhu Yufeng joined a subsidiary of the Company in 2006. He is responsible for human resources, administration and project tender of the Company. Mr. Zhu Yufeng is the chairman of GCL System Integration Technology Co., Ltd. (協鑫集成科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock code: 002506) and GCL Energy Technology Co., Ltd. (協鑫能源科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock code: 002015), an executive director and the vice chairman of GCL New Energy Holdings Ltd. (協鑫新能源控股有限公司), a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock code: 00451). Mr. Zhu Yufeng is the committee secretary of CPC GCL Group Limited (中共協鑫集團有限公司),the vice chairman and the president of Golden Concord Holdings Limited (協鑫(集團)控股有限公司), a member of the Standing Committee of All-China Youth Federation, the vice president of Chinese Young Entrepreneurs'Association, the vice chairman of China Electricity Council, the vice president of General Chamber of Commerce of Jiangsu Province, the president of Jiangsu Youth Chamber of Commerce and a member of the 14th and 15th committees of CPPCC in Suzhou City etc. In addition, Mr. Zhu Yufeng was honored as "2017 Top Ten People of the Year for China New Energy (2017中國新能源十大年度人物)", "2017 Virtuous Leadership Award (2017年度臻善領袖獎)", "2021 China Energy Industry Leader (2021年度中國能源行業領軍人物)" and "2023 Jiangsu Financial Figures (2023江蘇財經人物)". Mr. Zhu Yufeng graduated from George Brown College (Business Administration Faculty).

ZHU Zhanjun (Vice Chairman and Joint CEO), aged 54, has been an Executive Director and Executive President of the Company since January 2015. He has been appointed as the Chief Executive Officer ("CEO") of the Company since April 2016 and has been appointed as the Vice Chairman and re-designated as a Joint CEO of the Company since February 2022. Mr. Zhu Zhanjun is a member of the Strategy and Investment Committee of the Company and also a director of several subsidiaries of the Company. Mr. Zhu Zhanjun has vast experience in the polysilicon and wafer business. He joined in 2004 as a plant manager of one of the power plants of the Group and was promoted as the general manager in 2006. He was transferred to Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd.* (江蘇中能硅業發展有限公司), a subsidiary of the Company which manufactures polysilicon and acted as the deputy director-infrastructure in 2008. Mr. Zhu Zhanjun was promoted as the general manager of Jiangsu GCL Silicon Material Technology Development Co., Ltd.* (江蘇協鑫硅材料科技發展有限公司), a subsidiary of the Company in 2009 and was appointed as the Vice President of the Company in 2013, overseeing the Company's ingot business and wafer business. Mr. Zhu Zhanjun is an engineer and obtained a master degree in business administration from China Europe International Business School* (中歐國際工商學院) in 2013. Mr. Zhu Zhanjun is also a director of GCL System Integration Technology Co., Ltd. (協鑫集成科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002506).

Lan Tianshi (Joint CEO), aged 43, has been appointed as an Executive Director and a Joint CEO since February 2022. He joined the Group in July 2007 and served as a professional technician, the deputy factory manager, the factory manager, the assistant deputy general manager, the deputy general manager and the executive deputy general manager of Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd.* (江蘇中能硅業科技發展有限公司), a wholly-owned subsidiary of the Company. Mr. Lan currently holds various positions in the subsidiaries of the Company, including the chairman of Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd.* (江蘇中能硅業科技發展有限公司), GCL Technology (Suzhou) Co., Ltd.* (協鑫科技(蘇州) 有限公司), GCL Technology Investment Co., Ltd.* (協鑫科技投資有限公司) and GCL New (Shanghai) Photovoltaic Technology Co., Ltd.* (協鑫新(上海) 光伏科技有限公司) etc., a director of Leshan GCL New Energy Technology Co., Ltd. * (樂山協鑫新能源科技有限公司) and Inner Mongolia Xinhuan Silicon Energy Technology Co., Ltd.* (內蒙古鑫環硅能科技有限公司) etc. Mr. Lan holds a bachelor degree in chemical engineering and technology from Harbin Engineering University, a master degree from Sichuan University and a petrochemical engineering senior engineer with a certificate issued by the Jiangsu Petrochemical Engineering Advanced Professional Technical Qualification Evaluation Committee. Mr. Lan has nearly 20 years of experience in chemical manufacturing and management.

SUN Wei, aged 52, has been an Executive Director of the Company since September 2016 and a director of several subsidiaries of the Company. Prior to the appointment, Ms. Sun was an Executive Director of the Company for the periods from November 2006 to July 2007 and from October 2007 to January 2015, and served the Company as the Honorary Chairlady of Finance and Strategy Function. Ms. Sun currently is responsible for the corporate finance, financial strategy and management of the Group. Ms. Sun is the vice chairlady of Golden Concord Holdings Limited, a non-executive director of GCL New Energy Holdings Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 00451), a director of GCL System Integration Technology Co., Ltd. (協鑫集成科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002506), and the joint president of China Hong Kong Economic Trading International Association. Ms. Sun was awarded a doctorate degree in business administration in 2005, and has over 25 years' experience in corporate finance, financial strategy and management experience.

YEUNG Man Chung, Charles (CFO and Company Secretary), aged 56, has been an Executive Director of the Company since September 2014. He is also a member of the Nomination Committee, Corporate Governance Committee and Strategy, Investment Committee and Environmental, Social and Governance Committee of the Company. Mr. Yeung was appointed as the Chief Financial Officer ("CFO") of the Company on 30 April 2014 and Company Secretary of the Company on 20 March 2017. He is also a director of several subsidiaries of the Company. Prior to joining the Company in April 2014, he served as partner of Deloitte and was a part-time member of the Central Policy Unit of the Government of Hong Kong Special Administrative Region. When he left Deloitte in March 2014, he was the head of corporate finance advisory services, southern China. Mr. Yeung has a bachelor of business degree with a major in accounting and he is also a member of The Hong Kong Institute of Certified Public Accountants and The Australian Society of Certified Practising Accountants. Mr. Yeung has over 30 years of experience in accounting, auditing and financial management. Mr. Yeung is responsible for the financial control and reporting, corporate finance, tax and risk management of the Company and its subsidiaries. Mr. Yeung is also a non-executive director of GCL New Energy Holdings Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Exchange: 00451), the vice president of Golden Concord Holdings Limited and an independent non-executive director of Qi-House Holdings Limited, a company with its shares listed on the Hong Kong Stock Exchange GEM Board (Stock code: 08395).

INDEPENDENT NON-EXECUTIVE DIRECTORS

HO Chung Tai, **Raymond**, *SBS, MBE, S.B.St.J., JP*, aged 85, has been an Independent Non-Executive Director of the Company since September 2007. Dr. Ho is the Chairman of the Remuneration Committee, the Strategy and Investment Committee and the Corporate Governance Committee of the Company, and also a member of the Audit Committee, the Nomination Committee and the Environmental, Social and Governance Committee of the Company. Dr. Ho has over 60 years of experience in the fields of civil, structural, environmental and geotechnical engineering and direct project management of mega size engineering projects including over 50 years in Hong Kong and 10 years in the United Kingdom. As project director, he had direct management responsibility for the HK$3.0 billion (cost at the time) project of Electrification and Modernisation of Kowloon-Canton Railway (East Rail line) from the mid-70's till early 80's; and also as project director for all the government-funded infrastructure works for Shatin New Town and Tseung Kwan O New Town from early 1982 till the end of 1993, as well as professionally responsible experience in the construction of tunnels, bridges, flyovers, roads, dockyards, wharves, jetties, hospitals, hotels, incinerators, high-rise commercial/residential buildings, slopes, reclamation, environmental studies and environmental protection projects. Dr. Ho is currently the honorary chairman and past chairman of Guangdong Daya Bay Nuclear Power Station and Ling Ao Nuclear Power Station Nuclear Safety Consultative Committee and former professional advisor to The Ombudsman of Hong Kong (Architecture, Engineering and Surveying). He also participates in the promotion of innovation and technology such as Graphene. Dr. Ho also is currently an independent non-executive director of the following listed companies in Hong Kong, namely, Deson Development International Holdings Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 00262), Chinlink International Holdings Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 00997) and AP Rentals Holdings Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 01496).

YIP Tai Him, aged 53, has been an Independent Non-Executive Director of the Company since March 2009. He is the chairman of the Audit Committee and the Nomination Committee and is also a member of the Remuneration Committee, the Strategy and Investment Committee and the Corporate Governance Committee and the Environmental, Social and Governance Committee of the Company. Mr. Yip is a practising accountant in Hong Kong. He is also a member of the Institute of Chartered Accountants in England and Wales and the Association of Chartered Certified Accountants in the United Kingdom. He has over 25 years of experience in accounting, auditing and financial management. Mr. Yip is currently an independent non-executive director of the following listed companies in Hong Kong, namely, Shentong Robot Education Group Company Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 08206), Redco Properties Group Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 01622), Dongguan Rural Commercial Bank Co., Ltd., a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 09889) and Zhongchang International Holdings Group Limited, a company with its shares listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 00859).

SHEN Wenzhong, aged 55, Dr. Shen has been an Independent Non-Executive Director of the Company since July 2015. He is the chairman of the Environmental, Social and Governance Committee and a member of the Audit Committee and the Strategy and Investment Committee of the Company. Dr. Shen has been a Professor and PhD supervisor in the School of Physics and Astronomy, Shanghai Jiao Tong University since 1999 as well as a Changjiang Chair Professor of Shanghai Jiao Tong University since 2000. He became the director of the Institute of Solar Energy at Shanghai Jiao Tong University since 2007. Dr. Shen has participated in various science and technology research programmes in the PRC, published scientific papers in international journals and books on photovoltaic subjects. He graduated from the Shanghai Institute of Technical Physics, Chinese Academy of Sciences with a doctorate degree in 1995. During the period from 1996-1999, he joined Georgia State University in the U.S. as a postdoctoral fellow. Dr. Shen is currently the honorary chairman of the Committee of Shanghai Solar Energy Society. He is currently a director of Shanghai Optech Science And Technology Co., Ltd. (上海歐普泰科技創業股份有限公司), a company with its shares listed on the Beijing Stock Exchange (Stock Code: 836414), an independent director of Zhejiang Bangjie Holding Group Co., Ltd (浙江棒傑控股集團股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002634) and Hainan Drinda New Energy Co., Ltd. (海南鈞達新能源科技股份有限公司), a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002865).

* English name for identification only.

SENIOR MANAGEMENT

At the date of this report, the senior management of the Group comprises the above executive Directors, namely, Mr. Zhu Gongshan, Mr. Zhu Yufeng, Mr. Zhu Zhanjun, Mr. Lan Tianshi, Ms. Sun Wei and Mr. Yeung Man Chung, Charles.

Corporate Governance Report

The Company is dedicated to achieve and maintain a high standard of corporate governance to maximize the Company's and the stakeholders' value, with continuous review and evaluation of the various systems and procedures are carried out to ensure their effectiveness. During 2023, the Company had organised an in-house Directors' training in corporate governance for the Directors and senior management of the Company. The Strategy and Investment Committee has reviewed and assessed its responsibility to cover evaluation of significant investment and disposal proposals. Other work done in relation to corporate governance during 2023 is delineated in this report.

During the year ended 31 December 2023, the Company has complied with the code provisions of the Corporate Governance Code as set out in Part 2 of Appendix C1 of the Listing Rules.

CORPORATE CULTURE AND STRATEGY

GCL Technology endeavours to seize clean technology opportunities and consistently implements our mission of "dedicating to green growth and keep improving the human living environment". The Company is committed to building a "zero-carbon world" for a better human life.

The Group promotes its corporate culture in alignment with its core values and vision, which enables the Group to implement its long-term strategies and create sustainable value for its shareholders and other stakeholders.

More information about the Group's core vision, core value, mission and corporate dream is set out in the 2023 ESG Report.

THE BOARD

Board Composition

As at the date of this report, there are nine Board members comprising, six Executive Directors and three INEDs, with different gender, culture, professional background and/or extensive expertise and experience in the Group's business related industries.

Biographical details of the Directors are set out under the section headed "Biographical details of Directors and Senior Management" of this annual report on pages 38 to 41.

Mr. Zhu Gongshan and Mr. Zhu Yufeng are beneficiaries of the Zhu Family Trust which is a controlling shareholder of the Company. Mr. Zhu Yufeng is the son of Mr. Zhu Gongshan. Each of Mr. Zhu Zhanjun, Ms. Sun Wei and Mr. Yeung Man Chung, Charles holds management positions in the companies controlled by the Zhu Family Trust.

Save for the above and to the best knowledge of the Company, there is no financial, business, family or other material or relevant relationships among members of the Board and the substantial shareholders of the Company.

Each of the three INEDs has made a written confirmation to the Company of his independence with reference to the criteria and guidelines as set out in Rule 3.13 of the Listing Rules. Each Director has declared to the Company of his/her interests in any material contracts or other interest in the business of the Group or in any competing business with the Group. During the year ended 31 December 2023, the Company complied with Rules 3.10(1), 3.10(2) and 3.10A of the Listing Rules which require the minimum number of INEDs and at least one of the INEDs has appropriate professional qualifications or accounting or related financial management expertise.

Appropriate insurance to cover against liability of the Directors and officers of the Company has been arranged and renewed annually.

BOARD PROCESS AND EFFECTIVENESS

The Board is responsible for leading the Group's activities by determining strategic directions and business plan, exercising a number of reserved powers to oversee the operations and monitor the financial performance of the Group by determination of the annual budget, approving significant capital investment, ensuring the integrity of the Group's accounting and financial reporting system and to oversee management in the design, implementation and monitoring of the risk management and internal control systems of the Group and subject to the Listing Rules.

The management is responsible to implement the Board's decision within the delegated authority, to make investment proposal, report their performance regularly to the Board and ensure by continuous monitoring that the Group's risk management and internal control systems are effective. Key features of Board process:

- at least 4 regular Board meetings will be held each year, with additional meetings to be held as and when required. In 2023, there were four regular meetings and 24 non-regular meetings held by the Board;
- in respect of regular meetings, at least 14 days' notice is given to all Directors to give them an opportunity to attend. For all other meetings, reasonable notice is given;
- proposed agenda has been given to all Directors at least 14 days prior to the regular meetings to give them an opportunity to include matters in the agenda and the board papers were sent to all Directors at least 3 days before the meetings;
- all Directors are able to access to the advice and services of the Company Secretary, management and external professionals with a view to ensuring that board procedures, all applicable rules and regulations, are followed;
- minutes of all board meetings and committee meetings have been sent to all Directors for their comments and records respectively, within a reasonable time after the meetings are held; and
- a procedure has been adopted by the Company to enable the Directors, upon reasonable request, to seek independent professional advice in appropriate circumstances, at the Company's expense.

BOARD INDEPENDENCE EVALUATION

The Company has established a Board Independence Evaluation Mechanism which sets out the processes and procedures to ensure a strong independent element on the Board, which allows the Board effectively exercises independent judgment to better safeguard Shareholders' interests.

The objectives of the evaluation are to improve Board effectiveness, maximize strengths, and identify the areas that need improvement or further development. The evaluation process also clarifies what actions of the Company need to be taken to maintain and improve the Board performance, for instance, addressing individual training and development needs of each Director.

Pursuant to the Board Independence Evaluation Mechanism, the Board will conduct annual review on its independence.

APPOINTMENT AND RE-ELECTION OF DIRECTORS

The INEDs are appointed for a specific term of office for three years. All Directors, including the INEDs, are subject to retirement by rotation and eligible for re-election at annual general meetings in accordance with the Company's Articles of Association, provided that every Director shall be retired at least once every three years. At the annual general meeting held on 31 May 2023. Mr. Zhu Yufeng, Mr. Zhu Zhanjun and Dr. Shen Wenzhong had been retired and re-elected as Directors at such meeting.

NOMINATION OF DIRECTOR

Where vacancies arise at the Board or whenever any qualified professionals or individuals with relevant expertise and experience is likely to be invited to join the Board, the age, cultural background, gender, qualifications, experience and awards (if any) of the proposed candidate(s) will be put forward to the Nomination Committee for its consideration and decision whether to make recommendation to the Board. A nomination policy has been adopted by the Company.

RESPONSIBILITIES OF DIRECTORS

During the year, the Directors had performed their responsibilities by attending and participating in various committees meetings, board meetings and general meetings. In order to encourage the Director's active participation in the meetings, meeting materials will be and had been dispatched to the Directors in advance of the meetings (for all regular meetings, at least three days in advance) to allow them to have the chance to read and understand the issues to be discussed at the meetings. The Company will also circulate a monthly report to the Directors to keep them up-to-date of the status and position of the Group.

There were 28 Board meetings held during the year and 1 annual general meeting. The attendance of such meetings is shown in the table below:

Members of the Board	**Number of Board meetings attended/held**	**Number of general meetings attended/held**
Executive Directors		
Zhu Gongshan *(Chairman)*	26/28	1/1
Zhu Yufeng *(Vice Chairman)*	28/28	1/1
Zhu Zhanjun *(Vice Chairman and Joint CEO)*	27/28	1/1
Lan Tianshi *(Joint CEO)*	27/28	1/1
Sun Wei	27/28	1/1
Yeung Man Chung, Charles *(Chief Financial Officer and Company Secretary)*	28/28	1/1
Independent Non-executive Directors		
Ho Chung Tai, Raymond	28/28	1/1
Yip Tai Him	28/28	1/1
Shen Wenzhong	28/28	1/1

DIRECTORS' INDUCTION AND CONTINUOUS PROFESSIONAL DEVELOPMENT

Upon the appointment of new Directors, a comprehensive directors' handbook, which sets out the Company's business and a summary of the applicable laws, rules and regulations and key governance issues, will be and had been provided to each newly appointed Directors. A training regarding the rules and regulations applicable to directors of listed companies to observe during their services on Board will also be provided to each of the newly appointed Directors. During the year, the Company had organised an in-house Directors' training for the Directors and the senior management of the Company to attend.

Ongoing updating the Directors and senior management of the Company on further developments and requirements of any applicable rules, regulations and laws or refreshing their knowledge and skills by providing briefings or arrangement of seminars had been adopted by the Company during the year. In addition, understanding the business and operations of the Group is also important for the Directors to discharge their responsibilities.

The Directors acknowledged the importance of updating their professional development and refreshing their knowledge and skills. The Company encouraged the Directors to participate in any seminar or forum organised by professional bodies, independent auditors, solicitors, chambers and business organisations as well as reading relevant articles. Below is a table in accordance with the records maintained by the Company indicating the Directors had received the following training in compliance with code provision C.1.4 of Appendix C1 of the Listing Rules during the year:

	Corporate Governance/Updates on Laws, Rules & Regulations/ Accounting/Financial/Management or Other Professional Skills	
Directors	**Read Materials**	**Attend Seminars/ Briefings**
Executive Directors		
Zhu Gongshan *(Chairman)*	√	√
Zhu Yufeng *(Vice Chairman)*	√	√
Zhu Zhanjun *(Vice Chairman and Joint CEO)*	√	√
Lan Tianshi *(Joint CEO)*	√	√
Sun Wei	√	√
Yeung Man Chung, Charles *(Chief Finance Officer and Company Secretary)*	√	√
Independent Non-executive Directors		
Ho Chung Tai, Raymond	√	√
Yip Tai Him	√	√
Shen Wenzhong	√	√

CHAIRMAN AND JOINT CHIEF EXECUTIVE OFFICER

Mr. Zhu Gongshan had been the Chairman of the Board since September 2009, and since 1 April 2016, Mr. Zhu Zhanjun was appointed as CEO of the Company. Mr. Zhu Zhanjun has been appointed as the Vice Chairman of the Board and re-designated as a Joint Chief Executive Officer; and Mr. Lan Tianshi has been appointed as an executive Director and a Joint CEO since February 2022. Mr. Zhu Yufeng has been appointed as the Vice Chairman of the Board since September 2022. The primary responsibilities of the Chairman are to provide leadership to the Board in setting corporate goals of the Company, overseeing the performance and effectiveness of the Board, ensuring the compliance of rules and regulations and taking a lead to ensure that the Board acts in the best interest of the Company and shareholders as a whole. In particular, the Chairman should ensure that Board meetings are effectively conducted, including all Directors to receive timely, adequate, accurate, complete and reliable information. The Chairman also takes the primary responsibility for ensuring that good corporate governance practices and procedures are established. The Vice Chairman is responsible for assisting the Chairman in daily management of the Board.

The Joint CEO is responsible for strategic planning and management of the Company's daily operation, including financial management, technology and brand development.

The Chairman will meet with the non-executive Directors to discuss with them of any issues concerning the Company, without the presence of the executive Directors. During the year, a meeting had been held among the Chairman and the INEDs.

DELEGATION BY THE BOARD

The Board delegates certain responsibilities to various committees which are discussed below. Each of these committees has its respective terms of reference, all of them are posted on the Stock Exchange's and the Company's websites.

ACCOUNTABILITY AND AUDIT

The Directors acknowledge their responsibility for preparing the financial statements for each financial year, which give a true and fair view of the state of affairs of the Group and of the profits and cash flows of the Group in accordance with International Financial Reporting Standards, disclosure requirements of the Hong Kong Companies Ordinance and the Listing Rules. In preparing the financial statements for the year ended 31 December 2023, the Directors have selected suitable accounting policies and applied them consistently; made judgements and estimates which are reasonable and have prepared the financial statements on a going concern basis. The Directors are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position, results of operations, cash flows and changes in equity of the Group. The Independent Auditor's Report relating to their reporting responsibilities on the financial statements of the Company is set out from pages 91 to 92 of this annual report.

AUDIT COMMITTEE

The Audit Committee comprises three INEDs, namely Mr. Yip Tai Him, Ir. Dr. Ho Chung Tai, Raymond and Dr. Shen Wenzhong. Mr. Yip Tai Him, who is a practicing accountant in Hong Kong and a member of the Institute of Chartered Accountants in England and Wales and the Association of Chartered Certified Accountants in the United Kingdom, possesses extensive accounting experience and serves as the chairman of the committee.

The terms of reference of the Audit Committee, which has been updated on 4 January 2016, setting out the operation, authorities and responsibilities of the committee is available on the websites of the Company and the Stock Exchange. The major responsibilities of the Audit Committee includes:

- monitoring integrity of the financial statements, annual report and interim report;
- monitoring and assessing the risk management and internal control systems (including the adequacy of resources, qualifications and experience of accounting and financial reporting staff);
- discussing the risk management and internal control systems with management to ensure that management has performed its duty to have effective systems;
- considering any major investigation findings on risk management and internal control matters as delegated by the Board or on its own initiative and management's response to these findings;
- monitoring the independence of an external auditor;
- monitoring and assessing the performance of the external auditor, proposing to the Board the appointment or removal of the external auditor, and facilitating the communication between external auditor and internal audit function;
- reviewing any material queries raised by the external auditor to management about accounting records, financial accounts or systems of control, management's response and the Board's timely response; and
- acting as key representative body for overseeing the Company's relations with the external auditor.

6 Audit Committee meetings were held in 2023 and the attendance is set out in the following table:

Members of Audit Committee	**Number of meetings attended/eligible to attend**
Yip Tai Him *(Chairman)*	6/6
Ho Chung Tai, Raymond	6/6
Shen Wenzhong	6/6

The following work was performed by the Audit Committee during the year ended 31 December 2023 and up to the date of this report:

i. reviewed and approved the audit fees;
ii. assessed the independence of the external auditors;
iii. approved the scope of audit for the year ended 31 December 2023;
iv. reviewed the reports from the Auditor for the interim and year end;
v. reviewed the 2023 audited financial statements and the results announcement;
vi. reviewed the report on the continuing connected transactions for the financial year ended 31 December 2023 and six months ended 30 June 2023;
vii. reviewed the interim and year end internal audit reports and concluded that the Group has effective risk management and internal control systems and the qualifications and experience of the Company's accounting staff and resources for financial reporting function are adequate;
viii. reviewed the corporate governance review report (including the compliance status of provisions in relation to risk management and internal audit under Appendix C1 of the Listing Rules) prepared by Internal Controls Consultant and reported to the Board of its conclusion and recommendation;
ix. recommended the election of the proposed external auditors at the forthcoming annual general meeting; and
x. reviewed and approved certain non-audit services provided by the auditor.

The Audit Committee monitors the audit and non-audit services rendered to the Group by its external auditors and ensures that their engagement in other non-audit services will not impair their audit independence.

For the year ended 31 December 2023, the total remuneration paid to the Crowe (HK) CPA Limited is analysed as follows:

Nature of Service	**Fees** (RMB'000)
Audit services	
— 2023 Annual audit	9,800
Non-audit services	
— 2023 Interim review	2,100

Risk Management and Internal Control

With assistance of the Corporate Governance Committee and the Audit Committee, the Board of the Company is responsible for monitoring and reviewing the effectiveness of the risk management and internal control systems of the Group (the "Systems") on an ongoing basis. The Systems implemented by the management and relevant parties of the Group aims to manage rather than eliminate risks of failure to achieve the following business objectives, and to only provide reasonable, but not absolute, assurance against material misstatement or loss:

- efficiency and effectiveness of operation
- reliability of financial reporting
- compliance with applicable laws and regulations
- effectiveness of risk management

Members of the Board and the management of the Company actively engage in the risk assessment, the review of response measures and the discussion with respect to major issues.

The Company has an internal audit department in place to be responsible for the implementation of risk management and internal control policies. In performing its responsibilities, the internal audit department has organized and coordinated the Company to identify and assess the risks exposed to the Group for the Board's consideration and motivate the management to design, implement and manage suitable internal control and risk management systems to facilitate policies adopted by the Board. In addition to the Internal Audit Department, all employees are accountable for the implementation of risk management and internal control under each of scope of their responsibilities.

Systems Overview

Each business unit of the Group adopts the Systems during the ordinary course of business. The risk management portion within the Systems aims to provide clear and effective management procedures for each business units to identify, review and prioritize risks for the purpose of efficient resource allocation in conducting corresponding risk management. The management can also have an understanding of the significant risks exposed to the Group through the Systems, make and implement decisions on risk mitigation accordingly, in which enable its business to achieve a better performance. Further, the internal control portion within the Systems aims to offer a clear guidelines for each business unit to clarify the internal control objectives of each key business process and conduct regular review of the effectiveness of control activities adopted to achieve the control objectives.

Systems Structure and Communication Mechanism

The Board of the Company has been establishing the Audit Committee, which is currently comprised of 3 independent non-executive directors. Members of the Audit Committee have extensive experiences in the industry and ensure their full independence. The Company has also established and published the Terms of Reference for the Audit Committee, which expressly specifies the authorities and responsibilities of the Audit Committee, in accordance with the Listing Rules.

The Company has been adopting risk management and internal control systems at different levels of the Board, the senior management, the management center and its subsidiaries. The internal audit department is responsible for the overall planning and arrangement to carry out appraisal of the adequacy and effectiveness of internal control and risk management systems performed by the management center and the subsidiaries. Positions in relation to risk management and internal control are in place in some subsidiaries, which are responsible for organizing and carrying out specific work in risk management and internal control.

For the purpose of continuous monitoring of risk management and internal control by the Board and the management, the Company has established various communication channels, ensuring that relevant information is circulated in a timely and accurate manner among the Board and the management, and providing the Board with confirmation of implementation status on the Systems from the management:

- The internal audit department conducts risk assessment semi-annually. A comprehensive risk assessment questionnaire is completed by senior personnel of major business units respectively. Each risk assessment questionnaire is submitted to the internal audit department for consolidation, analysis and preparation of a risk assessment report. Major risk items are reported to the Board and management on a regular basis for oversight of the risk management; and

- The internal audit department reports regularly to the management, the Audit Committee and the Board with respect to risk management and internal control, ensuring the Board having known sufficient information for the fulfillment of its continuous responsibility for supervision.

Review Procedure for Systems Effectiveness

The Audit Committee of the Company, on behalf of the Board, makes a comprehensive assessment of the effectiveness of risk management and internal control systems at least semi-annually. The Audit Committee has strictly implemented the supervision function of risk management and internal control during the year ended 31 December 2023 (the "Year") in the following specific procedures:

- reviewed financial controls, internal control and risk management systems of the Company;

- discussed the risk management and internal control systems with the management to ensure that the management has performed its duty to have effective internal control and risk management systems. The discussion included whether the resources, staff qualification and experience, training and relevant budget of the Company in accounting, internal audit, and financial reporting functions, as to whether their relevant employee is sufficient or not;

- considered major investigation findings on risk management and internal control matters on its own initiative or as delegated by the Board and research on the management's response to these findings;
- ensured coordination between the internal and external auditors, and also ensure the internal audit function is sufficiently resourced and properly in place inside the Company, and review and supervise its effectiveness; and
- reported to the Board in relation to matters regarding code provision D.3 of the Corporate Governance Code.

The management of the Company takes responsibilities for implementing risk management and internal control systems on an on-going basis and reporting the implementation position to the Audit Committee and the Board at least semi-annually. The management has primarily conducted the following works in relation to risk management and internal control during the Year:

- The Company has been establishing an internal audit policy to clearly define the scope, duties and responsibilities, as well as reporting protocol of its internal audit function;
- The Company has established a unified risk framework and completed risk pool, and carried out internal risk examination and risk assessments on a regular basis;
- The Company has carried out relevant activities to analyze and monitor the major risks, in terms of strategic, operational, financial, marketing, technological and compliance aspects, in responses to the recent changes in the policies of the photovoltaic industry in mainland China;
- The Company has carried out quantitative risk management regularly with the aim of optimising quantitative risk measurement indexes to support the risk assessment and risk monitoring procedures;
- The Company has conducted review of internal control system through combination of quantitative self-assessment by the business units and qualitative evaluation by the internal audit department, so as to continuously monitored the operation of the internal control system;
- The Company has established risk-oriented internal audit work, effectively carried out the annual internal audit in accordance with the approved internal audit plan, regularly communicated with, and reported to, the management and the Audit Committee about significant findings from the annual internal audit and followed up the rectification matters; and
- The Company has appointed an independent professional consultant (the "External Consultant") to assist the Audit Committee and the Board in conducting an independent review of the risk management and internal control systems of the Group for the Year.

The Audit Committee and the Board performed analysis and appraisal of the effectiveness and adequacy of the risk management and internal control systems of the Group through the outcome of the abovementioned review performed by the internal audit department and the External Consultant, considered and were of the opinion that the Group has maintained adequate and effective risk management and internal control systems for the Year.

Significant Risks and Management Program

During the Year, the Company has performed overall risk assessment, updated risk register and analyzed changes in risk result in previous year. Significant risks were identified below which need constant attention. Part of the mitigation measures adopted by the Group in relation to significant risks are set forth below:

- To cope with keen market competition in the photovoltaic industry, the Group would anchor the N-type market, accelerate a speedy conversion from P-type cells production to N-type cells production, continuously promote low-energy-consumption granular silicon products, create a low-carbon industrial ecology, improve the quality and cost control of granular silicon, optimize the technical process of large-size silicon wafers, and sign long-term contracts with customers to strengthen the competitiveness of its own products;

- Continuously increase investments in R&D to provide a stable quality and better customer experiences of products. Setting up the GCL Technology Global Silicon-based Materials Research Institute to carry out industrial technical modification, promote the application of new knowledge and technology and collaborative development with cutting-edge technology; and

- Strengthen the organizing capacity of competent technicians around the core operation of the Group so as to attract international high-tech talents as well as provide training align with the international business development of the Group to improve the technical skills of core technicians.

Internal Controls for Handling Inside Information

An inside information committee has been set up since November 2012, which is currently comprises all executive Directors. The committee's principal function is to determine whether any confidential information arises from time to time is inside information or not. If the committee recognises that the information constitutes inside information, it will report to the Board and recommend timely disclosure of such information pursuant to the relevant provisions under the Securities and Futures Ordinance and the Listing Rules. A monthly report of potential inside information, where appropriate, will be provided to the committee for continuous monitoring. A policy of inside information has been provided to the senior management of the Group for implementation. The senior management are encouraged to report to their superiors or the committee directly, in case of any incidents or information that constitutes as potential inside information when performing their duties.

REMUNERATION OF DIRECTORS AND SENIOR MANAGEMENT

REMUNERATION COMMITTEE

The Remuneration Committee comprises two INEDs and one executive Director, namely Ir. Dr. Ho Chung Tai, Raymond (chairman of the committee), Mr. Yip Tai Him and Mr. Zhu Yufeng. The Board resolved to adopt that the Remuneration Committee has the duty to determine, with delegated responsibility, the remuneration packages of individual executive Directors and senior management. A copy of the terms of reference setting out the operation, authorities and responsibilities of the Remuneration Committee is available at the Company's and the Stock Exchange's websites.

The primary responsibilities of the Remuneration Committee include:

- determining, with delegated responsibility, the remuneration packages of individual executive Directors and senior management;
- making remuneration recommendations of non-executive Directors to the Board;
- recommending the remuneration policy and structure for all Directors and senior management to the Board for approval;
- reviewing and approving the compensation arrangement to executive Directors and senior management for any loss or termination of officer appointment to ensure that it is consistent with contractual terms and is fair and not excessive; and
- reviewing and approving matters relating to share schemes under chapter 17 of the Listing Rules.

5 meetings were held by the Remuneration Committee during the year 2023 and the attendance is set out in the following table:

Members of Remuneration Committee	Number of meetings attended/held
Ho Chung Tai, Raymond *(Chairman)*	5/5
Yip Tai Him	5/5
Zhu Yufeng	5/5

The Remuneration Committee had performed the following work during the year ended 31 December 2023 and up to the date of this report:

i. reviewed and recommended the Board on the remuneration policy of the executive Directors and senior management of the Company;
ii. assessed the performance of the executive Directors;
iii. making remuneration recommendations of non-executive Directors of the Board;
iv. reviewed, considered and approved the remuneration package of the existing executive Directors and senior management;
v. approved the adjustment of remuneration of the executive Directors; and
vi. reviewed and made recommendation to the Board on the granting of share awards to the senior management.

NOMINATION COMMITTEE

The Nomination Committee comprises two INEDs, namely Mr. Yip Tai Him (chairman of the committee) and Ir. Dr. Ho Chung Tai, Raymond, and an executive Director, namely Mr. Yeung Man Chung, Charles. A copy of the terms of reference setting out the operation, authorities and responsibilities of the Nomination Committee is available at the Company's and the Stock Exchange's websites.

The duties of the Nomination Committee include reviewing the structure, size and composition of the Board at least annually and make recommendations on any proposed changes to the Board, identifying and making recommendations to the Board on the selection of individual nominated for directorships, assessing the independence of INEDs, and making recommendations to the Board on the appointment or re-appointment of Directors and succession planning for Directors.

A meeting was held by the Nomination Committee during the year 2023, the attendance is set out in the following table:

Members of Nomination Committee	**Number of meetings attended/held**
Yip Tai Him *(Chairman)*	1/1
Ho Chung Tai, Raymond	1/1
Yeung Man Chung, Charles	1/1

During the meeting, the committee had reviewed, assessed or made recommendations to the Board (where suitable) on (i) the independence of the INEDs against the criteria and guidelines as set out in Rule 3.13 of the Listing Rules and concluded that all INEDs had complied with the criteria; (ii) the composition of the existing Board members with reference to their age, sex, experience, qualification and expertise against the business scope of the Company and (iii) succession plan.

NOMINATION POLICY

The Company adopted a nomination policy (the "Nomination Policy") and board diversity policy ("Board Diversity Policy"), with effect from 1 January 2019. A summary of the Nomination Policy is set out as follows:

1. Selection Criteria

The factors listed below would be used as reference by the Nomination Committee in assessing the suitability of a proposed candidate:

- Reputation for integrity
- Accomplishment and experience relevant in the principal activities of the group or photovoltaic and related industry
- Commitment in respect of available time and relevant interest
- Diversity in all its aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service

These factors are for reference only, and not meant to be exhaustive and decisive. The Nomination Committee has the discretion to nominate any person, as it considers appropriate.

2. Nomination Procedures

1 The Secretary of the Nomination Committee shall call a meeting of the Nomination Committee, and invite nominations of candidates from Board members if any, for consideration by the Nomination Committee prior to its meeting. The Nomination Committee may also put forward candidates who are not nominated by Board members.

2 For filling a casual vacancy, the Nomination Committee shall make recommendations for the Board's consideration and approval.

3 Until the issue of the Members' circular, the nominated persons shall not assume that they have been proposed by the Board to stand for election at the general meeting.

BOARD DIVERSITY POLICY

With a view to achieving a sustainable and balanced development, the Company sees increasing diversity at the Board level as an essential element in supporting the attainment of its strategic objectives and its sustainable development. In designing the Board's composition, Board diversity has been considered from a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. All Board appointments will be based on meritocracy, and candidates will be considered against objective criteria, having due regard for the benefits of diversity on the Board.

A summary of the Board Diversity Policy is set out as follows:

Selection of candidates will be based on a range of diversity perspectives, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. The ultimate decision will be based on merit and contribution that the selected candidates will bring to the Board, having due regard to the benefits of diversity on the Board and also the needs of the Board without focusing, on a single diversity aspect. The Company will not consider diversity to be achieved for a single gender board.

- The Board would ensure that appropriate balance of gender diversity is achieved with the ultimate goal of bringing the Board to gender parity. The Board shall include at least one female director. The Board's composition (including but not limited to gender, ethnicity, cultural, age, educational background, professional experience, or length of service) will be disclosed in the Corporate Governance Report annually.
- The Board focuses on the capability of operation judgment, operation management and crisis management, so more than two-thirds of the Board be capable of the ability of relevant core businesses.
- The Company should arrange continuing diversified development for directors so as to improve their decision-making quality, fulfill their supervisory responsibilities, and strengthen the functions of the Board.
- In addition to the Board level, the Company also advocates gender diversity across the workforce (including senior management). A plans or measurable goals to achieve an appropriate balance between the composition of men and women should be established.

The Company considers that the current composition of the Board, one out of its nine members being female, is characterised by diversity, whether considered in terms of gender, cultural, professional background and skills. The current Directors have extensive experience and skills relevant to the business of the Company.

The Board targets to maintain at least one female member, with the ultimate goal of achieving a diversity gender senior management. The Board will continue to seek opportunities to increase the proportion of female members over time as and when suitable candidates are identified.

The Company will continue to take, steps to promote diversity at all levels of its workforce. Opportunities for employment, training and career development are equally opened to all eligible employees without discrimination. Employees of all genders in each department have the opportunity to participate in decision-making and reinforce gender equality awareness through training, publicity and other activities and eliminate gender stereotypes and prejudices in the workplace to ensure that all employees are provided with equal opportunities for career development based on their abilities and performance. Further details of gender ratio and labour force, please refer to "Environmental, Social and Governance Report" of the Company.

The Nomination Committee will review this Policy annually, to ensure the effectiveness of this Policy. The Nomination Committee will discuss any revisions that may be required, and recommend any such revisions to the Board for consideration and approval.

The Nomination Committee will monitor the implementation of this Policy by conducting review of the Board's composition at least once annually taking into account the benefits of all relevant diversity aspects, and adhering to this Policy when making recommendation on any Board appointments. The Nomination Committee will also ensure that Board diversity is considered as part of the evaluation of the Board's effectiveness.

OTHER COMMITTEE

Strategy and Investment Committee

During the year, the Strategic and Investment Committee comprised six members, three INEDs (Ir. Dr. Ho Chung Tai, Raymond (who is also the chairman of the committee), Mr. Yip Tai Him and Dr. Shen Wenzhong) and three executive Directors (Mr. Zhu Gongshan, Mr. Zhu Zhanjun and Mr. Yeung Man Chung, Charles). A copy of the terms of reference setting out the operation, authorities and responsibilities of such committee is available at the Company's and the Stock Exchange's websites.

The primary responsibilities of the Strategy and Investment Committee include:

- reviewing long-term strategic development plans;
- reviewing the annual performance of the Company and assessing implementation and progress of the long term strategic development plans;
- reviewing and recommending to the Board on opportunities of upgrading the facilities, expansion, mergers and acquisitions;
- reviewing and recommending to the Board with regard to the political, social and economic development in the PRC affecting or potentially affecting the business activities of the Group;
- reviewing and monitoring the relationship of the Company with its key strategic joint-venture partners or the relationship building with these partners; and
- reviewing, evaluation and recommendation to the Board of any significant investment and disposal proposals.

During the year, the Strategy and Investment Committee (i) reported to the Board and reviewed the long-term strategic development plan of the Group; and (ii) reviewed certain investment proposals and reported to the Board of its conclusion at the Board meeting from time to time.

CORPORATE GOVERNANCE COMMITTEE

The Corporate Governance Committee comprises two INEDs, namely Ir. Dr. Ho Chung Tai, Raymond (chairman of the committee) and Mr. Yip Tai Him and an executive Director, namely Mr. Yeung Man Chung, Charles. A copy of the terms of reference setting out the operation, authorities and responsibilities of the Corporate Governance Committee is available at the Company's website.

The duties of the Corporate Governance Committee includes:

- developing and reviewing the Company's policies and practices on corporate governance and make recommendations to the Board;
- reviewing and monitoring the training and continuous professional development of Directors and senior management;
- reviewing and monitoring the Company's policies and practices on compliance with legal and regulatory requirements;
- developing, reviewing and monitoring the code of conduct applicable to employees and Directors; and
- reviewing the Company's compliance with the Code and disclosure in the Corporate Governance Report.

2 meetings were held by the committee during the year 2023, the attendance is set out in the following table:

Members of Corporate Governance Committee	**Number of meetings attended/held**
Ho Chung Tai, Raymond *(Chairman)*	2/2
Yip Tai Him	2/2
Yeung Man Chung, Charles	2/2

The committee had reviewed and evaluated the effectiveness of (i) the performance of certain policies and practices adopted by the Company, including the whistle-blowing policy, the inside information policy and discloseable transaction policy and connected transaction policy; (ii) the Board committees, including the Audit Committee, Remuneration Committee, Nomination Committee, Strategy and Investment Committee and Environmental, Social and Governance Committee; (iii) the policy in relation to the training and continuous professional development of Directors and senior management; (iv) the constitution, authority and responsibilities of the Strategy and Investment Committee which mainly deals with the investment proposals and make recommendations to the Board; and (v) the report on whistle-blowing policy. The committee concluded the adopted policies are effective.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE COMMITTEE

Environmental, Social and Governance Committee comprises three INEDs, namely Dr. Shen Wenzhong (chairman of the committee), Ir. Dr. Ho Chung Tai, Raymond, Mr. Yip Tai Him and an executive Director namely Mr. Yeung Man Chung, Charles. A copy of the terms of reference setting out the operation, authorities and responsibilities of Environmental, Social and Governance Committee is available at the Company's and the Stock Exchange's websites.

The duties of the Environmental, Social and Governance Committee includes:

- recommending and reviewing the Group's ESG management policies, vision, strategies and goals for the Board's approval;

- determining the criteria of selecting material ESG factors, identifying and continuously reviewing the list of material ESG factors, and determining the risks and opportunities that material ESG factors will bring to the Group (the "Materiality Assessment") with the assistance of the ESG Working Group. When conducting the Materiality Assessment, the Committee shall fully consider the Group's strategies and current market conditions;

- monitoring the ESG Working Group to develop and implement external stakeholder engagement plans, as well as review and conduct the Materiality Assessment on the basis of investors' and stakeholders' opinions;

- approving ESG-related policies and practices drafted by the Company;

- reviewing and monitoring the Group's policies and practices in relation to material ESG topics and ensure that they are appropriate in the context of the size, business nature and scope of the Group; and

- evaluating and reviewing the applicability of policies related to material ESG topics of the Group once a year or as and when required, report to and provide amendment suggestions for the Board to ensure that they remain relevant and fit for purpose and compliant with the applicable legal and regulatory requirements and international standards.

2 meetings were held by the Environmental, Social and Governance Committee during the year 2023, the attendance is set out in the following table:

Members of Environmental, Social and Governance Committee	**Number of meetings attended/held**
Shen Wenzhong *(Chairman)*	2/2
Ho Chung Tai, Raymond	2/2
Yip Tai Him	2/2
Yeung Man Chung, Charles	2/2

The committee had reviewed and evaluated the effectiveness of (i) the Group's ESG management policies, vision, strategies and goals with the assistance of management; (ii) provided advice on the actions to be taken to enhance the effectiveness of ESG management; and (iii) reviewed the annual ESG Report (the "ESG Report") to ensure that the ESG Report has properly disclosed ESG risks faced by the Group, the measures taken and the progress of goals achieved in compliance with the Listing Rules, and make recommendation to the Board for the approval of the ESG Report.

DIVIDEND POLICY

The Company has adopted a dividend policy (the "Dividend Policy"). The Board would consider the following factors before declaring or recommending dividend to the Shareholders from time to time:

(a) financial results of the Company;
(b) Shareholders' interests;
(c) general business conditions, strategies and future expansion needs;
(d) the Company's capital requirements;
(e) the payment of cash dividends to the Company from its subsidiaries;
(f) possible effects on liquidity and financial position of the Company; and
(g) the amount of profit can be distributed under applicable accounting standards and other factors that the Board may deem relevant and appropriate.

Any dividend declared by the Company shall be conducted in accordance with the Cayman Islands Companies Law, the Memorandum and Articles of the Company and other applicable laws and regulations, and shall not affect the normal operation of the Company and its subsidiaries.

The Board will review the Dividend Policy, as appropriate, which will include an assessment of the effectiveness of the Dividend Policy and approve any amendments thereto if necessary.

The Board has approved the Share Buy-back and Cancellation or Dividend Payment Plan to conduct share buy-back and cancellation or dividend payment through (i) buy-back and cancellation by the Company of its ordinary shares from the open market, over the three years ending 31 December 2024, 31 December 2025 and 31 December 2026 and/or (ii) declaration and payment of dividends by the Company to Shareholders. Please refer to the announcement of the Company dated 15 March 2024 for more details.

COMPLIANCE WITH MODEL CODE

MODEL CODE FOR SECURITIES TRANSACTIONS

The Board has adopted the model code for securities transactions by Directors (the "Model Code") as set out in Appendix C3 of the Listing Rules. Having made specific enquiry of all Directors, apart from the below, each of the Directors confirmed that he/she has complied with the required standard of dealings as set out in the Model Code throughout the year ended 31 December 2023.

On 12 June 2023, Mr. Lan Tianshi ("Mr. Lan"), being an executive director of the Company, disposed of his award shares granted under the share award scheme adopted by the Company on 16 January 2017 (the "Transaction") without notifying the Board prior to the Transaction, which was a non-compliance with paragraphs A.1 and B.8 of the Model Code.

The Company has taken or will take the following measures to avoid any similar incident from arising in the future and to strengthen the Company's corporate governance regarding the Directors' dealings in the Company's securities:

1. the Company has put in place an existing internal approval procedure, which is set out in the Director's Handbook provided by the Company to all Directors, that the Directors shall submit a written notification form to the Board and receive clearance by the Board prior to their dealings in the securities of the Company. In addition, in July 2023, the Company has adopted an additional internal approval procedure applicable for the Company's executive Directors and senior management in respect of their shareholding changes in the Company, pursuant to which, in the event that any executive Director or senior management intends to purchase or sell any of the Company's shares, he/she is required to submit an online application to obtain the approval from the Compliance and Company Secretarial Department of the Company and Mr. Zhu Gongshan (as the chairman of the Company) or Mr. Zhu Yufeng (as the vice chairman of the Company);

2. the management of the Company has discussed the incident with Mr. Lan to ensure that he is aware of and understands the requirements and his obligations under the Model Code; and

3. the Company has arranged to highlight the provisions in the Model Code in the regular director training conducted by the Company's legal advisors to the Directors.

Mr. Lan has repurchased part of disposal shares on the open market in compliance with the Model Code on 26 June 2023.

The Board considers that the implementation of the above measures would minimize the chance of breach of the Model Code by the Directors in the future.

INVESTOR RELATIONS AND COMMUNICATION WITH SHAREHOLDERS

The Board recognises the importance of communication with shareholders and has adhered to its established communication policy. The general communication policy includes timely dispatch full and accurate information to shareholders and investment public by announcement, financial reports and circulars through the website of the Stock Exchange and the Company's website; maintain dialogue with shareholders by disclosing the way of communication to the Board and in relation to share registration matters, the contact of the share registrar in Hong Kong; and by convening the general meetings (if any) and annual general meeting. On 31 May 2023, the Company convened an annual general meeting. At the meeting, the Directors, members and/or chairman of the Board committees had attended and answer questions raised by the shareholders.

Directors and our Investor Relations team also communicated from time to time with analysts, fund managers, institutional shareholders and media while keeping the stringent standard of not disclosing inside information to any selective group. The Directors, executives together with our Investor Relations team held/participated in meetings, presentations and conference with them. Details of investor relations activities were further described under the section headed "Major Investor Relations Activities" of this report.

The Company considers that the implementation of the communication policy can facilitate effective communication with shareholders.

SHAREHOLDERS' RIGHTS

Procedures for members to convene extraordinary general meeting ("EGM") and putting forward proposals

The following procedures are subject to the Company's Articles of Association and applicable legislation and regulation.

1. Pursuant to Article 58 of the Articles of Association of the Company, any one or more members of the Company holding at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company shall at all times have the right, by written requisition to the Board or the Company Secretary, to require an EGM to be called by the Board for the transaction of any business specified in such requisition; and such meeting shall be held within two months after the deposit of such requisition.

2. If within twenty-one days of such deposit the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

3. The requisitionist(s) shall deposit his/their requisition together with the proposals to be considered at such meeting at the principal place of business of the Company at Unit 1703B–1706, Level 17, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong or at any address notified by the Company from time to time and for the attention of the Chairman of the Board and the Company Secretary.

4. If the requisition is in order, the Company Secretary will ask the Board to convene an EGM by serving sufficient notice in accordance with the requirements under the Articles of Association to all the registered members. On the contrary, if the requisition is invalid, the members concerned will be advised of this outcome and accordingly, an EGM will not be convened as requested.

5. The notice period to be given to all the registered members for consideration of the proposal raised by the member(s) concerned at an EGM varies according to the nature of the proposal, as follows:

   — at least twenty-one (21) clear days' notice in writing if the proposal constitutes a special resolution of the Company, which cannot be amended other than to a mere clerical amendment to correct a patent error; and

   — at least fourteen (14) clear days' and not less than ten (10) clear business days' notice in writing if the proposal constitutes an ordinary resolution of the Company.

Members who have enquiries about the above procedures may write to the Company Secretary at Unit 1703B–1706, Level 17, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong or at any address notified by the Company from time to time.

Procedures for a Member to Propose a Person for Election as a Director

The following procedures are subject to the Company's Articles of Association and applicable legislation and regulation.

1. If a member, who is duly qualified to attend and vote at the general meeting convened to deal with appointment/election of director(s), wishes to propose a person (other than the member himself/herself) for election as a director at that meeting, he/she can deposit a written notice at the Company's principal office at Unit 1703B–1706, Level 17, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong, or at any address notified by the Company from time to time for the attention of the Company Secretary of the Company.

2. In order for the Company to inform all members of that proposal, the written notice must state the full name of the person proposed for election as a director, his/her biographical details as required by Rule 13.51(2) of the Listing Rules, and be signed by the member concerned and that person indicating his/her willingness to be elected.

3. The period for lodgment of such a written notice will commence on the day after the despatch of the notice of the general meeting and end no later than seven (7) clear days prior to the date of such general meeting. If the notice is received less than fifteen (15) business days prior to that general meeting (twenty (20) business days in case of annual general meeting), the Company will need to consider adjournment of the general meeting in order to (i) assess the suitability of the proposed candidate; and (ii) publish an announcement or circulate a supplementary circular in relation to the proposal to the members at least fourteen (14) clear days and not less than ten (10) business days prior to the general meeting (twenty (20) business days in case of annual general meeting).

Members who have enquiries about the above procedures may write to the Company Secretary at Unit 1703B–1706, Level 17, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong or at any address notified by the Company from time to time.

ENQUIRIES TO THE BOARD

No procedure set in the Articles of Association of the Company is available for any member to put forward an enquiry to the Board. A member may, of course, at any time write to the board of directors of the Company at the Company's principal office at Unit 1703B–1706, Level 17, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong or at any address notified by the Company from time to time. In relation to share registration matters in Hong Kong, a member shall contact the branch share registrar in Hong Kong, namely Tricor Investor Services Limited at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong.

REPORT OF THE DIRECTORS

The directors of the Company (the "Directors" or the "Board") submit their report together with the audited consolidated financial statements of GCL Technology Holdings Limited (the "Company") and its subsidiaries (collectively the "Group") for the year ended 31 December 2023.

PRINCIPAL ACTIVITIES

The principal activities of the Group during the year 2023 are principally engaged in the manufacturing and sale of polysilicon and wafers products, and developing, owning and operation of solar farms.

The particulars of the Group's principal subsidiaries, interests in associates and interests in joint ventures are set out in notes 50, 21 and 22 of the consolidated financial statements, respectively.

BUSINESS REVIEW

The Group's revenue is derived principally from the sales of polysilicon, wafer and electricity, which is primarily conducted in the PRC. An analysis of the Group's performance for the year by operating segment is set out in note 6 to the consolidated financial statements.

A fair review of the Group's business, including the important events affecting the Group that have occurred since the end of 2023 and the likely future developments of the Group's business, is set out in the Chairman's Statement, CEO's Review of Operations and Outlook, and the Management Discussion and Analysis sections on pages 11 to 34 of this report. Potential risks and uncertainties faced by the Group are set out in the Management Discussion and Analysis section on pages 31 to 32 of this report, reviewed and assessed by the Board, which was set out in the Corporate Governance Report under the Risk Management and Internal Controls section on pages 49 to 52. Details about the Group's financial risk management are set out in note 41 to the consolidated financial statements.

There was no incidence of non-compliance with the relevant laws and regulations in relation to the operations that have a significant impact on the Group's business.

COMPLIANCE WITH LAWS AND REGULATIONS

As far as the Board and management are aware, the Group has complied in material aspects with the relevant laws and regulations that have a significant impact on the business and operation of the Group. During the reporting period, there was no material breach of or non-compliance with the applicable of relevant laws and regulations by the Group.

The Company's environmental policies and performance are set out in the Corporate Environmental Policies and Performance section on pages 36 to 57 of this report.

RESULTS AND APPROPRIATIONS

The results of the Group for the year ended 31 December 2023 are set out in the consolidated statement of profit or loss and other comprehensive income from pages 93 to 95. The Directors do not recommend the payment of final dividend for the year ended 31 December 2023 (2022: HK$6.0 cents).

FINANCIAL SUMMARY

A summary of the consolidated results and of the assets and liabilities of the Group for the last five financial years is set out on page 2.

PROPERTY, PLANT AND EQUIPMENT

Movements in the property, plant and equipment of the Group during the year are set out in note 17 to the consolidated financial statements.

SHARE CAPITAL

Details of movements in the issued share capital of the Company during the year are set out in note 37 to the consolidated financial statements.

DISTRIBUTABLE RESERVES

The distributable reserves of the Company as at 31 December 2023 amounted to approximately RMB39,881 million (2022: approximately RMB40,282 million).

BANK AND OTHER BORROWINGS

Particulars of the Group's bank and other borrowings are set out in note 33 to the consolidated financial statements.

DONATIONS

Donations by the Group for charitable and other purposes as at 31 December 2023 amounted to approximately RMB2,400,000 (2022: approximately RMB13,210,000).

EQUITY-LINKED AGREEMENTS

Save for the share option schemes and the share award scheme described below with details of movements set out in note 46 to the consolidated financial statements, no equity–linked agreements were entered into by the Group during the year ended 31 December 2023, or subsisted at the end of the year 2023.

DIRECTORS

The directors of the Company during the year and up to the date of this report are:

Executive Directors

Mr. Zhu Gongshan *(Chairman)*
Mr. Zhu Yufeng *(Vice Chairman)*
Mr. Zhu Zhanjun *(Vice Chairman and Joint CEO)*
Mr. Lan Tianshi *(Joint CEO)*
Ms. Sun Wei
Mr. Yeung Man Chung, Charles *(Chief Financial Officer and Company Secretary)*

Independent Non-executive Directors

Ir. Dr. Ho Chung Tai, Raymond
Mr. Yip Tai Him
Dr. Shen Wenzhong

In accordance with Articles 87(1) and (2) of the Articles of Association of the Company, Mr. Zhu Gongshan, Mr. Lan Tianshi and Ir. Dr. Ho Chung Tai, Raymond will retire at the forthcoming annual general meeting and, being eligible, offer themselves for re-election.

The Company has received from each of its independent non-executive Directors an annual confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Company has assessed their independence and considers that all the independent non-executive directors are independent in accordance with guidelines set out in the Listing Rules.

DIRECTORS' SERVICES CONTRACTS

Each of the independent non-executive directors has entered into a service contract with the Company for a fixed term of three years and will be terminated by not less than three months' notice in writing served by either party on the other. Upon the expiry of the notice period, the appointment will be terminated.

No Director proposed for re-election at the forthcoming annual general meeting has entered into any service agreements with any member of the Group which is not determinable within one year without payment of compensation, other than statutory compensation.

DIRECTORS' INTEREST IN CONTRACTS

Save as disclosed under the section headed "Continuing Connected Transactions" in this report of the Directors, no Director had a material interest, either directly or indirectly, in any contract of significance to the business of the Group to which the Company or any of its subsidiaries was a party, and which subsisted at the end of the year or at any time during the year.

PERMITTED INDEMNITY PROVISION

Subject to the applicable laws, every Directors, Company Secretary and other officers of the Company shall be indemnified out of the assets and profits of the Company against all actions, costs, charges, losses, damages and expenses incurred by him or her in the execution of his or her duties or in relation thereto pursuant to the Company's Articles of Associations, provided that this indemnity shall not extend to any matter in respect of any fraud or dishonesty which may attach to any of said persons. Such provisions were in force during the course of the financial year ended 31 December 2023 and remained in force as of the date of this report.

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY AND ASSOCIATED COMPANY

As at 31 December 2023, the Directors and chief executive of the Company had the following interests and short positions in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO"), which were required (a) to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO); or (b) to be and were entered into the register required to be kept by the Company pursuant to Section 352 of the SFO; or (c) as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") of the Listing Rules:

Long position/short position in the shares and underlying shares of the Company:

		Number of ordinary shares held					
Name of Director/ chief executive	**Long/Short position**	**Beneficiary of a trust**	**Corporate interests**	**Personal/ Family interests**	**Number of underlying Shares held**	**Total**	**Approximate percentage of issued share capital (note 5)**
Zhu Gongshan	Long position	6,405,332,156 (note 1)	—	—	6,300,000 (note 2)	6,411,632,156	23.80%
	Short position	240,000,000 (note 3)	—	—	—	—	0.89%
Zhu Yufeng	Long position	6,405,332,156 (note 1)	—	—	5,010,755 (notes 2 & 4)	6,410,342,911	23.79%
	Short position	240,000,000 (note 3)	—	—	—	—	0.89%
Zhu Zhanjun	Long position	—	—	3,400,000	6,019,359 (notes 2 & 4)	9,419,359	0.03%
Lan Tianshi	Long position	—	—	2,497,415	7,512,000 (note 4)	10,009,415	0.03%
Sun Wei	Long position	—	—	5,723,000	5,012,189 (notes 2 & 4)	10,735,189	0.04%
Yeung Man Chung, Charles	Long position	—	—	—	4,700,000 (notes 2 & 4)	4,700,000	0.01%
Ho Chung Tai, Raymond	Long position	—	—	—	1,507,170 (notes 2 & 4)	1,507,170	0.00%
Yip Tai Him	Long position	—	—	—	1,507,170 (notes 2 & 4)	1,507,170	0.00%
Shen Wenzhong	Long position	—	—	—	500,000 (note 4)	500,000	0.00%

Notes:

(1) An aggregate of 6,405,332,156 shares of the Company are collectively held by Highexcel Investments Limited, Happy Genius Holdings Limited and Get Famous Investments Limited, which are wholly-owned by Golden Concord Group Limited, which in turn is wholly-owned by Asia Pacific Energy Holdings Limited. Asia Pacific Energy Holdings Limited is in turn wholly-owned by Asia Pacific Energy Fund Limited. Asia Pacific Energy Fund Limited is ultimately held under a discretionary trust with Credit Suisse Trust Limited as trustee and Mr. Zhu Gongshan and his family (including Mr. Zhu Yufeng, a Director of the Company and the son of Mr. Zhu Gongshan) as beneficiaries.

(2) These are share options granted by the Company to the Directors, pursuant to the share option scheme adopted by the shareholders of the Company on 22 October 2007. Such granted share options can be exercised by the Directors at various intervals during the period from 15 March 2016 to 28 March 2026 at an exercise price of HK$1.160 or HK$1.324.

(3) The short position was held as a result of an equity of derivative agreement entered by Happy Genius Holdings Limited.

(4) These are award shares granted by the Company to the Directors, pursuant to the share award scheme adopted by the Company on 16 January 2017.

(5) The total number of ordinary shares of the Company in issue as at 31 December 2023 is 26,938,930,973.

SHARE SCHEMES

SHARE OPTION SCHEME

2007 Share Option Scheme

The Company adopted a share option scheme (the "2007 Share Option Scheme") on 22 October 2007 which became effective on 13 November 2007. The purpose of the 2007 Share Option Scheme is to motivate personnel to optimize their future contributions to the Group and/or to reward them for their past contributions, to attract and retain or otherwise maintain on-going relationships with such personnel who are significant to and/or whose contributions are or will be beneficial to the performance, growth or success of the Group, and additionally in the case of executives of the Company, to enable the Group to attract and retain individuals with experience and ability and/or to reward them for their past contributions. The 2007 Share Option Scheme shall be valid and effective for a period of 10 years from 22 October 2007, after which no further options will be granted or offered but the provisions of the 2007 Share Option Scheme shall remain in full force and effect to the extent necessary to give effect to the exercise of any subsisting options granted prior to the expiry of the 10-year period or otherwise as may be required in accordance with the provisions of the 2007 Share Option Scheme. Since no further options could be granted under the 2007 Share Option Scheme after its expiry in 2017, the number of shares available for issue under the 2007 Share Option Scheme are the same as the number of outstanding options, i.e. 39,265,486, representing approximately 0.15% of the number of issued shares as of the date of this annual report.

The eligible participants of the 2007 Share Option Scheme cover directors and management of the Group.

Upon expiry of the 2007 Share Option Scheme, no further options could be granted or offered but the provisions of this scheme shall remain in full force for the granted share options and remained outstanding. The total number of shares in respect of which options may be granted under the 2007 Share Option Scheme are not permitted to exceed 10% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders. The number of shares issued and to be issued in respect of which options granted and may be granted to any individual in any one year is not permitted to exceed 1% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders.

At an extraordinary general meeting of the Company held on 26 November 2015, the shareholders of the Company approved the refreshment of the existing limit to an aggregate number of shares of the Company which may be allotted and issued pursuant to the exercise of options granted under the 2007 Share Option Scheme not exceeding 200,000,000 shares of the Company. During the year, no share options was granted, a total of 5,009,277 share options were lapsed or forfeited or cancelled and a total of 558,000 share options were exercised. The outstanding share options under the 2007 Scheme Option Scheme as at 31 December 2023 are 39,265,486 share options. Particular of the 2007 Share Option Scheme, including the fair value of the share option at the date of grant and weight average closing price of the shares on the exercise date are set out in note 46 to the consolidated financial statements.

Details of the share options outstanding and movements under the 2007 Share Option Scheme of the Company during the year are as follows:

				Number of options					
Name or category of participant	**Date of grant (note 1)**	**Exercise period**	**Exercise Price per share (HK$)**	**Outstanding as at 1.1.2023**	**Granted during the year**	**Lapsed or forfeited or cancelled during the year**	**Cancelled during the year**	**Exercised during the year**	**Outstanding as at 31.12.2023**
Directors/chief executive and their associates									
Zhu Yufeng	29.3.2016	18.4.2016 to 28.3.2026	1.324	1,510,755	—	—	—	—	1,510,755
Zhu Zhanjun	29.3.2016	18.4.2016 to 28.3.2026	1.324	2,719,359	—	—	—	—	2,719,359
Sun Wei	19.2.2016	15.3.2016 to 18.2.2026	1.16	1,712,189	—	—	—	—	1,712,189
Yeung Man Chung, Charles	29.3.2016	18.4.2016 to 28.3.2026	1.324	1,700,000	—	—	—	—	1,700,000
Ho Chung Tai, Raymond	29.3.2016	18.4.2016 to 28.3.2026	1.324	1,007,170	—	—	—	—	1,007,170
Yip Tai Him	29.3.2016	18.4.2016 to 28.3.2026	1.324	1,007,170	—	—	—	—	1,007,170
Successor of Zhu Qingsong (note 2)	29.3.2016	18.4.2016 to 28.3.2026	1.324	1,007,170	—	—	—	—	1,007,170
Employees and others	5.7.2013	16.9.2013 to 4.7.2023	1.630	4,501,956	—	(4,501,956)	—	—	0
	24.3.2014	26.5.2014 to 23.3.2024	2.867	2,618,642	—	—	—	—	2,618,642
	19.2.2016	15.3.2016 to 18.2.2026	1.16	24,631,144	—	(507,321)	—	(558,000)	23,565,823
	29.3.2016	18.4.2016 to 28.3.2026	1.324	2,417,208	—	—	—	—	2,417,208
Total				**44,832,763**		**(5,009,277)**	**—**	**(558,000)**	**39,265,486**

Notes:

1 The vesting period under the 2007 Share Option Scheme is 20% of the share options granted on the year of grant, the first, second, third and fourth anniversary of the date of grant, respectively. All share options granted will be fully vested on the fourth anniversary of the date of grant.

2 Mr. Zhu Qingsong passed away in 2021.

2022 Share Option Scheme

The Company adopted a new share option scheme (the "2022 Share Option Scheme") on 9 March 2022 which became effective on 1 April 2022. The purpose of 2022 Share Option Scheme is to replace 2007 Share Option Scheme and to is to motivate personnel to optimise their future contributions to the Group and/or to reward them for their past contributions, to attract and retain or otherwise maintain on-going relationships with such personnel who are significant to and/or whose contributions are or will be beneficial to the performance, growth or success of the Group, and additionally in the case of directors (including independent non-executive directors) and executive of the Company, to enable the Group to attract and retain individuals with experience and ability and/or to reward them for their past contributions. The maximum number of shares in respect of which options which may be issued upon exercise of all options to be granted under the 2022 Share Option Scheme and any other schemes of the Company shall not exceed 10% of the Company's issued share capital on the date of the approval of the 2022 Share Option Scheme. The number of shares issued and to be issued in respect of which options granted and may be granted to any individual in any one year is not permitted to exceed 1% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders.

As of the date this report, (i) no share options was granted under 2022 Share Option Scheme; and (ii) the total number of shares available for issue under 2022 Share Option Scheme is 2,709,901,044 Shares, representing approximately 10% of the Company's number of issued shares as of the date of this annual report. No share options were outstanding under 2022 Share Option Scheme as at 31 December 2022.

Under the 2022 Share Option Scheme, the exercise price shall be determined by the Board and notified to a proposed beneficiary at the time of offer of the option and shall be not less than whichever is the highest for (a) the nominal value of a share; (b) the closing price of the shares as stated in the Stock Exchange's daily quotation sheet on the date of grant; and (c) the average closing price of the shares as stated in the Stock Exchange's daily quotation sheet for the five business days immediately preceding the date of grant.

Under the 2022 Share Option Scheme, an option granted can only be exercised according to the following vesting schedule:

Vesting date	**Cumulative percentage of Share a Grantee is entitled to subscribe under Options granted to him/her**
1st anniversary of the Commencement Date	20%
2nd anniversary of the Commencement Date	40%
3rd anniversary of the Commencement Date	60%
4th anniversary of the Commencement Date	80%
5th anniversary of the Commencement Date	100%

Under the 2022 Share Option Schemes, the Company may grant options to directors, employees of the Company and its subsidiaries and qualifying grantees to subscribe for shares of the Company.

Unless otherwise terminated by the Board or the shareholders in general meeting in accordance with the terms of the 2022 Share Option Scheme, the 2022 Share Option Scheme shall be valid and effective for a period of 10 years from the date of its adoption date. The remaining life of the 2022 Share Option Scheme is around 8 years.

SHARE AWARD SCHEME

The Company has adopted a share award scheme (the "Share Award Scheme") on 16 January 2017. in which Eligible Persons will be entitled to participate and pursuant to which ordinary shares of the Company (the "Shares") may be purchased by the Trustee from the market out of cash contributed by the Group and/or the Company may allot and issue new Shares to the Trustee pursuant to a Specific Mandate and such Shares would be held upon trust for the relevant Grantees until such Award Shares are vested in accordance with the rules of the Scheme (the "Scheme Rules").

Purpose

The purpose of the Share Award Scheme is, through the grant of award(s) ("Award(s)") of award Share(s) ("Award Share(s)") to certain Eligible Persons, to effectively attract, retain and incentivise core employees of the Group and align their interests and growth with the Group as a whole.

Eligible Persons

The Eligible Person under the Share Award Scheme is any individual who is an employee of any Group Company, (including any director holding a salaried employment or office in any Group Company); however, no individual who is resident in a place where the grant, acceptance or vesting of an Award pursuant to this Scheme is not permitted under the laws and regulations of such place or where, in the view of the Board, compliance with applicable laws and regulations in such place makes it necessary or expedient to exclude such individual, shall be entitled to participate in this Scheme and such individual shall therefore be excluded from the term Eligible Person.

Shares Available for Issue

As at the date of this report, the Directors have not been authorized under any specific mandate granted by the Shareholders to allot and issue any Shares for the purpose of the Share Award Scheme. Accordingly, as at the date of this report, no new Share was available for issue under the Share Award Scheme.

Maximum Limit

The maximum number of Shares that can be held by the Trustee under the Share Award Scheme is limited to 2 per cent. of the total number of issued Shares from time to time.

The maximum number of Award Shares which may be granted to a Grantee who is not a Director but unvested under the Scheme shall not exceed 0.1 per cent. of the total number of issued Shares from time to time.

The maximum number of Award Shares which may be granted to a Grantee who is a Director shall not, in aggregate, exceed 0.5 per cent. of the total number of issued Shares in any 12-month period.

Duration

Subject to any early termination as may be determined by the Board pursuant to the terms of the Scheme Rules, the Share Award Scheme shall be valid and effective for the period commencing on the Adoption Date until the later of (i) the 10th anniversary of the Adoption Date, and (ii) such date that all Awards outstanding are fully vested, settled, lapsed, forfeited or cancelled (as the case may be).

The remaining life of the Share Award Scheme is around 3 years.

Administration

The Share Award Scheme shall be subject to the administration of the Board, the Committee and the Trustee in accordance with the Scheme Rules and the Trust Deed.

Operation

Grant of Awards

The Board may, from time to time, at its absolute discretion, select any Eligible Persons to participate in the Share Award Scheme as Grantees, subject to the terms and conditions set out in the Scheme Rules. In determining the Grantees, the Board shall take into consideration matters including, but without limitation, the present and expected contribution of the relevant Grantees to the Group. A Grantee may be granted an Award by the Company during the Award Period which will vest over a period of time and on such other conditions to be determined by the Board in its absolute discretion.

Subject to the restrictions set out in the section headed "Restrictions" below, the Company shall:

(i) pay to the Trustee monies and may give directions or a recommendation to the Trustee to apply such monies and/or such other net amount of cash derived from Shares held as part of the Trust Fund to acquire Shares or instruct the Trustee to reallocate any Returned Shares; and/or

(ii) allot and issue new Shares to the Trustee pursuant to a Specific Mandate and in accordance with all applicable laws and regulations, including but not limited to the requirements of the Listing Rules and the Takeovers Code, to satisfy any Award made or any expected or potential Award to be made under the Share Award Scheme.

In the event that a Grantee ceases to be an Eligible Person at any time prior to the relevant vesting date by reason of: (i) resignation of the Grantee's employment, or (ii) retirement of the Grantee which is earlier than his/her normal retirement age as specified in his/her terms of employment with the Group, or (iii) termination of the Grantee's employment or contractual engagement with the Group by reason of redundancy, all unvested Awards made to the Grantee shall lapse and be forfeited immediately and all Award Shares vested (but not yet transferred to the Grantee) under the Award shall become immediately transferable to the Grantee.

In the event that a Grantee ceases to be an Eligible Person at any time prior to the relevant vesting date by reason of termination of the Grantee's employment or early termination of the contractual engagement with the Group by reasons of culpable termination or otherwise pursuant to law or employment or engagement contract, all unvested Awards made to the Grantee shall lapse and be forfeited immediately and all Award Shares vested (but not yet transferred to the Grantee) under the Award shall become Returned Shares.

In the event that a Grantee ceases to be an Eligible Person at any time prior to the relevant vesting date by reason of: (i) retirement of the Grantee at his/her normal retirement age as specified in his/her terms of employment with the Group, or (ii) winding-up of any member of the Group in which the Grantee is employed or is contractually engaged, or (iii) completion of the term of the Grantee's contract for provision of services, goods or otherwise with the Group pursuant to such contract terms, or (iv) completion of the term of the contract of the Grantee's engagement with the Group as contractual staff, all unvested Awards shall vest and become immediately transferable to the Grantee.

In the event that a Grantee ceases to be an Eligible Person at any time prior to the relevant vesting date by reason of death or loss of capacity of the Grantee, all unvested Awards shall vest immediately and be transferable to the legal personal representative of the Grantee.

If there occurs an event of change in control (as specified in the Takeovers Code from time to time) of the Company by way of merger or a privatisation of the Company by way of a scheme, or by way of offer to purchase the entire issued share capital of the Company, the Committee shall determine at its discretion whether the outstanding Award Shares shall vest in the relevant Grantee(s) and the time at which such outstanding Award Shares shall vest.

Restrictions

No Award shall be made to Grantees and no payments shall be made to the Trustees to purchase Shares and no directions or recommendations to acquire Shares shall be given to the Trustees under the Scheme and no new Shares shall be allotted and issued to the Trustee pursuant to a Specific Mandate, where any Director is in possession of unpublished inside information in relation to the Company or where dealings in the Shares by Directors are prohibited under any code or requirement of the Listing Rules and all applicable laws from time to time.

Voting Rights

For so long as the Trustee holds any of the Award Shares for the purpose of the Scheme under the Trust, the Trustee shall not exercise the voting rights in respect of any Shares held under the Trust (including but not limited to the Award Shares, any Returned Shares, any bonus Shares and any scrip Shares). Upon the Award Shares being transferred and released to the Grantee in accordance with the Scheme Rules, the Grantee shall be entitled to exercise all voting rights in respect of such Award Shares.

Dividends

A Grantee shall have no right to any dividend derived from the Award Shares which shall be retained by the Trustee for the benefit of the Scheme unless such Award Shares have been transferred and released to him/her in accordance with the Scheme Rules.

Transferability and other rights

Any Award granted under the Scheme but not yet vested shall be personal to the Grantee to whom it is made and shall not be assignable or transferable and no Grantee shall in any way sell, transfer, charge, mortgage, encumber or create any interest in favour of any other person over or in relation to any Award, or enter into any agreement to do so.

Termination

The Share Award Scheme shall terminate on:

(i) such date after the expiry of the Award Period that all Awards outstanding are fully vested, settled, lapsed, forfeited or cancelled (as the case may be) in accordance with the terms and conditions set out in the Scheme; or

(ii) such date of early termination as determined by the Board provided that such termination shall not affect any subsisting rights of any Grantee thereunder.

Following the settlement, lapse, forfeiture or cancellation (as the case may be) of the last outstanding Award made or which can be made under the Share Award Scheme (whichever is later), the Trustee shall sell all the Shares remaining in the Trust within a reasonable time period as agreed between the Trustee and the Company after receiving notice of the settlement, lapse, forfeiture or cancellation (as the case may be) of such last outstanding Award (or such longer period as the Company may otherwise determine), and remit all cash and net proceeds of such sale referred herein and such other funds remaining in the Trust (after making appropriate deductions in respect of all disposal costs, expenses and other existing and future liabilities in accordance with the Trust Deed) to the Company. For the avoidance of doubt, the Trustee shall not transfer any Shares to the Company nor may the Company otherwise hold any Shares whatsoever (other than the proceeds in the sale of such Shares pursuant to this paragraph).

During the year, a total of 4,296,000 Award Shares were granted to 4 participants under the Share Award Scheme.

The Share Award Scheme does not expressly stipulate the number of Award Shares that may be granted thereunder. In the event where any Award is to be satisfied by the allotment and issue of new Shares, the Board shall obtain a specific mandate from the shareholders of the Company at a general meeting. Accordingly, there is no upper limit of the number of Award Shares to be satisfied by existing Shares of the Company available for grant as at 1 January 2023 and 31 December 2023, whereas since the Board has not been authorized by the shareholders of the Company to allot and issue Shares under the Share Award Scheme pursuant to any specific mandate, the number of Award Shares to be satisfied by allotment and issue of new Shares of the Company available for grant as at 1 January 2023 and 31 December 2023 was nil. Details of the Award Shares granted under the Share Award Scheme and the movements during the year are as follows:

			Number of Award Shares				
Name	Date of Grant	Vesting Period	as at 1 January 2023	granted during the year	vested during the year	lapsed or cancelled during the year	Outstanding as 31 December 2023
Directors							
Zhu Gongshan	6 July 2022	6.07.2022 to 5.07.2027	6,300,000 (note1)	0	—	—	6,300,000
Zhu Yufeng	6 July 2022	6.07.2022 to 5.07.2027	3,500,000 (note1)	0	—	—	3,500,000
Zhu Zhanjun	6 July 2022	6.07.2022 to 5.07.2027	3,300,000 (note1)	0	—	—	3,300,000
Lan Tianshi	16 February 2022	16.02.2022 to 15.02.2027	9,390,000 (note2)	0	(1,878,000) (notes2&4)	—	7,512,000
Sun Wei	6 July 2022	6.07.2022 to 5.07.2027	3,300,000 (note1)	0	—	—	3,300,000
Yeung Man Chung, Charles	6 July 2022	6.07.2022 to 5.07.2027	3,000,000 (note1)	0	—	—	3,000,000
Ho Chung Tai, Raymond (note6)	6 July 2022	6.07.2022 to 5.07.2027	500,000 (note1)	0	—	—	500,000
Yip Tai Him (note6)	6 July 2022	6.07.2022 to 5.07.2027	500,000 (note1)	0	—	—	500,000
Shen Wenzhong (note6)	6 July 2022	6.07.2022 to 5.07.2027	500,000 (note1)	0	—	—	500,000
Other Employees	16 February 2022	16.02.2022 to 15.02.2027	204,910,000 (note2)	0	(37,942,000) (notes2&4)	(11,960,000)	155,008,000
	6 July 2022	6.07.2022 to 5.07.2027	55,630,000 (note1)	0	—	(400,000)	55,230,000
	21 July 2023	21.07.2023 to 20.07.2027	0	4,296,000 (note3)	—	—	4,296,000
Total			290,830,000	4,296,000	(39,820,000) (note 5)	(12,360,000)	242,946,000

Notes

1. Based on the closing price of HK$3.83 per Share quoted on the Stock Exchange on 6 July 2022, the market value of the granting Award Shares (at grant price of HK$0.86 per Award Share) is approximately HK$293,109,900. The details of accounting standard adopted is set out in note 46.

2. Based on the closing price of HK$2.52 per Share quoted on the Stock Exchange on 16 February 2022, the market value of the granting Award Shares (at grant price of HK$0.86 per Award Share) is approximately HK$540,036,000. The details of accounting standard adopted is set out in note 46.

3. Based on the closing price of HK$1.59 per Share quoted on the Stock Exchange on 21 July 2023, the market value of the granting Award Shares (at grant price of HK$0.86 per Award Share) is approximately HK$6,830,640. The details of accounting standard adopted is set out in note 46.

4. The vesting is conditional upon the achievement or attainment of certain performance targets by the Company. Please refer to the announcement of the Company dated 16 February 2022 for details.

5. The detail of the weighted average closing price of the shares immediately before the dates on which the Awards were vested is set out in note 46.

6. Granting Award Share to the Independent Non-Executive Directors was approved by the board of the company and all Independent Non-Executive Directors was abstain from voting for the relevant resolution.

The number of shares that may be issued in respect of options and awards granted under all schemes of the Company during the financial year divided by the weighted average number of shares in issue for the year is approximately 0.15%.

INTERESTS AND SHORT POSITIONS OF SUBSTANTIAL SHAREHOLDERS

As at 31 December 2023, so far as is known to any Director or chief executive of the Company, the following persons (other than a Director or chief executive of the Company) had an interest or short position in the shares or underlying shares of the Company as recorded in the register kept pursuant to Section 336 of the SFO:

(i) Long position in the shares and underlying shares of the Company

Name	Capacity/nature of interest	Number of shares/ underlying shares	Approximate percentage of issued share capital of the Company (Note 2)
Asia Pacific Energy Fund Limited	Interest in a controlled corporation (Note 1)	6,405,332,156	23.77%

Notes:

1. An aggregate of 6,405,332,156 shares of the Company are collectively held by Highexcel Investments Limited, Happy Genius Holdings Limited and Get Famous Investments Limited, which are wholly-owned by Golden Concord Group Limited, which in turn is wholly–owned by Asia Pacific Energy Holdings Limited. Asia Pacific Energy Holdings Limited is in turn wholly-owned by Asia Pacific Energy Fund Limited. Asia Pacific Energy Fund Limited is ultimately held under a discretionary trust with Credit Suisse Trust Limited as trustee for Mr. Zhu Gongshan and his family (including Mr. Zhu Yufeng, a Director and the son of Mr. Zhu Gongshan) as beneficiaries.

2. The total number of ordinary shares of the Company in issue as at 31 December 2023 is 26,938,930,973.

Save as disclosed aforesaid, so far as is known to any Directors or chief executive of the Company, as at 31 December 2023, no other persons (other than a Director or chief executive of the Company) who had an interest or short position in the shares or underlying shares of the Company as recorded in the register kept pursuant to Section 336 of the SFO.

DIRECTOR'S INTEREST IN SIGNIFICANT CONTRACTS

Save as disclosed in the heading "Continuing Connected Transactions", there is no transaction, arrangement or contract of significance subsisting during or at the end of the year in which a director of the Company is or was materially interested, either directly or indirectly.

CONTINUING CONNECTED TRANSACTIONS

The INEDs of the Company, have reviewed and considered the report from internal auditors in respect of the internal audit procedures taken and findings on the continuing connected transactions, confirmed that the continuing connected transactions for the year ended 31 December 2023 and that they were entered into:

i. in the ordinary course of the business of the Group;

ii. on normal commercial terms or better; and

iii. in accordance with the relevant written agreements governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company has engaged the auditor of the Company to conduct certain procedures in respect of the continuing connected transactions of the Group in accordance with the Hong Kong Standard on Assurance Engagement 3000 (Revised) "Assurance Engagement Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants.

The auditor has confirmed to the Board in writing that for the year ended 31 December 2023, the continuing connected transactions, which were entered into:

a. have received the approval of the Board;

b. have been in accordance with the pricing policies of the Company for transactions involving the provision of goods or services;

c. have been in accordance with the relevant agreement governing such transactions; and

d. have not exceeded the relevant announced cap amounts for the financial year ended 31 December 2023.

Details of the continuing connected transactions of the Company for the year ended 31 December 2023 that are subject to reporting and annual review requirements under the Listing Rules are as follows:

(1) Steam supply

The Group entered into the following agreement dated 31 July 2020:

Reference is made to the announcement dated 31 July 2020, in relation to:

Yangzhou GCL and Yangzhou Power entered into the Yangzhou Steam Supply Agreement ("2020 Yangzhou Steam Supply Agreement") dated 31 July 2020 in relation to the supply of steam by Yangzhou Power to Yangzhou GCL after the expiry of the Existing Yangzhou Steam Supply Agreement on 31 May 2020.

On 31 July 2020, Zhu Gongshan Family Trust effectively holds 40.8% equity interests in Yangzhou Power, therefore, Yangzhou Power is an associate of Mr. Zhu and a connected person of the Company. Accordingly, the transaction contemplated under the Supplemental Agreement constitutes a continuing connected transaction for the Company under Chapter 14A of the Listing Rules.

The transaction amounts and the revised annual caps for the year ended 31 December 2023 under the New Yangzhou Steam Supply Agreement (as supplemented by the Supplemental Agreement) were as follows:

Agreement	**Transaction amount for the year ended 31 December 2023** (RMB)	**Annual Cap for the year ended 31 December 2023** (RMB)
2020 Yangzhou Steam Supply Agreement	nil	4,100,646

An announcement dated 31 July 2020 setting out details of the above-mentioned transaction was issued by the Company.

(2) Lease of property

Reference is also made to the announcement dated 30 September 2021 in relation to a Leases Agreement.

Suzhou GCL Research, entered into the following lease agreements as landlord, dated 30 September 2021:

1. GCL Energy Technology as tenant in relation to the leasing of the East, South and West 3 Zones of 3/F Headquarter for use as offices for a term of two years commencing from 1 October 2021 to 30 September 2023 (the "New GCL Energy Technology Lease Agreement for Headquarter"); and

2. GCL Power Sales as tenant in relation to the leasing of the North Zone of 3/F Headquarter for use as offices for a term of two years commencing from 1 October 2021 to 30 September 2023 (the "GCL Power Sales Lease Agreement").

3/F Research Building is spare space in the property of the Group. The leasing of such spare space could bring additional rental income to the Group.

As at 30 September 2021, the Zhu Family Trust is the shareholder and a connected person of the Company. Each of GCL Energy Technology and GCL Power Sales is an indirect subsidiary of Golden Concord Group, which is in turn ultimately held by the Zhu Family Trust, and is therefore an associate of the Zhu Family Trust and a connected person of the Company as defined under Chapter 14A of the Listing Rules. Accordingly, the transactions contemplated under the Lease Agreements constitute continuing connected transactions of the Company under Chapter 14A of the Listing Rules.

The transaction amounts and the revised annual caps for the year ended 31 December 2023 under the New GCL Energy Technology Lease Agreement for Headquarter and GCL Power Sales Lease Agreement were as follows:

Agreements	**Transaction amount for the year ended 31 December 2023** (RMB)	**Annual Cap for the year ended 31 December 2023** (RMB)
New GCL Energy Technology Lease Agreement for Headquarter	11,945,678	11,945,678
GCL Power Sales Lease Agreement	860,625	860,625

An announcement dated 30 September 2021 setting out details of the above-mentioned transactions were issued by the Company.

Perpetual Notes Agreement with GNE

Reference is made to the Company's announcement dated 30 August 2022 and circular dated 6 September 2022 regarding, among other things, the continuation of existing perpetual notes agreement with GNE (the "***Perpetual Notes Agreement***").

On 18 November 2016, certain wholly-owned subsidiaries of the Company, including GCL Technology (Suzhou) Co., Ltd. (協鑫科技(蘇州)有限公司), Jiangsu GCL Silicon Material Technology Development Co., Ltd. (江蘇協鑫硅材料科技發展有限公司), Suzhou GCL Photovoltaic Technology Co., Ltd. (蘇州協鑫光伏科技有限公司), and Taicang GCL Photovoltaic Technology Co., Ltd. (太倉協鑫光伏科技有限公司) (as lenders) and Nanjing GCL New Energy Development Co., Ltd, an indirect wholly-owned subsidiary of GNE (as borrower), entered into the Perpetual Notes Agreement in the principal amount of RMB1,800,000,000. Following the completion of the distribution in specie of shares of GNE by the Company on 29 September 2022, Golden Concord Group, a substantial shareholder and a connected person of the Company, consolidated the financial results of GNE as its subsidiary pursuant to applicable accounting standards. Pursuant to Rule 14A.07(4) of the Listing Rules, GNE became an associate of Golden Concord Group as a connected person of the Company. Accordingly, the Perpetual Notes Agreement constitutes continuing connected transaction of the Company for the purposes of the Listing Rules.

Under the terms of the Perpetual Notes Agreement, the interest rate for the principal amount is 7.3% per annum for the first two years, 9% per annum for the third to fourth year and is capped at 11% per annum starting from the fifth year. Therefore, the maximum interest payment in the year ended 31 December 2022 is RMB210,000,000.00.

Further details on the principal terms of the Perpetual Notes Agreement are set out in the Company's announcement dated 30 August 2022 and circular dated 6 September 2022.

Save as disclosed above, no other related party transactions set out in the note 49 of the consolidated financial statements constitute connected transactions or continuing connected transactions that are required to be disclosed under Chapter 14A of the Listing Rules.

(3) Coal Supply Framework Agreement

Reference is made to the announcement dated 30 December 2022, in relation to:

On 30 December 2022, Jiangsu Zhongneng (as customer) and Suzhou GCL (as supplier) entered into the Coal Supply Framework Agreement, pursuant to which Suzhou GCL agreed to supply coal to Jiangsu Zhongneng for a period of three years commencing from 1 January 2023 and ending on 31 December 2025 ("Coal Supply Framework Agreement").

On 30 December 2022, the Zhu Family Trust is a substantial shareholder of the Company, and therefore is a connected person of the Company. As Suzhou GCL is ultimately held by the Zhu Family Trust, Suzhou GCL is an associate of the Zhu Family Trust and a connected person of the Company under Chapter 14A of the Listing Rules.

The transaction amounts and the annual cap for the years ended 31 December 2023 under Coal Supply Framework Agreement was as follow:

Agreement	**Transaction amount for the year ended 31 December 2023** (RMB)	**Annual Cap for the year ended 31 December 2023** (RMB)
Coal Supply Framework Agreement	120,000,552	810,000,000

(4) Procurement Framework Agreement

Reference is made to the announcements dated 18 November 2021, 3 April 2023 and 19 May 2023, in relation to:

Jiangsu Zhongneng, a wholly-owned subsidiary of the Company (as seller), agreed to sell a total of not less than 97,500 metric tonnes of polysilicon materials and granular silicon to Wuxi Shangji and Hongyuan New Materials (as purchasers) for a term of five years commencing from 1 January 2022 and ending on 31 December 2026. On 19 May 2023, due to the increased minimum order quantity of polysilicon materials and granular silicon under the Procurement Framework Agreement, the seller and the buyer entered into the Supplemental Agreement to increase the Annual Caps s for the year ending 31 December 2023 ("Procurement Framework Agreement").

On 3 April 2024, Wuxi Shangji is a substantial shareholder of Inner Mongolia Xin Yuan, a non-wholly-owned subsidiary of the Company established on 2 April 2021, and Hongyuan New Materials is a subsidiary of Wuxi Shangji. As the relevant percentage ratios (as defined under Rule 14A.09 of the Listing Rules) in respect of Inner Mongolia Xin Yuan were less than 10% for the period from 2 April 2021 (date of incorporation) to 31 December 2021, Inner Mongolia Xin Yuan was an insignificant subsidiary of the Company under Rule 14A.09 of the Listing Rules. Therefore, Wuxi Shangji and Hongyuan New Materials were not connected persons of the Company under the Listing Rules. Based on the annual results announcement of the Company for the financial year ended 31 December 2022, which was published by the Company on 30 March 2023, the relevant percentage ratios (as defined under Rule 14A.09 of the Listing Rules) in respect of Inner Mongolia Xin Yuan exceeded 10% for the financial year ended 31 December 2022, and Inner Mongolia Xin Yuan has ceased to be an insignificant subsidiary of the Company under Rule 14A.09 of the Listing Rules. Therefore, each of Wuxi Shangji and Hongyuan New Materials has become a connected person of the Company at the subsidiary level under the Listing Rules.

The transaction amounts and the annual cap for the years ended 31 December 2023 under Procurement Framework Agreement was as follow:

Agreement	**Transaction amount for the year ended 31 December 2023** (RMB)	**Annual Cap for the year ended 31 December 2023** (RMB)
Procurement Framework Agreement	2,483,600,013	9,415,000,000

(5) Wafer Sale Agreement

Reference is made to the announcement dated 26 April 2023, in relation to:

On 26 April 2023, GCL Technology Suzhou, a wholly-owned subsidiary of the Company, (as the seller), and GCL System Integration (as the buyer) entered into the Wafer Sale Agreement, pursuant to which the Seller shall sell and the Buyer shall purchase certain quantities of wafers during the period from 26 April 2023 to 31 December 2023 ("Wafer Sale Agreement").

On 26 April 2023, the Zhu Family Trust is a substantial shareholder and a connected person of the Company. GCL System Integration is ultimately controlled by Mr. Zhu. Accordingly, GCL System Integration is a connected person of the Company and the transactions contemplated under the Wafer Sale Agreement constitute continuing connected transactions of the Company under Chapter 14A of the Listing Rules.

The transaction amounts and the annual cap for the years ended 31 December 2023 under Wafer Sale Agreement was as follow:

Agreement	**Transaction amount for the year ended 31 December 2023** (RMB)	**Annual Cap for the year ended 31 December 2023** (RMB)
Wafer Sale Agreement	783,193,228	900,000,000

DIRECTORS' INTERESTS IN COMPETING BUSINESS

During the years, the following Director is considered to have interest in the business which competes or is likely compete, either directly or indirectly, with the business of the Group as required to be disclosed pursuant to the Listing Rules:

Names of Director	Name of company in which the relevant Director has interest	Principal activities of the competing company	% interest in competing company
Mr. Zhu Yufeng	錫林郭勒中能硅業有限公司 Xilingol Zhongneng Silicon Co., Ltd.* (Dormant and inactive)	Intend to produce polysilicon ingot upon completion of construction	Mr. Zhu Yufeng, through companies controlled by him, holds 70% interest

Note: * English name for identification only

EMOLUMENT POLICY

The emolument policy of the Group to reward its employees is based on their performance, qualifications, competence and market comparables. Remuneration package generally comprises salary, contribution to pension schemes and bonuses relating to the profit of the relevant company and individual's performance. The remuneration package of the executive Directors and the senior management are also linked to the performance of the Group and the return to its shareholders. The remuneration policy of the executive Directors is reviewed by the Remuneration Committee of the Company.

The Group has adopted share option schemes and share award scheme as incentives to Directors, employees and eligible participants, details of the schemes are set out under the section headed "Option Schemes" and "Share Award Scheme" in this report and in notes 46a(I) and 46a(II) respectively to the consolidated financial statements.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Company's Articles of Association or relevant laws of the Cayman Islands which would oblige the Company offer new Shares on a pro rata basis to the existing shareholders.

MAJOR CUSTOMERS AND SUPPLIERS

During the year, the Group's largest supplier accounted for approximately 15.31% of total purchases. The five largest suppliers accounted for approximately 33.79% of the Group's total purchases.

One of the five largest suppliers of the Company was Inner Mongolia Zhonghuan Crystal Material Co., Ltd.* (內蒙古中環晶體材料有限公司) ("Inner Mongolia Zhonghuan Crystal"). As at 31 December 2023, (i) a non-wholly-owned subsidiary of the Company holds 6.41% interest in Inner Mongolia Zhonghuan Crystal and (ii) an associate company of the Company holds 9.62% interests Inner Mongolia Zhonghuan Crystal.

During the year, the Group's largest customers accounted for approximately 15.78% of the Group's total sales. The five largest customers accounted for approximately 44.36% of the Group's total sales.

As at 31 December 2023, Mr. Zhou Gongshan and Mr. Zhu Yufeng had interest in the Company as disclosed under the section of "Director's and Chief Executive's Interests and Short Positions in Shares, Underlying Shares and Debentures of the Company and Associated Company".

Save as disclosed above, to the best knowledge of the Directors, there is no other Directors or any of their associates or any shareholder who holds more than 5% of the ordinary shares of the Company has any interests in the suppliers or customers disclosed above.

* English name for identification only.

PURCHASES, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the six-months period ended 30 June 2023, the Company repurchased a total of 84,500,000 shares of the Company (the "Repurchased Shares") on the market of the Hong Kong Stock Exchange respectively on 2 June, 5 June, 6 June, 7 June, 8 June, 12 June and 14 June 2023 at an aggregate consideration (including transaction cost) of approximately HK$131 million. The Repurchased Shares were subsequently cancelled on 6 July 2023.

During the period from 1 July 2023 to 31 December 2023, the Company further repurchased a total of 54,000,000 Repurchased Shares on the Stock Exchange respectively on 11 September, 19 September, 21 September, 26 October and 31 October 2023 at an aggregate consideration (including transaction cost) of approximately HK$69 million. The Repurchased Shares were subsequently cancelled on 4 December 2023.

Further detail of the above Repurchased Shares are set out in note 37 of the consolidated financial statements.

Other than disclosed above, during the year ended 31 December 2023, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities.

RELATED PARTY TRANSACTIONS

Details of the related party transactions undertaken in normal course of business are set out in note 49 to the consolidated financial statements. Details of the connected transactions/continuing connected transactions are set out under section of "Continuing Connected Transactions"

PUBLIC FLOAT

As at the date of this report, based on the information that is publicly available to the Company and within the knowledge of the Directors, there is sufficient public float of not less than 25% of the Company's issued shares as required under the Listing Rules.

CHANGES IN INFORMATION ON DIRECTORS

As at the date of this report, the changes in information required to be disclosed by the Director(s) of the Company pursuant to Rule 13.51(B) of the Listing Rules since the published of 2023 Interim Report are set out below:

Name of Director	Details of Change	Effective Date
Mr. Zhu Zhanjun	• appointed as a director of GCL System Integration Technology Co. Ltd., a company with its shares listed on the Shenzhen Stock Exchange (Stock Code: 002506))	October 2023

AUDITOR

Following the resignation of Deloitte Touche Tohmatsu as the auditor of the Company with effect from 14 May 2021, Crowe (HK) CPA Limited was appointed as the auditor of the Company with effect from 29 June 2021 to fill the casual vacancy and re-appointed as the auditor of the Company at the annual general meeting of the Company held on 31 May 2023.

EVENTS AFTER REPORTING PERIOD

Details of the events after reporting period are set out in note 53 to the consolidated financial statements.

On behalf of the Board
Zhu Gongshan
Chairman

Hong Kong, 15 March 2024

Independent Auditor's Report

國富浩華（香港）會計師事務所有限公司
Crowe (HK) CPA Limited
香港 銅鑼灣 禮頓道77號 禮頓中心9樓
9/F Leighton Centre,
77 Leighton Road,
Causeway Bay, Hong Kong

TO THE SHAREHOLDERS OF GCL TECHNOLOGY HOLDINGS LIMITED
協鑫科技控股有限公司
(incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of GCL Technology Holdings Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 93 to 279, which comprise the consolidated statement of financial position as at 31 December 2023, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policy information.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2023, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRS Standards") issued by the International Accounting Standards Board ("IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants (the "Code"), together with any ethical requirement that are relevant to our audit of the consolidated financial statements in the Cayman Islands, and we have fulfilled our other ethical responsibilities in accordance with these requirement and the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
Fair value measurement on perpetual notes at fair value through other comprehensive income ("FVTOCI")	
We identified the fair value measurement on perpetual notes at FVTOCI as a key audit matter due to the significance of the balance to the consolidated financial statements as a whole and the significant management judgement and estimates involved in determining the fair value. The Group held perpetual notes issued by GNE and are classified as equity instrument at FVTOCI. As disclosed in note 21 to the consolidated financial statements, the Group's perpetual notes at FVTOCI which are measured at fair value carried at RMB998,002,000 as at 31 December 2023. During the year ended 31 December 2023, a loss on change in fair value of equity instrument at FVTOCI of RMB1,102,465,000 was recognised in other comprehensive income.	The fair value of the Group's perpetual notes at FVTOCI is determined with reference to the valuation performed by the external valuer engaged by the Group (the "Valuer"). Details of the valuation techniques, significant assumptions and key inputs used in the valuation are disclosed in note 42 to the consolidated financial statements. The valuation depends on certain significant assumptions and key inputs that involve management's judgements and estimates. Our audit procedures to assess the fair value of perpetual notes at FVTOCI included the following: • Evaluating the competence, capabilities and objectivity of the Valuer; • Understanding the Valuer's valuation process and methodology, significant assumptions adopted, critical judgmental areas and key inputs used in the valuation through discussion with management and the Valuer with the assistance of our internal valuation specialist; • Evaluating the appropriateness of the methodology in the valuation of equity instrument at FVTOCI with the assistance of our internal valuation specialist; and • Assessing the reasonableness of the key assumptions and inputs adopted by management and the Valuer by comparing to entity-specific information and market data and with the assistance of our internal valuation specialist. Based as the above procedures performed, we found the inputs and estimates used in the valuation of perpetual notes at FVTOCI to be supported by available evidences and consistent with our understanding.

INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS Standards issued by the IASB and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. This report is made solely to you, as a body, in accordance with our agreed terms of engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of the internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with the relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Crowe (HK) CPA Limited
Certified Public Accountants
Hong Kong, 15 March 2024

Chan Wai Dune, Charles
Practising Certificate Number P00712

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2023

	NOTES	2023 RMB'000	2022 RMB'000
Continuing operations			
Revenue	6	**33,700,479**	35,930,485
Cost of sales and services rendered		**(22,008,306)**	(18,434,966)
Gross profit		**11,692,173**	17,495,519
Other income	7	**1,084,131**	975,631
Distribution and selling expenses		**(250,908)**	(142,916)
Administrative expenses		**(2,274,035)**	(1,706,283)
Finance costs	8	**(417,837)**	(239,507)
Reversal of Impairment losses under expected credit loss model, net	9	**136,971**	235,855
Other expenses, gains and losses, net	10	**(5,859,456)**	(2,344,362)
Share of profits of associates	21	**203,192**	4,116,548
Share of losses of joint ventures	22	**(12,321)**	(87,883)
Profit before tax		**4,301,910**	18,302,602
Income tax expense	11	**(974,806)**	(1,880,020)
Profit for the year from continuing operations	12	**3,327,104**	16,422,582
Discontinued operation			
Loss for the year from discontinued operation	51	**—**	(942,631)
Profit for the year		**3,327,104**	15,479,951
Other comprehensive (expense) income			
Items that will not be reclassified to profit or loss:			
Fair value (loss) gain on investments in equity instruments at fair value through other comprehensive income		**(1,111,993)**	64,215
Share of other comprehensive income of associates		**64,806**	67,530
		(1,047,187)	131,745

Consolidated Statement of Profit or Loss and Other Comprehensive Income (CONTINUED)

For the year ended 31 December 2023

	2023 RMB'000	2022 RMB'000
Items that may be reclassified subsequently to profit or loss:		
Exchange differences arising on translation of foreign operations	**6,136**	76,490
Share of other comprehensive income (expense) of an associate	**538**	(941)
Reclassification of exchange differences upon Distribution in Specie	**—**	(3,013)
	6,674	72,536
Other comprehensive (expense) income for the year	**(1,040,513)**	204,281
Total comprehensive income for the year	**2,286,591**	15,684,232
Profit (loss) for the year attributable to:		
Owners of the Company		
– from continuing operations	**2,510,076**	16,393,668
– from discontinued operation	**—**	(363,361)
	2,510,076	16,030,307
Non-controlling interests		
– from continuing operations	**817,028**	28,914
– from discontinued operation	**—**	(579,270)
	817,028	(550,356)
	3,327,104	15,479,951
Total comprehensive income (expense) for the year attributable to:		
Owners of the Company	**1,469,563**	16,202,796
Non-controlling interests	**817,028**	(518,564)
	2,286,591	15,684,232

For the year ended 31 December 2023

	NOTES	2023 RMB cents	2022 RMB cents
Earnings per share	16		
From continuing and discontinued operations			
— Basic		**9.47**	59.98
— Diluted		**9.46**	59.86
From continuing operations			
— Basic		**9.47**	61.34
— Diluted		**9.46**	61.21

The notes on pages 107 to 279 form part of these consolidated financial statement.

Details of dividends distributed and proposed are set out in note 15.

Consolidated Statement of Financial Position

At 31 December 2023

	NOTES	2023 RMB'000	2022 RMB'000
NON-CURRENT ASSETS			
Property, plant and equipment	17	**34,783,732**	26,530,692
Right-of-use assets	18	**1,541,452**	1,570,978
Investment properties	19	**365,352**	378,493
Intangible assets	20	**116,432**	150,944
Interests in associates	21	**5,786,822**	14,985,018
Interests in joint ventures	22	**149,234**	201,383
Investments at fair value through profit or loss	23	**844,203**	707,027
Equity instruments at fair value through other comprehensive income	23	**441,347**	30,309
Deferred tax assets	24	**597,888**	575,871
Deposits and other receivables	26	**1,250,104**	2,611,651
Amount due from a related company-non-trade related	27	**2,169,172**	—
Pledged and restricted bank and other deposits	29	**31,154**	251,206
		48,076,892	47,993,572
CURRENT ASSETS			
Inventories	25	**2,884,246**	2,587,348
Trade and other receivables	26	**17,901,265**	23,621,398
Amounts due from related companies – trade related	27	**314,296**	221,067
Amounts due from related companies – non-trade related	27	**2,561,670**	567,682
Investments at fair value through profit or loss	23	**1,693,521**	253,845
Held for trading investments	28	**2,686**	3,035
Tax recoverable		**190,317**	137,533
Pledged and restricted bank and other deposits	29	**2,321,951**	3,543,342
Bank balances and cash	29	**6,821,328**	6,635,646
		34,691,280	37,570,896

	NOTES	2023 RMB'000	2022 RMB'000
CURRENT LIABILITIES			
Trade and other payables	30	**14,246,371**	19,580,904
Amounts due to related companies – trade related	31	**682,140**	219,923
Amounts due to related companies – non-trade related	31	**679,094**	3,276,441
Contract liabilities	32	**525,528**	1,113,281
Bank and other borrowings – due within one year	33	**5,315,936**	9,419,358
Lease liabilities – due within one year	34	**70,493**	104,904
Other financial liabilities	35	**525,695**	293,952
Derivative financial instruments	35	**15,972**	98,340
Deferred income	36	**28,557**	29,479
Tax payables		**49,140**	181,888
		22,138,926	34,318,470
NET CURRENT ASSETS		**12,552,354**	3,252,426
TOTAL ASSETS LESS CURRENT LIABILITIES		**60,629,246**	51,245,998
NON-CURRENT LIABILITIES			
Contract liabilities	32	**221,237**	136,200
Bank and other borrowings – due after one year	33	**9,951,069**	3,806,496
Lease liabilities – due after one year	34	**75,878**	46,179
Deferred income	36	**51,382**	85,515
Deferred tax liabilities	24	**2,011,971**	1,616,697
		12,311,537	5,691,087
NET ASSETS		**48,317,709**	45,554,911

Consolidated Statement of Financial Position (CONTINUED)

At 31 December 2023

	NOTES	2023 RMB'000	2022 RMB'000
CAPITAL AND RESERVES			
Share capital	37	**2,344,280**	2,359,838
Reserves		**40,242,736**	40,322,436
Equity attributable to owners of the Company		**42,587,016**	42,682,274
Non-controlling interests		**5,730,693**	2,872,637
TOTAL EQUITY		**48,317,709**	45,554,911

The consolidated financial statements on pages 93 to 279 were approved and authorised for issue by the board of directors on 15 March 2024 and are signed on its behalf by:

Zhu Gongshan	**Yeung Man Chung, Charles**
DIRECTOR	*DIRECTOR*

Consolidated Statement of Changes in Equity

For the year ended 31 December 2023

	Attributable to owners of the Company																
	Share capital RMB'000	Share premium RMB'000	Treasury share RMB'000 (Note i)	Share award reserve RMB'000 (Note ii)	Shares held for share award scheme RMB'000 (Note iii)	Capital redemption reserve RMB'000 (Note iv)	Investments revaluation reserve RMB'000	Other reserve RMB'000 (Note v)	Capital reserve RMB'000 (Note vi)	Statutory reserve funds RMB'000 (Note vii)	Special reserves RMB'000 (Note viii)	Share options reserve RMB'000 (Note ii)	Translation reserve RMB'000	Accumulated profits RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total RMB'000
At 1 January 2023	2,359,838	15,544,401	(57,971)	185,068	(676,107)	22,202	69,610	(1,133,192)	67,251	3,476,041	(2,333,893)	57,986	4,540	25,096,500	42,682,274	2,872,637	45,554,911
Exchange differences arising from translation of financial statements of foreign operations	–	–	–	–	–	–	–	–	–	–	–	–	6,136	–	6,136	–	6,136
Fair value loss on investments in equity instruments at FVTOCI	–	–	–	–	–	–	(1,111,993)	–	–	–	–	–	–	–	(1,111,993)	–	(1,111,993)
Share of other comprehensive income of associates	–	–	–	–	–	–	64,806	–	–	–	–	–	538	–	65,344	–	65,344
Profit for the year	–	–	–	–	–	–	–	–	–	–	–	–	–	2,510,076	2,510,076	817,028	3,327,104
Total comprehensive income (expense) for the year	–	–	–	–	–	–	(1,047,187)	–	–	–	–	–	6,674	2,510,076	1,469,563	817,028	2,286,591
Exercise of share options	51	1,347	–	–	–	–	–	–	–	–	–	(805)	–	–	593	–	593
Forfeitures of share options	–	–	–	–	–	–	–	–	–	–	–	(3,530)	–	3,530	–	–	–
Forfeitures of share options of an associate	–	–	–	–	–	–	–	–	–	–	–	–	–	1,039	1,039	–	1,039
Equity-settled share-based payment	–	–	–	152,801	–	–	–	–	–	–	–	–	–	–	152,801	–	152,801
Exercise of share award	–	–	–	(57,279)	51,332	–	–	–	–	–	–	–	–	36,894	30,947	–	30,947
Repurchase of shares	–	–	(182,010)	–	–	–	–	–	–	–	–	–	–	–	(182,010)	–	(182,010)
Cancellation of shares	(15,609)	(224,372)	239,981	–	–	15,609	–	–	–	–	–	–	–	(15,609)	–	–	–
Dividend paid	–	–	–	–	–	–	–	–	–	–	–	–	–	(1,439,723)	(1,439,723)	–	(1,439,723)
Transfer to reserves	–	–	–	–	–	–	–	–	–	630,772	–	–	–	(630,772)	–	–	–
Change in capital structure of a subsidiary (note 38(A))	–	–	–	–	–	–	–	(89,160)	–	–	(30,484)	–	–	–	(119,644)	125,302	5,658
Deemed disposal of partial interests in subsidiaries through newly-increased registered capital (note 39(A))	–	–	–	–	–	–	–	–	–	–	(8,824)	–	–	–	(8,824)	1,915,726	1,906,902
At 31 December 2023	2,344,280	15,321,376	–	280,590	(624,775)	37,811	(977,577)	(1,222,352)	67,251	4,106,813	(2,373,201)	53,651	11,214	25,561,935	42,587,016	5,730,693	48,317,709

Consolidated Statement of Changes in Equity (CONTINUED)

For the year ended 31 December 2023

	Attributable to owners of the Company																
	Share capital RMB'000	Share premium RMB'000	Treasury share RMB'000 (Note i)	Share award reserve RMB'000 (Note ii)	Shares held for share award scheme RMB'000 (Note iii)	Capital redemption reserve RMB'000 (Note iv)	Investments revaluation reserve RMB'000	Other reserve RMB'000 (Note v)	Capital reserve RMB'000 (Note vi)	Statutory reserve funds RMB'000 (Note vii)	Special reserves RMB'000 (Note viii)	Share options reserve RMB'000 (Note ii)	Translation reserve RMB'000	Accumulated profits RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total RMB'000
At 1 January 2022	2,359,030	17,504,873	—	—	(236,629)	22,202	(62,135)	(955,200)	67,251	3,782,275	(2,198,821)	72,334	(36,204)	8,707,037	29,026,013	3,275,592	32,301,605
Exchange differences arising from translation of financial statements of foreign operations	—	—	—	—	—	—	—	—	—	—	—	—	44,698	—	44,698	31,792	76,490
Reclassification of exchange differences upon deemed disposal of GNE (as defined in note 1)	—	—	—	—	—	—	—	—	—	—	—	—	(3,013)	—	(3,013)	—	(3,013)
Fair value gain on investments in equity instruments at FVTOCI	—	—	—	—	—	—	64,215	—	—	—	—	—	—	—	64,215	—	64,215
Share of other comprehensive income of associates	—	—	—	—	—	—	67,530	—	—	—	—	—	(941)	—	66,589	—	66,589
Profit (loss) for the year	—	—	—	—	—	—	—	—	—	—	—	—	—	16,030,307	16,030,307	(550,356)	15,479,951
Total comprehensive income for the year	—	—	—	—	—	—	131,745	—	—	—	—	—	40,744	16,030,307	16,202,796	(518,564)	15,684,232
Exercise of share options	808	22,062	—	—	—	—	—	—	—	—	—	(13,202)	—	—	9,668	—	9,668
Forfeitures of share options	—	—	—	—	—	—	—	—	—	—	—	(1,146)	—	1,146	—	—	—
Equity-settled share-based payment	—	—	—	185,068	—	—	—	—	—	—	—	—	—	—	185,068	—	185,068
Equity-settled share-based payment recognised by GNE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12,841	12,841
Purchase of shares under share award scheme	—	—	—	—	(439,478)	—	—	—	—	—	—	—	—	—	(439,478)	—	(439,478)
Repurchase of shares	—	—	(57,971)	—	—	—	—	—	—	—	—	—	—	—	(57,971)	—	(57,971)
Contributions from non-controlling shareholders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,255,079	1,255,079
Deemed disposal of partial interest in a subsidiary by increase of paid-up capital of a subsidiary (note 39(B)(i)(b))	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	580,000	580,000
Dividend by way of distribution in specie (note 15)	—	(1,963,482)	—	—	—	—	—	—	—	(986,516)	(51,776)	—	—	1,038,292	(1,963,482)	(2,077,657)	(4,041,139)
Transaction costs attributable to the distribution in specie	—	(19,052)	—	—	—	—	—	—	—	—	—	—	—	—	(19,052)	—	(19,052)
Transfer to reserves	—	—	—	—	—	—	—	—	—	689,995	—	—	—	(689,995)	—	—	—
Acquisition of additional interest in a subsidiary	—	—	—	—	—	—	—	—	—	—	(805)	—	—	—	(805)	(3,195)	(4,000)
Disposal of subsidiaries (note 39(B)(i)(d))	—	—	—	—	—	—	—	—	—	(9,713)	—	—	—	9,713	—	(18,473)	(18,473)
Deemed disposed of partial interest in GNE by share placement of GNE (note 39(B)(i)(a))	—	—	—	—	—	—	—	—	—	—	(62,195)	—	—	—	(62,195)	328,795	266,600
Change in capital structure of a subsidiary (note 38(B))	—	—	—	—	—	—	—	(177,992)	—	—	(20,296)	—	—	—	(198,288)	38,219	(160,069)
At 31 December 2022	2,359,838	15,544,401	(57,971)	185,068	(676,107)	22,202	69,610	(1,133,192)	67,251	3,476,041	(2,333,893)	57,986	4,540	25,096,500	42,682,274	2,872,637	45,554,911

Notes:

(i) Treasury shares represent the amounts paid by the Group for repurchases of the equity instruments of the Company. During the years ended 31 December 2022 and 2023, 31,625,000 and 138,500,000 ordinary shares of the Company were repurchased by the Group at an aggregate consideration of approximately RMB 57,971,000 and RMB 182,010,000, respectively, which were recognised in equity as treasury shares. During the year ended 31 December 2023, 170,125,000 ordinary shares have been cancelled.

(ii) Share options reserve and share award reserve comprise the portion of the grant date fair value of unexercised share options and award shares granted to employees of the Group and others providing similar services that have been recognised in accordance with the accounting policy adopted for share-based compensation benefits.

(iii) During 2017, 2018 and 2022, the Company paid in total of approximately RMB676,107,000 to a trustee ("Trustee") to purchase 524,498,888 shares of the Company in the market pursuant to the Share Award Scheme (the "Scheme") established on 16 January 2017 ("Adoption Date") by the board of directors of the Company (the "Directors"). During the year ended 31 December 2023, 39,820,000 shares were vested and transferred to the Award Grantees (as defined in note 46a(II)) under the Scheme. As at 31 December 2023, all the remaining 484,678,888 shares were held by the Trustee. More details are set out in note 46a(II).

(iv) Capital redemption reserve represents the par value of shares repurchased by the Company pursuant to section 37 of the Cayman Islands Companies Law.

(v) Other reserve represents the equity (other than share capital) attributable to owners of the Company prior to the reverse acquisition, including share premium, capital reserve, contribution from a shareholder, other reserve, share options reserve, revaluation reserve and deficit. As the Company was accounted for as reverse acquisition by Universe Solar Energy Technology Inc (formerly known as GCL Solar Energy Technology Holding Inc.) ("Solar Energy") in 2009, such reserves attributable to owners of the Company were reclassified to other reserve upon the completion of the reverse acquisition.

Upon disposal of the non-solar power business in 2015, portion of the amount was realised and transferred to the share premium, share options reserve and accumulated profits of the Group.

Moreover, other reserve includes the initial recognition of put options granted to non-controlling interests by subsidiaries.

(vi) Capital reserve represents the amount of contribution from former immediate holding company of Solar Energy of United States dollars ("US$") 15,009,000 (equivalent to RMB126,029,000) net of the 500,000 ordinary shares of Solar Energy repurchased for a consideration of US$7,000,000 (equivalent to RMB58,778,000) and cancelled prior to 2009.

(vii) Pursuant to the relevant laws in the People's Republic of China (the "PRC"), each of the subsidiaries established in the PRC is required to transfer 5% – 10% of its profit after tax as per statutory financial statements (as determined by the management of the subsidiary) to the reserve funds (including the general reserve fund and enterprise development fund where appropriate). The general reserve fund is discretionary when the fund balance reaches 50% of the registered capital of the respective company and can be used to make up for previous years' losses or, expand the existing operations or can be converted into additional capital of the subsidiary. The enterprise development fund can only be used for development and is not available for distribution to shareholder.

(viii) Special reserves represent (i) the difference between the consideration to acquire additional interests in subsidiaries and the respective share of the carrying amounts of the net assets acquired; (ii) the difference by which the non-controlling interests were adjusted and the fair value of consideration received in relation to the disposal of partial interest of a subsidiary; and (iii) change of interests in existing subsidiaries arising from restructuring.

Upon the completion of Distribution in Specie (as defined in note 15), portion of the amount was realised and transferred to accumulated profits of the Group during the year ended 31 December 2022.

Consolidated Statement of Cash Flows

For the year ended 31 December 2023

	NOTES	2023 RMB'000	2022 RMB'000
OPERATING ACTIVITIES			
Profit (loss) for the year			
– from continuing operations		**3,327,104**	16,422,582
– from discontinued operation		**—**	(942,631)
		3,327,104	15,479,951
Adjustments for:			
Income tax expense		**974,806**	1,897,360
Finance costs		**417,837**	677,703
Interest income		**(240,213)**	(159,915)
Foreign exchange loss, net		**18,353**	19,152
Depreciation of property, plant and equipment		**3,108,897**	1,939,668
Depreciation of right-of-use assets		**184,979**	202,806
Depreciation of investment properties		**20,318**	17,085
Amortisation of intangible assets		**34,512**	33,682
Amortisation of deferred income		**(33,263)**	(66,817)
(Gain) loss on disposal of property, plant and equipment		**(30,685)**	164,806
Share of losses of joint ventures		**12,321**	87,883
Share of profits of associates		**(203,192)**	(4,229,059)
Gain on disposal of subsidiaries, net		**—**	(8,718)
Gain on disposal/partial disposal/deemed disposal of associates		**(201,596)**	(201,537)
Loss on disposal of and impairment loss on interest in an associate		**3,189,789**	—
Share-based payment expenses		**152,801**	197,909
Loss (gain) on fair value change of held for trading investments		**390**	(392)
(Gain) loss on fair value change of investments at fair value through profit or loss ("FVTPL")		**(53,914)**	81,050
(Gain) loss on fair value change of derivative financial instruments		**(82,368)**	3,604
Loss (gain) on fair value change of convertible bond to a non-controlling shareholder of a subsidiary		**11,805**	(11,773)

	NOTES	2023 RMB'000	2022 RMB'000
OPERATING ACTIVITIES (Continued)			
Reversal of impairment losses on financial assets under expected credit loss ("ECL") model, net		**(136,971)**	(96,988)
Write-down of inventories		**156,756**	126,376
Impairment loss on property, plant and equipment		**1,128,134**	1,048,770
Write-back of other payables		**(7,652)**	(3,257)
Gain on early termination of leases		**—**	(16,656)
Reclassification of exchange differences upon the Distribution in Specie		**—**	(3,013)
Operating cash flows before movements in working capital		**11,748,948**	17,179,680
Increase in inventories		**(360,821)**	(1,712,912)
Increase in trade and other receivables		**(13,045,550)**	(11,828,888)
(Increase) decrease in amounts due from related companies		**(107,276)**	410,555
(Decrease) increase in trade and other payables		**(1,255,439)**	4,625,517
Increase (decrease) in amounts due to related companies		**462,217**	(48,453)
Increase in contract assets		**—**	(3,632)
(Decrease) increase in contract liabilities		**(502,716)**	317,353
Increase in deposits, prepayments and other non-current assets		**—**	120,444
Cash (used in) generated from operations		**(3,060,637)**	9,059,664
Income taxes paid		**(787,081)**	(1,190,593)
NET CASH (USED IN) FROM OPERATING ACTIVITIES		**(3,847,718)**	7,869,071

	NOTES	2023 RMB'000	2022 RMB'000
INVESTING ACTIVITIES			
Interest received		**305,161**	105,608
Proceeds from disposal of property, plant and equipment		**178,050**	60,273
Proceeds from disposal of right-of-use assets		**37,415**	20,900
Payments for construction and purchase of property, plant and equipment		**(12,177,037)**	(15,316,500)
Payments for right-of-use assets		**(47,378)**	(606,407)
Investments in associates		**(606,000)**	(536,713)
Reduction of capital of joint ventures		**—**	12,058
Dividends received from joint ventures		**45,050**	33,238
Dividends received from associates		**450,603**	42,240
Proceeds from disposal of an associate		**1,208,475**	471,600
Addition of investments at FVTPL		**(5,593,857)**	(460,000)
Addition of investments at FVTOCI		**(420,566)**	—
Addition of intangible assets		**—**	(4,756)
Withdrawal of pledged and restricted bank		**8,832,255**	3,173,573
Placement of pledged and restricted bank		**(7,390,812)**	(3,959,373)
Advances to related companies		**—**	(20,036)
Repayment from related companies		**—**	55
Short-term loan to third parties/ a third party		**(3,200,000)**	(1,600,000)
Repayment of short-term loan from a third party		**3,200,000**	—
Payments for note receivables		**(163,407)**	—
Proceeds from disposal of investments at FVTPL		**4,047,013**	95,966
Settlement of consideration receivables from disposal of subsidiaries with solar power plant projects		**—**	38,985
Settlement of consideration and other receivables in relation to former subsidiaries		**—**	1,498,260
Settlement of consideration receivables from disposal of associates		**381,149**	150,000
Net cash inflow from disposal of subsidiaries		**—**	254,472
NET CASH USED IN INVESTING ACTIVITIES		**(10,913,886)**	(16,546,557)

	NOTES	2023 RMB'000	2022 RMB'000
FINANCING ACTIVITIES			
Interest paid		**(577,420)**	(927,945)
New bank and other borrowings raised		**19,339,914**	16,675,534
Repayment of bank and other borrowings		**(1,712,349)**	(7,349,183)
Repayment of lease liabilities		**(160,298)**	(406,104)
Repayment of notes payables		**—**	(701,025)
Proceeds of loans from related companies		**—**	600,000
Repayment to loans from related companies		**—**	(617,514)
Advances from related companies		**186,669**	872,943
Repayment to related companies		**(2,784,016)**	(102,781)
Contribution from non-controlling interests		**2,262,658**	1,935,079
Acquisition of additional equity interests in non-wholly owned subsidiaries		**—**	(4,000)
Dividend paid to the owners of the Company		**(1,439,723)**	—
Dividends paid to non-controlling interests		**—**	(6,000)
Proceeds from exercise of share options		**593**	9,668
Proceeds from issue of new shares of GNE		**—**	266,600
Net cash outflow in respect of the Distribution in Specie	39(B)(i)(a)	**—**	(1,351,011)
Purchase of shares of the Company under share award scheme		**—**	(439,478)
Proceeds from vesting of shares of share award scheme		**30,947**	—
Repurchase of shares of the Company		**(182,010)**	(57,971)
NET CASH FROM FINANCING ACTIVITIES		**14,964,965**	8,396,812

Consolidated Statement of Cash Flows (CONTINUED)

For the year ended 31 December 2023

	2023 RMB'000	2022 RMB'000
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**203,361**	(280,674)
CASH AND CASH EQUIVALENTS AT 1 JANUARY, represented by		
— Bank balances and cash	**6,635,646**	6,702,316
— Bank balances and cash classified as held for sale	**—**	23,351
	6,635,646	6,725,667
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF BANK BALANCES AND CASH HELD IN FOREIGN CURRENCIES	**(17,679)**	190,653
CASH AND CASH EQUIVALENTS AT 31 DECEMBER, represented by		
— Bank balances and cash	**6,821,328**	6,635,646
	6,821,328	6,635,646

1. GENERAL INFORMATION

GCL Technology Holdings Limited (the"Company") is an exempted company with limited liability incorporated in the Cayman Islands on 12 July 2006 under the Companies Law, Cap 22 of the Cayman Islands. The shares of the Company are listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") on 13 November 2007. The address of the registered office of the Company is at Cricket Square, Hutchins Drive, PO Box 2681, Grand Cayman, KY1-1111, Cayman Islands and the principal place of business is at Units 1703B–1706, Level 17, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong.

The Company is an investment holding company. The principal activities of its subsidiaries (together with the Company collectively referred to as the "Group"), associates and joint ventures are principally engaged in (1) the manufacturing and sales of polysilicon and wafers for the solar industry; and (2) the sales of electricity, development, investment, management and operation of solar projects.

During the year ended 31 December 2022, the Group had discontinued the operations of GCL New Energy Holdings Limited ("GNE") (a company listed on the Main Board of the Stock Exchange with stock code: 0451) and its subsidiaries (together with GNE collectively referred to the "GNE Group") through distribution in specie.

The functional and presentation currency of the Company is Renminbi ("RMB").

2. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (the "IFRS Standards") issued by the International Accounting Standards Board (the "IASB"). For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the Stock Exchange ("Listing Rules") and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

2. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Statement of compliance (Continued)

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2 *Share-based Payment,* leasing transactions that are accounted for in accordance with IFRS 16 *Leases*, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in IAS 2 *Inventories* or value in use in IAS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;

- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and

- Level 3 inputs are unobservable inputs for the asset or liability.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS")

New and amendments to IFRS Standards that are mandatorily effective for the current year

In the current year, the Group has applied the following new and amendments to IFRS Standards issued by the IASB for the first time, which are mandatorily effective for the Group's financial annual periods beginning on or after 1 January 2023 for the preparation of the consolidated financial statements:

– IFRS 17 and the Related Amendments - Insurance Contracts

– Amendments to IAS 1 and IFRS Practice Statement 2 - Disclosure of Accounting Policies

– Amendments to IAS 8 - Definition of Accounting Estimates

– Amendments to IAS 12 - Deferred Tax Related to Assets and Liabilities arising from a Single Transaction

– Amendments to IAS 12 - International Tax Reform–Pillar Two Model Rules

Except as described below, the application of the new and amendments to IFRSs in the current year has had no material impact on the Group's financial positions and performance for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

New and amendments to IFRS Standards that are mandatorily effective for the current year (Continued)

Amendment to IAS 1 and IFRS Practice Statement 2 Disclosure of Accounting Policies

IAS 1 is amended to replace all instances of the term "significant accounting policies" with "material accounting policy information". Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The amendments also clarify that accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material. If an entity chooses to disclose immaterial accounting policy information, such information must not obscure material accounting policy information.

IFRS Practice Statement 2 Making Materiality Judgements (the "Practice Statement") is also amended to illustrate how an entity applies the "four-step materiality process" to accounting policy disclosures and to judge whether information about an accounting policy is material to its financial statements. Guidance and examples are added to the Practice Statement.

The Group has revisited the accounting policy information it has been disclosing and considered it is consistent with the amendments.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

New and amendments to IFRS Standards that are mandatorily effective for the current year (Continued)

Amendments to IAS 8 Definition of Accounting Estimate

The amendments define accounting estimates as "monetary amounts in financial statements that are subject to measurement uncertainty". An accounting policy may require items in financial statements to be measured in a way that involves measurement uncertainty – that is, the accounting policy may require such items to be measured at monetary amounts that cannot be observed directly and must instead be estimated. In such a case, an entity develops an accounting estimate to achieve the objective set out by the accounting policy. Developing accounting estimates involves the use of judgements or assumptions based on the latest available, reliable information. In addition, the concept of changes in accounting estimates in IAS 8 is retained with additional clarifications.

The amendments do not have a material impact on these financial statements as the Group's approach in distinguishing changes in accounting policies and changes in accounting policies and changes in accounting estimates is consistent with the amendments.

Amendments to IAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments narrow the scope of the recognition exemption of deferred tax liabilities and deferred tax assets in paragraphs 15 and 24 of IAS 12 *Income Taxes* so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences.

Prior to the adoption of Amendments to IAS 12, for leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group previously applied IAS 12 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.

Upon the application of the amendments, the Group recognises a deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised) and a deferred tax liability for all deductible and taxable temporary differences associated with the right-of-use assets and the lease liabilities.

The application of the amendments does not have a material impact on the Group's financial position and performance because the deferred tax assets and the deferred tax liabilities as a result of the adoption of Amendments to IAS 12 qualify for offset under paragraph 74 of IAS 12. There was also no material impact on the opening balances as at 1 January 2022 as a result of the change.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

New and amendments to IFRS Standards that are mandatorily effective for the current year (Continued)

Amendments to IAS 12 International Tax Reform – Pillar Two Model Rules

The amendments apply to income taxes arising from tax law enacted or substantively enacted to implement the Pillar Two model rules published by the Organisation for Economic Cooperation and Development, including tax law that implements qualified domestic minimum top-up taxes described in those rules.

The Group has applied the amendments for the first time in the current year retrospectively. In accordance with the transitional provisions, the Group applies the mandatory temporary exception to recognising and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes. Following the amendments, the Group is required to disclose that it has applied the exception and to disclose separately its current tax expense (income) related to Pillar Two income taxes.

The amendments do not have a material impact on these financial statements.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

Amendments to IFRS Standards in issue but not yet effective

The Group has not early applied the following amendments to IFRS Standards that have been issued but are not yet effective:

Amendments to IAS 7 and IFRS 7	Supplier Finance Arrangements [1]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[3]
Amendments to IAS 1	Classification of Liabilities as Current or Non-current and Non-current Liabilities with Covenants[1]
Amendments to IFRS 16	Lease Liability in a Sale and Leaseback[1]
Amendments to IAS 21	Lack of Exchangeability[2]

1 Effective for annual periods beginning on or after 1 January 2024.
2 Effective for annual periods beginning on or after 1 January 2025.
3 Effective for annual periods beginning on or after a date to be determined.

Except for the amendments to IFRS Standards mentioned below, the Directors anticipate that the application of all other amendments to IFRS Standards will have no material impact on the consolidated financial statements.

Amendments to IAS 1 Classification of Liabilities as Current or Non-current ("2020 Amendments") and Non-current Liabilities with Covenants ("2022 Amendments")

The 2020 Amendments provide clarification and additional guidance on the assessment of right to defer settlement for at least twelve months from reporting date for classification of liabilities as current or non-current, which:

- specify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. Specifically, the 2020 Amendments clarify that:

  (i) the classification should not be affected by management intentions or expectations to settle the liability within 12 months; and

  (ii) if the right is conditional on the compliance with covenants, the right exists if the conditions are met at the end of the reporting period, even if the lender does not test compliance until a later date; and

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

Amendments to IAS 1 Classification of Liabilities as Current or Non-current ("2020 Amendments") and Non-current Liabilities with Covenants ("2022 Amendments") (Continued)

- clarify that if a liability has terms that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instruments, these terms do not affect its classification as current or non-current only if the entity recognises the option separately as an equity instrument applying IAS 32 *Financial Instruments: Presentation ("IAS 32")*.

The 2022 Amendments modify the requirements introduced by the 2020 Amendments on how an entity classifies debt and other financial liabilities with covenants as current or non-current. The 2022 Amendments specify that only covenants with which the entity is required to comply with on or before the end of the reporting period affect the entity's right to defer settlement of a liability for at least twelve months after the reporting period. Covenants which are required to comply with only after the reporting period do not affect whether that right exists at the end of the reporting period.

The 2022 Amendments also specify the disclosure requirements about information that enables users of financial statements to understand the risk that the liabilities could become repayable within twelve months after the reporting period, if the entity classify liabilities arising from loan arrangements as non-current when the entity's right to defer settlement of those liabilities is subject to the entity complying with covenants within twelve months after the reporting period.

Based on the Group's outstanding liabilities as at 31 December 2023 and the related terms and conditions stipulated in the agreements between the Group and the relevant lenders, the application of the amendments will not result in a reclassification of the Group's liabilities.

Amendments to IAS 7 and IFRS 7 Supplier Finance Arrangements

The amendments add a disclosure objective to IAS 7 stating that an entity is required to disclose information about its supplier finance arrangements that enables users of financial statements to assess the effects of those arrangements on the entity's liabilities and cash flows. In addition, IFRS 7 was amended to add supplier finance arrangements as an example within the requirements to disclose information about an entity's exposure to concentration of liquidity risk.

The application of the amendments is not expected to have significant impact on the financial position and performance of the Group.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

Amendments to IFRS 16 Lease Liability in a Sale and Leaseback

The amendments add subsequent measurement requirements for sale and leaseback transactions that satisfy the requirements of IFRS 15 to be accounted for as a sale. The amendments require a seller-lessee to determine "lease payments" or "revised lease payments" such that the seller-lessee would not recognise a gain or loss that relates to the right of use retained by the seller-lessee. The amendments also clarify that applying the requirements does not prevent the seller-lessee from recognising in profit or loss any gain or loss relating to subsequent partial or full termination of a lease.

The amendments are effective for annual reporting periods beginning on or after 1 January 2024, with early application permitted and must applied retrospectively to sale and leaseback transactions entered into after the date of initial application of IFRS 16.

The application of the amendments is not expected to have significant impact on the financial position and performance of the Group.

Amendments to IAS 21 Lack of Exchangeability

The amendments specify a currency is exchangeable when an entity is able to exchange that currency for the other currency through markets or exchange mechanisms that create enforceable rights and obligations without undue delay at the measurement date and for a specified purpose. When a currency is not exchangeable at the measurement date, an entity estimates the spot exchange rate as the rate that would have applied to an orderly transaction between market participants at the measurement date and that would faithfully reflect the economic conditions prevailing.

When a currency is not exchangeable, an entity discloses information that would enable users of its financial statements to evaluate how a currency's lack of exchangeability affects, or is expected to affect, its financial performance, financial position and cash flows.

The amendments are effective for annual reporting periods beginning on or after 1 January 2025, with early application permitted. An entity is not permitted to apply the amendments retrospectively. Instead, an entity is required to apply the specific transition provisions included in the amendments. The application of the amendments is not expected to have significant impact on the financial position and performance of the Group.

3. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRS STANDARDS") (Continued)

Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments to IFRS 10 *Consolidated Financial Statements* and IAS 28 *Investments in Associates* and Joint Ventures deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method, are recognised in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognised in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The application of the amendments is not expected to have significant impact on the financial position and performance of the Group.

4. MATERIAL ACCOUNTING POLICY INFORMATION

Material accounting policy information adopted by the Group is disclosed below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Basis of consolidation (Continued)

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income ("OCI") are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Changes in the Group's interests in existing subsidiaries

Changes in the Group's interests in existing subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non–controlling interests according to the Group's and the non-controlling interests' proportionate interests.

Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interest (if any) are derecognised. A gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the owners of the Company. All amounts previously recognised in OCI in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRS Standards). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IFRS 9 Financial Instruments ("IFRS 9") or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

Business combinations

Operation concentration test

The Group can elect to apply an optional concentration test, on a transaction-by-transaction basis, that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. The gross assets under assessment exclude cash equivalents, deferred tax assets, and goodwill resulting from the effect of deferred tax liabilities. If the concentration test is met, the set of activities and assets is determined not to be a business and no further assessment is needed.

Asset acquisitions

When the Group acquires a subsidiary or group of assets and liabilities that do not constitute a business, the Group identifies and recognises the individual identifiable assets acquired and liabilities assumed by allocating the purchase price first to financial assets/financial liabilities at the respective fair values, the remaining balance of the purchase price is then allocated to the other identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. Such a transaction does not give rise to goodwill or bargain purchase gain.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Business combinations (Continued)

Acquisitions of businesses

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition–related costs are generally recognised in profit or loss as incurred.

For business combinations in which the acquisition date is on or after 1 January 2022, the identifiable assets acquired and liabilities assumed must meet the definitions of an asset and a liability in the *Conceptual Framework for Financial Reporting* issued by International Accounting Standards Board in March 2018 (the "Conceptual Framework") except for transactions and events within the scope of IAS 37 or IFRIC 21, in which the Group applies IAS 37 or IFRIC 21 instead of the Conceptual Framework to identify the liabilities it has assumed in a business combination. Contingent assets are not recognised.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that:

- deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with IAS 12 *Income Taxes* and IAS 19 *Employee Benefits* respectively;

- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share–based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 at the acquisition date (see the accounting policy below);

- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard; and

- lease liabilities are recognised and measured at the present value of the remaining lease payments (as defined in IFRS 16) as if the acquired leases were new leases at the acquisition date, except for leases for which (a) the lease term ends within 12 months of the acquisition date; or (b) the underlying asset is of low value. Right-of-use assets are recognised and measured at the same amount as the relevant lease liabilities, adjusted to reflect favourable or unfavourable terms of the lease when compared with market terms. Right-of-use assets relating to leasehold lands in which the relevant acquires are the registered owners with full upfront lease payments measured at fair value.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Business combinations (Continued)

Acquisitions of businesses (Continued)

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non–controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after reassessment, the net amount of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured at the non–controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets or at fair value. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at their fair value.

Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates and joint ventures are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates and joint ventures used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and OCI of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Investments in associates and joint ventures (Continued)

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

The Group assesses whether there is an objective evidence that the interest in an associate or a joint venture may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When the Group ceases to have significant influence over an associate or a joint venture, it is accounted for as a disposal of the entire interest in the investee with a resulting gain or loss being recognised in profit or loss. When the Group retains an interest in the former associate or joint venture and the retained interest is a financial asset within the scope of IFRS 9, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition. The difference between the carrying amount of the associate or joint venture and the fair value of any retained interest and any proceeds from disposing of the relevant interest in the associate or joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognised in OCI in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in OCI by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) upon disposal/partial disposal of the relevant associate or joint venture.

When the Group reduces its ownership interest in an associate or a joint venture but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognised in OCI relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

When a group entity transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognised in the Group's consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Discontinued operation

A discontinued operation is a component of the Group's business, the operations and cash flows of which can be clearly distinguished from the rest of the Group, that either has been disposed of, or is classified as held for sale, and which represents a separate major line of business or geographical area of operations, or is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations, or is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier. It also occurs if the operation is abandoned.

Where an operation is classified as discontinued, a single amount is presented on the face of the consolidated statement of profit or loss, which comprises:

– the post-tax profit or loss of the discontinued operation; and

– the post-tax gain or loss recognised on the measurement to fair value less costs to sell, or on the disposal, of the assets or disposal group(s) constituting the discontinued operation.

Revenue from contracts with customers

The Group recognises revenue when (or as) a performance obligation is satisfied, i.e., when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;

- the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or

- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Revenue from contracts with customers (Continued)

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

Revenue from sales of electricity is recognised at a point in time when the control of the electricity transferred, being at the point when electricity has generated and transmitted to the customer.

Operation and management service income, consultancy fee income and solar related supporting services income are recognised over time when services are rendered.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with IFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e., only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation

Output method

The progress towards complete satisfaction of a performance obligation is measured based on output method, which is to recognise revenue on the basis of direct measurements of the value of the goods or services transferred to the customer to date relative to the remaining goods or services promised under the contract, that best depict the Group's performance in transferring control of goods or services.

As a practical expedient, if the Group has a right to consideration in an amount that corresponds directly with the value of the Group's performance completed to date, the Group recognises revenue in the amount to which the Group has the right to invoice.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Revenue from contracts with customers (Continued)

Variable consideration

For contracts that contain variable consideration in relation to sales of electricity to the grid companies which contain tariff adjustments related to solar power plants yet to be enlisted in the List (as defined in note 6) by the PRC government, the Group estimates the amount of consideration to which it will be entitled using the most likely amount.

The estimated amount of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty with the variable consideration is subsequently resolved.

At the end of each reporting period, the Group updates the estimated transaction price (including updating its assessment of whether an estimate of variable consideration is constrained) to represent faithfully the circumstances present at the end of the reporting period and the changes in circumstances during the reporting period.

Existence of significant financing component

In determining the transaction price, the Group adjusts the promised amount of consideration for the effects of the time value of money if the timing of payments agreed (either explicitly or implicitly) provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract.

For contracts where the period between payment and transfer of the associated goods or services is less than one year, the Group applies the practical expedient of not adjusting the transaction price for any significant financing component.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Leases

Definition of a lease

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified on or after the date of initial application or arising from business combinations, the Group assesses whether a contract is or contains a lease based on the definition under IFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

The Group as a lessee

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group applies practical expedient not to separate non-lease component from lease component, and instead account for the lease component and any associated non-lease components as a single lease component.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the recognition exemption for lease of low-value assets. Lease payments on short-term leases and leases of low– value assets are recognised as expense on a straight-line basis or another systematic basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Leases (Continued)

The Group as a lessee (Continued)

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

When the group obtains ownership of the underlying leased assets at the end of the lease term, upon exercising purchase options, the carrying amount of the relevant right-of-asset is transferred to property, plant and equipment.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

Refundable rental deposits

Refundable rental deposits paid are accounted under IFRS 9 and initially measured at fair value. Any difference between the initial fair value and the nominal value of the deposits at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

Lease liabilities

At the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate used to determine those payments, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, by discounting the revised lease payments using an unchanged discount rate, unless the change in lease payments results from a change in floating interest rates. In that case, the lessee shall use a revised discount rate that reflects changes in the interest rate. When there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option, the lease liability is remeasured by discounting the revised lease payments using a revised discount rate, being the interest rate implicit in the lease for the remainder of the lease term, or the Group's incremental borrowing rate at the date of reassessment, if the interest rate implicit in the lease cannot be readily determined. When the lease liability is remeasured in either of these ways, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

In the consolidated statement of financial position, the current portion of long-term lease liabilities is determined as the principal portion of contractual payments that are due to be settled within twelve months after the reporting period.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Leases (Continued)

The Group as a lessee (Continued)

Lease modifications

Changes in considerations of lease contracts that were not part of the original terms and conditions are accounted for as lease modifications, including lease incentives provided through forgiveness or reduction of rentals.

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification. When the modified contract contains one or more additional lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component. The associated non-lease components are included in the respective lease components. The only exceptions are rent concessions that occurred as a direct consequence of the COVID-19 pandemic and met the conditions set out in paragraph 46B of IFRS 16 Leases. In such cases, the Group has taken advantage of the practical expedient not to assess whether the rent concessions are lease modifications, and recognised the change in consideration as negative variable lease payments in profit or loss in the period in which the event or condition that triggers the rent concessions occurred.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset.

The Group as a lessor

Classification and measurement of leases

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset, and such costs are recognised as an expense on a straight-line basis over the lease term.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Leases (Continued)

The Group as a lessor (Continued)

Allocation of consideration to components of a contract

When a contract includes both leases and non-leases components, the Group applies IFRS 15 "Revenue from Contracts with Customers"("IFRS 15") to allocate consideration in a contract to lease and non-lease components. Non-lease components are separated from lease component on the basis of their relative stand-alone selling prices.

Refundable rental deposits

Refundable rental deposits received are accounted for under IFRS 9 and initially measured at fair value.

Sale and leaseback transactions

The Group applies the requirements of IFRS 15 to assess whether sale and leaseback transaction constitutes a sale by the Group.

The Group as a seller-lessee

For a transfer that does not satisfy the requirements as a sale, the Group as a seller-lessee continues to recognise the assets and accounts for the transfer proceeds as loans from a related company and other loans within the scope of IFRS 9.

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recognised at the rates of exchanges prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at the date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit or loss in the period in which they arise.

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into the presentation currency of the Group (i.e., RMB) using exchange rate prevailing at the end of each reporting period. Income and expenses items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during the period, in which case, the exchange rates prevailing at the dates of transactions are used. Exchange differences arising, if any, are recognised in OCI and accumulated in equity under the heading of translation reserve (attributed to non–controlling interests as appropriate).

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Foreign currencies (Continued)

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non–controlling interests and are not recognised in profit or loss. For all other partial disposals (i.e., partial disposals of associates or joint arrangements that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale.

Any specific borrowing that remain outstanding after the related asset is ready for its intended use or sale is included in the general borrowing pool for calculation of capitalisation rate on general borrowings. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred income in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants related to income that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable. Government grants relating to compensation of expenses are deducted from the related expenses, other government grants are presented under "other income".

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Retirement benefit costs

Payments to defined contribution retirement benefit plans including state-managed retirement benefit schemes and the Mandatory Provident Fund Scheme are recognised as an expense when employees have rendered service entitling them to the contributions.

Short-term employee benefits

Short-term employee benefits are recognised at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognised as an expense unless another IFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognised for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

Shares held for share award schemes

The consideration paid by the Trustee for purchasing the Company's shares from the market, including any directly attributable incremental cost, is presented as "Shares held for share award schemes" and the amount is deducted from total equity.

Share-based compensation benefits

The Group operates a number of share-based compensation plans (including share option schemes and share award schemes), under which the Group receives services from employees and other qualifying participants as consideration for equity instruments (including share options and award shares) of the Group. The fair value of the employee services and other qualifying participants' services received in exchange for the grant of equity instruments of the Group is recognised as an expense over the vesting period, i.e. the period over which all of the specified vesting conditions are to be satisfied and credited to equity.

For grant of share options and award shares under the Scheme to employees and others providing similar services, the total amount to be expensed is determined by reference to the fair value of the options and award shares under the Scheme granted by using option-pricing model, which includes the impact of market performance conditions but excludes the impact of service condition and non-market performance conditions.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Share-based compensation benefits (Continued)

Non-market performance and service conditions are included in assumptions about the number of options that are expected to become vested.

From the perspective of the Company, the grants of its equity instruments to employees of its subsidiaries are made in exchange for their services related to the subsidiaries. Accordingly, the share-based compensation expenses are treated as part of the "Investments in subsidiaries" or "Other receivables" in the Company's statement of financial position.

At the end of each reporting period, the Group revises the estimates of the number of options and award shares that are expected to ultimately vest. It recognises the impact of the revision to original estimates, if any, in the consolidated income statement of the Group, with a corresponding adjustment to share options reserve and share award reserve respectively.

When the options are exercised, the proceeds received net of any directly attributable transaction costs and the amount previously recognised in share options reserve are credited to share capital (nominal value) and share premium. When the vested equity instruments are later forfeited prior to expiry date, the amount previously recognised in share options reserve will be transferred to accumulated profits.

When the share awards are exercised, the difference between the amount of the cost shares transferred previously recognised in "Shares held for share award scheme", and the proceeds received net of any directly attributable transaction costs and the amount previously recognised in share award reserve are credited to "accumulated profits".

If the terms of an equity-settled award are modified, at a minimum an expense for the services received is recognised as if the terms had not been modified. An additional expense is recognised for any modification that increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employees and other qualifying participants, as measured at the date of modification.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit/loss before tax because of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised.

Deferred tax is not recognised for:

- temporary differences arising from goodwill not deductible for tax purposes,
- temporary differences arising from the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination) and do not give rise to equal taxable and deductible temporary differences;
- temporary differences related to income taxes arising from tax laws enacted or substantively enacted to implement the Pillar Two model rules published by the Organisation for Economic Co-operation and Development.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary differences will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred 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.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Taxation (Continued)

Deferred 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 realised, 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 tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognises the right–of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in OCI or directly in equity, in which case, the current and deferred tax are also recognised in OCI or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

In assessing any uncertainty over income tax treatments, the Group considers whether it is probable that the relevant tax authority will accept the uncertain tax treatment used, or proposed to be used by individual group entities in their income tax filings. If it is probable, the current and deferred taxes are determined consistently with the tax treatment used or planned to be used in the income tax filings. If it is not probable that the relevant taxation authority will accept an uncertain tax treatment, the effect of each uncertainty is reflected by using either the most likely amount or the expected value.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Property, plant and equipment

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, or for administration purposes (other than properties under construction as described below). Property, plant and equipment (other than construction in progress) are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Property, plant and equipment in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

When the Group makes payments for ownership interests of properties which include both leasehold land and building elements, the entire consideration is allocated between the leasehold land and the building elements in proportion to the relative fair values at initial recognition. To the extent the allocation of the relevant payments can be made reliably, interest in leasehold land that is accounted for as an operating lease is presented as "right-of-use assets" in the consolidated statement of financial position. When the consideration cannot be allocated reliably between non-lease building element and undivided interest in the underlying leasehold land, the entire properties are classified as property, plant and equipment.

Depreciation is recognised so as to write off the cost of assets other than properties under construction less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation.

Investment properties are initially measured at cost, including any directly attribution expenditure. Subsequent to initial recognition, investment properties are stated at cost less subsequent accumulated depreciation and any accumulated impairment losses. Depreciation is recognised so as to write off the cost of investment properties over their estimated useful lives and after taking into account of their estimated residual value, using the straight-line method.

An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposals. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognised.

Intangible assets

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortisation and any accumulated impairment losses. Amortisation for intangible assets with finite useful lives is recognised on a straight-line basis over their estimated useful lives. The estimated useful lives and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Internally-generated intangible assets – research and development expenditure

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development activities (or from the development phase of an internal project) is recognised if, and only if, all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Intangible assets (Continued)

Internally-generated intangible assets – research and development expenditure (Continued)

- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognised for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses (if any), on the same basis as intangible assets that are acquired separately.

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, is recognised in profit or loss when the asset is derecognised.

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill

At the end of the reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets and intangible assets with finite useful lives to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any).

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill (Continued)

The recoverable amount of property, plant and equipment, right-of-use assets and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash-generating unit ("CGU") to which the asset belongs.

In testing a CGU for impairment, corporate assets are allocated to the relevant CGU when a reasonable and consistent basis of allocation can be established, or otherwise they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be established. The recoverable amount is determined for the CGU or group of CGUs to which the corporate asset belongs, and is compared with the carrying amount of the relevant CGU or group of CGUs.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or a CGU) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or the CGU) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a CGU, the Group compares the carrying amount of a group of CGUs, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of CGUs, with the recoverable amount of the group of CGUs. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of CGUs. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit or the group of CGUs. An impairment loss is recognised immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or CGU or a group of CGUs) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a CGU or a group of CGUs) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Treasury shares

Own equity instruments which are held by the Group (treasury shares) for cancellation are recognised directly in equity at cost. No gain or loss is recognised in the consolidated statement of profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments.

Inventories

Inventories are stated at the lower of cost and net realisable value. Costs of inventories are determined on a weighted average method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instruments. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with IFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at FVTPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

Financial assets that meet the following conditions are subsequently measured at FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL, except that at the date of initial application of IFRS 9/initial recognition of a financial asset, the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in OCI if that equity investment is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which IFRS 3 *Business Combinations* applies.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that is required to be measured at amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

(i) Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost and debt instruments subsequently measured at FVTOCI. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit-impaired.

(ii) Equity instruments designated as at FVTOCI

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in OCI and accumulated in the investments revaluation reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, but will be transferred to accumulated profits.

Dividends from these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

(iii) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss. The net gain or loss recognised in profit or loss includes any dividend or interest earned on the financial asset and is included in the "other expenses, gains and losses, net" line item, unless the dividends clearly represent a recovery of part of the cost of the investment.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets, financial guarantee contracts and contract assets

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade and other receivables, amounts due from related companies, pledged and restricted bank and other deposits and bank balances), financial guarantee contracts and contract assets which are subject to impairment under IFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessments are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for trade receivables, amounts due from related companies (trade related) and contract assets, including those with significant financing component.

For all other instruments, the Group measures the loss allowance equals to 12-month ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increase in the likelihood or risk of a default occurring since initial recognition.

(i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets, financial guarantee contracts and contract assets (Continued)

(i) Significant increase in credit risk (Continued)

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g., a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast changes in technological, market, economic or legal environment that has a significant adverse effect on the debtor's ability to meet its obligation to the Group;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations;
- failure to make payments of principal or interest on their contractually due dates;
- significant increases in credit risk on other financial instruments of the same debtor;
- significant changes in the value of the collateral supporting the obligation or in the quality of third-party guarantees or credit enhancements, which are expected to reduce the debtor's economic incentive to make scheduled contractual payments or to otherwise have an effect on the probability of a default occurring; and
- significant adverse changes in the expected performance and behaviour of the debtor.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

For financial guarantee contracts, the date that the Group becomes a party to the irrevocable commitment is considered to be the date of initial recognition for the purposes of assessing impairment. In assessing whether there has been a significant increase in the credit risk since initial recognition of financial guarantee contracts, the Group considers the changes in the risk that the specified debtor will default on the contract.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets, financial guarantee contracts and contract assets (Continued)

(ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events of default that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

(a) significant financial difficulty of the issuer or the debtor;

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

(c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;

(d) it is becoming probable that the debtor will enter bankruptcy or other financial reorganisation;

(e) significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or

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

(iv) Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are over three years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised as reversal of impairment in profit or loss in the period in which the recovery occurs.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets, financial guarantee contracts and contract assets (Continued)

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e., the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights. The historical loss rates are adjusted to reflect current and forward-looking information.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition. For a lease receivable, the cash flows used for determining the ECL is consistent with the cash flows used in measuring the lease receivable in accordance with IFRS 16.

For a financial guarantee contract, the Group is required to make payments only in the event of a default by the debtor in accordance with the terms of the instruments that is guaranteed. Accordingly, the expected losses is the present value of the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder, the debtor or any other party.

For ECL on financial guarantee contracts for which the effective interest rate cannot be determined, the Group will apply a discount rate that reflects the current market assessment of the time value of money and the risks that are specific to the cash flows but only if, and to the extent that the risks are taken into account by adjusting the discount rate instead of adjusting the cash shortfalls being discounted.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on amortised cost of the financial asset.

For financial guarantee contracts, the loss allowances are recognised at the higher of the amount of the loss allowance determined in accordance with IFRS 9; and the amount initially recognised less, where appropriate, cumulative amount of income recognised over the guarantee period.

Except for financial guarantee contracts, the Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade receivables, amounts due from related companies (trade related) and contract assets where the corresponding adjustment is recognised through a loss allowance account.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to accumulated profits.

Financial liabilities and equity instruments

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements entered into and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is (i) held for trading or (ii) it is designated as at FVTPL.

A financial liability is held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

Financial liabilities at amortised cost

Financial liabilities including trade and other payables, amounts due to related companies, bank and other borrowings are subsequently measured at amortised cost, using the effective interest method.

Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument. Financial guarantee contract liabilities are measured initially at their fair values. They are subsequently measured at the higher of:

- the amount of the loss allowance determined in accordance with IFRS 9; and
- the amount initially recognised less, where appropriate, cumulative amortisation recognised over the guarantee period.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial lability derecognised and the consideration paid and payable is recognised in profit or loss.

Derivative financial instruments

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The gain or loss on remeasurement to fair value is recognised in profit or loss unless the derivatives qualify for cash flow hedge accounting or hedges of net investment in a foreign operation, in which event the timing of the recognition in profit or loss depends on the nature of the item being hedged.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Cash and cash equivalents are assessed for ECL in accordance with the policy set out above.

Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

(i) has control or joint control over the Group;

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of Group or Group's parent.

(b) An entity is related to the Group if any of the following conditions applies:

(i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

(viii) The entity, or any member of a group of which it is a part, provides key management personnel services of the Group or to the Group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

4. MATERIAL ACCOUNTING POLICY INFORMATION (Continued)

Distribution of non-cash assets to owners

Upon loss of control of a subsidiary through distribution of shares in the subsidiary to the shareholders of the Company where the subsidiary is ultimately controlled by the same party both before and after the distribution, the Group (i) derecognises the assets and liabilities of the former subsidiary at their carrying amounts and the carrying amount of non-controlling interests in the former subsidiary at the date when control is lost; (ii) recognises its investment retained in the former subsidiary at its fair value when control is lost and subsequently accounts for it as an associate; (iii) reclassifies to profit or loss, or transfer directly to accumulated profits if required by other IFRSs, the amounts recognised in other comprehensive income in relation to the former subsidiary; and (iv) recognises the resulting difference as the distribution to the owners of the Company. The difference between the attributable net carrying amount at the date when control is lost and the fair value of the retained interest is also recognised in equity.

5. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in note 4, the Directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

5. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Useful lives and estimated impairment of property, plant and equipment and right-of-use assets

Property, plant and equipment and right-of-use assets are stated at costs less accumulated depreciation and impairment, if any. In determining whether an asset is impaired, the Group has to exercise judgment and make estimation, particularly in assessing: (1) whether an event has occurred or any indicators that may affect the asset value; (2) whether the carrying value of an asset can be supported by the recoverable amount, in the case of value in use, the net present value of future cash flows which are estimated based on the continued use of the asset; and (3) the appropriate key assumptions to be applied in estimating the recoverable amounts including cash flow projections and an appropriate discount rate. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the assets belongs, including allocation of corporate assets when a reasonable and consistent basis of allocation can be established, otherwise recoverable amount is determined at the smallest group of CGUs, for which the relevant corporate assets have been allocated. Changing the assumptions and estimates, including the discount rates or revenue growth rates in the cash flow projections, could materially affect the recoverable amounts. Furthermore, the growth rates and discount rates in the cash flow projections are subject to greater uncertainties in the current year due to volatility in financial markets and solar industry, including potential disruptions in the Group's solar material business segment.

The Group has made substantial investment in property, plant and equipment. The machineries and equipment are vulnerable to changes in market conditions and vulnerable to changes in government policies.

5. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Key sources of estimation uncertainty (Continued)

Useful lives and estimated impairment of property, plant and equipment and right-of-use assets (Continued)

With the impairment indicators identified, the carrying amounts of the relevant CGUs may be higher than the recoverable amount which involves estimation uncertainty on assumptions of such recoverable amount.

Additionally, the Group determines the estimated useful lives and related depreciation charges for its property, plant and equipment and right-of-use assets. These estimates are based on the historical experience of the actual useful lives of property, plant and equipment of similar nature and functions. The management will increase the depreciation charge where useful lives are expected to be shorter than previously estimated. Actual economic lives may differ from estimated useful lives. Periodic review could result in a change in depreciable lives and therefore depreciation expense in future periods.

As at 31 December 2023, the carrying amounts of property, plant and equipment and right-of-use assets, were approximately RMB34,784 million and RMB1,541 million (2022: RMB26,531 million and RMB1,571 million) respectively. During the year ended 31 December 2023, the Group recognised impairment on property, plant and equipment, amounting to approximately RMB1,128 million (2022: RM804 million in continuing operations) (see note 17).

Provision of ECL on amounts due from related companies (non-trade related)

The Group measures loss allowance equal to 12-month ECL for amounts due from related companies (non-trade related). Management regularly reviews the historical payment patterns or financial position of counterparties and overdue status of the receivables. The amount of ECL reflects changes in credit risk since initial recognition and is sensitive to changes in estimates.

As at 31 December 2023, the carrying amounts of amounts due from related companies (non-trade related) were approximately RMB4,731 million (2022: RMB568 million).

The information about the ECL and the Group's amounts due from related companies (non-trade related) are disclosed in notes 41 and 27, respectively.

5. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Key sources of estimation uncertainty (Continued)

Provision of ECL on trade receivables, amounts due from related companies (trade related)

Trade receivables and amounts due from related companies (trade related) with significant balances and credit-impaired are assessed for ECL individually.

In addition, the Group uses practical expedient in estimating ECL on trade receivables and amounts due from related companies (trade related) which are not assessed individually using a provision matrix. The provision rates are based on internal credit ratings as groupings of various debtors taking into consideration the Group's historical default rates and forward-looking information that is reasonable, supportable and available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered.

The provision of ECL is sensitive to changes in estimates. The information about the ECL and the Group's trade receivables and amounts due from related companies (trade related) are disclosed in notes 41, 26 and 27, respectively.

Fair value measurement of financial instruments

Certain of the Group's financial assets and financial liabilities as described in note 42 are measured at fair values with fair values being determined based on unobserved inputs using valuation techniques. Judgement and estimation are required in establishing the relevant valuation techniques and the relevant inputs thereof. Changes in assumptions relating to these factors could affect the reported fair values of these instruments. See note 42 for further disclosures.

6. REVENUE AND SEGMENT INFORMATION

Information reported to the Executive Directors of the Company, being collectively the chief operating decision maker ("CODM"), for the purposes of resources allocation and assessment of segment performance focuses on types of goods delivered or services provided, except for the business operations of GNE, which was assessed by the CODM as a separate operating segment.

No operating segments identified by the CODM have been aggregated in arriving at the reportable segments of the Group.

The Group's reportable and operating segments under IFRS 8 *Operating Segments* are as follows:

Continuing operations

— Solar material business – mainly manufacture and sales of polysilicon and wafer products to companies operating in the solar industry.

— Solar farm business – operates solar farms located in the United States of America (the "USA") and the PRC. These solar farms were constructed or acquired by the Group prior to obtaining a controlling stake in GNE.

Discontinued operation

— New energy business – represents the business operations of GNE, which is principally engaged in the development, construction, operation and management of solar farms. Upon the completion of distribution in specie of shares of GNE (see note 15) during the year ended 31 December 2022, GNE has become an associate of the Group and the new energy business segment has been classified as discontinued operation.

6. REVENUE AND SEGMENT INFORMATION (Continued)

Segment revenue and results

The following is an analysis of the Group's revenue and results by reportable and operating segments:

Year ended 31 December 2023

	Continuing Operations		
	Solar material business RMB'000	Solar farm business RMB'000	Total RMB'000
Revenue from external customers	33,486,492	213,987	33,700,479
Segment profit	3,237,566	55,832	3,293,398
Unallocated income			33,014
Unallocated expenses			(119,236)
Gain on fair value change of investments at FVTPL			4,116
Loss on fair value change of held for trading investments (note 10)			(390)
Reversal of impairment losses under expected credit loss model, net			221,271
Share of loss of an associate			(72,823)
Share of losses of joint ventures			(32,246)
Profit for the year			3,327,104

6. REVENUE AND SEGMENT INFORMATION (Continued)

Segment revenue and results (Continued)

Year ended 31 December 2022

	Continuing Operations			Discontinued operation	
	Solar material business RMB'000	Solar farm business RMB'000	Sub-total RMB'000	New energy business RMB'000	Total RMB'000
Segment revenue	35,713,515	216,970	35,930,485	828,607	36,759,092
Elimination of inter-segment revenue	—	—	—	(9,038)	(9,038)
Revenue from external customers	35,713,515	216,970	35,930,485	819,569	36,750,054
Segment profit (loss)	16,535,166	33,897	16,569,063	(956,091)	15,612,972
Unallocated income			113,693	—	113,693
Unallocated expenses			(50,069)	—	(50,069)
Gain on fair value change of investments at FVTPL			5,592	—	5,592
Gain on fair value change of held for trading investments (note 10)			392	—	392
Impairment losses under expected credit loss model, net			(147,445)	—	(147,445)
Share of loss of an associate			(29,076)	—	(29,076)
Share of losses of joint ventures			(26,108)	—	(26,108)
Operating expenses allocation for segment reporting purpose (Note)			(13,460)	13,460	—
Profit (loss) for the year			16,422,582	(942,631)	15,479,951

Note: The operating results of new energy business included allocated corporate expenses.

The accounting policies of the operating segments are the same as the Group's accounting policies described in note 4. Segment profit (loss) represents the profit (loss) of each respective segment excluding unallocated income, unallocated expenses, certain impairment losses under expected credit loss model, net, change in fair value of certain investments at FVTPL, change in fair value of held for trading investments, share of profits (losses) of interests in certain joint ventures and GNE. This is the measure reported to the CODM for the purpose of resources allocation and performance assessment.

6. REVENUE AND SEGMENT INFORMATION (Continued)

Segment assets and liabilities

The following is an analysis of the Group's assets and liabilities by reportable and operating segments:

	2023 RMB'000	2022 RMB'000
Segment assets		
Solar material business	78,875,420	81,800,878
Solar farm business	1,873,437	1,911,745
Total segment assets	80,748,857	83,712,623
Investments at FVTPL	692,442	418,457
Equity instruments at FVTOCI	20,781	30,309
Held for trading investments	2,686	3,035
Interest in an associate	160,507	231,753
Interests in joint ventures	123,285	189,222
Unallocated bank balances and cash	694,737	685,554
Unallocated corporate assets	324,877	293,515
Consolidated assets	82,768,172	85,564,468
Segment liabilities		
Solar material business	33,766,895	39,299,711
Solar farm business	598,304	668,363
Total segment liabilities	34,365,199	39,968,074
Unallocated corporate liabilities	85,264	41,483
Consolidated liabilities	34,450,463	40,009,557

For the purpose of monitoring segment performance and allocating resources between segments:

- All assets are allocated to operating segments, other than unallocated corporate assets, corporate bank balances and cash and other assets (including certain investments at FVTPL, certain equity instruments at FVTOCI, held for trading investments and certain interests in joint ventures and GNE) of the management companies and investment holding companies;
- All liabilities are allocated to operating segments, other than unallocated corporate liabilities of the management companies and investment holding companies; and
- Upon the completion of distribution in specie of shares of GNE (see note 15) during the year ended 31 December 2022, GNE becomes an associate of the Group and interest in GNE accounted for using equity method has been classified as the "unallocated assets" and the perpetual notes classified as financial assets at fair value through other comprehensive income has been included in the segment assets of solar material segment.

6. REVENUE AND SEGMENT INFORMATION (Continued)

Other segment information (included in the segment profit or loss or segment assets or regularly provided to the CODM)

Year ended 31 December 2023

	Continuing operations			
	Solar material business RMB'000	Solar farm business RMB'000	Unallocated RMB'000	Total RMB'000
Amount included in the measure of segment profit or loss or segment assets:				
Interests in joint ventures	—	25,949	123,285	149,234
Interests in associates	5,626,315	—	160,507	5,786,822
Share of profits (losses) of joint ventures	—	19,925	(32,246)	(12,321)
Share of profits (losses) of associates	276,015	—	(72,823)	203,192
Addition to property, plant and equipment, and right-of-use assets	12,923,383	1,949	—	12,925,332
Addition to investment properties	7,177	—	—	7,177
Depreciation of property, plant and equipment	(2,999,406)	(84,684)	(24,807)	(3,108,897)
Depreciation of right-of-use assets	(171,748)	(1,309)	(11,922)	(184,979)
Depreciation of investment properties	(20,318)	—	—	(20,318)
Amortisation of intangible assets	(34,512)	—	—	(34,512)
Finance costs	(391,236)	(25,637)	(964)	(417,837)
Bank and other interest income	214,287	1,073	24,853	240,213
Gain on fair value change of financial instruments	112,463	7,898	3,726	124,087
Gain on disposal of property, plant and equipment	30,685	—	—	30,685
Write-down of inventories, net	156,756	—	—	156,756
Reversal of impairment losses (impairment loss) under ECL model net	(66,745)	(17,555)	221,271	136,971
Impairment loss on property, plant and equipment	(1,128,134)	—	—	(1,128,134)
Gain on partial disposal/deemed disposal of associates	201,596	—	—	201,596
Research and development costs	(1,872,796)	—	—	(1,872,796)
Income tax expense	(956,044)	(18,762)	—	(974,806)
Loss on disposal of and impairment loss on interest in an associate	(3,189,789)	—	—	(3,189,789)

6. REVENUE AND SEGMENT INFORMATION (Continued)

Other segment information (included in the segment profit or loss or segment assets or regularly provided to the CODM) (Continued)

Year ended 31 December 2022

	Continuing operations				Discontinued operation	
	Solar material business RMB'000	Solar farm business RMB'000	Unallocated RMB'000	Sub-total RMB'000	New energy business RMB'000	Total RMB'000
Amount included in the measure of segment profit or loss or segment assets:						
Interests in joint ventures	—	12,161	189,222	201,383	—	201,383
Interests in associates	14,753,265	—	231,753	14,985,018	—	14,985,018
Share of losses of joint ventures	(1,464)	(60,311)	(26,108)	(87,883)	—	(87,883)
Share of profits (losses) of associates	4,145,624	—	(29,076)	4,116,548	112,511	4,229,059
Addition to property, plant and equipment, and right-of-use assets	16,661,077	1,288	—	16,662,365	386,763	17,049,128
Addition to investment properties	351,514	—	—	351,514	—	351,514
Addition to intangible assets	4,756	—	—	4,756	—	4,756
Depreciation of property, plant and equipment	(1,619,475)	(84,289)	(24,716)	(1,728,480)	(211,188)	(1,939,668)
Depreciation of right-of-use assets	(163,776)	(1,433)	(12,031)	(177,240)	(25,566)	(202,806)
Depreciation of investment properties	(17,085)	—	—	(17,085)	—	(17,085)
Amortisation of intangible assets	(33,682)	—	—	(33,682)	—	(33,682)
Finance costs	(208,796)	(30,038)	(673)	(239,507)	(438,196)	(677,703)
Bank and other interest income	96,452	1,069	3,288	100,809	48,510	149,319
Interest arising from contracts containing significant financing components	—	—	—	—	10,596	10,596
Gain (loss) on fair value change of financial instruments	(82,845)	4,372	5,984	(72,489)	—	(72,489)
Loss on disposal of property, plant and equipment	(164,793)	—	—	(164,793)	(13)	(164,806)
Write-down of inventories, net	(126,376)	—	—	(126,376)	—	(126,376)
Reversal of impairment losses (impairment loss) under ECL model net	383,300	—	(147,445)	235,855	(138,867)	96,988
Impairment loss on property, plant and equipment	(804,115)	—	—	(804,115)	(244,655)	(1,048,770)
Gain on disposal of subsidiaries	—	41,248	—	41,248	—	41,248
Loss on disposal of solar power plant projects, net	—	—	—	—	(32,530)	(32,530)
Gain on partial disposal/deemed disposal of associates	201,537	—	—	201,537	—	201,537
Research and development costs	(1,685,721)	—	—	(1,685,721)	—	(1,685,721)
Income tax expense	(1,860,379)	(19,641)	—	(1,880,020)	(17,340)	(1,897,360)

6. REVENUE AND SEGMENT INFORMATION (Continued)

Revenue

(i) Disaggregation of revenue from contracts with external customers

Year ended 31 December 2023

	Continuing operations		
Segments	Solar material business RMB'000	Solar farm business RMB'000	Total RMB'000
Types of goods or services			
Sales of wafer	11,637,962	—	11,637,962
Sales of electricity	—	213,987	213,987
Sales of polysilicon	17,435,147	—	17,435,147
Processing fees	1,389,369	—	1,389,369
Others (comprising the sales of ingots and industrial silicon)	3,024,014	—	3,024,014
Total	33,486,492	213,987	33,700,479
Geographic markets			
The PRC	32,836,910	175,104	33,012,014
Others	649,582	38,883	688,465
Total	33,486,492	213,987	33,700,479
Timing of revenue recognition			
A point in time	32,097,123	213,987	32,311,110
Over time	1,389,369	—	1,389,369
Total	33,486,492	213,987	33,700,479

6. REVENUE AND SEGMENT INFORMATION (Continued)

Revenue (Continued)

(i) Disaggregation of revenue from contracts with external customers (Continued)

Year ended 31 December 2022

	Continuing operations			Discontinued operation	
Segments	Solar material business RMB'000	Solar farm business RMB'000	Sub-total RMB'000	New energy business RMB'000	Total RMB'000
Types of goods or services					
Sales of wafer	14,045,577	—	14,045,577	—	14,045,577
Sales of electricity	—	216,970	216,970	604,712	821,682
Sales of polysilicon	17,661,338	—	17,661,338	—	17,661,338
Processing fees	2,793,280	—	2,793,280	—	2,793,280
Operation and management service and solar related supporting services incomes	—	—	—	214,857	214,857
Others (comprising the sales of ingots)	1,213,320	—	1,213,320	—	1,213,320
Total	35,713,515	216,970	35,930,485	819,569	36,750,054
Geographic markets					
The PRC	35,081,291	177,014	35,258,305	752,290	36,010,595
Others	632,224	39,956	672,180	67,279	739,459
Total	35,713,515	216,970	35,930,485	819,569	36,750,054
Timing of revenue recognition					
A point in time	32,920,235	216,970	33,137,205	604,712	33,741,917
Over time	2,793,280	—	2,793,280	214,857	3,008,137
Total	35,713,515	216,970	35,930,485	819,569	36,750,054

6. REVENUE AND SEGMENT INFORMATION (Continued)

Revenue (Continued)

(ii) Performance obligations from contracts with customers

Continuing operations

Revenue from the manufactures and sales of polysilicon, wafer, ingots and industrial silicon are recognised at a point in time upon goods are delivered and titles have passed. The Group generally grants credit period of approximately one month to customers from the invoice date. For those customers with continuous business relationships, the Group generally would enter into supply framework contracts and receive certain percentage of deposits as advance payments from these customers. Advances from customers are recognised as revenue upon orders are fulfilled. Sales agreements typically do not contain product warranties except for return and replacement of defective products within 30 days from delivery.

Processing income are recognised over time and measured based on output method upon sawing and cutting services are rendered to customers. The Group generally grants credit period of approximately one month to customers from the invoice date.

Revenue arising on sales of electricity of solar farm business is recognised at a point in time. Substantially, all of the revenue is derived from electricity sales to local grid companies in the PRC and customer in the USA for the years ended 31 December 2023 and 2022.

Discontinued operation

For sales of electricity and tariff adjustments, substantially all of the revenue is derived from electricity sales to local grid companies in the PRC for the year ended 31 December 2022. The GNE Group generally entered into power purchase agreements with local grid companies with a term of one to five years which stipulate the price of electricity per watt hour. Revenue is recognised when control of the electricity has been transferred, being at the point when electricity has been generated and transmitted to the customer and the amount included tariff adjustments of approximately RMB324,089,000 recognised during the year ended 31 December 2022. Except for trade receivables and contract assets relating to tariff adjustment, the GNE Group generally grants credit period of approximately one month to customers from the date of invoice in accordance with the relevant power purchase agreements between the GNE Group and the respective local grid companies or oversea customers. The GNE Group will complete the remaining performance obligations in accordance with the relevant terms as stipulated in the power purchase agreements and the remaining aggregated transaction price will be equal to the quantity of electricity that can be generated and transmitted to the customers times the stipulated price per watt hour.

The financial resource for the tariff adjustment is the national renewable energy fund that is accumulated through a special levy on the consumption of electricity of end users. The PRC government is responsible to collect and allocate the fund to the respective state-owned grid companies for settlement to the solar power companies. Effective from March 2012, the application, approval and settlement of the tariff adjustment are subject to certain procedures as promulgated by Caijian 2012 No. 102 Notice on the Interim Measures for Administration of Subsidy Funds for Tariff Premium of Renewable Energy (可再生能源電價附加輔助資金管理暫行辦法). Caijian 2013 No. 390 Notice issued in July 2013 further simplified the procedures of settlement of the tariff adjustment.

6. REVENUE AND SEGMENT INFORMATION (Continued)

Revenue (Continued)

(ii) Performance obligations from contracts with customers (Continued)

Discontinued operation (Continued)

In January 2020, the Several Opinions on Promoting the Healthy Development of Non-Hydro Renewable Energy Power Generation (Caijian 2020 No. 4)*《關於促進非水可再生能源發電健康發展的若干意見》(財建20204號) and the Measures for Administration of Subsidy Funds for Tariff Premium of Renewable Energy (Caijian 2020 No. 5)*《財政部國家發展改革委國家能源局關於印發〈可再生能源電價附加資金管理辦法〉的通知》(財建20205號) (the" 2020 Measures") were jointly announced by the Ministry of Finance, National Development and Reform Commission and National Energy Administration. In accordance with the new government policy as stipulated in the 2020 Measures, the PRC government has simplified the application and approval process regarding the registration of tariff adjustments for non-hydro renewable energy power plant projects into the Renewable Energy Tariff Subsidy List (可再生能源發電補助項目清單, the" List"). The state-owned grid companies will regularly announce the list based on the project type, time of grid connection and technical level of the solar power projects. For those on-grid solar power projects which have already started operation but yet to register into the List, these on-grid solar power projects are entitled to enlist into the List once they have met the conditions as stipulated on the Administration of Subsidy Funds for Tariff Premium of Renewable Energy (可再生能源電價附加資金管理辦法) and completed the submission and application in the Platform.

Tariff adjustments are recognised as revenue and due from grid companies in the PRC in accordance with the relevant power purchase agreements.

For those tariff adjustments that are subject to approval for registration in the List by the PRC government at the end of reporting period, the relevant revenue from these tariff adjustments are considered variable considerations, and are recognised only to the extent that it is highly probable that a significant reversal will not occur and are included in contract assets. Management assessed that all of the GNE Group's operating solar power plants have qualified and met all the requirements and conditions as required based on the prevailing nationwide government policies on renewable energy for solar power plants. The contract assets are transferred to trade receivables upon the relevant solar power plants obtained the approval for registration in the List or when the relevant solar power plants is enlisted in the List since the release of the 2020 Measures.

* English name for identification only

6. REVENUE AND SEGMENT INFORMATION (Continued)

Revenue (Continued)

(ii) Performance obligations from contracts with customers (Continued)

Discontinued operation (Continued)

Since certain of the tariff adjustments were yet to obtain approval for registration in the List by the PRC government, the management considered that it contained a significant financing component over the relevant portion of the tariff adjustments until settlement of the trade receivables. For the year ended 31 December 2022, the respective tariff adjustments were adjusted for this financing component based on an effective interest rate ranging from 2.11% to 2.37% per annum and the adjustments in relation to the revision of the expected timing of tariff collection. As such, the GNE Group's revenue was adjusted by approximately RMB39 million and interest income amounting to approximately RMB10 million was recognised.

Operation and management service income represents the service income from the provision of the solar power plants operation and management services.

Solar related supporting services income represents the income from sales of solar modules with related supporting services. The GNE Group generally requires customers to provide 10% to 20% of the agreed consideration of specified goods or services as upfront deposits and the remainder of the consideration is payable before seven to ten days the solar modules are delivered. The GNE Group would complete the performance obligations in accordance with the relevant terms as stipulated in the contracts.

6. REVENUE AND SEGMENT INFORMATION (Continued)

Revenue (Continued)

(iii) Transaction price allocated to the remaining performance obligation for contracts with customers

For contracts on sales of polysilicon, wafer, ingots and industrial silicon products, the Group will complete the performance obligations in accordance with the relevant terms as stipulated in the supply contracts.

For contracts on sales of electricity, the Group will complete the remaining performance obligations in accordance with the relevant terms as stipulated in the power purchase agreements and the remaining aggregated transaction price will equal to the quantity of electricity that can be generated and transmitted to the customers times the stipulated price per watt hour.

Geographical information

The Group's revenue from external customers by customer's location and information about its non-current assets by location of the assets are detailed below:

	Revenue from external customers					Non-current assets*	
	Continuing operations RMB'000	**2023 RMB'000**	Continuing operations RMB'000	Discontinued operation RMB'000	2022 RMB'000	**2023 RMB'000**	2022 RMB'000
The PRC	**33,012,014**	**33,012,014**	35,258,306	752,290	36,010,596	**42,503,679**	43,706,426
Taiwan	**13,619**	**13,619**	88,976	—	88,976	**—**	—
Korea	**38,214**	**38,214**	76,846	—	76,846	**—**	—
India	**255,737**	**255,737**	105,472	—	105,472	**—**	—
Vietnam	**171,638**	**171,638**	175,425	—	175,425	**—**	—
The USA	**38,883**	**38,883**	39,956	67,279	107,235	**273,023**	294,821
Cambodia	**170,374**	**170,374**	117,791	—	117,791	**—**	—
South Africa	**—**	**—**	—	—	—	**25,949**	12,161
Others	**—**	**—**	67,713	—	67,713	**172,531**	295,340
	33,700,479	**33,700,479**	35,930,485	819,569	36,750,054	**42,975,182**	44,308,748

* Non-current assets excluded deferred tax assets and financial instruments.

6. REVENUE AND SEGMENT INFORMATION (Continued)

Information about major customers

For the year ended 31 December 2023, the revenue from the largest customer in total accounted for 15.8% (2022: 16.6% of the total revenue from continuing operations and discontinued operation) of the Group's revenue, which was the only customer contributing over 10% of the total revenue of the Group and was derived from solar material business.

7. OTHER INCOME

	2023 RMB'000	2022 RMB'000
Continuing operations		
Government grants (note 36)	312,368	105,292
Bank and other interest income and other related income	240,213	100,809
Sales of scrap materials	396,272	708,179
Management and consultancy fee income	15,046	7,799
Rental and rental related income from related companies	76,579	26,947
Rental income	13,062	14,752
Write-back of other payables	7,652	3,257
Compensation income	18,701	694
Recovery of bad debt written off	—	5,424
Others	4,238	2,478
	1,084,131	975,631

8. FINANCE COSTS

	2023 RMB'000	2022 RMB'000
Continuing operations		
Interest on financial liabilities at amortised cost		
— bank and other borrowings	482,391	215,567
— loans from related companies	45,107	4,440
— other financial liabilities	42,743	15,859
Interest on lease liabilities	10,380	14,554
Total borrowing costs	580,621	250,420
Less: interest capitalised	(162,784)	(10,913)
	417,837	239,507

Interest expenses capitalised on qualifying assets represent the amount of interest bearing debts which is directly attributable to the acquisition of property, plant and equipment and was capitalised as the cost of property, plant and equipment.

9. REVERSAL OF IMPAIRMENT LOSSES (IMPAIRMENT LOSSES) UNDER EXPECTED CREDIT LOSS MODEL, NET

	2023 RMB'000	2022 RMB'000
Continuing operations		
Impairment losses reversed (recognised), net, in respect of		
— trade receivables – goods and services	8,855	301,008
— other receivables	128,116	(65,153)
	136,971	235,855

Details of impairment assessment are set out in note 41.

10. OTHER EXPENSES, GAINS AND LOSSES, NET

	2023 RMB'000	2022 RMB'000
Continuing operations		
Research and development costs	**1,872,796**	1,685,721
Exchange losses (gains), net	**25,105**	(139,971)
(Gain) loss on fair value change of investments at FVTPL	**(53,914)**	81,050
Loss (gain) on fair value change of held for trading investments	**390**	(392)
(Gain) loss on fair value change of derivative financial instruments (note 35)	**(82,368)**	3,604
Loss (gain) on fair value change of convertible bond payable	**11,805**	(11,773)
Impairment loss on property, plant and equipment (note 17)	**1,128,134**	804,115
(Gain) loss on disposal of property, plant and equipment	**(30,685)**	164,793
Gain on disposal/partial disposal/deemed disposal of associates	**(201,596)**	(201,537)
Gain on disposal of subsidiaries, net	**—**	(41,248)
Loss on disposal of and impairment loss on interest in an associate (note 21)	**3,189,789**	—
	5,859,456	2,344,362

11. INCOME TAX EXPENSE

	2023 RMB'000	2022 RMB'000
Continuing operations		
PRC Enterprise Income Tax ("EIT")		
Current tax	663,585	1,193,390
Overprovision in prior years	(92,024)	(20,326)
PRC dividend withholding tax	30,000	—
	601,561	1,173,064
USA Federal and State Income Tax		
Current tax	—	118
(Overprovision)/underprovision in prior years	(12)	26
	(12)	144
Deferred tax (note 24)	373,257	706,812
	974,806	1,880,020

The PRC EIT for the year represents income tax in the PRC which is calculated at the prevailing tax rate on the taxable income of subsidiaries in the PRC.

Under the Law of the PRC on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, the tax rate of the PRC subsidiaries is 25% for both years, except for those subsidiaries described below. The overprovision of EIT in prior years arose mainly as a result of completion of tax clearance procedures by certain PRC subsidiaries with the respective tax authorities.

11. INCOME TAX EXPENSE (Continued)

Certain subsidiaries operating in the PRC have been accredited as a "High and New Technology Enterprise" for a term of three years, and have been registered with the local tax authorities for enjoying the reduced 15% EIT rate. Accordingly, the profits derived by these subsidiaries are subject to 15% EIT rate. The qualification as a High and New Technology Enterprise will be subject to annual review by the relevant tax authorities in the PRC.

Federal and State income tax rates in the USA were calculated at 21% and 8.84%, respectively, for both years.

Hong Kong Profits Tax is calculated at 16.5% of the estimated assessable profit for both years.

The Group's subsidiaries, associates and joint ventures that are tax residents in the PRC are subject to the PRC dividend withholding tax of 5% or 10% for those non-PRC tax resident immediate holding companies registered in Hong Kong and the British Virgin Islands ("BVI"), respectively, when and if undistributed earnings are declared to be paid as dividends out of profits that arose on or after 1 January 2008. Net deferred tax expenses of approximately RMB187,834,000 in respect of withholding tax on undistributed profits was debited to profit or loss during the current year (2022: RMB610,518,000).

The tax charge for the year can be reconciled to the profit before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	2023 RMB'000	2022 RMB'000
Continuing operations		
Profit before tax from continuing operations	4,301,910	18,302,602
Tax at PRC EIT rate of 25% (Note)	1,075,477	4,575,651
Tax effect of expenses not deductible for tax purpose	568,101	1,527,927
Tax effect of income not taxable for tax purpose	(117,350)	(734,153)
Tax effect of share of profits of associates	(50,798)	(1,029,137)
Tax effect of share of losses of joint ventures	3,080	21,971
Tax effect of deductible temporary difference not recognised	(155,907)	(164,801)
Tax effect of tax losses not recognised	304,930	423,848
Utilisation of tax losses previously not recognised	(296,547)	(351,371)
Effect of tax exemption and tax concessions granted to certain subsidiaries in the PRC	(451,978)	(2,980,133)
Effect of different tax rates of group companies operating in jurisdictions other than the PRC	—	—
Withholding tax on undistributed profits	187,834	610,518
Overprovision in prior years, net	(92,036)	(20,300)
Income tax expense for the year	974,806	1,880,020

Note: The PRC EIT rate is used as it is the domestic tax in the jurisdiction where the operation of the Group is substantially based.

12. PROFIT FOR THE YEAR

	2023 RMB'000	2022 RMB'000
Continuing operations		
Profit for the year has been arrived at after charging (crediting) the following items:		
Staff costs, including directors' remuneration		
Salaries, wages and other benefits	2,338,213#@	1,752,682#@
Retirement benefits scheme contributions	175,054	131,457
Depreciation of property, plant and equipment (Note 17)	3,201,730	1,778,717
Depreciation of right-of-use assets (Note 18)	184,979	177,240
Depreciation of investment properties (Note 19)	20,318	17,085
Amortisation of intangible assets (Note 20)	34,512	33,682
Total depreciation and amortisation	3,441,539	2,006,724
Less: amounts absorbed in opening and closing inventories, net	(92,833)	(50,237)
	3,348,706*	1,956,487*
Auditors' remuneration		
– audit services	9,800	10,150
– other services	2,100	3,300
	11,900	13,450

Cost of inventories included staff costs of approximately RMB935,665,000 (2022: RMB792,960,000).

* The amounts absorbed in inventories sold approximately RMB2,671,206,000 (2022: RMB1,411,830,000).

@ Salaries, wages and other benefits included share-based payment expenses of approximately RMB152,801,000 (2022: RMB185,068,000).

13. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS

Directors' and Chief Executive's remuneration for the year, disclosed pursuant to the applicable Listing Rules and Hong Kong Companies Ordinance, is as follows:

Year ended 31 December 2023

Name of Director	Directors' fee RMB'000	Salaries and other benefits RMB'000	Performance-related bonuses RMB'000	Retirement benefits scheme contributions RMB'000	Share-based payments-share award RMB'000	Total RMB'000
Executive Directors (Note a)						
Mr. ZHU Gongshan	—	6,842	50,000	14	5,745	62,601
Mr. ZHU Yufeng (Note c)	—	1,800	25,000	83	3,192	30,075
Mr. ZHU Zhanjun (Note d)	—	4,013	19,200	181	3,009	26,403
Mr. LAN Tianshi (Note e)	—	4,008	40,000	166	4,201	48,375
Ms. SUN Wei	—	4,513	19,000	315	3,009	26,837
Mr. YEUNG Man Chung, Charles	—	4,501	8,283	125	2,736	15,645
Independent Non-executive Directors (Note b)						
Dr. HO Raymond Chung Tai	804	—	—	—	456	1,260
Mr. YIP Tai Him	600	—	—	—	456	1,056
Dr. SHEN Wenzhong	391	—	—	—	456	847
	1,795	25,677	161,483	884	23,260	213,099

13. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS (Continued)

Year ended 31 December 2022

Name of Director	Directors' fee RMB'000	Salaries and other benefits RMB'000	Performance-related bonuses RMB'000	Retirement benefits scheme contributions RMB'000	Share-based payments-share award RMB'000	Total RMB'000
Executive Directors (Note a)						
Mr. ZHU Gongshan	—	6,816	50,000	166	4,444	61,426
Mr. ZHU Yufeng (Note c)	—	4,114	20,000	83	2,469	27,301
Mr. ZHU Zhanjun (Note d)	—	4,013	13,200	132	2,327	19,672
Mr. LAN Tianshi (Note e)	—	3,053	32,000	136	5,744	40,933
Ms. SUN Wei	—	4,782	12,150	207	2,328	19,830
Mr. YEUNG Man Chung, Charles	—	4,774	8,530	124	2,116	15,726
Mr. ZHENG Xiongjiu (Note f)	—	—	269	—	—	269
Independent Non-executive Directors (Note b)						
Dr. HO Raymond Chung Tai	839	—	—	—	353	1,192
Mr. YIP Tai Him	624	—	—	—	353	977
Dr. SHEN Wenzhong	409	—	—	—	353	762
Mr. WONG Man Chung, Francis (Note g)	105	—	—	—	—	105
	1,977	27,552	136,149	848	20,487	188,193

Note a: The executive directors' emoluments shown above were for their services in connection with the management of the affairs of the Company and the Group.

Note b: The independent non-executive directors' emoluments shown above were for their services as directors of the Company.

Note c: On 9 September 2022, Mr. Zhu Yufeng has been appointed as a Vice Chairman of the Company.

Note d: Mr. Zhu Zhanjun was also the Chief Executive Officer of the Company during the year ended 31 December 2022 and his emoluments disclosed above include those for services rendered by him as the Chief Executive Officer. On 21 February 2022, Mr. Zhu Zhanjun has been appointed as a Vice Chairman of the Company and redesignated as a Joint Chief Executive Officer of the Company.

Note e: On 21 February 2022, Mr. Lan Tianshi has been appointed as an executive director and a Joint Chief Executive Officer of the Company.

Note f: On 18 August 2022, Mr. Zheng Xiongjiu has resigned as an executive director of the Company.

Note g: On 31 May 2022, Mr. Wong Man Chung, Francis has resigned as an independent non-executive director of the Company.

13. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS (Continued)

Bonuses are discretionary and are based on the performance of the Group or its subsidiaries for the year.

During the year ended 31 December 2022, nine directors of the Company were granted award shares, in respect of their services to the Group, under the share award scheme of the Company, further details of which are set out in note 46 to the financial statements. The fair values of such shares awarded, which have been recognised in the consolidated statement of profit or loss over the vesting period, were determined as at the date of grant and the amounts included in the financial statements for the years ended 31 December 2023 and 2022 are included in the above directors' and chief executive's remuneration disclosures.

There was no arrangement under which a director or the Chief Executive waived or agreed to waive any remuneration during both years.

No other directors waived any emoluments and no incentive paid on joining and no compensation for the loss of office during both years.

14. FIVE HIGHEST PAID EMPLOYEES AND COMPENSATION OF KEY MANAGEMENT PERSONNEL

(a) Five highest paid employees

The five highest paid employees of the Group during the year included five directors (2022: five directors), details of whose remuneration are set out in note 13.

14. FIVE HIGHEST PAID EMPLOYEES AND COMPENSATION OF KEY MANAGEMENT PERSONNEL (Continued)

(b) Compensation of key management personnel

The remuneration of senior management personnel, comprising Directors' and Chief Executive's remuneration during the year was as follows:

	2023	2022
	RMB'000	RMB'000
Short-term benefits	**188,955**	166,858
Post-employment benefits	**884**	848
Share-based payments	**23,260**	20,487
	213,099	188,193

The remuneration of the Directors and other key executives was determined by the remuneration committee having regard to the performance of individuals and market trends.

15. DIVIDEND

		2023	2022
		RMB'000	RMB'000
(i)	Dividends payable to equity shareholders of the Company attributable to the year:		
	Special interim dividend by way of distribution of shares in GNE (Note a)	**—**	1,963,482
	Final dividend proposed after the end of the reporting period for the year ended 31 December 2022 of HK$6.0 cents per ordinary share (Note b)	**—**	1,423,154
		—	3,386,636
(ii)	Dividends payable to equity shareholders of the Company attributable to previous financial year, approved and paid during the year:		
	Final dividend in respect of the previous financial year, approved and paid during the year of HK$6.0 cents per ordinary share	**1,439,723**	—

Note:

(a) On 30 August 2022, a conditional special interim dividend was declared by the Board of the Company through a distribution in specie of 8,639,024,713 ordinary shares of GNE ("DIS shares") (approximately 31% of the issued capital of GNE) on the basis of 318 GNE shares for every 1,000 shares of the Company held by the shareholders of the Company ("Distribution in Specie"). The resolutions in relation to Distribution in Specie were passed by shareholders of the Company at the extraordinary general meeting held on 22 September 2022 and the DIS shares were distributed to the shareholders of the Company during the year ended 31 December 2022. Further details of Distribution in Specie are disclosed note 39(B)(i)(a).

(b) The final dividend proposed after the end of the reporting period for the year ended 31 December 2022 of RMB1,423,154,000 was calculated based on the total number of shares (adjusted for the ordinary shares held by the Trustee pursuant to the share award scheme) and the currency exchange rate as the date of approval of the audited financial statements for the year ended 31 December 2022.

(c) The Board of the Company did not recommend payment of any dividend for the year ended 31 December 2023.

16. EARNINGS PER SHARE

(a) From continuing and discontinued operations

The calculation of the basic and diluted earnings per share attributable to owners of the Company is based on the following data:

	2023 RMB'000	2022 RMB'000
Earnings		
Earnings for the purpose of basic and diluted earnings per share (Profit for the year attributable to owners of the Company)	2,510,076	16,030,307

	2023 '000	2022 '000
Weighted average number of ordinary shares		
Issued ordinary shares at 1 January	27,108,498	27,099,010
Effect of shares held by the Group under the Scheme (as defined in note 46(a)(II))	(502,352)	(377,163)
Effect of treasury shares	(92,911)	(247)
Effect of share options exercised	272	4,744
Weighted average number of ordinary shares at 31 December	26,513,507	26,726,344

	2023 '000	2022 '000
Number of shares		
Weighted average number of ordinary shares for the purpose of basic earnings per share	26,513,507	26,726,344
Effect of dilutive potential ordinary shares		
— Share options	10,295	25,403
— Share awards scheme	18,649	28,991
Weighted average number of ordinary shares for the purpose of diluted earnings per share	26,542,451	26,780,738

For the years ended 31 December 2023 and 2022, the weighted average number of ordinary shares for the purpose of calculation of basic earnings per share had been adjusted for (i) the effect of the ordinary shares held by the Trustee pursuant to the Scheme, (ii) the effect of the treasury shares purchased by the Group from market and (iii) the effect of share options exercised.

16. EARNINGS PER SHARE (Continued)

(a) From continuing and discontinued operations (Continued)

Diluted earnings per share for the years ended 31 December 2023 and 2022 is calculated by adjusting the weighted average number of ordinary shares in issue during the period with the weighted average number of ordinary shares deemed to be issued or transferred assuming the dilutive impact of certain share options and award shares granted. In addition, certain share options and award shares granted were not assumed to be exercised as they would have an anti-dilutive impact on the earnings per share.

Diluted earnings per share for the year ended 31 December 2023 and 2022 did not assume the exercise of share options granted by GNE since the exercise would result in increase in earnings per share for 2023 and 2022. In addition, the convertible bond issued and put options granted by a subsidiary to non-controlling shareholders of this subsidiary have either anti-dilutive effect or insignificant dilutive effect on the earnings per share for the years ended 31 December 2023 and 2022.

(b) From continuing operations

The calculation of basic and diluted earnings per share from continuing operations attributable to the owners of the Company is based on the following data:

	2023 **RMB'000**	2022 RMB'000
Earnings figures are calculated as follows:		
Profit for the year attributable to owners of the Company	**2,510,076**	16,030,307
Add: Loss for the year from discontinued operation attributable to owners of the Company	**—**	363,361
Earnings for the purpose of basic and diluted earnings per share (Profit for the year from continuing operations attributable to owners of the Company)	**2,510,076**	16,393,668

(c) For discontinued operation

For the year ended 31 December 2022

Basic loss per share from discontinued operation for the year ended 31 December 2022 is RMB1.36 cents per share based on the loss for the year from the discontinued operation attributable to owners of the Company of RMB363,361,000 and the denominator set out above for basic earnings per share.

Diluted loss per share from discontinued operation for the year ended 31 December 2022 is RMB1.35 cents per share based on the loss for the year from discontinued operation attributable to owners of the Company of RMB363,361,000 and the denominators set out above for diluted earnings per share.

17. PROPERTY, PLANT AND EQUIPMENT

	Buildings RMB'000	Plant and machinery RMB'000	Aircraft RMB'000	Office equipment RMB'000	Motor vehicles RMB'000	Construction in progress RMB'000	Total RMB'000
COST							
At 1 January 2022	6,851,755	34,270,422	176,135	615,507	139,167	2,290,301	44,343,287
Additions	732,248	4,597,129	—	136,406	92,013	10,765,226	16,323,022
Transfer	1,532,744	4,787,022	—	4,916	4,656	(6,329,338)	—
Transfer from right-of-use assets	—	1,557,162	—	—	—	—	1,557,162
Disposal	(277,240)	(4,186,220)	—	(29,369)	(12,493)	—	(4,505,322)
Disposed on disposal of subsidiaries	(24,526)	(1,340,346)	—	(1,698)	(1,145)	—	(1,367,715)
Disposal upon Distribution in Specie	(331,984)	(5,978,204)	—	(125,734)	(16,417)	(668,363)	(7,120,702)
Transfer to investment property	(351,514)	—	—	—	—	—	(351,514)
Effect of foreign currency exchange difference	—	171,674	—	—	—	—	171,674
At 31 December 2022	8,131,483	33,878,639	176,135	600,028	205,781	6,057,826	49,049,892
Additions	—	102,476	—	40,873	79,467	12,509,764	12,732,580
Transfer	2,362,198	12,495,256	—	120,253	17,914	(14,995,621)	—
Disposal	(468,358)	(5,683,271)	—	(314,621)	(8,430)	(3,306)	(6,477,986)
Transfer to investment property	(7,727)	—	—	—	—	—	(7,727)
Effect of foreign currency exchange difference	—	9,998	—	—	—	—	9,998
At 31 December 2023	10,017,596	40,803,098	176,135	446,533	294,732	3,568,663	55,306,757
ACCUMULATED DEPRECIATION AND IMPAIRMENT							
At 1 January 2022	2,491,620	22,310,679	38,914	211,135	96,506	901,897	26,050,751
Depreciation expense	335,635	1,478,296	24,577	129,310	22,087	—	1,989,905
Eliminated on disposals of assets	(192,824)	(4,056,781)	—	(20,944)	(9,563)	—	(4,280,112)
Eliminated on disposals of subsidiaries	(6,573)	(377,489)	—	(1,289)	(1,004)	—	(386,355)
Impairment losses recognised in profit and loss	2,307	1,005,143	—	41,320	—	—	1,048,770
Effect of foreign currency exchange difference	—	46,222	—	—	—	—	46,222
Eliminated on disposal upon Distribution in Specie	(44,929)	(1,902,953)	—	(42,066)	(10,155)	(591,732)	(2,591,835)
Transfer from right-of-use assets	—	654,284	—	—	—	—	654,284
Transfer to investment property	(12,430)	—	—	—	—	—	(12,430)
At 31 December 2022	2,572,806	19,157,401	63,491	317,466	97,871	310,165	22,519,200
Depreciation expense	602,062	2,328,664	24,576	193,292	53,136	—	3,201,730
Eliminated on disposals	(452,046)	(5,680,268)	—	(187,472)	(7,529)	(3,306)	(6,330,621)
Impairment losses recognised in profit and loss	156,753	952,760	—	17,510	1,111	—	1,128,134
Transfer to investment property	(550)	—	—	—	—	—	(550)
Effect of foreign currency exchange difference	—	5,132	—	—	—	—	5,132
At 31 December 2023	2,879,025	16,763,689	88,067	340,796	144,589	306,859	20,523,025
CARRYING AMOUNTS							
At 31 December 2023	7,138,571	24,039,409	88,068	105,737	150,143	3,261,804	34,783,732
At 31 December 2022	5,558,677	14,721,238	112,644	282,562	107,910	5,747,661	26,530,692

17. PROPERTY, PLANT AND EQUIPMENT (Continued)

The above items of property, plant and equipment, except for construction in progress, are depreciated on a straight-line basis at the following rates per annum:

Buildings	Over the shorter of lease terms or 2%–8.33%
Plant and machinery	4%–25% or % calculated based on license period
Aircraft	$6^{2}/_{3}\%$
Office equipment	20%–33%
Motor vehicles	20%–30%

Impairment loss on solar material business segment

Year ended 31 December 2023

In face of the new energy changes and market challenges, the Director resolved that the Group will withdraw from the production of rod silicon with high cost and shift the limited production capacity to granular silicon with high profit margin so as to maximize the Group's profit with limited production capacity. During the year ended 31 December 2023, the Directors resolved that the production of rod silicon will be completely suspended by June 2023. The Directors conducted a review of the recoverable amount of the property, plant and equipment belonged to rod silicon business based on the scrap value. Additionally certain property, plant and equipment became obsolete. Accordingly, an impairment loss of approximately RMB1,128 million was recognised in respect of the relevant property, plant and equipment of the solar material business segment for the year ended 31 December 2023.

Year ended 31 December 2022

In face of the new energy changes and market challenges, the Director resolved that the Group will withdraw from the production of rod silicon with high cost in an orderly manner and shift the limited production capacity to granular silicon with high profit margin so as to maximize the Group's profit with limited production capacity. During the year ended 31 December 2022, the Directors resolved that the production of rod silicon will be completely suspended by the end of 2023 (the "Suspension"). The Directors conducted a review of the recoverable amount of the cash generating unit ("CGU") of the rod silicon business unit in solar material segment to which the property, plant and equipment belonged as at 31 December 2022. The recoverable amount of this CGU has been determined based on a value in use calculation with reference to the valuation report of an independent valuer. The management used cash flow projections based on an existing cashflow forecast approved by the Directors covering the period until the Suspension with a pre-tax discount rate of 10.2%. Another key assumption for the value in use calculated was based on the budgeted gross margin, which is determined based on the CGU's past performance and management expectations before the Suspension.

17. PROPERTY, PLANT AND EQUIPMENT (Continued)

Impairment loss on solar material business segment (Continued)

Year ended 31 December 2022 (Continued)

Based on the results of the assessment, the Directors determined that the recoverable amount of the CGU is lower than its carrying amount. The impairment amount has been allocated to each category of each property, plant and equipment such that the carrying amount of each category of asset is not reduced below the highest of its fair value less cost of disposal, its value in use and zero. Based on the value in use calculation and the allocation, impairment loss of approximately RMB804 million has been recognised against the property, plant and equipment within the relevant functions to which the assets relate.

Impairment loss on new energy business segment

Year ended 31 December 2022

The modules of certain photovoltaic solar power plants of GNE in the United States were confirmed as damaged after the inspection in 2022. Accordingly, based on the extent of damage and the impact on production volume the management estimated that an impairment loss of approximately RMB243,550,000 was recognised for the respective property, plant and equipment for the year ended 31 December 2022.

* English name for identification only

18. RIGHT-OF-USE ASSETS

	Leasehold lands RMB'000	Plant and machinery RMB'000	Properties RMB'000	Rooftops RMB'000	Others RMB'000	Total RMB'000
As at 31 December 2023						
Carrying amount	1,478,179	—	53,418	—	9,855	1,541,452
As at 31 December 2022						
Carrying amount	1,440,667	—	86,824	—	43,487	1,570,978
For the year ended 31 December 2023						
Depreciation charge	(52,010)	—	(93,683)	—	(39,286)	(184,979)
Disposal	(37,415)	—	—	—	—	(37,415)
For the year ended 31 December 2022						
Depreciation charge	(61,915)	(42,426)	(47,379)	(1,593)	(49,493)	(202,806)
Eliminated on disposals of subsidiaries	(16,206)	—	—	(12,147)	(6)	(28,359)
Transfer to property, plant and equipment	—	(902,878)	—	—	—	(902,878)
Transfer to asset held for sale	(9,897)	—	—	—	(220)	(10,117)
Disposal	(20,900)	—	—	—	—	(20,900)
Disposal upon Distribution in Specie	(199,666)	—	(13,022)	(11,255)	—	(223,943)

18. RIGHT-OF-USE ASSETS (Continued)

	2023 RMB'000	2022 RMB'000
Expenses relating to short-term leases	**(32,424)**	(14,942)
Total cash outflow for leases	**(240,100)**	(1,042,007)
Additions to right-of-use assets	**192,752**	726,106
Early termination of a lease	**—**	(59,952)
Effect of foreign currency exchange differences	**116**	(5,209)

For both years, the Group leased lands, plant and machinery, properties, rooftops and other equipment for its operations. Lease contracts were entered into for terms ranging from 2 to 50 years, and contained extension options as described below. Lease terms were negotiated on an individual basis and contained a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applied the definition of a contract and determined the period for which each contract was enforceable.

In addition, the Group owns several leasehold lands where its manufacturing facilities, solar farms and office buildings are primarily located. The Group is the registered owner of these property interests.

The Group regularly enters into short-term leases for offices, motor vehicles and staff quarters. As at 31 December 2023 and 2022, the portfolio of short-term leases is similar to the portfolio of short-term leases for which the short-term lease expense is as disclosed above.

The Group has extension options in a number of leases for the leasehold lands and properties. These are used to maximise operational flexibility in terms of managing the assets used in the Group's operations. The majority of extension options held are exercisable only by the Group and not by the respective lessors.

18. RIGHT-OF-USE ASSETS (Continued)

The Group assessed at lease commencement date whether it was reasonably certain to exercise the extension options. The Group was reasonably certain to exercise the extension options in leases for the leasehold lands and was not reasonably certain whether to exercise the extension options in leases for the properties. As at 31 December 2023 and 2022, no lease liabilities with the exercise of extension options were recognised. The potential exposures to these future lease payments for extension options in which the Group was not reasonably certain to exercise are summarised below:

	Lease liabilities recognised as at 31 December 2023 RMB'000	**Potential future lease payments not included in lease liabilities (undiscounted) 31 December 2023 RMB'000**	Lease liabilities recognised as at 31 December 2022 RMB'000	Potential future lease payments not included in lease liabilities (undiscounted) 31 December 2022 RMB'000
Properties — the PRC	—	—	43,571	225,000

In addition, the Group reassesses whether it is reasonably certain to exercise an extension option upon the occurrence of either a significant event or a significant change in circumstances that is within the control of the lessee. During both years, there was no such triggering event.

Details of the lease maturity analysis of lease liabilities are set out in notes 34 and 41b.

Sale and leaseback transactions – seller-lessee

To better manage the Group's capital structure and financing needs, the Group sometimes enters into sale and leaseback arrangements in relation to machinery leases. The transfer of legal title to the solar farms, plant and equipment does not satisfy the requirements of IFRS standards to be accounted for as a sale of the solar farms, plant and equipment. During the years ended 31 December 2023 and 2022, there were no new borrowings in respect of such sale and leaseback arrangements. More details are set out in note 33.

19. INVESTMENT PROPERTIES

	RMB'000
COST	
As at 1 January 2022	103,279
Transfer from property, plant and equipment	351,514
As at 31 December 2022	454,793
Transfer from property, plant and equipment	7,727
As at 31 December 2023	462,520
ACCUMULATED DEPRECIATION	
As at 1 January 2022	46,785
Transfer from property, plant and equipment	12,430
Provided for the year	17,085
As at 31 December 2022	76,300
Transfer from property, plant and equipment	550
Provided for the year	20,318
As at 31 December 2023	97,168
CARRYING AMOUNTS	
As at 31 December 2023	365,352
As at 31 December 2022	378,493

The investment properties are depreciated on a straight-line basis over the shorter of the lease terms of the leasehold land or 5% per annum.

The fair value of the Group's investment properties at 31 December 2023 and 2022 was approximately RMB426,592,000 and RMB478,830,000, respectively. The fair value was valued by direct comparison approach and was determined by the Directors with reference to recent market evidence of transaction prices for similar properties in similar locations and conditions and the fair value of the properties is categorised as level 2 measurement.

In estimating the fair value of the properties, the highest and best use of the properties is their current use.

20. INTANGIBLE ASSETS

	Technical know-how RMB'000
COST	
At 1 January 2022	1,068,421
Addition	4,756
At 31 December 2022 and 31 December 2023	1,073,177
ACCUMULATED AMORTISATION AND IMPAIRMENT	
At 1 January 2022	888,551
Amortisation	33,682
At 31 December 2022	922,233
Amortisation	34,512
At 31 December 2023	956,745
CARRYING AMOUNTS	
At 31 December 2023	116,432
At 31 December 2022	150,944

Technical know-how are mainly acquired by solar material business from third parties in relation to technical know-how of hydrochlorination production techniques and hydrochlorination recycling system, fluidised bed reactor techniques, Continuous Czochralski monosilicon techniques, perovskite solar cells techniques and technical know-how on production of polysilicon and wafer products.

Technical know-how have definite useful lives and are amortised on a straight-line basis over 10 years.

The amortisation charge for the year is included in administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

21. INTERESTS IN ASSOCIATES

	2023 RMB'000	2022 RMB'000
Cost of investments in associates	**3,198,806**	6,381,326
Share of post-acquisition profits and OCI, net of dividends received	**1,590,014**	6,503,225
Perpetual notes classified as financial assets at fair value through other comprehensive income	**998,002**	2,100,467
	5,786,822	14,985,018

Details of the Group's major associates at the end of the reporting period are as follows:

Name of company	Country of incorporation/ operation	Proportion of ownership interest						Principal activities
		2023			2022			
		Company's effective interest	held by the Company	held by a subsidiary	Company's effective interest	held by the Company	held by a subsidiary	
GNE (Note a)	Bermuda/ Hong Kong	**7.44%**	**—**	**7.44%**	7.44%	—	7.44%	New energy business
新疆戈恩斯能源材料科技有限公司 Xinjiang Goens Energy Technology Co., Limited* ("Xinjiang Goens") (Note b)	PRC	**—**	**—**	**—**	38.5%	—	38.50%	Production and sale of polysilicon
徐州中平協鑫產業升級股權投資基金(有限合夥) Xuzhou Zhongping GCL Industrial Upgrading Equity Investment Fund LLP* ("Xuzhou Fund") (Note c)	PRC	**40.27%**	**—**	**40.27%**	40.27%	—	40.27%	Investment and asset management
內蒙古中環晶體材料有限公司 Inner Mongolia Zhonghuan-Crystal Material Co., Ltd.* ("Inner Mongolia Zhonghuan Crystal") (Note d)	PRC	**4.50%**	**—**	**6.42%**	4.50%	—	6.42%	Production of silicon rods
樂山市仲平多晶硅光電信息產業基金合夥企業(有限合夥) Leshan Zhongping Polysilicon Photovoltaic Information Industry Investment Fund Partnership (Limited Partnership)* ("Leshan Fund") (Note e)	PRC	**14.78%**	**—**	**14.78%**	14.78%	—	14.78%	Investment and asset management

21. INTERESTS IN ASSOCIATES (Continued)

Name of company	Country of incorporation/ operation	Proportion of ownership interest						Principal activities
		2023			2022			
		Company's effective interest	held by the Company	held by a subsidiary	Company's effective interest	held by the Company	held by a subsidiary	
樂山市中平能鑫企業管理諮詢合夥企業(有限合夥) Leshan Zhongping Nengxin Enterprise Management Consultancy Partnership (Limited Partnership)* ("Zhongping Nengxin") (Note f)	PRC	66.65%	—	66.65%	66.65%	—	66.65%	Investment and asset management
江蘇鑫華半導體材料科技有限公司 Jiangsu Xinhua Semiconductor Material Technology Co., Ltd* ("Jiangsu Xinhua") (Note g)	PRC	24.55%	—	24.55%	28.05%	—	28.05%	Production and trading of semiconductor polysilicon
徐州日晟低碳產業投資合夥企業(有限合夥) Xuzhou Risheng Low Carbon Industry Investment Partnership (Limited Partnership)* ("Xuzhou Risheng") (Note h)	PRC	49.92%	—	49.92%	—	—	—	Investment and asset management

* English name for identification only

Notes:

(a) As set out in note 15 to the financial statements, a special interim dividend by way of distribution of shares of GNE was declared by the board of directors of the Company. Upon the completion of Distribution in Specie (see note 15), the Group's effective interest in GNE were changed from 44.44% to 7.44%. The Directors consider the Group can exercise significant influence over GNE and GNE therefore becomes an associate of the Group after Distribution in Specie due to the following reasons:

(i) Upon the completion of Distribution in Specie, the Group became the third largest shareholder of GNE, and the first and the second largest shareholders of GNE are the Company's controlling shareholder and its subsidiary, respectively;

(ii) The remaining shareholdings of GNE are widely dispersed and all other investors, individually, have substantially smaller ownership interests in GNE;

(iii) Under the Bermuda Companies Act, shareholder of GNE holding not less than 5% of paid-up share capital of GNE, or not less than one hundred shareholders, may submit a written request to move a resolution at the annual general meeting. After the Distribution in Specie, the Group is one of the three shareholders that individually holds not less than 5% of paid-up share capital of GNE.

Further details of Distribution in Specie are disclosed in note 39(B)(i)(a).

As at 31 December 2023, the fair value of the 7.44% equity interest in GNE determined by the quoted market price is RMB29,130,000 (2022: RMB99,339,000).

21. INTERESTS IN ASSOCIATES (Continued)

Notes: (Continued)

(b) In 2019, the Group entered into an agreement with Xuzhou Fund (see note (c) below), an associate of the Group, to dispose of 31.5% out of its 70% equity interest in Xinjiang Goens for a consideration of approximately RMB2,490,850,000. Resolution for the disposal was duly passed by the shareholders of the Company at an extraordinary general meeting on 9 September 2019. The Group still retained significant influence over Xinjiang Goens upon completion of the disposal. Following the completion of such disposal, the Group's equity interest in Xinjiang Goens was 38.5% which is accounted for using the equity method.

On 29 December 2023, Xinjiang Goens resolved to distribute dividends ("Dividend Distribution") to some shareholders, including Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. ("Jiangsu Zhongneng"), an indirect wholly-owned subsidiary of the Company, and reduce the registered capital ("Capital Reduction") held by some shareholders, including Jiangsu Zhongneng, details of which as below.

Xinjiang Goens approved the Dividend Distribution which involves declaration of dividends of approximately RMB4,473,334,000 to Jiangsu Zhongneng, of which (1) the first tranche of approximately RMB1,993,765,000 shall be payable by Xinjiang Goens within 5 business days of (a) completion of the Capital Reduction, (b) Xinjiang Goens obtaining an updated business license, and (c) satisfaction of all the conditions of the payment of the consideration under the Capital Reduction; and (2) the second tranche of approximately RMB2,479,569,000 shall be payable to Jiangsu Zhongneng within 4 years after the completion of the Capital Reduction.

Pursuant to the Capital Reduction Agreement entered among Jiangsu Zhongneng, Xinjiang Goens, Xuzhou Fund and other shareholder, the registered capital of Xinjiang Goens will be reduced by RMB1,126,600,000 at consideration of RMB1.5 for each RMB1 registered capital, of which RMB662,200,000 was reduced from the registered capital owned by Jiangsu Zhongneng and RMB464,400,000 was reduced from the registered capital owned by other shareholder. As a result of the Capital Reduction, RMB993,300,000 was paid by Xinjiang Goens to Jiangsu Zhongneng on 29 December 2023 and the completion of Capital Reduction took place on the same date. Accordingly, Jiangsu Zhongneng cease to hold any direct equity interest in Xinjiang Goens, which is considered to be disposal of equity interest in Xinjiang Goens by the Group.

Prior to the disposal of Xinjiang Goens, the Group recorded an impairment loss on interest in Xinjiang Goens of approximately RMB2,877,868,000, including an impairment loss of goodwill included in the carrying amount of interest in Xinjiang Goens of approximately RMB2,416,798,000, by reference to a valuation report prepared by an independent professional valuer dated 11 December 2023 using an income approach with the valuation of the entire equity interests of Xinjiang Goens as of 30 September 2023 being approximately RMB14,199,761,000.

Prior to the disposal of interest in Xinjiang Goens, the carrying amount of the interest in Xinjiang Goens held by the Group amounted to RMB1,305,221,000, which is calculated using the equity method after the above-mentioned impairment of approximately RMB2,877,868,000 and after deduction of fair value of dividend receivable of approximately RMB4,162,937,000 arising from Dividend Distribution. Loss on disposal of equity interest in Xinjiang Goens of approximately RMB311,921,000 is recognised (see note 10) which is determined by the proceeds received of RMB993,300,000 arising from the Capital Reduction and the carrying amount of RMB1,305,221,000 immediately before the completion of disposal.

(c) In 2019, the Group entered into a partnership agreement as a limited partner with six independent investors to subscribe for a 40.27% equity interest in Xuzhou Fund for a consideration of RMB1,350,000,000 which was fully injected.

The investment return attributable to the Group was calculated based on the following terms as set out in the partnership agreement:

1. First round distribution: the investment return to be distributed based on the accumulated paid-up subscription capital of each partner. (the "First Distribution")

2. Second round distribution: after the First Distribution, the remaining to be distributed among the limited partners based on an annual return of 6% of the accumulated paid-up subscription capital. (the "Second Distribution")

3. Third round distribution: after the Second Distribution, the remaining to be distributed to the general partner based on an annual return of 6% of its accumulated paid-up subscription capital. (the "Third Distribution")

4. After the Third Distribution, the residual amount to be distributed was apportioned by a ratio of 20:80 among the general partner and limited partners.

Pursuant to the partnership agreement of Xuzhou Fund, two-third of the votes of the investment committee is required to direct its activities. The Group is entitled to two out of eight voting rights in the investment committee. The Directors consider that the Group can exercise significant influence over Xuzhou Fund and it is therefore classified as an associate of the Group.

During the year ended 31 December 2023, Xuzhou Fund originally held equity interests of 34.5% in Xinjiang Goens. Referring to note 21(b), after the completion of Capital Reduction on 29 December 2023, Xinjiang Goens became a subsidiary of Xuzhou Fund.

Upon the completion of Capital Reduction of Xinjiang Goens, the Group shared a loss of RMB703 million (based on investment return set out above) from the interests in associate, which was recorded in the line item of "Share of profits of associates" in the Group's consolidated statement of profit or loss and other comprehensive income.

21. INTERESTS IN ASSOCIATES (Continued)

Notes: (Continued)

(d) In November 2017, Inner Mongolia Zhonghuan Crystal was established with certain independent third parties in which the Group injected RMB900,000,000 as capital for a 30% equity interest.

In December 2019, one of the existing shareholders and other investors further injected RMB2,500,000,000 into Inner Mongolia Zhonghuan Crystal to increase its registered capital, which resulted in diluting the Group's equity interest in Inner Mongolia Zhonghuan Crystal from 30% to 17.17%.

In March 2020, the Group entered a capital injection agreement with the existing shareholders. It set out that one of the existing shareholders of Inner Mongolia Zhonghuan Crystal further injected RMB480,000,000 in total into Inner Mongolia Zhonghuan Crystal to increase its registered capital, which resulted in diluting the Group's equity interest in Inner Mongolia Zhonghuan Crystal by approximately 1%. It further sets out that the Group, after the completion of the capital injection, was entitled to 30% equity interest of a production line held by Inner Mongolia Zhonghuan Crystal ("the Production Line").

In February 2021, the Group entered into an equity transfer agreement that the Group agreed to sell 3.848% equity interest in Inner Mongolia Zhonghuan Crystal to Leshan Fund (See note (e) below) at a consideration of RMB600 million and agreed to grant a put option to Leshan Fund upon the occurrence of certain specific events. The equity transfer agreement further set out that, the Group's equity interest in the Production Line was reduced from 30% to 22.8%. The relevant gain on disposal resulting from decrease of equity interest was RMB141,449,000. Pursuant to the equity transfer agreement, Leshan Fund has the right to request the Group to repurchase its 3.848% equity interest at a premium if Inner Mongolia Zhonghuan Crystal fails to fulfil certain conditions. As this put option is a derivative financial instrument within the scope of IFRS 9, the Group measured it at fair value as at 31 December 2023 and 2022 (note 35).

Following the completion of the disposal of partial equity interest in Inner Mongolia Zhonghuan Crystal in February 2021, the Group entered into a second equity transfer agreement with Leshan Fund that the Group agreed to sell 5.775% equity interest in Inner Mongolia Zhonghuan Crystal to Leshan Fund at a consideration of RMB900 million in January 2022.

The equity transfer agreement further sets out that, upon the completion of the transaction, the Group's effective equity interest in Inner Mongolia Zhonghuan Crystal was 4.5% which was equivalent to 12% equity interest of the Production Lines. The relevant gain on disposal resulting from the transaction was RMB168,572,000 during the year ended 31 December 2022.

As at 31 December 2023 and 2022, the Group is given the right to appoint two out of seven directors on the board of Inner Mongolia Zhonghuan Crystal, the Directors considered that the Group can exercise significant influence over Inner Mongolia Zhonghuan Crystal and it is therefore continued to be classified as an associate of the Group.

(e) During 2020, the Group entered into a limited partnership agreement with certain independent third parties and an associate of the Group, Zhongping Nengxin (see note (f) below) for the establishment of an investment fund, Leshan Fund. The establishment of Leshan Fund was completed during 2021 and the Group was entitled to 23.09% equity interest in Leshan Fund. The principal activities of Leshan fund are to invest in silicon production related project in Leshan, Sichuan, and the Group's subsidiary, Leshan New Energy GCL ("樂山協鑫新能源科技有限公司").

During 2022, there were further funds injected to Leshan Fund by the Group and other partners and the Group is entitled to 14.78% equity interest in Leshan Fund after the fund injection.

Pursuant to the limited partnership agreement of Leshan Fund, the Group is given the right to appoint two out of seven directors on the investment committee which directs the investment activities of the Leshan Fund, the Directors considered that the Group can exercise significant influence over Leshan Fund and it is therefore classified as an associate of the Group.

(f) In the beginning of 2021, the Group entered into a limited partnership agreement with certain independent third parties for the establishment of an investment fund, Zhongping Nengxin. The Group was entitled to 66.7% equity interest of Zhongping Nengxin. The principal activities of Zhongping Nengxin are to invest in Leshan Fund and silicon production related projects.

Pursuant to the limited partnership agreement, the investment and operating activities of Zhongping Nengxin are solely controlled by the investment manager appointed under the limited partnership agreement, and the Group was given one-third of the voting right in the partnership meeting of Zhongping Nengxin to amend the partnership agreement. The Directors considered that the Group can exercise significant influence over Zhongping Nengxin and it is therefore classified as an associate of the Group.

21. INTERESTS IN ASSOCIATES (Continued)

Notes: (Continued)

(g) In April 2016, the Group entered into a joint venture investment agreement ("Investment Agreement") with an independent investor ("Partner"), pursuant to which the Group invested 50.98% equity interest in Jiangsu Xinhua at a consideration of RMB520,000,000 in the form of property, plant and equipment which approximated the fair values of the relevant assets at the date of transfer.

Pursuant to the Investment Agreement, the Partner has the right to request the Group to repurchase the equity interest in Jiangsu Xinhua held by the Partner at the cost of investment of the Partner plus interest at applicable rate if Jiangsu Xinhua fails to fulfil certain conditions. Further details of the put options are set out in note 35(1).

During the year 2021, the Group disposed 7.5% of its equity interest in Jiangsu Xinhua to certain independent third parties. Following the completion of the disposal, the Group's equity interest in Jiangsu Xinhua was 43.48%.

Moreover, in 2021, Jiangsu Xinhua entered into a shareholder agreement with another group of independent third parties, pursuant to which the new investors agreed to subscribe for new registered capital of 31.03% equity interest in Jiangsu Xinhua with a consideration of RMB900 million. Following the completion of the transaction, the Group's equity interest in Jiangsu Xinhua was diluted to 29.99%.

According to the Investment Agreement, the relevant activities require unanimous consent of the parties sharing control. The Directors consider that the Group can exercise joint control over Jiangsu Xinhua and it was therefore classified as a joint venture of the Group as at 31 December 2021.

During 2022, certain new independent third parties investors subscribed newly-increased registered capital of Jiangsu Xinhua of RMB102 million, representing 6.45% of equity interest of Jiangsu Xinhua for a consideration of RMB200 million. As a result, the Group's equity interest was diluted to 28.05% and relevant gain on deemed disposal recognised in the Group's profit or loss was RMB32,965,000 during the year ended 31 December 2022.

Upon the completion of the transaction, the articles of association of Jiangsu Xinhua was revised. According to the revised articles of association, the relevant activities were no longer required unanimous consent of the parties sharing control and the Group was given the right to appoint two out of nine directors of the board of directors of Jiangsu Xinhua. The Directors considered that the Group can exercise significant influence over Jiangsu Xinhua after the revision of article and association and Jiangsu Xinhua is therefore reclassified as an associate from a joint venture of the Group during the year ended 31 December 2022.

During the year ended 31 December 2023, pursuant to shareholder agreements signed by the Group and the shareholders of Jiangsu Xinhua, two existing shareholders and certain new independent third parties investors subscribed for newly-increased registered capital of Jiangsu Xinhua of RMB186 million, representing 12.5% of equity interest of Jiangsu Xinhua for a consideration of RMB1,000 million during the year ended 31 December 2023. As a result, the Group's equity interest was diluted from 28.05% to 24.55% and relevant gain on deemed disposal recognised in the Group's profit or loss was RMB182,969,000.

(h) During the year ended 31 December 2023, the Group entered into a limited partnership agreement with certain independent third parties for the establishment of an investment fund, 徐州日晟低碳產業投資合夥企業(有限合夥) ("Xuzhou Risheng"). The Group contributed RMB600,000,000 and was entitled to 49.92% equity interest of Xuzhou Risheng for the year ended 31 December 2023.

Pursuant to the limited partnership agreement, the investment and operating activities of Xuzhou Risheng are solely controlled by the investment manager appointed under the limited partnership agreement, and the Group was given one-fifth of the voting right in the partnership meeting of Xuzhou Risheng to amend the partnership agreement. The Directors considered that the Group can exercise significant influence over Xuzhou Risheng and it is therefore classified as an associate of the Group.

* English name for identification only

All of the associates are accounted for using the equity method in these consolidated financial statements.

21. INTERESTS IN ASSOCIATES (Continued)

Summarised financial information of material associates

Summarised financial information in respect of the Group's material associates, GNE, Xinjiang Goens, Inner Mongolia Zhonghuan Crystal and Xuzhou Fund, is set out below.

GNE

	2023 **RMB'000**	2022 RMB'000
Current assets	**2,526,343**	5,590,111
Non-current assets	**3,979,921**	6,573,445
Current liabilities	**(765,875)**	(1,795,802)
Non-current liabilities	**(745,735)**	(4,389,722)

	2023 **RMB'000**	From the date of completion of Distribution in Specie to 31 December 2022 RMB'000
Revenue	**831,520**	100,450
Loss for the year/period	**(964,010)**	(342,737)
Other comprehensive income (expense) for the year/period	**7,223**	(12,643)
Total comprehensive expense for the year/period	**(956,787)**	(355,380)

21. INTERESTS IN ASSOCIATES (Continued)

Summarised financial information of material associates (Continued)

GNE (Continued)

Reconciliation of the above summarised financial information to the carrying amount of the interest in GNE recognised in the consolidated financial statements is set out below:

	2023 **RMB'000**	2022 RMB'000
Net assets of GNE	**4,994,654**	5,978,032
Less: Non-controlling interests of GNE	**(2,939,222)**	(2,773,356)
Share options reserve of GNE	**(84,919)**	(83,801)
Equity attributable to owners of GNE	**1,970,513**	3,120,875
Proportion of the Group's ownership interest in GNE	**7.44%**	7.44%
The Group's share of net assets of GNE (Note a)	**160,507**	231,753
Perpetual notes classified as financial assets at fair value through other comprehensive income (Note b)	**998,002**	2,100,467
Carrying amount of the Group's interest in GNE	**1,158,509**	2,332,220

Note:

(a) The fair value of the investment in GNE by reference to the quoted market price of the shares of GNE as at 31 December 2023 was RMB32,145,000 (2022: RMB111,205,000).

(b) On 18 November 2016, 南京協鑫新能源發展有限公司 Nanjing GCL New Energy Development Co. Ltd* ("Nanjing GCL New Energy"), an indirect wholly-owned subsidiary of GNE, entered into a perpetual notes agreement with certain wholly-owned subsidiaries of the Company (the "Lenders"). Nanjing GCL New Energy issued perpetual notes of RMB800,000,000 and RMB1,000,000,000 in November and December 2016, respectively and key terms are as follows:

* English name for identification only

21. INTERESTS IN ASSOCIATES (Continued)

Summarised financial information of material associates (Continued)

GNE (Continued)

(i) Interest rate

Interest rate is 7.3% per annum for the first two years, 9% per annum for the third to fourth years and 11% per annum starting from the fifth year.

(ii) Maturity date

There is no maturity date.

(iii) Repayment terms

The distribution shall be paid on the 21st day of the last month of each quarter (the "Distribution Payment Date"). Nanjing GCL New Energy shall have the right to defer any distribution due and payable indefinitely by notifying the Lenders five working days before the Distribution Payment Date, and there is no compound interest on the deferred distribution payment. If Nanjing GCL New Energy chooses to defer distribution payment, for as long as there is any deferred distribution payment not yet paid in full, Nanjing GCL New Energy is not permitted to declare and pay dividends to its shareholders. The Lenders shall have no right at any time to request repayment of the perpetual notes from Nanjing GCL New Energy, but Nanjing GCL New Energy shall have the right, but not the obligations, to repay the perpetual notes amount by notifying the Lenders in writing five working days before the repayment of the perpetual notes at par value.

(iv) Classification of perpetual notes

The perpetual notes are classified as equity instruments in the GNE's consolidated financial statements as GNE does not have a contractual obligation to deliver cash or other financial assets arising from the issue of the perpetual notes. Any distributions made by Nanjing GCL New Energy to the holders are recognised in equity in the consolidated financial statements of GNE. The perpetual notes are classified as financial assets at fair value through other comprehensive income by the Group. Before Distribution in Specie, the perpetual notes were fully eliminated in the consolidated financial statements of the Group. Upon completion of Distribution in Specie of the shares of GNE (note 15) during the year ended 31 December 2022, GNE becomes an associate of the Group and the perpetual notes are included in the Group's interest in GNE.

21. INTERESTS IN ASSOCIATES (Continued)

Summarised financial information of material associates (Continued)

Xinjiang Goens

	2022 RMB'000
Current assets	12,025,470
Non-current assets	6,388,916
Current liabilities	(3,087,165)
Non-current liabilities	(842,899)

	From 1 January 2023 to date of disposal RMB'000	2022 RMB'000
Revenue	**6,914,854**	13,523,962
Profit and total comprehensive income for the period/year	**1,717,243**	8,302,156

Note:

During the year ended 31 December 2023, Xinjiang Goens declared a dividend of RMB 4,473,334,250, which is interest free, unsecured and repayable within 4 years. The carrying amount of such dividend receivable of RMB4,162,938,000 as at 31 December 2023 was included in "amounts due from related companies" which represented the present value of the future expected cash flows discounted at 3.4% per annum.

Reconciliation of the above summarised financial information to the carrying amount of the interest in Xinjiang Goens recognised in the consolidated financial statements is set out below:

	2022 RMB'000
Net assets of Xinjiang Goens	14,484,322
Proportion of the Group's ownership interest in Xinjiang Goens	38.50%
The Group's share of net assets of Xinjiang Goens	5,576,464
Goodwill	2,416,798
Carrying amount of the Group's interest in Xinjiang Goens	7,993,262

21. INTERESTS IN ASSOCIATES (Continued)

Summarised financial information of material associates (Continued)

Inner Mongolia Zhonghuan Crystal

The followings are the summarised financial information of the Production Line of Inner Mongolia Zhonghuan Crystal shared by the Group pursuant to the relevant equity transfer agreements.

	2023 RMB'000	2022 RMB'000
Current assets	**5,684,899**	5,509,077
Non-current assets	**5,139,788**	4,885,431
Current liabilities	**(2,281,355)**	(2,223,923)
Non-current liabilities	**(1,214,132)**	(1,641,568)

	2023 RMB'000	2022 RMB'000
Revenue	**13,822,273**	18,320,011
Profit and total comprehensive income for the year	**800,183**	635,877

Reconciliation of the above summarised financial information to the carrying amount of the interest in the Production Line Inner Mongolia Zhonghuan Crystal recognised in the consolidated financial statements is set out below:

	2023 RMB'000	2022 RMB'000
Net assets of the Production Line of Inner Mongolia Zhonghuan Crystal	**7,329,200**	6,529,017
Proportion of the Group's ownership interest in the Production Line of Inner Mongolia Zhonghuan Crystal	**12%**	12%
The Group's share of net assets of the Production Line of Inner Mongolia Zhonghuan Crystal	**879,504**	783,482
Carrying amount of the Group's interest in Inner Mongolia Zhonghuan Crystal	**879,504**	783,482

21. INTERESTS IN ASSOCIATES (Continued)

Summarised financial information of material associates (Continued)

Xuzhou Fund

	2023 RMB'000	2022 RMB'000
Current assets	**12,080,763**	636,233
Non-current assets	**5,285,769**	7,071,161
Current liabilities	**(6,008,700)**	—
Non-current liabilities	**(5,465,258)**	—

	2023 RMB'000	2022 RMB'000
(Loss)/profit and total comprehensive (expense)/income for the year	**(1,460,953)**	2,827,557
Dividend declared during the year	**(353,867)**	—

Reconciliation of the above summarised financial information to the carrying amount of the interest in Xuzhou Fund recognised in the consolidated financial statements is set below:

	2023 RMB'000	2022 RMB'000
Net assets of Xuzhou Fund	**5,892,574**	7,707,394
Proportion of the Group's ownership interest in Xuzhou Fund	**40.27%**	40.27%
The Group's share of net assets of Xuzhou Fund	**2,372,940**	3,103,894
Others*	**(327,361)**	(291,203)
Carrying amount of the Group's interest in Xuzhou Fund	**2,045,579**	2,812,691

* Other adjustments represent the adjustments of the Group's share of net assets pursuant to profit sharing terms under the partnership agreement of Xuzhou Fund.

21. INTERESTS IN ASSOCIATES (Continued)

Aggregate information of associates that are not individually material

	2023 RMB'000	2022 RMB'000
The Group's share of (loss)/profits	**(18,519)**	25,625
The Group's share of OCI	**64,806**	62,530
The Group's share of profit and total comprehensive income	**46,287**	88,155
Carrying amount of the Group's interest in associates that are not individually material	**1,703,230**	1,063,363

22. INTERESTS IN JOINT VENTURES

Details of the Group's investments in joint ventures are as follows:

	2023 RMB'000	2022 RMB'000
Cost of unlisted investment in joint ventures	**324,553**	324,553
Share of post-acquisition loss and OCI, net of dividends received	**(175,319)**	(123,170)
	149,234	201,383

22. INTERESTS IN JOINT VENTURES (Continued)

Details of each of the Group's major joint ventures at the end of the reporting period are as follows:

Name of company	Country of incorporation/ operation	Proportion of ownership interest						Principal activities
		2023			2022			
		Company's effective interest	held by the Company	held by a subsidiary	Company's effective interest	held by the Company	held by a subsidiary	
SA Equity Holdco S.a.r.l ("SA Equity") (Note a)	Luxembourg/ South Africa	**51%**	**—**	**51%**	51%	—	51%	Investment holding of photovoltaic power generation projects in South Africa
蘇州協鑫景世豐股權投資管理有限公司 Suzhou GCL Jingshifeng Investment Management Co., Ltd.* ("Jingshifeng") (Note b)	PRC	**63%**	**—**	**63%**	63%	—	63%	Investment and asset management
江蘇疌泉景世豐投資基金 (有限合夥) Jiangsu Jiequan Jingshifeng Investment Fund (Limited Partnership)* ("Jiequan Jingshifeng") (Note c)	PRC	**55.32%**	**—**	**55.32%**	55.32%	—	55.32%	Investment and asset management
MIT GCL Investment Limited	Cayman Islands/ Hong Kong	**50%**	**—**	**50%**	50%	—	50%	Investment holding
GHC Investment Management Limited	Cayman Islands/ Hong Kong	**50%**	**—**	**50%**	50%	—	50%	Investment holding

* English name for identification only

Notes:

(a) At 31 December 2023 and 2022, the Group held a 51% equity interest in SA Equity which is an investment holding company holding a 76% equity interest in each of Solar Reserve GCL Soutdrift PV1 Proprietary Limited and Solar Reserve GCL Humansrus PV1 Proprietary Limited that together indirectly holds 25% equity interest of a 150MW photovoltaic power plant in South Africa.

Pursuant to the subscription agreement entered into by the Group and the other shareholder, the relevant activities of SA Equity require unanimous consent of the parties sharing control. As a result, SA Equity is accounted for as a joint venture of the Group.

(b) In 2017, the Group entered into an agreement with certain independent third parties pursuant to which the Group invested 53% equity interest and the independent third parties invested 42% and 5% in Jingshifeng at a consideration of RMB5,300,000, RMB4,200,000 and RMB500,000, respectively.

In 2021, the Group entered an equity transfer agreement with a shareholder of Jingshifeng, who agreed to transfer its entire equity interest of 10% to the Group for RMB1,150,000. The Group's equity interest increased from 53% to 63% during the year ended 31 December 2021.

As at 31 December 2023 and 2022, the Group held 63% equity interest in Jingshifeng.

According to the agreement, two-thirds of the votes are required to direct the relevant activities of Jingshifeng. The Directors consider that the Group can only exercise joint control over Jingshifeng and it is therefore classified as a joint venture of the Group.

22. INTERESTS IN JOINT VENTURES (Continued)

Notes: (Continued)

(c) In August 2017, the Group entered into a partnership agreement with certain independent investors pursuant to which the Group committed to contribute RMB300,000,000 to the partnership for 50% equity interest and injected funds amounting to RMB90,000,000 as at 31 December 2017.

In November 2020, the Group further injected approximately RMB23,300,000 whereas the other investors injected approximately RMB700,000 into Jiequan Jingshifeng for the increase of its registered capital, resulting in the change in the equity interest in Jiequan Jingshifeng from 50% to 58.80%.

In August 2021, the Group enter into agreements with existing partners to reduce the partnership registered capital to RMB250,000,000.

In November 2021, the Group and the existing partners further injected approximately RMB25,000,000 and RMB21,000,000 respectively into Jiequan Jingshifeng for the increase of its registered capital, resulting in the change in the equity interest in Jiequan Jingshifeng from 58.80% to 55.32%.

As at 31 December 2023 and 2022, the Group held 55.32% equity interest in Jiequan Jingshifeng.

Pursuant to the partnership agreement of Jiequan Jingshifeng, two-thirds of the votes are required to direct the relevant activities. The Directors consider that the Group can only exercise joint control over Jiequan Jingshifeng and the investment is therefore classified as a joint venture of the Group.

* English name for identification only

All joint ventures are accounted for using equity method in these consolidated financial statements. In the opinion of Directors of the Company all the joint ventures are not individually material for the year ended 31 December 2023 and 2022 and the aggregate information of joint ventures are as follows:

Aggregate information of joint ventures that are not individually material

	2023 **RMB'000**	2022 RMB'000
The Group's share of losses for the year		
— continuing operations	**(12,321)**	(87,883)

23. INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS/EQUITY INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2023 RMB'000	2022 RMB'000
Current assets		
Other financial assets at FVTPL:		
Unlisted investments (Note a)	1,693,521	253,845
Non-current assets		
Other financial assets at FVTPL:		
Unlisted investments (Note b)	176,079	193,829
Unlisted equity investments (Note c)	668,124	513,198
	844,203	707,027
Equity instruments at FVTOCI:		
Listed and unlisted equity investments (Note d)	441,347	30,309

Notes:

(a) The unlisted investments represent the financial products issued by financial institutions and banks in Hong Kong and the PRC. The Directors consider the fair values of the unlisted investments, which are based on the prices provided by the financial institutions and banks, that are the prices they would pay to redeem the financial products at the end of the reporting period, approximated their carrying value.

(b) The Group invested in the form of interests as limited partners in certain private entities, which held a portfolio of unlisted investments. The primary objective of the investments is to earn income and for capital gain. Pursuant to investment agreements, the beneficial interests held by the Group in these unlisted investments are in the form of participating shares or interests which primarily provide the Group with the share of returns from the unlisted investments but not any decision making power nor any voting right to involve in and control the daily operation. The unlisted investments are mainly made up of private entities incorporated in the PRC and liquid financial assets (including cash and cash equivalents).

(c) Unlisted equity investments mainly represents the investments in unlisted equity instruments issued by private entities established in the PRC and Hong Kong.

(d) As at 31 December 2023, the amount of RMB20,781,000 (2022:RMB30,309,000) represents the equity interests in Lithium America (Argentina) Corp and Lithium America Corp ("Lithium America") (2022: Lithium America), whose shares are listed on TSX Venture Exchange in Canada, and Lamtex Holdings Limited ("Lamtex"), whose shares were listed on the Stock Exchange and delisted on 22 April 2022. The Directors consider the fair value of the investment in Lamtex was zero as at 31 December 2023 and 2022.

During the year ended 31 December 2023, the Group acquired 2.54% equity interest in a private entity established in the PRC with a consideration of RMB420,566,000. As at 31 December 2023, the fair value of the unlisted equity investment in this private entity was RMB420,566,000.

These investments are not held for trading; instead, they are held for long-term strategic purpose. The Directors have elected to designate these investments in equity instruments as at FVTOCI as they believe that recognising short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long– term purposes and realising their performance potential in the long run.

24. DEFERRED TAXATION

For the purpose of presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances for financial reporting purposes:

	2023	2022
	RMB'000	RMB'000
Deferred tax assets	**597,888**	575,871
Deferred tax liabilities	**(2,011,971)**	(1,616,697)
	(1,414,083)	(1,040,826)

The following are the deferred tax assets (liabilities) recognised and movements thereon during the year:

	Right-of-use assets	Lease liabilities	Property, plant and equipment	Withholding tax on undistributed profits	Unrealised profits on inventories	Fair value uplift of interest in an associate	Tax losses	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2022	(70,574)	70,574	250,833	(210,749)	6,092	(357,326)	—	7,177	(303,973)
Credit (charge) to profit or loss									
– continuing operations	48,873	(48,873)	(474,140)	(610,518)	20,518	—	354,258	3,070	(706,812)
– discontinued operation	—	—	(4,941)	—	—	—	—	162	(4,779)
Disposal upon Distribution in Specie	—	—	(25,941)	—	—	—	—	679	(25,262)
At 31 December 2022	(21,701)	21,701	(254,189)	(821,267)	26,610	(357,326)	354,258	11,088	(1,040,826)
Credit (charge) to profit or loss									
– continuing operations	2,136	(2,136)	(596,477)	(187,834)	(24,003)	357,326	52,405	25,326	(373,257)
At 31 December 2023	(19,565)	19,565	(850,666)	(1,009,101)	2,607	—	406,663	36,414	(1,414,083)

Under the tax law of the PRC, withholding tax is imposed on dividends declared in respect of profits earned by the PRC subsidiaries from 1 January 2008 onwards.

24. DEFERRED TAXATION (Continued)

At the end of the reporting period, the Group had unused tax losses of approximately RMB4,419,444,000 (2022: RMB4,515,140,000) available for offset against future profits. Deferred tax asset of approximately RMB406,663,000 (2022: RMB354,258,000) had been recognised due to certain deferred tax liability relating to tax concession for property, plant and equipment has been recognised. The remaining tax loss had not been recognised as deferred tax asset due to the unpredictability of future profit steams. Unrecognised tax losses of approximately RMB3,445,006,000 (2022: RMB3,749,628,000) will expire from 2024 to 2033 (2022: 2023 to 2032) and other losses may be carried forward indefinitely.

At the end of the reporting period, the Group had deductible temporary differences mainly in respect of impairment of certain assets in aggregate of approximately RMB8,918,675,000 (2022: RMB7,723,796,000). A deferred tax asset had been recognised in respect of approximately RMB878,302,000 (2022: RMB913,749,000) of such deductible temporary differences. No deferred tax asset had been recognised in relation to the remaining deductible temporary differences of approximately RMB8,040,373,000 (2022: RMB6,810,047,000) as it is not probable that taxable profit will be available against which the deductible temporary differences can be utilised.

25. INVENTORIES

	2023	2022
	RMB'000	RMB'000
Raw materials	**1,256,770**	1,217,870
Work in progress	**5,176**	182,437
Semi-finished goods (Note)	**419,662**	1,060,872
Finished goods	**1,202,638**	126,169
	2,884,246	2,587,348

Note: Semi-finished goods mainly represented polysilicon.

During the year ended 31 December 2023, cost of inventories of approximately RMB21,963,385,000 (2022: RMB18,332,243,000) recognised as cost of sales included write-down of inventories, net of approximately RMB156,756,000 (2022: write-down of inventories, net, of approximately RMB126,376,000) because the cost of certain inventories were higher than their net realisable values.

26. DEPOSITS AND OTHER RECEIVABLES/TRADE AND OTHER RECEIVABLES

Deposits and other receivables

	2023 RMB'000	2022 RMB'000
Deposits for acquisitions of property, plant and equipment	**1,230,160**	2,591,707
Consideration receivables	**19,944**	19,944
	1,250,104	2,611,651

Trade and other receivables

	2023 RMB'000	2022 RMB'000
Trade and bill receivables (Note a)		
— Bill receivables	**10,463,808**	17,853,765
— Trade receivables	**1,337,025**	979,834
	11,800,833	18,833,599
Other receivables and prepayments:		
— Refundable value-added tax	**2,038,106**	1,463,673
— Consideration receivables	**—**	441,525
— Prepayments	**1,365,627**	920,380
— Amounts due from former subsidiaries (note b)	**42,490**	42,490
— Short-term loan to a third party (note c)	**1,600,000**	1,617,362
— Note receivables (note d)	**176,345**	12,938
— Others	**1,218,095**	776,310
	18,241,496	24,108,277
Less: allowance for credit losses		
— Trade	**(60,977)**	(79,509)
— Non-Trade	**(279,254)**	(407,370)
	17,901,265	23,621,398

At 1 January 2022, trade and bill receivables from contracts with customers, net of ECL, amounted to RMB11,513,678,000.

26. DEPOSITS AND OTHER RECEIVABLES/TRADE AND OTHER RECEIVABLES (Continued)

Trade and other receivables (Continued)

Notes:

(a) The Group allows a credit period of approximately one month from the invoice date for trade receivables (excluding those arising from sales of electricity) and may further extend it for 3 to 6 months for settlement through bills issued by banks and financial institutions obtained from trade customers.

The following is an aging analysis of trade receivables (excluding sales of electricity and bills held by the Group for future settlement), net of allowance for credit losses, presented based on the invoice date at the end of the reporting period:

	2023	2022
	RMB'000	RMB'000
Within 3 months	**683,150**	478,009
3 to 6 months	**72,281**	5,521
Over 6 months	**415**	17,929
	755,846	501,459

For sales of electricity, the Group generally grants credit period of approximately one week and one month to oversea customers and power grid companies in the PRC, respectively, from the date of invoice in accordance with the relevant electricity sales contracts between the Group and the respective customers.

The following is an aging analysis of trade receivables arising from sales of electricity (excluding bills held by the Group for future settlement), net of allowance for credit losses, presented based on the invoice date at the end of the reporting period:

	2023	2022
	RMB'000	RMB'000
Unbilled (Note)	**517,847**	396,464
Within 3 months	**2,355**	1,856
3 to 6 months	**—**	546
	520,202	398,866

Note: Amount represents unbilled basic tariff receivables for solar power plants operated by the Group, and tariff adjustment receivables of those solar power plants already registered in the Renewable Energy Tariff Subsidy List announced by the state-owned grid companies.

26. DEPOSITS AND OTHER RECEIVABLES/TRADE AND OTHER RECEIVABLES (Continued)

Trade and other receivables (Continued)

Notes: (Continued)

(a) (Continued)

The aging analysis of the unbilled trade receivables, which is based on revenue recognition date, are as follows:

	2023	2022
	RMB'000	RMB'000
0–90 days	**32,428**	56,239
91–180 days	**41,434**	101,280
181–365 days	**92,049**	18,969
Over 365 days	**351,936**	219,976
	517,847	396,464

As at 31 December 2023, trade receivables include bills received amounting to approximately RMB10,463,808,000 (2022: RMB17,853,765,000) were held by the Group for future settlement of trade receivables, of which certain bills were further discounted/endorsed by the Group. The Group continued to recognise their full carrying amount at the end of the reporting period and details are disclosed in note 43. All bills received by the Group were with a maturity period of less than one year.

The Directors closely monitor the credit quality of trade and other receivables and considered the trade and other receivables, which are neither past due nor impaired, are of a good credit quality in view of the good historical repayment record.

As at 31 December 2023, included in the Group's trade receivables balance (excluding sales of electricity and bills held by the Group for future settlement) were debtors with aggregate carrying amount of approximately RMB337,957,000 (2022: RMB115,348,000) which were past due as at the reporting date. Out of the past due balances, approximately RMB30,974,000 (2022: RMB20,935,000) had been past due 121 days or more but was not considered as in default as part of such receivables was either supported by letters of credit issued by banks or offset by advances from customers or substantially settled subsequent to the end of the reporting period.

As at 31 December 2023, included in these trade receivables arising from sales of electricity were debtors with aggregate carrying amount of RMB2,355,000 (2022: RMB2,402,000) which was past due as at the end of the reporting date. These trade receivables related to a number of customers for whom there was no recent history of default.

The Group did not hold any collaterals over all balances.

26. DEPOSITS AND OTHER RECEIVABLES/TRADE AND OTHER RECEIVABLES (Continued)

Trade and other receivables (Continued)

Notes: (Continued)

(b) The amount represents amounts due from former subsidiaries of which the Group disposed of the entire interests during the years ended 31 December 2022 and 2021. As at 31 December 2023, the amounts were non-trade in nature, unsecured, non-interest bearing and had not fixed term of repayment.

(c) During the year ended 31 December 2022, the Group, the PRC banks and a government related entity ("the Borrower") entered into entrusted loan agreements pursuant to which the Group agreed to lend short-term loan through the PRC banks to the Borrower for an aggregate amount of RMB1.6 billion ("2022 Loan"). The amounts was non-trade in nature, unsecured, interest bearing of 5.88% per annum.

In June 2023, the Borrower fully repaid the 2022 Loan to the Group. The Group, the PRC banks and two government related entities ("the Borrowers") entered into two new entrusted loan agreements pursuant to which the Group agreed to lend short-term loans through the PRC banks to the Borrowers for an aggregate amount of RMB1.6 billion ("2023 Loan"). The amounts were non-trade in nature, secured by the equity-interest in a state-owned company, interest bearing of 5.88% per annum, and the amounts were fully repaid on 29 December 2023.

In December 2023, the Group, the PRC banks and two government related entities (the "Borrowers") entered into two entrusted loan agreements pursuant to which the Group agreed to lend short-term loans through the PRC banks to the Borrowers for an aggregate amount of RMB1.6 billion. The amounts were non-trade in nature, secured by the equity-interest in a state-owned company, interest bearing of 5.88% per annum, and to be repaid on 27 December 2024.

Subsequent to the end of the reporting period, part of the above short-term loan of RMB0.49 billion was early repaid in February 2024 by the borrower to the Group.

(d) The amount represents the notes issued by the borrower. As at 31 December 2023, the amount was non-trade in nature, unsecured, interest bearing of 8% per annum, and to be matured within one year from the dates of subscription.

* English name for identification only

Details of impairment assessment of the trade and other receivables are set out in note 41.

27. AMOUNTS DUE FROM RELATED COMPANIES

The related companies included associates, joint ventures, other related parties of the Group and companies controlled by Mr. Zhu Gongshan, the chairman of the Group, and his family members which hold in aggregate approximately 23.80% (2022: 23.62%) of the Company's share capital as at 31 December 2023 and exercise significant influence over the Company.

	2023 RMB'000	2022 RMB'000
Amounts due from related companies		
— Trade related (Note a,c)	165,766	33,331
— Non-trade related (Note b)	7,797	6,610
	173,563	39,941
Amounts due from associates		
— Trade related (Note a,c)	165,819	150,509
— Non-trade related (Note d)	4,693,752	529,715
	4,859,571	680,224
Amounts due from joint ventures		
— Trade related (Note a,c)	—	14
— Non-trade related (Note b)	9,293	11,357
	9,293	11,371
Amounts due from other related parties		
— Trade related (Note a,c)	3,918	48,743
— Non-trade related (Note e)	20,000	20,000
	23,918	68,743
	5,066,345	800,279
Less: allowance for credit losses	(21,207)	(11,530)
	5,045,138	788,749
Analysed for reporting purposes as:		
— Current assets	2,875,966	788,749
— Non-current assets	2,169,172	—
	5,045,138	788,749
— Trade related	314,296	221,067
— Non-trade related	4,730,842	567,682
	5,045,138	788,749

27. AMOUNTS DUE FROM RELATED COMPANIES (Continued)

Notes:

(a) The amounts are unsecured, non-interest-bearing and the credit period is normally within 30 days (2022: 30 days).

(b) The amounts are unsecured, non-interest-bearing and with no fixed term of repayment.

The maximum amount outstanding during 2023 is approximately RMB7,797,000 (2022: RMB6,977,000) for non-trade related amounts due from related companies in which Mr. Zhu Gongshan and his family have control.

(c) The following is an aging analysis of amounts due from related companies, associates and joint ventures (trade related), net of allowance for credit losses, at the end of the reporting period, presented based on the invoice date which approximated the respective revenue recognition dates:

	2023 **RMB'000**	2022 RMB'000
Within 3 months	**164,708**	127,935
3 to 6 months	**6,593**	4,659
More than 6 months	**142,995**	88,473
	314,296	221,067

(d) As at 31 December 2023, the amounts are unsecured, non-interest-bearing and had no fixed term of repayment, except for (i) an amount of approximately RMB528,400,000 (2022: RMB528,400,000) which was a consideration receivable and will be repayable if the Group has fully settled the agreed capital contribution of the associate and (ii) the dividend receivable from Xinjiang Goens with carrying amount of approximately RMB4,162,938,000 (Non-current portion: RMB2,169,172,000, Current portion: RMB1,993,766,000) (see note 21).

(e) The other related parties represent the non-controlling interest shareholders of subsidiaries of the Group. The amounts are unsecured, non-interest-bearing and with no fixed term of repayment.

The Directors closely monitors the credit quality of amounts due from related companies and consider those accounts, which are neither past due nor impaired, are of a good credit quality in view of the good historical repayment records of such parties.

As at 31 December 2023, RMB30,369,000 (2022: RMB34,733,000) of amounts due from related companies (trade related) were credit-impaired because there were defaults of payments from counterparties. During the year ended 31 December 2023, the Group recognised an impairment loss of RMB9,677,000 (2022: a reversal of impairment loss of RMB294,221,000 as a result of settlement of debts from related companies).

Details of impairment assessment of amounts due from related companies are set out in note 41.

At 1 January 2022, amounts due from related companies (trade related) from contracts with customers to amounted RMB213,999,000.

28. HELD FOR TRADING INVESTMENTS

	2023 RMB'000	2022 RMB'000
Listed securities:		
— Equity securities listed in Hong Kong	**2,686**	3,035

29. PLEDGED AND RESTRICTED BANK AND OTHER DEPOSITS AND BANK BALANCES

Bank balances

Bank balances carry interest at floating rates which range from 0.03% to 4.7% (2022: 0.01% to 2%) per annum or fixed rates which range from 0.2% to 5.42% (2022: 0.25% to 4.92%) per annum.

Pledged bank and other deposits

Pledged bank and other deposits represent deposits pledged to banks and other financial institutions to secure banking facilities granted to the Group. Deposits amounting to approximately RMB270,000,000 (2022: RMB87,868,000) were pledged to secure the Group's short-term borrowings in the PRC, which were due within one year and were therefore classified as current assets. The remaining deposits amounting to approximately RMB5,600,000 (2022: RMB225,600,000) were pledged to secure long-term borrowings granted to the Group which were due after one year, and were therefore classified as non-current assets.

Pledged bank deposits carried fixed interest rates ranging from 2.3% to 4.18% (2022: 0.25% to 4.18%) per annum.

As at 31 December 2023, pledged other deposits of nil (2022: RMB57,500,000) were non-interest-bearing.

Restricted bank deposits

The deposits carried interest at floating rates from 0.2% to 3.4% (2022: 0.25% to 2.22%) per annum or fixed rates ranging from 0.05% to 4.2% (2022: 0.25% to 3.99%) per annum and will be released upon the settlement or discharge of the relevant letters of credit and guarantee.

Restricted bank deposits amounting to approximately RMB1,879,411,000 (2022: RMB3,455,474,000) were utilized to secure bills and short-term letters of credit for trade and other payables, and were therefore classified as current assets. The deposits amounting to approximately RMB25,554,000 (2022: RMB25,606,000) were utilized to secure long-term borrowings granted to the Group which were due after one year, and were therefore classified as non-current assets. The remaining deposits amounting to approximately RMB172,540,000 (2002: nil) represented the time deposits which have a maturity period over three months from the date of acquisition.

30. TRADE AND OTHER PAYABLES

	2023	2022
	RMB'000	RMB'000
Trade payables (Note a)	**6,713,529**	11,558,952
Construction payables (Note a)	**5,618,914**	5,681,954
Other payables	**299,440**	483,961
Convertible bond to a non-controlling shareholder of a subsidiary (Note b)	**84,212**	72,407
Salaries and bonus payable	**808,904**	748,875
Other tax payables	**95,950**	424,178
Interest payables	**45,813**	95,735
Accruals	**579,609**	514,842
	14,246,371	19,580,904

Notes:

(a) Included in the trade payables and construction payables are (i) RMB1,461,327,000 (2022: RMB3,525,418,000) and RMB514,234,000 (2022: RMB252,442,000), respectively, against which the Group issued bills to the relevant creditors for settlement and (ii) an aggregate amount of approximately RMB4,318,120,000 (2022: RMB8,272,025,000) being bills received endorsed to creditors with recourse. All these bills were with a maturity period of less than one year.

(b) In September 2020, the Group entered into an investment agreement with a non-controlling shareholder, pursuant that (i) Kunshan GCL Optoelectronic Material Co., Ltd* 昆山協鑫光電材料有限公司 ("Kunshan GCL") agreed to allot and the non-controlling shareholder agreed to subscribe for RMB92,000 new registered capital of Kunshan GCL at a consideration of RMB1 million, representing 0.15% of the registered capital of Kunshan GCL; and (ii) the non-controlling shareholder agreed to subscribe a convertible bond with principal amount of RMB49 million to be issued by Kunshan GCL.

Pursuant to the investment agreement in relation to the convertible bond, the non-controlling shareholder was given the right, under certain condition, to request Kunshan GCL to convert the loan to equity interest in Kunshan GCL at the date of conversion by reference to the amount of the accrued interest plus the business valuation at the date of the investment agreement and the business valuation of subsequent new capital injection into Kunshan GCL.

The Group designated the convertible bond to a non-controlling shareholder of a subsidiary of amount approximately RMB84,212,000 (2022: RMB72,407,000) as financial liability at fair value through profit or loss taking reference to valuation report issued by valuer and the loss on fair value change of RMB11,805,000 (2022: gain on fair value change of RMB11,773,000) was recognised in profit or loss during the year ended 31 December 2023.

* English name for identification only

The credit period for trade payables is within 3 to 6 months (2022: 3 to 6 months).

30. TRADE AND OTHER PAYABLES (Continued)

The following is an aged analysis of trade payables (excluding bills presented by the Group for settlement) presented based on the invoice date at the end of the reporting period:

	2023 RMB'000	2022 RMB'000
Within 3 months	2,121,216	3,345,033
3 to 6 months	2,725,010	4,605,580
More than 6 months	405,976	82,921
	5,252,202	8,033,534

31. AMOUNTS DUE TO RELATED COMPANIES

The related companies included associates, joint ventures, other related parties of the Group and companies controlled by Mr. Zhu Gongshan, the chairman of the Group, and his family members which held in aggregate approximately 23.80% (2022: 23.62%) of the Company's share capital as at 31 December 2023 and exercise significant influence over the Company.

	2023 RMB'000	2022 RMB'000
Amounts due to related companies		
— Trade related (Note a)	14,458	7,686
— Non-trade related (Note b)	24,373	33,983
	38,831	41,669
Amounts due to associates		
— Trade related (Note a)	618,364	201,022
— Non-trade related (Note b)	654,721	3,226,435
	1,273,085	3,427,457
Amounts due to other related parties		
— Trade related (Note a)	49,318	11,215
— Non-trade related (Note c)	—	16,023
	49,318	27,238
	1,361,234	3,496,364
Analysed for reporting purposes as:		
— Trade related	682,140	219,923
— Non-trade related	679,094	3,276,441
	1,361,234	3,496,364

At 1 January 2022, amounts due to related companies (trade related) amounted to RMB254,876,000.

31. AMOUNTS DUE TO RELATED COMPANIES (Continued)

Notes:

(a) The amounts are unsecured, non-interest-bearing and the credit period is normally within 30 days (2022: 30 days).

The following is an aging analysis of amounts due to related companies, associates and a joint venture (trade related) at the end of the reporting period, presented based on the invoice date:

	2023 RMB'000	2022 RMB'000
Within 3 months	**253,086**	117,865
3 to 6 months	**161,749**	32
More than 6 months	**267,305**	102,026
	682,140	219,923

(b) The amounts are unsecured and have no fixed terms of repayment. Except for an amount of approximately RMB423,202,000 (2022: RMB nil) which is interest bearing at 2.8% per annum, the remaining amounts are non-interest bearing.

(c) The other related parties represent the non-controlling interest shareholders of subsidiaries of the Group. The amounts are unsecured, non-interest bearing and have no fixed terms of repayment.

32. CONTRACT LIABILITIES

	2023 RMB'000	2022 RMB'000
Sales of polysilicon and wafer		
Current	**525,528**	1,113,281
Non-current	**221,237**	136,200
	746,765	1,249,481

The Group entered into supply framework contracts with customers with continuous business relationships and received advance payments from these customers. When the Group receives certain percentage of deposits as an advance payment upon signing the supply framework contract, this will give rise to contract liabilities at the start of a contract, until revenue is recognised upon the order is fulfilled.

Contract liabilities are classified as current liabilities and non-current liabilities based on the agreed portion of advance payments to be utilised for the estimated amounts of purchase of goods as stated in the respective supply framework contracts within one year and after one year, respectively.

At 1 January 2022, contract liabilities amounted to RMB932,128,000.

32. CONTRACT LIABILITIES (Continued)

The following table shows how much of the revenue recognised relates to brought-forward contract liabilities and how much relates to performance obligations that were satisfied in prior periods:

	2023 RMB'000	2022 RMB'000
Revenue recognised that was included in the contract liabilities at the beginning of the year	**1,113,281**	896,128

The decrease in contract liabilities in the current year are mainly due to decrease in average selling price of solar materials under stable supply in the market. The increase in contract liabilities for the year ended 31 December 2022 were due to increase in average selling price of solar materials under shortage of supply in the market.

33. BANK AND OTHER BORROWINGS

Details of the bank and other borrowings are as follows:

	2023 RMB'000	2022 RMB'000
Bank loans	**15,173,075**	12,954,326
Other loans	**93,930**	271,528
	15,267,005	13,225,854
Representing:		
Secured	**10,795,480**	8,605,397
Unsecured	**4,471,525**	4,620,457
	15,267,005	13,225,854

33. BANK AND OTHER BORROWINGS (Continued)

The carrying amounts of the above borrowings are repayable*:

	Bank loans		Other loans	
	2023	2022	**2023**	2022
	RMB'000	RMB'000	**RMB'000**	RMB'000
The carrying amounts of the above borrowings are repayable*:				
Short-term borrowings	**5,094,357**	7,835,485	**—**	—
Long-term borrowings				
Within one year	**167,010**	1,478,201	**54,569**	105,672
More than one year, but not exceeding two years	**1,084,570**	1,298,594	**16,997**	126,462
More than two years, but not exceeding five years	**7,234,549**	2,154,324	**22,364**	39,394
More than five years	**1,592,589**	187,722	**—**	—
	10,078,718	5,118,841	**93,930**	271,528
	15,173,075	12,954,326	**93,930**	271,528
Less: amounts due within one year shown under current liabilities	**(5,261,367)**	(9,313,686)	**(54,569)**	(105,672)
Amounts due after one year	**9,911,708**	3,640,640	**39,361**	165,856
Analysed as:				
Fixed-rate borrowings	**4,028,266**	8,942,126	**16,167**	122,424
Variable-rate borrowings	**11,144,809**	4,012,200	**77,763**	149,104
	15,173,075	12,954,326	**93,930**	271,528

* The amounts due are based on scheduled repayment dates set out in the loan agreements.

33. BANK AND OTHER BORROWINGS (Continued)

Included in the other loans are approximately RMB78 million (2022: RMB149 million) representing financing arrangements with financial institutions for leases on assets with lease terms ranging from 1 to 4 years (2022: 1 to 5 years), with legal title of the respective equipment transferred to the financial institutions. The Group continued to operate and manage the relevant equipment during the lease term without any involvement from the financial institutions. The Group is entitled to purchase back the equipment at a minimal consideration upon the maturity of the respective leases, except for one of the financing arrangements with a financial institution that the Group can either exercise the early buyout option granted to the Group to purchase back the relevant equipment at a pre-determined price at the end of the seventh year of the lease term, or to purchase back the equipment from this financial institution at fair value upon the end of the lease period. Despite the arrangement involves the legal form of a lease, it does not constitute a sale and leaseback transaction in accordance with the substance of the arrangement.

The ranges of effective interest rates (which are also equal to contracted interest rates) on the Group's borrowings are analysed as follows:

	2023	2022
Fixed-rate borrowings		
RMB borrowings	**2.8% to 6.5%**	1.2% to 6.5%
US$ borrowings	**2.7%**	2.7%
Variable-rate borrowings		
RMB borrowings	**100% to 105% of Benchmark Rate**	103% to 170% of Benchmark Rate
	LPR -0.95% to +1.80%	LPR -0.75% to +2.53%

33. BANK AND OTHER BORROWINGS (Continued)

The Group's borrowings that are denominated in currencies other than the functional currency of the relevant group entities are set out below:

	2023 RMB'000	2022 RMB'000
Borrowings denominated in US$	**225,714**	241,191

Certain borrowings are secured by certain assets of the Group as set out in note 45.

During the year ended 31 December 2023, the Group discounted bills arising from future settlement of trade receivables with recourse of approximately RMB11,585,687,000 (2022: RMB9,055,786,000) to banks for short-term financing. At 31 December 2023, the associated borrowings amounted to approximately RMB3,591,203,000 (2022: RMB7,414,485,000).

The Group is required to comply with certain restrictive financial and other covenants and undertaking requirements.

34. LEASE LIABILITIES

	2023 RMB'000	2022 RMB'000
Lease liabilities payable:		
Within one year	**70,493**	104,906
Within a period of more than one year but not exceeding two years	**41,924**	24,617
Within a period of more than two years but not exceeding five years	**26,830**	13,301
Within a period of more than five years	**7,124**	8,259
	146,371	151,083
Less: amount due for settlement with 12 months shown under current liabilities	**(70,493)**	(104,904)
Amount due for settlement after 12 months shown under non–current liabilities	**75,878**	46,179

The weighted average incremental borrowing rates applied to lease liabilities is approximately 5% to 6% (2022: 5.0% to 6.0%).

Lease obligations that are denominated in currencies other than the functional currencies of the relevant group entities are set out below:

	2023 RMB'000	2022 RMB'000
Lease obligations denominated in HK$	**12,589**	24,660

35. DERIVATIVE FINANCIAL INSTRUMENTS AND OTHER FINANCIAL LIABILITIES

	2023 RMB'000	2022 RMB'000
Derivative financial instruments:		
Written put options of interests in associates		
— Jiangsu Xinhua[(1)]	15,972	12,014
— Inner Mongolia Zhonghuan Crystal[(2)]	—	86,326
	15,972	98,340
Other financial labilities:		
Written put options over non-controlling interests		
— Kunshan GCL[(3)]	525,695	293,952

(1) In April 2016, the Group entered into the Investment Agreement with the Partner (as defined in note 21(g)) pursuant to which the Partner is given a right to request the Group to repurchase the equity interest in Jiangsu Xinhua held by the Partner at the cost of investment of the Partner plus interest at applicable rate under the following circumstances:

(a) If Jiangsu Xinhua fails to complete a qualified initial public offering ("IPO") at a mutually-agreed stock exchange within a specified time frame;

(b) If Jiangsu Xinhua meets the listing requirements of the specified stock exchanges but fails to complete a qualified IPO due to external factors such as a change in government policy or other factors out of Jiangsu Xinhua's control;

(c) If Jiangsu Xinhua fails to produce polysilicon to the level of quality and specification stipulated under the Investment Agreement within a specified time frame; or

(d) If there is a significant breach by the Group of the relevant terms of the Investment Agreement or actions brought by the Group resulting in a significant adverse impact to the joint venture and the Group fails to remediate such breach within the period required by the Partner.

In December 2020, the Group entered into a supplementary agreement with the Partner to replace the circumstance (c) by the following circumstance:

(e) If Jiangsu Xinhua fails to meet any of the annual operational or strategic requirements by 2021, 2022 and 2023 as set out in the supplementary agreement.

The Directors have recognised the put option of interest in Jiangsu Xinhua as a derivative financial instrument and initially recognised it at fair value with subsequent changes in fair value recognised in profit or loss. During the year ended 31 December 2023, the Group remeasured the fair value and a loss on fair value change of the derivative financial instrument of approximately RMB3,958,000 (2022: gain on fair value change of RMB5,233,000) was recognised in profit or loss.

35. DERIVATIVE FINANCIAL INSTRUMENTS AND OTHER FINANCIAL LIABILITIES (Continued)

(2) In February 2021, the Group entered into an equity transfer agreement with an associate, Leshan Fund pursuant to which the Group agreed to sell and Leshan Fund agreed to purchase 3.848% equity interest in 內蒙古中環晶體材料有限公司 Inner Mongolia Zhonghuan Crystal Material Co., Ltd.* ("Inner Mongolia Zhonghuan Crystal") at a consideration of RMB600 million. The Group agreed to grant a put option to Leshan Fund to request the Group to repurchase the equity interest in Inner Mongolia Zhonghuan Crystal held by Leshan Fund at the cost of investment of Leshan Fund plus interest at applicable rate under the following circumstances:

- If Inner Mongolia Zhonghuan Crystal fails to be acquired by independent third parties given that Inner Mongolia Zhonghuan Crystal has completely executed the given clause under the agreement entered between Leshan Fund and the Group at the equity transfer date.

The Directors have recognised the put option of interest in Inner Mongolia Zhonghuan Crystal as derivative financial instrument and initially recognised it at fair value with subsequent changes in fair value recognised in profit or loss. During the year ended 31 December 2023, the Group and Leshan Fund entered into an agreement, pursuant to which Leshan Fund agreed to give up its put option to request the Group to repurchase the equity interest in Inner Mongolia Zhonghuan Crystal. The fair value change and gain on derecognition of approximately RMB86,326,000 was recognised in profit or loss. During the year ended 31 December 2022, the Group remeasured the fair value and a loss on fair value change of derivative financial instrument of approximately RMB8,837,000 was recognised in profit or loss.

(3) In 2020 and 2021, the Group entered into investment agreements ("2020/21 Kunshan Investment Agreements") with certain investors pursuant to which the investors were given the rights to request the Group to repurchase the 20.24% equity interest in Kunshan GCL Optoelectronic Material Co., Ltd.* ("昆山協鑫光電材料有限公司") ("Kunshan GCL"), a subsidiary of the Company, at a premium under certain conditions. On 18 March 2022, the Group entered into a new shareholder agreement ("2022 Kunshan Shareholder Agreement") with Kunshan GCL, a new investor and the then existing non-controlling shareholders of Kunshan GCL, pursuant to which the Group agreed to subscribe for RMB6.6 million new registered capital and the new investor agreed to subscribe for RMB4.4 million new registered capital of Kunshan GCL at a cash consideration of RMB150 million and RMB100 million respectively, representing 8.96% and 5.97% of the enlarged registered capital of Kunshan GCL respectively. As a result of the transactions, the Group's equity interest of Kunshan GCL changed from 50.03% to 51.52%. On 30 November 2022, the Group entered into a new shareholder agreement ("2022 Kunshan Shareholder Agreement II") with Kunshan GCL, certain new investors of Kunshan GCL and one new investor of Kunshan GCL mentioned in 2022 Kunshan Shareholder Agreement, pursuant to which the Group agreed to subscribe for RMB9.1 million new registered capital and the certain new investors and the existing non-controlling shareholder agreed to subscribe for RMB7.2 million new registered capital of Kunshan GCL at a cash consideration of RMB240 million and RMB189 million respectively, representing 10.16% and 8.0% of the enlarged registered capital of Kunshan GCL respectively. The subscription was completed during the year ended 31 December 2023. As a result of the transactions, the Group's equity interest in Kunshan GCL changed from 51.52% to 52.33%.

* English name for identification purpose only

35. DERIVATIVE FINANCIAL INSTRUMENTS AND OTHER FINANCIAL LIABILITIES (Continued)

(3) (Continued)

Pursuant to the 2022 Kunshan Shareholder agreement and the 2022 Kunshan Shareholder Agreement II, those new investors were given the right to request the Group to repurchase total 12.89% equity interest in Kunshan GCL at a redemption price equal to the sum of (i) investment cost made by the new investor; (ii) 10% required annual rate of return on the investment cost; and (iii) the share of accumulated unpaid dividends of Kunshan GCL during the investment period, under the following circumstances:

a) If Kunshan GCL fails to complete a qualified initial public offering ("IPO") at a mutually agreed stock exchange on or before 31 December 2025;

b) If there is a significant breach by the Group on the relevant terms of the 2022 Kunshan Shareholder Agreement or actions brought by the Group resulting in significant adverse impact to Kunshan GCL and the Group fails to remediate such breach within the period required by the new investor;

c) If Kunshan GCL fails to meet operation target as set out in the previous agreements signed with the shareholders of Kunshan GCL within a specified time frame.

In addition, certain terms in the 2020/21 Kunshan Investment Agreements in relation to the written put options are revised to the same terms of put option over new investor under 2022 Kunshan Shareholder Agreement.

As a result of the additional put options over non-controlling interests, during the year ended 31 December 2023, the Group further recognised the financial liability of approximately RMB189,000,000 (2022: RMB278,000,000) in relation to the put options over non-controlling interests of Kunshan GCL with a corresponding entry of the same amount recognised in equity, which was based on the present value of the exercise price required to pay plus 10% interest per annum, by applying a discount rate of 10% and on the assumption that the put option will be redeemable on the date of redemption. This liability is subsequently stated at amortised cost with finance cost (note 8) accrued up to the redemption amount that is payable at the date at which the option becomes exercisable.

As at 31 December 2023, the Group has recognised the financial liability of approximately RMB525,695,000 (2022: RMB293,952,000) in relation to the put options over non-controlling interest of Kunshan GCL.

Details of the inputs and assumptions adopted in the fair value measurement are described in note 42.

36. DEFERRED INCOME

	2023 RMB'000	2022 RMB'000
Continuing operations		
Amounts credited to profit or loss during the year:		
Incentive subsidies (Note a)	**279,105**	45,354
Subsidies related to property, plant and equipment (Note b)	**27,327**	53,423
Value-added tax refunds related to depreciable assets (Note c)	**5,936**	6,515
	312,368	105,292

	2023 RMB'000	2022 RMB'000
Deferred income related to government grants:		
Subsidies related to property, plant and equipment (Note b)	**74,318**	103,437
Value-added tax refunds related to depreciable assets (Note c)	**5,621**	11,557
Total	**79,939**	114,994
Less: current portion	**(28,557)**	(29,479)
Non-current portion	**51,382**	85,515

Notes:

(a) Incentive subsidies were received from the relevant PRC government for improvement of working capital and financial assistance to the operating activities to enhance the competitiveness in the industry. The amount also includes grants for relevant expenses incurred such as those for research and development activities and interest subsidies. The subsidies were granted on a discretionary basis to the Group during the year.

(b) The Group received government subsidies for capital expenditure incurred for the plant and machinery. The amounts are deferred and amortised over the estimated useful lives of the respective assets.

(c) The Group received value-added tax refunds on purchases of domestic manufactured plant and machinery. The amounts are deferred and amortised over the estimated useful lives of the respective plant and machinery.

37. SHARE CAPITAL

	Number of shares '000	Amount HK$'000
Ordinary shares of HK$0.1 each		
Authorised		
At 1 January 2022, 31 December 2022 and 31 December 2023	50,000,000	5,000,000
Issued and fully paid		
At 1 January 2022	27,099,010	2,709,901
Exercise of share options (Note a)	9,488	949
At 31 December 2022	27,108,498	2,710,850
Exercise of share options (Note a)	558	56
Cancellation of shares (Note b)	(170,125)	(17,013)
At 31 December 2023	26,938,931	2,693,893

	2023 RMB'000	2022 RMB'000
Shown in the financial statements as	**2,344,280**	2,359,838

Notes:

(a) During the year ended 31 December 2023, share option holders exercised their rights to subscribe for 558,000 (2022: 8,359,849, 604,302 and 523,374) ordinary shares in the Company at HK$1.16 (2022: HK$1.16 and HK$1.32 and HK$1.63) per share, respectively, with the net proceeds of approximately RMB593,000 (2022: RMB9,668,000).

37. SHARE CAPITAL (Continued)

Notes: (Continued)

(b) The Company repurchased its own ordinary shares through the Stock Exchange as follows:

Month of repurchase	Number of shares repurchased	Price per share		Aggregate consideration paid
		Highest	**Lowest**	
		HK$	HK$	HK$'000
Dec 2022	31,625,000	2.03	1.97	62,857
	31,625,000			62,857
Jun 2023	84,500,000	1.64	1.48	130,992
Sept 2023	30,000,000	1.38	1.30	40,396
Oct 2023	24,000,000	1.23	1.15	28,770
	138,500,000			200,158
	170,125,000			263,015

During the year ended 31 December 2023, 138,500,000 (2022: 31,625,000 ordinary shares) ordinary shares of the Company were repurchased by the Group at an aggregate consideration of HK$200,158,000 (equivalent to approximately RMB182,010,000) (2022: HK$62,857,000 equivalent to approximately RMB57,971,000) which were recognised in equity as treasury shares. All of the treasury shares have been cancelled during the year ended 31 December 2023.

During the year ended 31 December 2023, in aggregate of 170,125,000 ordinary shares of the Company, which were repurchased from open market during the years ended 31 December 2023 and 2022 were cancelled and accordingly the issued share capital of the Company was reduced by the nominal value of these shares. The premium payable on repurchase was charged against the share premium. An amount equivalent to the nominal value of the shares cancelled was transferred from accumulated profits to the capital redemption reserve.

All shares issued during the years ended 31 December 2023 and 2022 rank pari passu in all respects with the then existing shares of the Company.

38. CHANGE IN CAPITAL STRUCTURE OF A SUBSIDIARY

(A) Year ended 31 December 2023

During the year ended 31 December 2023, pursuant to the 2022 Kunshan Shareholder agreement II (note 35), the Group agreed to subscribe for RMB9.1 million new registered capital and the certain new investors and the existing non-controlling shareholder agreed to subscribe for RMB7.2 million new registered capital of Kunshan GCL at a cash consideration of RMB240 million and RMB189 million respectively, representing 10.16% and 8.0% of the enlarged registered paid-up capital of Kunshan GCL respectively. In addition, those investors under 2022 Kunshan Shareholder agreement II were given the right to request the Group to repurchase its 8% equity interest in Kunshan GCL at a redemption price under certain circumstances (see note 35(3)). The difference between the consideration received from those investors and the relevant carrying amount of non-controlling interest is recognised in special reserve in consolidated statement of changes in equity.

During the year ended 31 December 2023, two companies owned by certain individuals subscribed for approximately RMB5,658,000 new registered capital of Kunshan GCL at a cash consideration of approximately RMB5,658,000, representing 5.92% of the enlarged registered paid-up capital of Kunshan GCL. The difference between the consideration received from those investors and the relevant carrying amount of non-controlling interest is recognised in special reserve in consolidated statement of changes in equity.

After the completion of the change in capital structure of Kunshan GCL abovementioned, the Group's equity interest in Kunshan GCL changed from 51.52% to 49.23%.

(B) Year ended 31 December 2022

Change in capital structure of a subsidiary

On 18 March 2022, the Group entered into 2022 Kunshan Shareholder Agreement with a new investor, the then existing non-controlling shareholders of Kunshan GCL and Kunshan GCL, pursuant to which the Group agreed to subscribe for RMB6.6 million new registered capital and the new investor agreed to subscribe RMB4.4 million new registered capital of Kunshan GCL at a cash consideration of RMB150 million and RMB100 million, respectively, representing 8.96% and 5.97% of the enlarged registered capital. In addition, the new investor was given the right to request the Group to repurchase its 5.97% equity interest in Kunshan GCL at a redemption price under certain circumstances (see note 35(3)). The difference between the consideration received from the new investor and the relevant carrying amount of non-controlling interest is recognised in special reserve in consolidated statement of changes in equity.

After the completion of the change in capital structure of Kunshan GCL, the Group's equity interest in Kunshan GCL increased from 50.03% to 51.52%.

39. DEEMED DISPOSAL OF SUBSIDIARIES/PARTIAL INTEREST IN SUBSIDIARIES

(A) Year ended 31 December 2023

A During the year ended 31 December 2023, the Group entered into a capital injection agreement with a non-controlling shareholder of 內蒙古鑫環硅能科技有限公司, pursuant to which the non-controlling shareholder and the Group agreed to subscribe for RMB1,668 million and RMB1,702 million newly-increased registered and paid-up capital of 內蒙古鑫環硅能科技有限公司 with a cash consideration of RMB1,668 million and RMB1,702 million respectively. After completion of the capital injection and as at 31 December 2023, the Group's interest in 內蒙古鑫環硅能科技有限公司 decreased from 88.3% to 60.0%. The difference between the consideration received from the non-controlling shareholder and the relevant carrying amount of non-controlling interest is recognised in special reserve in consolidated statement of changes in equity.

B. During the year ended 31 December 2023, the Group and Xuzhou Zhongping GCL Industrial Upgrading Equity Investment Fund LLP* ("Xuzhou Fund") 徐州中平協鑫產業升級股權投資基金 (有限合夥) (being an associate of the Group), agreed to subscribe for RMB400 million and RMB400 million new registered capital of Leshan GCL New Energy Technology Co., Ltd.* ("Leshan GCL") 樂山協鑫新能源科技有限公司, a subsidiary of the Group. After completion of the capital injection and as at 31 December 2023, the Group's effective interest (including those interest held indirectly through associates) in Leshan GCL decreased from 76.4% to 74.1%. The difference between the consideration received from non-controlling interests and the relevant carrying amount of non-controlling interest is recognised in special reserve in consolidated statement of changes in equity.

(B) Year ended 31 December 2022

(i) Disposals of subsidiaries and deemed disposals of partial interests in subsidiaries by the Group

(a) Deemed disposal of partial interest in GNE and Distribution in Specie of GNE shares

On 28 July 2022, Elite Time Global Limited, a wholly-owned subsidiary of the Company ("Elite Time"), GNE and the placing agents entered into a placing agreement, pursuant to which 2,275,000,000 new shares of GNE were to be issued and placed to placees with an aggregate value of approximately HK$314 million (equivalent to approximately RMB270 million). The transaction has been completed in August 2022 and the net proceeds of the transaction, after taking into account all related costs, fees, expenses and commission of the transaction, is approximately HK$310 million (approximately RMB267 million). As a result, Elite Time's equity interest in GNE was reduced from 49.24% to 44.44%.

39. DEEMED DISPOSAL OF SUBSIDIARIES/PARTIAL INTEREST IN SUBSIDIARIES (Continued)

(B) Year ended 31 December 2022 (Continued)

(i) Disposals of subsidiaries and deemed disposals of partial interests in subsidiaries by the Group (Continued)

(a) Deemed disposal of partial interest in GNE and Distribution in Specie of GNE shares (Continued)

As set out in note 15 to the financial statements, a special interim dividend by way of distribution of shares of GNE was declared and distributed during the year ended 31 December 2022. Upon the completion of Distribution in Specie, the Group's effective interest in GNE was changed from 44.44% to 7.44%. The Directors of the Company consider the Group can exercise significant influence over GNE and GNE therefore become an associate of the Group after the Distribution in Specie.

The net assets of GNE at the date of completion of Distribution in Specie were as follows:

	RMB'000
ASSETS	
Property, plant and equipment	4,528,867
Right-of-use assets	223,943
Interests in associates	1,421,184
Interests in joint ventures	3,152
Investments at fair value through profit or loss	43,714
Other non-current assets	95,102
Contract assets	47,107
Deferred tax assets	25,941
Trade and other receivables	5,012,995
Amounts due from related companies	27,469
Amount due from the Group	29,917
Tax recoverable	346
Pledged bank and other deposits	221,033
Bank balances and cash	1,310,548
Assets classified as held for sale	669,620
Total assets	13,660,938

39. DEEMED DISPOSAL OF SUBSIDIARIES/PARTIAL INTEREST IN SUBSIDIARIES (Continued)

(B) Year ended 31 December 2022 (Continued)

(i) Disposals of subsidiaries and deemed disposals of partial interests in subsidiaries by the Group (Continued)

(a) Deemed disposal of partial interest in GNE and Distribution in Specie of GNE shares (Continued)

	RMB'000
LIABILITIES	
Other payables and deferred income	(1,197,886)
Amounts due to related companies	(5,174)
Tax payable	(5,254)
Amount due to the Group	(117,509)
Liabilities directly associated with assets classified as held for sale	(513,156)
Loans from related companies	(14,811)
Bank and other borrowings	(2,172,775)
Notes payables	(2,688,543)
Lease liabilities	(277,655)
Deferred income	(338,365)
Deferred tax liabilities	(679)
Total liabilities	(7,331,807)
Net assets of GNE disposed of	6,329,131
Non-controlling interest	2,077,657
Fair value of perpetual notes of GNE held by the Group	2,024,879
Retained share in the fair value of identifiable net assets of GNE	261,770
Fair value of odd lots of undistributed GNE shares that are classified as held for trading	1,343
Special interim dividend by way of distribution in specie	1,963,482[#]
Analysis of net cash outflow in respect of Distribution in Specie	
Cash and cash equivalents distributed	1,310,548
Cash and cash equivalents included in assets classified as held for sale distributed	21,411
Transaction costs	19,052
	1,351,011

[#] The special interim dividend included the difference between the Retained share in fair value of identifiable net assets of GNE and the fair value of retained GNE's shares at the date of completion of Distribution in Specie of RMB136,444,000.

39. DEEMED DISPOSAL OF SUBSIDIARIES/PARTIAL INTEREST IN SUBSIDIARIES (Continued)

(B) Year ended 31 December 2022 (Continued)

(i) Disposals of subsidiaries and deemed disposals of partial interests in subsidiaries by the Group (Continued)

(b) Deemed disposal of partial interest in Inner Mongolia Xin Yuan Silicon Material Technology Co. Ltd ("Inner Mongolia Xin Yuan")

During the year ended 31 December 2022, the Group entered into a capital injection agreement with certain non-controlling shareholders of Inner Mongolia Xin Yuan and a new investor, pursuant to which the new investor agreed to subscribe for RMB580 million newly-increased registered and paid-up capital of Inner Mongolia Xin Yuan with a cash consideration of RMB580 million. After completion of the capital injection and as at 31 December 2022, the Group's interest in Inner Mongolia Xin Yuan decreased from 67.76% to 56.77%. As the difference between the consideration received from the investors and relevant carrying amount of non-controlling interest upon the capital injection is insignificant, no deemed gain or loss on partial disposal of a subsidiary was recognised in special reserve in consolidated statement of changes in equity.

(c) Disposals of equity interests in subsidiaries

For the year ended 31 December 2022, the Group completed two transactions with two independent third parties pursuant to which the Group transferred 100% equity interest of two subsidiaries, GCL-CIRO Holdings, LLC ("GCL CIRO") and Guayama Solar Energy, LLC ("Guayama") for a consideration of US$14,086,800 (equivalent to approximately RMB98,372,000) and US$2,913,200 (equivalent to approximately RMB20,344,000), respectively. For the disposal of GCL CIRO, approximately US$9,135,000 (equivalent to approximately RMB63,792,000) will be received by a local developer from the buyer to re-initiate the solar plant facility and the remaining of US$4,951,800 (equivalent to approximately RMB34,580,000) will be received by the Group. For the disposal of Guayama, all of the consideration will be received by the Group.

39. DEEMED DISPOSAL OF SUBSIDIARIES/PARTIAL INTEREST IN SUBSIDIARIES (Continued)

(B) Year ended 31 December 2022 (Continued)

(i) Disposals of subsidiaries and deemed disposals of partial interests in subsidiaries by the Group (Continued)

(c) Disposal of equity interests in subsidiaries (Continued)

As the major asset of GCL CIRO, such as property, plant and equipment and inventories were fully impaired in prior years due to the highly uncertainty at its operation domicile, the Directors considered that GCL-CIRO has net asset value with minimal amount as at the completion date.

The major asset of Guayama, such as property, plant and equipment and inventories were fully impaired in prior years due to the highly uncertainty at its operation domicile, however, its liability of US$1,958,000 (equivalent to approximately RMB13,673,000) was still existed.

The Directors considered that Guayama has net liability value as at the completion date.

Hence, the Group recognised the differences between the considerations to be received and the net asset value of GCL CIRO and the net liability value of Guayama as at the completion date as gain on disposal of US$5,907,000 (equivalent to approximately RMB41,248,000) in the profit or loss.

Up to 31 December 2023, US$3,543,120 (equivalent to approximately RMB24,676,000) have been settled.

(d) Disposals of subsidiaries by GNE

During the year ended 31 December 2022 and before the completion of Distribution in Specie, GNE Group entered into equity transfer agreements with four independent third parties to dispose of 100% equity interests in 7 subsidiaries and 60% equity interest in a subsidiary with an aggregate consideration of approximately RMB241 million and a loss on disposals of RMB47,630,000 was recognised in the profit or loss, which has been included in the loss of discontinued operation.

40. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged from 2022.

The capital structure of the Group consists of net debt, which mainly includes loans from related companies, bank and other borrowings, lease liabilities, net of cash and cash equivalents, and equity attributable to owners of the Company, comprising issued share capital and reserves.

The Directors review the capital structure on a regular basis. As part of this review, the Directors consider the cost of capital and the risks associated with each class of capital. Based on recommendations of the Directors, the Group will balance its overall capital structure through the payment of dividends, new share issues and share buy-backs as well as the issue of new debts or the redemption of existing debt.

41. FINANCIAL INSTRUMENTS

41a. Categories of financial instruments

	2023 RMB'000	2022 RMB'000
Financial assets		
FVTPL:		
Mandatorily measured at FVTPL		
— Held for trading	2,686	3,035
— Investments at FVTPL	2,537,724	960,872
Equity instruments at FVTOCI	1,439,349	2,130,776
Financial assets at amortised cost	28,737,047	32,476,232
Financial liabilities		
FVTPL:		
Derivative financial instruments	15,972	98,340
Convertible bond to a non-controlling shareholder of a subsidiary	84,212	72,407
Financial liabilities at amortised cost	31,366,514	36,251,572
Financial guarantee contracts	—	—

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies

Management provides services to the Group's business units, co-ordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Group through internal risk reports which analyse exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

Management reports periodically to the Directors who monitor risks and implemented policies to mitigate exposures.

There has been no change to the types of the Group's exposure in respect of financial instruments or the manner in which it measures and manages the risks.

Market risk

Foreign currency risk management

The Group's exposure to foreign currency risk arose from certain pledged and restricted bank deposits and bank balances, bank and other borrowings, lease liabilities, trade and other receivables and trade and other payables, amounts due from/to related companies, that are denominated in foreign currencies. The Group currently does not have a currency risk hedging policy. However, the management monitors foreign currency risk exposure by closely monitoring the movement of foreign currency rates and considers hedging against it should the need arise.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the reporting date are as follows:

	Assets		Liabilities	
	2023	2022	**2023**	2022
	RMB'000	RMB'000	**RMB'000**	RMB'000
The Group				
EUR	**61,163**	64,512	**—**	—
HK$	**884,539**	755,523	**25,613**	31,753
US$	**218,755**	256,278	**1,813**	242,959
JPY	**33,574**	—	**87,740**	—

The foreign currency assets in 2023 and 2022 mainly related to the HK$, US$, JPY and EUR denominated bank balances, trade and other receivables, amounts due from related companies, pledged and restricted bank and other deposits and bank balances as set out in notes 26, 27 and 29.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Market risk (Continued)

Foreign currency risk management (Continued)

The foreign currency liabilities in 2023 and 2022 mainly related to the HK$, US$ and JPY denominated trade and other payables, bank and other borrowing and lease liabilities as set out in notes 30, 33, and 34, respectively.

The Directors considered that the foreign currency risk arose from the inter-company balances that are denominated in foreign currencies at the reporting date are insignificant.

Foreign currency sensitivity analysis

The following sensitivity analysis details the Group's sensitivity to a 5% (2022: 5%) increase or decrease in the functional currency of the respective entities against the relevant foreign currencies. 5% (2022: 5%) is the sensitivity rate used when reporting foreign currency risk internally to management and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes outstanding foreign currency denominated monetary items and adjusts their translation at the end of the reporting period for a 5% (2022: 5%) change in foreign currency rates. The sensitivity analysis also includes inter-company balances where the denomination of the balance is in a currency other than the functional currency of the lender or the borrower. Where the functional currency of the respective entities had strengthened 5% (2022: 5%) against the relevant foreign currencies, profit or loss of the respective year would be affected as follows. For a 5% (2022: 5%) weakening of the functional currency of the respective entities against the relevant foreign currency, there would be an equal and opposite impact on profit or loss for the respective year.

The Group

	JPY	**EUR**	**HK$**	**US$**
	RMB'000	RMB'000	RMB'000	RMB'000
2023				
Increase/(Decrease) in profit for the year	**2,031**	**(2,294)**	**(32,210)**	**(8,135)**
2022				
Decrease in profit for the year	—	(2,419)	(27,141)	(499)

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Market risk (Continued)

Interest rate risk management

The Group is exposed to fair value interest rate risk in relation to fixed-rate amounts due from (to) related companies, pledged and restricted bank and other deposits and bank and other borrowings (see notes 27, 31, 29 and 33 for details of the above financial instruments, respectively). The Group currently has not entered into interest rate swaps to hedge against its exposure to changes in fair values of such financial assets and financial liabilities.

The Group is also exposed to cash flow interest rate risk in relation to variable-rate restricted bank deposits and bank balances and variable-rate bank borrowings (see notes 29 and 33).

The management has considered the Group's exposure to cash flow interest rate risk in relation to variable-rate pledged and restricted bank and other deposits and bank balances (see note 29) to be limited because the current market interest rates on general deposits are relatively low and stable.

It is the Group's policy to maintain an appropriate level between its fixed-rate and variable-rate borrowings so as to minimise the fair value and cash flow interest rate risk.

From continuing operations:

Interest income from financial assets that are measured at amortised cost is as follows:

	2023 **RMB'000**	2022 RMB'000
Financial assets at amortised cost	**240,213**	100,809

Interest expense on financial liabilities not measured at FVTPL is as follows:

	2023 **RMB'000**	2022 RMB'000
Financial liabilities at amortised cost	**580,621**	250,420

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Market risk (Continued)

Interest rate sensitivity analysis

The sensitivity analysis below has been determined based on the Group's exposure to interest rates for non-derivative instruments. The analysis is prepared assuming the financial instruments outstanding at the end of the reporting period were outstanding for the whole year. The following sensitivity analysis is used when reporting interest rate risk internally to management and represents management's assessment of the reasonably possible change in interest rates.

Variable-rate borrowings

If interest rates had been 50 basis points higher/lower on the lending benchmark interest rate stipulated by Benchmark Rate and all other variables were held constant, the Group's profit for the year ended 31 December 2023 would have decreased/increased by approximately RMB41,785,000 (2022: RMB15,605,000). This is mainly attributable to the Group's exposure to interest rates on its variable–rate borrowings. The Group's exposure to cash flow interest rate risk has increased during the current year mainly due to the increase in variable-rate borrowings. On the other hand, the Group's exposure to fair value interest rate risk has decreased during the year mainly due to the decrease in fixed-rate borrowings.

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates ("IBORs") with alternative nearly risk-free rates. As at 31 December 2023 and 2022, the Group has no LIBOR bank loans that may be subject to the interest rate benchmark reform. The Group is closely monitoring the transition to new benchmark interest rates.

Other price risk

The Group is exposed to price risk through its quoted and unquoted investments measured at FVTPL and measured at FVTOCI. The Group's equity price risk is mainly concentrated on equity instruments of entities operating in solar, and securities and financial service industries sector quoted on the Stock Exchange. In addition, the Group has monitored the price risk and will consider hedging the risk exposure should the need arise.

Other price risk sensitivity analysis

Other than sensitivity analysis of certain investments as disclosed in note 42(i), sensitivity on other investments is not provided as the amount is considered insignificant.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's credit risk is primarily attributable to trade and other receivables, amounts due from related companies, pledged and restricted bank and other deposits and bank balances.

Except for the financial guarantees given by the Group as set out below and in note 49, the Group does not provide any other guarantees which expose the Group to credit risk. The maximum exposure to credit risk in respect of these financial guarantees at the end of the reporting period is disclosed below and in note 49.

The Group does not hold any collateral or other credit enhancements to cover its credit risk associated with its financial assets and financial guarantee contracts.

Trade receivables and amounts due from related companies (trade related)

In order to minimise the credit risk, each major operating business has a policy of credit control in place under which credit evaluations of customers are performed on all customers requiring credit.

Credit terms are granted to customers which are either secured by bills or with letters of credit issued by banks or good credit quality customers. The management also has monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In this regard, the Directors consider that the Group's credit risk is significantly reduced. In addition, the Group performs impairment assessment under ECL model on trade balances individually or collectively.

Credit risk on sales of polysilicon and wafer products is not significant as the major customers are listed entities with good repayment history, and significant portion of trade receivables are either secured by bills or with letters of credit issued by banks or advance payments from customers.

Trade receivables arising from sales of electricity are mainly due from the local grid companies in various provinces in the PRC. The management considers the probability of default of trade receivables is low by taking into the account the past default experience of the debtors, adjusted for general economic conditions of the solar industry and an assessment of both current as well as forecast direction of market conditions at the reporting date. Accordingly, the management is of the opinion that the credit risk of trade receivables is limited.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Trade receivables and amounts due from related companies (trade related) (Continued)

In relation to tariff adjustment receivables, the management performs impairment assessment on a periodic basis. Based on the assessment, the management is of the opinion that the probability of default of the relevant counterparties are insignificant since the solar industry is well supported by the PRC government. In addition, management is confident that all of the Group's operating solar farms are able to be enlisted in the List in due course and the accrued revenue on tariff subsidy is fully recoverable but only subject to the timing of allocation of funds. Accordingly, the credit risk regarding tariff adjustment receivables is limited.

For sales of polysilicon and wafer, the Group's concentration of credit risk by geographical location is mainly the PRC, which accounted for approximately 100% of the trade receivables arising from sales of polysilicon and wafer as at 31 December 2023 and 2022.

For sales of electricity, the Group's concentration of credit risk by geographical location is mainly the PRC, which accounted for over 99% (2022: 99%) of the trade receivables arising from sales of electricity as at 31 December 2023.

As at 31 December 2023 and 2022, the Group had concentration of credit risk mainly on related companies which are known to the Group to be under common control. The gross carrying amount of amounts due from the aforesaid related companies (trade related) was approximately RMB167,329,000 (2022: RMB33,331,000).

Other receivables and amounts due from related companies (non-trade related)

The credit quality of other receivables and amounts due from related parties (non-trade related) excluding prepayments has been assessed with reference to historical information about the counterparties' past payment histories and financial position. The Directors closely monitor the credit quality of other receivables and amounts due from related companies (non-trade related) and consider those amounts, which are neither past due nor impaired, are of good credit quality in view of the good historical repayment record of such parties.

In addition, the Group performs impairment assessment under ECL model on these balances individually.

For the purpose of impairment assessment of other receivables, consideration receivables, receivables for modules procurement, amounts due from former subsidiaries and related companies (non-trade related), the loss allowance is measured at an amount equals to 12-month ECL. In determining the ECL for these assets, the Directors have taken into account the financial position of the counterparties, the industries they operate, as well as their latest available operating results, in estimating the probability of default of each of these financial assets occurring within their respective loss assessment time horizon, as well as the loss upon default in each case.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Other receivables and amounts due from related companies (non-trade related) (Continued)

As at 31 December 2023 and 2022, the Group had concentration of credit risk on other receivables and amount due from related companies (non-trade related) as the gross carrying amount of short-term loan to a third party and amount due from an associate as at 31 December 2023 were approximately RMB1,600 million (2022: approximately RMB1,617 million) and RMB4,165 million (2022: approximately RMB1 million). As at 31 December 2023 and 2022, the Group has no other significant concentration of credit risk on other receivables and the amounts due from related companies (non-trade nature).

Pledged and restricted bank and other deposits and bank balances

The Group's exposure to credit risk arising from pledged and restricted bank and other deposits and bank balances is limited because the counterparties are reputable banks and other financial institutions with high credit ratings assigned by international credit rating agencies in the PRC, Hong Kong and the USA.

The Group assessed 12-month ECL for bank balances and pledged and restricted bank and other deposits by reference to information relating to the probability of default and loss given default of the respective credit rating grades published by external credit rating agencies. Based on the average loss rates, the ECL on bank balances and pledged and restricted bank and other deposits is considered to be insignificant.

Financial guarantee contracts

For financial guarantee contracts, the maximum amount that the Group has guaranteed under the respective contracts was RMB2,571,150,000 (2022: RMB2,571,150,000) if the guarantees were called upon in their entirely, of which approximately RMB71,150,000 (2022: RMB71,150,000) and RMB2,500,000,000 (2022: RMB2,500,000,000) were provided to third parties and related parties, respectively, as at 31 December 2023. As at 31 December 2023, the guarantees provided to third parties of approximately RMB71,150,000 (2022: RMB71,150,000) was given to its investments at fair values through profit or loss for certain of their bank and other borrowings in proportional to the Group's interest in those investments. The details of the financial guarantees provided to the related parties are set out in note 49. The credit risks on financial guarantee contracts is limited as either the underlying borrowings are adequately secured by assets of the relevant borrowers or the relevant borrowers are with good historical repayment record.

At the end of the reporting period, the Directors performed impairment assessments on these financial guarantee contracts, and concluded that there has been no significant increase in credit risk since their initial recognition. Loss allowance is measured at 12-month ECL. In the opinion of the Directors, the fair value of the guarantees was considered insignificant at initial recognition, and the ECLs as at 31 December 2023 and 2022 were insignificant.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

The Group's internal credit risk grading assessment comprising the following categories:

Internal credit rating	Description	Trade receivables/ amounts due from related companies (trade related)	Other financial assets
Low risk	The counterparty has a low risk of default	Lifetime ECL (not credit-impaired)	12-month ECL
Medium risk	Debtor frequently repays after due dates but usually settles in full	Lifetime ECL (not credit-impaired)	12-month ECL
High risk	There has been significant increase in credit risk since initial recognition through information developed internally or external resources	Lifetime ECL (not credit-impaired)	Lifetime ECL (not credit-impaired)
Loss	There is evidence indicating the asset is credit-impaired	Lifetime ECL (credit-impaired)	Lifetime ECL (credit-impaired)
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery	Amount is written off	Amount is written off

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

The tables below detail the credit risk exposures of the Group's financial assets and financial guarantee contracts, which are subject to ECL assessment:

	Notes	External credit rating	Internal credit rating	12-month ECL or lifetime ECL	Gross carrying amount 2023 RMB'000	Gross carrying amount 2022 RMB'000
Financial assets at amortised costs						
Trade receivables						
— goods and services (excluding sales of electricity)	26	N/A	(Note 1,3)	Lifetime ECL not credit- impaired	**757,026**	507,535
		N/A	Loss (Note 1,3)	Credit-impaired	**56,242**	73,433
		Baa2–Aaa (2022: Baa2–Aaa)*	Low risk (Note 1,2)	Lifetime ECL	**10,463,808**	17,853,765
Trade receivables						
— sales of electricity	26	N/A	(Note 1,4)	Lifetime ECL not credit- impaired	**523,757**	398,866
Amounts due from related companies (trade related)	27	N/A	Low risk (Note 1,5)	Lifetime ECL	**305,134**	197,864
			Loss (Note 1,5)	Credit-impaired	**30,369**	34,733
Amounts due from related companies (non-trade related)	27	N/A	Low risk (Note 9)	12-month ECL	**4,730,842**	567,682
Other receivables	26	N/A	Low risk (Note 7)	12-month ECL	**937,851**	719,606
		N/A	Low risk (Note 8)	12-month ECL	**1,600,000**	1,617,362
		N/A	Loss (Note 6)	Credit-impaired	**342,678**	560,663
		N/A	Low risk (Note 11)	12-month ECL	**176,345**	12,938
Pledged and restricted bank and other deposits	29	N/A or Ba1–Aaa (2022: N/A or Ba1–Aaa)	Low risk (Note 7)	12-month ECL	**2,353,105**	3,794,548
Bank balances	29	Ba3–Aaa (2022: Ba3–Aaa)	Low risk	12-month ECL	**6,821,328**	6,635,646
Financial guarantee contracts	41(b), 49	N/A	Low risk (Note 10)	12-month ECL	**2,571,150**	2,571,150

* These represent credit rating grades of the relevant banks which issued the bills.

The amounts represent the maximum amount of the Group has guaranteed under the respective contracts.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Notes:

1. For trade receivables and amounts due from related companies (trade related), the Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. Except for debtors with significant outstanding balances, credit-impaired or to be settled by bills, the Group determines the ECL on these items collectively for debtors, grouped by internal credit rating.

2. Trade receivables with bills received from trade customers amounted to approximately RMB10,463,808,000 (2022: RMB17,853,765,000) as at 31 December 2023. The Directors consider the ECL for these trade receivables is insignificant because the bills are issued by reputable banks with high credit ratings assigned by international credit rating agencies in the PRC.

3. The following table provides information about the exposure to credit risk for trade receivables (excluding sales of electricity) which are assessed collectively as at 31 December 2023 within lifetime ECL (not credit-impaired). Debtors with internal credit rating of medium or high risk and credit-impaired with gross carrying amounts of approximately RMB582,000 (2022: RMB23,915,000) and RMB56,242,000 (2022: RMB73,433,000) as at 31 December 2023 were assessed individually, respectively.

Internal credit rating	**Trade receivables (excluding sales of electricity)**			
	2023		2022	
	Range of loss rate	**Gross carrying amount RMB'000**	Range of loss rate	Gross carrying amount RMB'000
Low risk	**0.5%-2.5%**	**756,444**	0.5%–2.5%	483,620
Medium risk	**10%**	**40**	10%	—
High risk	**25%**	**542**	25%	23,915
		757,026		507,535

The estimated loss rates are based on any historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information (for example, the current and forecasted economic growth rates in the PRC, which reflect the general economic conditions of the industry in which the debtors operate) that is available without undue cost or effort. Such forward-looking information is used by the management of the Group to assess both the current as well as the forecast direction of conditions at the reporting date. The grouping is regularly reviewed by management to ensure relevant information about specific debtors is updated.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Notes: (Continued)

The following table shows the movement in lifetime ECL that has been recognised for trade receivables (excluding sales of electricity) under simplified approach:

Trade receivables (excluding sales of electricity)

	Lifetime ECL (not credit-impaired) RMB'000	Lifetime ECL (credit-impaired) RMB'000	Total RMB'000
At 1 January 2022	11,588	80,324	91,912
Transfer to credit-impaired	(3,411)	3,411	—
Impairment loss recognised	14,678	10,960	25,638
Impairment loss reversed	(2,304)	(30,121)	(32,425)
Amounts written off as uncollectable	—	(5,616)	(5,616)
At 31 December 2022	20,551	58,958	79,509
Transfer to credit-impaired	(1,415)	1,415	—
Impairment loss recognised	1,043	4	1,047
Impairment loss reversed	(9,542)	(13,592)	(23,134)
At 31 December 2023	10,637	46,785	57,422

During the year ended 31 December 2023, impairment allowance for trade receivables of approximately RMB23,134,000 (2022: RMB32,425,000) was reversed as a result of subsequent settlement from the debtors.

4. The following table provides information about the exposure to credit risk for trade receivables in relation to its sales of electricity operation in the PRC which are assessed collectively within lifetime ECL (not credit– impaired).

	2023 Trade receivables (sales of electricity)		2022 Trade receivables (sales of electricity)	
Internal credit rating	**Average loss rate**	**Gross carrying amount RMB'000**	Average loss rate	Gross carrying amount RMB'000
Low risk	**0.68%**	**523,757**	—	398,866

The Group always measures the loss allowance for trade receivables for sales of electricity, including those with significant financing component at an amount equal to lifetime ECL. The estimated loss rates are based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue cost or effort. During the year ended 31 December 2023, impairment loss on trade receivables of RMB3,555,000 (2022: Nil) was recognised in continuing operations by the Group.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Notes: (Continued)

5. For amounts due from related companies (trade related), debtors with significant balances with gross carrying amounts of approximately RMB335,503,000 (2022: RMB232,597,000) as at 31 December 2023 were assessed individually, in which the Directors considered the receivables of gross carrying amount of approximately RMB30,369,000 (2022: RMB34,733,000) from related companies were credit-impaired because there was a default of payment from the counterparty. An accumulated impairment loss of RMB21,207,000 (2022: RMB11,530,000) was recognised as at 31 December 2023 for such receivables. During the year ended 31 December 2023, the Group has recognised impairment loss of RMB9,677,000 on amounts due from related companies (trade related) (2022: reversal of impairment loss of RMB294,221,000). Credit risk of the remaining amounts due from related companies (trade related) is considered as limited because the related companies are with good repayment history and with positive operating results/cashflows.

Amounts due from related companies (trade related)

	Lifetime ECL (credit-impaired) RMB'000
At 1 January 2022	305,751
Reversal of impairment	(294,221)
At 31 December 2022	11,530
Impairment loss recognised	9,677
At 31 December 2023	21,207

6. The following table shows movement in ECL that has been recognised for other receivables.

	Lifetime ECL (credit-impaired)		
	Consideration receivables RMB'000	**Other receivables** RMB'000	**Total** RMB'000
At 1 January 2022	527,460	548,433	1,075,893
(Reversal of impairment)/Impairment loss recognised	66,152	(999)	65,153
Amounts written-off	(356,308)	—	(356,308)
Derecognition upon Distribution in Specie	—	(377,368)	(377,368)
At 31 December 2022	237,304	170,066	407,370
Impairment loss recognised	—	109,188	109,188
Reversal of impairment loss	(237,304)	—	(237,304)
At 31 December 2023	—	279,254	279,254

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Notes: (Continued)

6. (Continued)

(i) For consideration receivables, in prior years, the Directors considered the consideration receivable from the disposal of a former subsidiary with a gross carrying amount of approximately RMB506,000,000 was credit-impaired because there were defaults of payments from the counterparty since 2019. Such consideration receivable was assessed for ECL individually. As at 31 December 2021, the accumulated impairment loss on the above consideration receivable was RMB431,308,000. During the year ended 31 December 2022, the Group signed an agreement with the counterparty pursuant to which the counterparty agreed to repay RMB150,000,000 to settle the above consideration receivable and the Group received the repayment during 2022. As a result, a reversal of impairment loss of RMB75,000,000 was recognised and the related remaining ECL of RMB356,308,000 was written off during the year ended 31 December 2022.

In prior years, the Group disposed of its entire equity interest in an associate to an independent third party at a consideration of approximately RMB727,879,000 and received the consideration of RMB346,730,000 up to 31 December 2022. The Directors consider the consideration receivables from the disposal of a former associate with a gross carrying amount of RMB381,149,000 as at 31 December 2022 was credit-impaired because there were defaults of payments from the counterparty. Such consideration receivables was assessed for ECL individually. Further impairment loss of approximately RMB141,152,000 was recognised for the year ended 31 December 2022 and the accumulated impairment loss on this consideration receivables was RMB237,304,000 as at 31 December 2022. During the year ended 31 December 2023, the Group fully received the consideration of RMB381,149,000. Impairment loss of RMB237,304,000 was reversed.

(ii) During the year ended 31 December 2023, changes in the loss allowance for other receivables of the Group are mainly due to the increase in credit risk of other receivables with gross carrying amounts of RMB150,000,000. During the year ended 31 December 2022, changes in the loss allowance for other receivables of the Group are mainly due to derecognition upon Distribution in Specie and the net impairment of consideration receivable disclosed in (i) above.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Notes: (Continued)

7. For purposes of internal credit risk management, the Group uses past due information to assess whether credit risk has increased significantly since initial recognition.

   As at 31 December 2023 and 2022, the balance of other receivables and pledged deposits was not past due and the internal credit rating was considered as low risk. These are measured at 12-month ECL (not credit-impaired). Therefore, the ECL of balances of other receivables and pledged deposits was considered to be insignificant.

8 In relation to the short-term loan to third parties, the management is of the opinion that the probability of default of the relevant counterparties is insignificant since the ultimate controlling party of the third parties is the PRC government. The Directors assessed the probability of default of the short-term loan by taking into the account the financial position of the borrowers and perform assessment of both current as well as forecast direction of market conditions at the reporting date. The Directors closely monitor the credit quality of the short-term loan and consider those amounts, which are neither past due nor impaired. Accordingly, the management is of the opinion that the credit risk of the short term loan is limited and the ECL of the balance was considered insignificant.

9. As at 31 December 2023, amounts due from related companies (non-trade related) mainly represents amounts due from associates of approximately RMB4,693,752,000 (2022: RMB529,715,000) and were not past due. The Directors assessed and considered the ECL by reference to the historical payment pattern, financial position of the related parties and aging period of the balances. The ECL of these balances was considered to be insignificant.

10. For financial guarantee contracts, the gross carrying amount represents the maximum amount that the Group has guaranteed under the relevant contracts. The Directors assessed and considered the ECL for the financial guarantee contracts is insignificant.

11. In relation to the note receivables, the Directors assessed and considered the ECL for the note receivables is insignificant.

Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. The management monitors the utilisation of bank borrowings to ensure unutilised banking facilities are adequate and ensures compliance with loan covenants or to obtain waiver from the relevant banks if the Group is not able to satisfy any of the covenant requirements.

The Group's current assets exceeded its current liabilities by approximately RMB12,552 million as at 31 December 2023 (2022: 3,252 million). Further, the Group had cash and cash equivalents of RMB6,821 million (2022: RMB6,636 million) with total borrowings due within one year amounted to RMB5,386 million (2022: RMB9,524 million).

The Group finances its capital intensive operations by short-term and long-term bank and other borrowings and shareholders' equity.

The following tables detail the Group's remaining contractual maturity for its non-derivative financial liabilities and the Group's liquidity analysis for its derivative financial instruments. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest dates on which the Group can be required to pay. The maturity dates for other non-derivative financial liabilities are based on the contractual repayment dates.

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Liquidity risk (Continued)

The tables include both interest and principal cash flows. To the extent that interest are at floating rate, the undiscounted amount is derived from interest rate at the end of the reporting period.

Liquidity and interest risk tables

	Weighted average interest rate %	On demand or within 1 year RMB'000	1–2 years RMB'000	2–5 years RMB'000	Over 5 years RMB'000	Total undiscounted cash flows RMB'000	Carrying amount RMB'000
At 31 December 2023							
Non-derivative financial liabilities							
Trade and other payables	—	14,066,209	—	—	—	14,066,209	14,066,209
Amounts due to related companies	0.87%	1,361,234	—	—	—	1,361,234	1,361,234
Bank and other borrowings							
— fixed-rate	0.36%	3,816,227	48,855	196,174	—	4,061,256	4,044,433
— variable-rate	3.75%	1,897,785	1,379,536	7,638,282	1,592,589	12,508,192	11,222,572
Written put options over non-controlling interests	10.00%	525,695	—	—	—	525,695	525,695
Lease liabilities	5.91%	76,895	43,483	29,128	8,298	157,804	146,371
Sub-total		21,744,045	1,471,874	7,863,584	1,600,887	32,680,390	31,366,514
Derivative financial instrument							
Put options classified as derivative financial instruments (note 35)	9.50%	647,665	—	—	—	647,665	15,972
Convertible bond to a non-controlling shareholder of a subsidiary	—	84,212	—	—	—	84,212	84,212
		22,475,922	1,471,874	7,863,584	1,600,887	33,412,267	31,466,698
Financial guarantee contracts (Note below)	—	2,571,150	—	—	—	2,571,150	—

41. FINANCIAL INSTRUMENTS (Continued)

41b. Financial risk management objectives and policies (Continued)

Liquidity risk (Continued)

Liquidity and interest risk tables (Continued)

	Weighted average interest rate %	On demand or within 1 year RMB'000	1–2 years RMB'000	2–5 years RMB'000	Over 5 years RMB'000	Total undiscounted cash flows RMB'000	Carrying amount RMB'000
At 31 December 2022							
Non-derivative financial liabilities							
Trade and other payables	—	19,084,319	—	—	—	19,084,319	19,084,319
Amounts due to related companies	—	3,496,364	—	—	—	3,496,364	3,496,364
Bank and other borrowings							
— fixed-rate	0.56%	8,726,031	283,619	179,788	—	9,189,438	9,064,550
— variable-rate	4.02%	967,885	2,233,535	967,371	187,720	4,356,511	4,161,304
Written put options over non-controlling interests	10.00%	293,952	—	—	—	293,952	293,952
Lease liabilities	5.84%	110,345	23,673	15,773	9,857	159,648	151,083
Sub-total		32,678,896	2,540,827	1,162,932	197,577	36,580,232	36,251,572
Derivative financial instrument							
Put options classified as derivative financial instruments (note 35)	9.50%	612,278	—	—	—	612,278	98,340
Convertible bond to a non-controlling shareholder of a subsidiary	4.75%	24,500	32,646	—	—	57,146	72,407
		33,315,674	2,573,473	1,162,932	197,577	37,249,656	36,422,319
Financial guarantee contracts (Note below)	—	2,571,150	—	—	—	2,571,150	—

The amounts included above for variable-rate borrowings are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

As at 31 December 2023 and 2022, the Group has no bank and other borrowings that are repayable on demand due to breach of loan covenants.

Note:

The amounts included above for financial guarantee contracts are the maximum amounts the Group could be required to settle under the arrangements for the full guaranteed amounts if that amounts are claimed by the counterparties to the guarantees. Based on expectations at the end of the reporting period, the Group considers that it is more likely than not that no amount will be payable under the arrangements. However, this estimate is subject to change depending on the probability of the counterparties claiming under the guarantees which is the likelihood that the financial receivables held by the counterparties which are guaranteed suffer credit losses.

42. FAIR VALUE MEASUREMENTS

(i) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used).

Financial assets/financial liabilities	Fair value as at 2023 RMB'000	Fair value as at 2022 RMB'000	Fair value hierarchy	Valuation techniques and key inputs	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
1) Listed equity securities classified as held for trading investments	2,686	3,035	Level 1	Quoted bid price in an active market.	N/A	N/A
2) Listed equity investments measured at FVTOCI	20,781	30,309	Level 1	Quoted bid price in an active market.	N/A	N/A
3) Unlisted equity investments measured at FVTOCI	420,566	—	Level 3	Adjusted net assets value	Net assets value	An increase in the net assets value would result in an increase in fair value and vice versa
4) Unlisted equity investments measured at FVTPL	—	466,909	Level 3	Market comparison approach and fair value was determined with reference to recent transaction price.	Adjusted market price between comparables and the underlying property held by the unlisted equity investments.	An increase in the price per square meter used would result in an increase in fair value measurement of the underlying property, and vice versa.
	250,058	46,289	Level 3	Adjusted net assets value	Net assets value	An increase in the net assets value would result in an increase in fair value and vice versa
	418,066	—	Level 3	Income approach	Long-term revenue growth rates, taking into account management's experience and knowledge of market conditions of the specific industries at 0%. Discount rate, taking into account of weighted average cost of capital (WACC) determined using a Capital Asset Pricing Model at 10.16%.	The higher the long term growth rate, the higher the fair value, vice versa. The higher the discount rate, the lower the fair value, vice versa.
5) Unlisted investments measured at financial assets at FVTPL	176,079	193,829	Level 3	Adjusted net assets value	Net assets value	An increase in the net assets value would result in an increase in fair value and vice versa
	516,363	253,845	Level 2	Quoted price from third party financial institutions and determined with reference to the value of underlying investments which mainly composed of listed shares and bonds.	N/A	N/A
	1,177,158	—	Level 2	Discounted cash flow	N/A	N/A
6) Put option of interest in Jiangsu Xinhua classified as derivative financial instruments (Note a)	15,972	12,014	Level 3	Binomial Option Pricing Model.	Expected volatility of 36.96% - 48.41% (2022: 44.3%) Risk free rate 2.32% to 2.51% (2022: 2.21%) Probability to exercise of 20% (2022:20%)	The higher the expected volatility, the higher the fair value. The higher the risk free rate, the lower the fair value. The higher the probability to exercise, the higher the fair value.

42. FAIR VALUE MEASUREMENTS (Continued)

(i) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Continued)

Financial assets/financial liabilities	Fair value as at 2023 RMB'000	Fair value as at 2022 RMB'000	Fair value hierarchy	Valuation techniques and key inputs	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
6) Put option of interest in Inner Mongolia Zhonghuan Crystal classified as derivative financial instrument (note b)	—	86,326	Level 3	Binomial Option Pricing Model	2022: Expected volatility of 54.96% to 55.87%	The higher of expected volatility, the higher of fair value.
					2022: Risk free rate of 2.09% to 2.32% respectively	The higher of risk free rate, the lower of fair value.
					2022: Probability to exercise of 20%	The higher the probability to exercise, the higher of fair value.
7) Convertible bond to a non-controlling shareholder of a subsidiary (note c)	84,212	72,407	Level 3	Binomial Option Pricing Model	Expected volatility of 38.6% (2022: 55.43%)	The higher of expected volatility, the higher of fair value.
					Risk free rate of 1.87% (2022: 2%)	The higher of risk free rate, the lower of fair value.
					Probability to exercise of 100% (2022: 100%)	The higher the probability to exercise, the higher of fair value.
8) Perpetual note classified as financial assets at FVTOCI included in interests in associates (note d)	998,002	2,100,467	Level 3	Modified discounted cash flow method, the key inputs are equity volatility, and discount rate.	Equity volatility of 53.6%, risk free rate of 2.91% and discount rate 23.02% (2022: 48.4%, 3.32% and 12.33%, respectively)	The higher the equity volatility, the lower fair value. The higher of discount rate, the lower of fair value.

Notes:

(a) If the expected volatility of the underlying shares was 5% higher/lower while all the other variables were held constant, the gain on change in fair value of the derivative financial instruments would decrease by approximately RMB3,300,000/increase by approximately RMB3,300,000 for the year ended 31 December 2023 (2022: the loss on change in fair value of the derivative financial instruments would increase by approximately RMB2,490,000/decrease by approximately RMB2,490,000).

If the risk free rate used was multiplied by 5% higher/lower while all the other variables were held constant, the gain on change in fair value of the derivative financial instruments would increase by approximately RMB110,000/decrease by approximately RMB110,000 for the year ended 31 December 2023 (2022: the loss on change in fair value of the derivative financial instruments would decrease by approximately RMB50,000/increase by approximately RMB50,000).

If the probability used was 30% higher/10% lower while all the other variables were held constant, the gain on change in fair value of the derivative financial instruments would decrease by approximately RMB23,960,000/increase by approximately RMB7,990,000 for the year ended 31 December 2023 (2022: the loss on change in fair value of the derivative financial instruments would increase by approximately RMB18,010,000/decrease by approximately RMB6,000,000).

42. FAIR VALUE MEASUREMENTS (Continued)

(i) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Continued)

Notes: (Continued)

(b) If the expected volatility of the underlying shares was 5% higher/lower while all the other variables were held constant, the loss on change in fair value of the derivative financial instrument would increase by approximately RMB18,965,000/decrease by approximately RMB16,631,000 for the year ended 31 December 2022.

If the risk free rate used was multiplied by 5% higher/lower while all the other variables were held constant, the loss on change in fair value of the derivative financial instrument would decrease by approximately RMB527,000/increase by approximately RMB531,000 for the year ended 31 December 2022.

If the probability used was 30% higher/20% lower while all the other variables were held constant, the loss on change in fair value of the derivative financial instruments would increase by approximately RMB34,472,000/decrease by approximately RMB22,981,000 for the year ended 31 December 2022.

(c) If the expected volatility of the underlying shares was 5% higher/lower while all the other variables were held constant, the loss on change in fair value of convertible bond payable would increase by approximately RMB381,000/decrease by approximately RMB409,000 (2022: the gain on change in fair value of convertible bond payable would decrease by approximately RMB914,000/increase by approximately RMB917,000).

If the risk free rate used was multiplied by 5% higher/lower while all the other variables were held constant, the loss on change in fair value of convertible bond payable would decrease by approximately RMB nil/increase by approximately RMB nil (2022: the gain on change in fair value of convertible bond payable would increase by approximately RMB1,000/decrease by approximately RMB1,000).

If the probability used was 30% lower while all the other variables were held constant, the gain on change in fair value of convertible bond payable would decrease by approximately RMB20,461,000 (2022: the gain on change in fair value of convertible bond payable would increase by approximately RMB21,722,000.

(d) If the equity volatility of the underlying shares was multiplied by 10% higher/lower while all the other variables were held constant, the loss on change in fair value of the investments in equity instruments at FVTOCI would increase by approximately RMB29,854,000/decrease by approximately RMB67,471,000 for the year ended 31 December 2023 (2022: the gain on change in fair value of the investments in equity instruments at FVTOCI would decrease by approximately RMB62,505,000/increase by approximately RMB57,187,000)

If the discount rate used was multiplied by 10% higher/lower while all the other variables were held constant, the loss on change in fair value of the investments in equity instruments at FVTOCI would increase by approximately RMB54,106,000/decrease by approximately RMB36,636,000 for the year ended 31 December 2023 (2022: the gain on change in fair value of the investments in equity instruments at FVTOCI would decrease by approximately RMB118,656,000/increase by approximately RMB143,634,000)

There is no transfer among the different levels of the fair value hierarchy for the years ended 31 December 2023 and 2022.

42. FAIR VALUE MEASUREMENTS (Continued)

(i) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Continued)

The Directors consider that the carrying amounts of financial assets and financial liabilities and associated interest receivables and interest payables recorded at amortised cost in the consolidated financial statements approximate their fair values.

Included in other expenses, gains and losses set out in note 10, a net gain of RMB124,087,000 is related to financial assets and financial liabilities measured at FVTPL held during 31 December 2023 (2022: a net loss of RMB72,489,000).

Fair value hierarchy as at 31 December 2023

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial assets at FVTPL				
Listed equity securities classified as held for trading investments	2,686	—	—	2,686
Investments at FVTPL	—	1,693,521	844,203	2,537,724
Equity investments at FVTOCI	20,781	—	420,566	441,347
Perpetual notes classified as equity instrument at FVTOCI included in interests in associates	—	—	998,002	998,002
Total	23,467	1,693,521	2,262,771	3,979,759
Financial liabilities				
Put options classified as derivative financial instruments	—	—	15,972	15,972
Convertible bond to a non-controlling shareholder of a subsidiary	—	—	84,212	84,212
Total	—	—	100,184	100,184

42. FAIR VALUE MEASUREMENTS (Continued)

(i) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Continued)

Fair value hierarchy as at 31 December 2022

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial assets at FVTPL				
Listed equity securities classified as held for trading investments	3,035	—	—	3,035
Investments at FVTPL	—	253,845	707,027	960,872
Equity investments at FVTOCI	30,309	—	—	30,309
Perpetual notes classified as equity instrument at FVTOCI included in interests in associates	—	—	2,100,467	2,100,467
Total	33,344	253,845	2,807,494	3,094,683
Financial liabilities				
Put options classified as derivative financial instruments	—	—	98,340	98,340
Convertible bond to a non-controlling shareholder of a subsidiary	—	—	72,407	72,407
Total	—	—	170,747	170,747

(ii) Reconciliation of Level 3 fair value measurements

31 December 2023

	Put options classified as derivative financial instruments RMB'000	Unlisted investments/ equity instruments measured at FVTPL RMB'000	Unlisted equity investments measured at FVTOCI RMB'000	Convertible bond to a non-controlling shareholder of a subsidiary RMB'000	Perpetual note at financial assets as FVTOCI (included in Interests in associates) RMB'000	Total RMB'000
Opening balance	(98,340)	707,027	—	(72,407)	2,100,467	2,636,747
(Loss) gain in profit or loss	82,368	25,015	—	(11,805)	—	95,578
Loss in other comprehensive income	—	—	—	—	(1,102,465)	(1,102,465)
Initial recognition	—	112,161	420,566	—	—	532,727
Closing balance	(15,972)	844,203	420,566	(84,212)	998,002	2,162,587

42. FAIR VALUE MEASUREMENTS (Continued)

(ii) Reconciliation of Level 3 fair value measurements (Continued)

31 December 2022

	Put options classified as derivative financial instruments RMB'000	Unlisted investments/ equity instruments measured at FVTPL RMB'000	Convertible bond to a non-controlling shareholder of a subsidiary RMB'000	Perpetual note at financial assets as FVTOCI (included in Interests in associates) RMB'000	Total RMB'000
Opening balance	(112,759)	252,696	(84,180)	—	55,757
Initial recognition upon Distribution in Specie	—	—	—	2,024,879	2,024,879
(Loss) gain in profit or loss	(3,604)	(5,669)	11,773	—	2,500
Gain in other comprehensive income	—	—	—	75,588	75,588
Derecognition	18,023	—	—	—	18,023
Initial recognition	—	460,000	—	—	460,000
Closing balance	(98,340)	707,027	(72,407)	2,100,467	2,636,747

Of the total losses for the year included in profit or loss, total gain of RMB9,252,000 (2022: total gain of RMB2,500,000) related to put options classified as derivative financial instruments (excluding the put options derecognised during the year), unlisted investments/equity instruments measured at FVTPL, and convertible bond to a non-controlling shareholder of a subsidiary held at the end of the reporting period which fair value gains or losses were included in other expense, gains and losses, net.

Fair value measurements and valuation processes

In estimating the fair value of an asset or a liability, the Group uses market-observable data to the extent they are available. Where Level 1 inputs are not available, the Group adopts valuation techniques disclosed in note 42(i) or engages third party qualified valuers to perform the valuation of the put options classified as derivative financial instruments, unlisted investments measured at FVTPL, unlisted equity investments measured at FVTPL and convertible bond to a non-controlling shareholder of a subsidiary and the perpetual notes classified as financial assets at FVTOCI. The Directors work closely with the qualified valuers to establish appropriate valuation techniques and inputs to the model. The management of the Group reports the findings to the Directors every half year to explain the cause of fluctuations in the fair value of the assets and liabilities.

Information about the valuation techniques and inputs used in determining the fair value of various assets and liabilities are disclosed above.

43. TRANSFERS OF FINANCIAL ASSETS

During the current year, the Group endorsed certain bills received from customers for the settlement of payables for the purchase of plant and machinery, construction costs and trade and other payables; and discounted certain bills received by the Group to banks for financing.

The following were bills received by the Group as at 31 December 2023 and 2022 that were discounted to banks or endorsed to creditors, respectively, on a full recourse basis. As the Group has not transferred the significant risks and rewards relating to these bills, it continues to recognise the full carrying amount of trade receivables and recognised the cash received on the transfer as secured borrowings or the amounts outstanding with the creditors remain to be recognised as trade and other payables. These financial assets are carried at amortised cost in the Group's consolidated statement of financial position.

At 31 December 2023

	Bills discounted to banks with full recourse RMB'000	**Bills endorsed to creditors with full recourse RMB'000**	**Total RMB'000**
Carrying amount of transferred assets	**3,591,203**	**4,318,120**	**7,909,323**
Carrying amount of associated liabilities	**(3,591,203)**	**(4,318,120)**	**(7,909,323)**
Net position	**—**	**—**	**—**

At 31 December 2022

	Bills discounted to banks with full recourse RMB'000	Bills endorsed to creditors with full recourse RMB'000	Total RMB'000
Carrying amount of transferred assets	7,414,485	8,272,025	15,686,510
Carrying amount of associated liabilities	(7,414,485)	(8,272,025)	(15,686,510)
Net position	—	—	—

The Directors consider that the carrying amounts of the endorsed and discounted bills approximate their fair values.

The finance costs recognised for bills discounted to banks were included in interest on bank and other borrowings (note 8).

44. COMMITMENTS AND LIABILITIES

(i) Commitments

	2023 RMB'000	2022 RMB'000
Capital commitments		
Capital expenditure in respect of acquisitions of property, plant and equipment contracted for but not provided for	**3,666,965**	10,224,751
Other commitments		
Commitment to contribute share capital to investments in associates contracted for but not provided for	**413,000**	166,000
Commitment to contribute share capital to investments at FVTPL contracted for but not provided for	**60,000**	60,000
	4,139,965	10,450,751

(ii) Contingent liabilities

Except for the financial guarantee contracts provided by the Group as disclosed in note 49 and a guarantee provided to third party of approximately RMB71,150,000 (2022: RMB71,150,000) was given to its investments at fair values through profit or loss for certain of their bank the other borrowings in proportional to the Group's interest in those investment, the Group had no any other material contingent liability as at 31 December 2023 and 2022.

45. PLEDGE OF OR RESTRICTIONS ON ASSETS

Pledge of assets

At the end of the reporting period, the Group had pledged the following assets to secure credit facilities of the Group:

	2023 RMB'000	2022 RMB'000
Bank and other borrowings secured by:		
Pledged and restricted bank deposits	**301,154**	339,074
Right-of-use assets	**224,051**	523,870
Investment properties	**365,352**	378,493
Property, plant and equipment	**1,373,278**	3,172,688
Trade receivables and other receivables	**2,726,871**	7,713,924
Total	**4,990,706**	12,128,049

Certain subsidiaries pledged their fee collection rights in relation to the sales of electricity. As at 31 December 2023, trade receivables in respect of such fee collection rights pledged amounted to approximately RMB380,151,000 (2022: RMB299,439,000).

As at 31 December 2023 and 2022, the Group had no pledged property, plant and equipment and right-of-use assets to secure bank and other borrowings of an associate and a joint venture of the Group.

In addition to the pledged assets above, there are restricted bank deposits of approximately RMB1,879,411,000 (2022: RMB3,455,535,000) and trade receivables of approximately RMB885,535,000 (2022: RMB465,163,000) which had been pledged to secure the issuance of bills and short-term letters of credit for trade and other payables.

Restrictions on assets

In addition, lease liabilities of approximately RMB146,371,000 (2022: RMB151,083,000) were recognised against related right-of-use assets of approximately RMB140,267,000 (2022: RMB142,274,000) as at 31 December 2023. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessors. Leased assets may not be used as security for borrowing purposes.

46. SHARE-BASED PAYMENT TRANSACTIONS

46a. The Company

(I) Equity-settled share option scheme

On 22 October 2007, a Share Option Scheme ("2007 Share Option Scheme") was adopted by the Company pursuant to the resolution of the sole shareholder. Under the schemes, the Company may grant options to directors, employees of the Company and its subsidiaries and qualifying grantees to subscribe for shares of the Company. Options granted are exercisable during the period after the respective vesting date to the last day of the ten-year period after the grant date. Upon expiry of the 2007 Share Option Scheme, no further options could be granted or offered but the provisions of this scheme shall remain in full force for the granted share options and remained outstanding.

The total number of shares in respect of which options may be granted under the 2007 Share Option Scheme are not permitted to exceed 10% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders. The number of shares issued and to be issued in respect of which options granted and may be granted to any individual in any one year is not permitted to exceed 1% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders.

The exercise price is determined by the Directors and will not be less than the higher of (i) the closing price of the Company's shares on the date of grant; (ii) the average closing price of the shares of the Company for the five business days immediately preceding the date of grant; and (iii) the nominal value of the Company's share.

Pursuant to the terms of the Share Option Scheme, the exercise price and number of share options were being adjusted as a result of the determination of entitlements to a rights issue of the Company on 26 January 2016. Details of the adjustments are disclosed in the announcement of the Company on 26 January 2016.

At 31 December 2023, the number of shares in respect of which options had been granted and remained outstanding under the 2007 Share Option Scheme was 39,265,486 (2022: 44,832,763) shares, representing 0.15% (2022: 0.17%) of the issued share capital of the Company at that date.

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(I) Equity-settled share option scheme (Continued)

On 1 April 2022, a new share option scheme ("2022 Share Option Scheme") was adopted by the Company pursuant to the resolution of the shareholders of the Company and the 2022 Share Option Scheme shall be valid and effective for a period of 10 years commencing on 1 April 2022. Under the 2022 Share Option Scheme, the Company may grant options to directors, employees of the Company and its subsidiaries and qualifying grantees to subscribe for shares of the Company. Options granted under 2022 Share Option Scheme can only be exercised according to the following vesting schedule upon the following anniversaries of the grant dates of the options: up to 20% of the shares issuable under the option upon the first anniversary; 40% upon the second anniversary; 60% upon the third anniversary; 80% upon the fourth anniversary and 100% upon the fifth anniversary.

The total number of shares in respect of which options may be granted under the 2022 Share Option Scheme and any other share option schemes of the Company are not permitted to exceed 10% of the shares of the Company as at the date on which the 2022 Share Option Scheme is adopted. The number of shares issued and to be issued in respect of which options granted and may be granted to any individual in any one year is not permitted to exceed 1% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders.

The exercise price is determined by the Directors and will not be less than the higher of (i) the closing price of the Company's shares on the date of grant; (ii) the average closing price of the shares of the Company for the five business days immediately preceding the date of grant; and (iii) the nominal value of the Company's share.

As 31 December 2023, no shares in respect of which options has been granted and remained outstanding under 2022 Share Option Scheme.

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(I) Equity-settled share option scheme (Continued)

Movements of share options granted during the year are as follows:

(i) 2007 Share Option Scheme

2023

	Exercise price	Date of grant	Exercisable period	Number of shares issuable under options			
				Outstanding at 1 January 2023	During the year Exercised (Note 1)	During the year Forfeited	Outstanding at 31 December 2023
Directors	HK$1.160	19.02.2016	15.03.2016 to 18.02.2026	1,712,189	—	—	1,712,189
	HK$1.324	29.03.2016	18.04.2016 to 28.03.2026	7,944,454	—	—	7,944,454
Employees and others	HK$1.630	05.07.2013	16.09.2013 to 04.07.2023	4,501,956	—	(4,501,956)	—
	HK$2.867	24.03.2014	26.05.2014 to 23.03.2024	2,618,642	—	—	2,618,642
	HK$1.160	19.02.2016	15.03.2016 to 18.02.2026	24,631,144	(558,000)	(507,321)	23,565,823
	HK$1.324	29.03.2016	18.04.2016 to 28.03.2026	3,424,378	—	—	3,424,378
				44,832,763	(558,000)	(5,009,277)	39,265,486
Exercisable at 1 January 2023/ 31 December 2023				44,832,763			39,265,486
Weighted average exercise price (HK$)				1.35	1.16	1.58	1.32

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(I) Equity-settled share option scheme (Continued)

(i) 2007 Share Option Scheme (Continued)

2022

				Number of shares issuable under options			
	Exercise price	Date of grant	Exercisable period	Outstanding at 1 January 2022	During the year Exercised (Note 1)	During the year Forfeited	Outstanding at 31 December 2022
Directors	HK$1.160	19.02.2016	15.03.2016 to 18.02.2026	4,230,113	(2,517,924)	—	1,712,189
	HK$1.324	29.03.2016	18.04.2016 to 28.03.2026	7,944,454	—	—	7,944,454
Employees and others	HK$1.630	05.07.2013	16.09.2013 to 04.07.2023	5,025,330	(523,374)	—	4,501,956
	HK$2.867	24.03.2014	26.05.2014 to 23.03.2024	2,618,642	—	—	2,618,642
	HK$1.160	19.02.2016	15.03.2016 to 18.02.2026	31,279,239	(5,841,925)	(806,170)	24,631,144
	HK$1.324	29.03.2016	18.04.2016 to 28.03.2026	4,028,680	(604,302)	—	3,424,378
				55,126,458	(9,487,525)	(806,170)	44,832,763
Exercisable at 1 January 2022/ 31 December 2022				55,126,458			44,832,763
Weighted average exercise price (HK$)				1.32	1.20	1.16	1.35

Notes:

1. In respect of the share options exercised during the year, the weighted average closing price of the Company's shares immediately before the dates of exercise was HK$1.67 (2022: HK$3.55).

2. The share options outstanding at 31 December 2023 had a weighted average remaining contractual life of 2.04 years (2022: 2.79 years).

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(II) Equity-settled share award scheme

Share award scheme

The Company adopted a share award scheme (the "Scheme") on the 16 January 2017 (the "Adoption Date") for a duration of the later of (i) the 10th anniversary of the Adoption Date, and (ii) such date that all awards outstanding are fully vested, settled, lapsed, forfeited or cancelled. The purpose of the Scheme is, through the grant of the share awards to certain of the Directors and employees ("Eligible Persons") of the Group, to effectively attract, retain and incentivise core employees of the Group and align their interests and growth with the Group as a whole.

The Company has entered into a trust deed with the Trustee for the purpose of facilitating the purchase, holding and sale of shares in the Group for the benefit of the Eligible Persons of the Group. The maximum number of shares that can be held by the Trustee under the Scheme is limited to 2% of the issued share capital of the Company from time to time. All the shares purchased by the Group through the Trustee on the Stock Exchange are recorded as shares held for the share award scheme in the Group's reserves and are for the Scheme only.

The Board of the Company may, from time to time, at its absolute discretion, select any Eligible Persons to participate in the Scheme as grantees ("Award Grantees"), subject to the terms and conditions set out in the rule of the Scheme. In determining the Award Grantees, the Board shall take into consideration matters including, but without limitation, the present and expected contribution of the relevant Award Grantees to the Group. An Award Grantee may be granted an award by the Company during the award period which will vest over a period of time and on such other conditions to be determined by the Board in its absolute discretion.

During the years ended 31 December 2023 and 2022, board of directors of the Company has resolved to award an aggregate of 4,296,000 and 290,830,000 award shares, respectively, (the "Award Shares") at a grant price of HK$0.86 per award share to directors and employees of the Group pursuant to the terms and conditions of the Scheme.

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(II) Equity-settled share award scheme (Continued)

Share award scheme (Continued)

Subject to the satisfaction of the vesting conditions of the Award Shares, the Trustee will transfer the Award Shares to the grantees within one month from the date of vesting notice.

The vesting of the Award Shares is subject to the satisfaction of the vesting conditions including certain corporate and personal performance and other service conditions.

Under certain circumstances, all unvested Award Shares and all vested Award Shares (but not yet transferred to the grantees) shall lapse immediately, and the grantees shall also, at the request of the Company, return the equivalent cash of the difference (or part of the difference) between (i) the share price of the Company at the date of exercise of the Award Shares vested and transferred to the grantees under the rules of the Scheme and (ii) the exercise price, within a certain period of time.

The Board may from time to time while the Scheme is in force and subject to all applicable laws, determine such vesting criteria and conditions or periods for the award to be vested thereunder. Details of the Scheme are set out in the announcement of the Company dated 16 January 2017. For the purpose of the Scheme, the Company purchased its own ordinary shares through the Trustee from the open market. Movements in the number of treasury shares held through the Trustee are as follows:

Month of purchase	**Number of ordinary shares**	**Aggregate consideration paid**	**Equivalent aggregate consideration paid**
		HK$'000	RMB'000
At 1 January 2022	322,998,888	277,372	236,629
Purchase of shares during the year	201,500,000	500,500	439,478
At 31 December 2022	524,498,888	777,872	676,107
Exercise of share award during the year	(39,820,000)	(59,057)	(51,332)
At 31 December 2023	484,678,888	718,815	624,775

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(II) Equity-settled share award scheme (Continued)

Share award scheme (Continued)

Movements in the number of award shares granted under the Share Award Scheme during the year and their related weighted average fair values are as follows:

2023

	Exercise price	Date of grant	Vesting period	Fair value per award share at the grant date	Number of Award shares				
					Outstanding at 1 January 2023	Granted	Exercised	Forfeited	Outstanding at 31 December 2023
Directors	HK$0.86	16.02.2022	16.02.2022 to 15.02.2023	HK$1.76	1,878,000	–	(1,878,000)	–	–
			16.02.2022 to 15.02.2024	HK$1.92	1,878,000	–	–	–	1,878,000
			16.02.2022 to 15.02.2025	HK$1.97	1,878,000	–	–	–	1,878,000
			16.02.2022 to 15.02.2026	HK$2.00	1,878,000	–	–	–	1,878,000
			16.02.2022 to 15.02.2027	HK$2.02	1,878,000	–	–	–	1,878,000
	HK$0.86	06.07.2022	06.07.2022 to 05.07.2024 (note)	HK$2.98	4,180,000	–	–	–	4,180,000
			06.07.2022 to 05.07.2024	HK$3.13	4,180,000	–	–	–	4,180,000
			06.07.2022 to 05.07.2025	HK$3.19	4,180,000	–	–	–	4,180,000
			06.07.2022 to 05.07.2026	HK$3.23	4,180,000	–	–	–	4,180,000
			06.07.2022 to 05.07.2027	HK$3.27	4,180,000	–	–	–	4,180,000
Employee and others	HK$0.86	16.02.2022	16.02.2022 to 15.02.2023	HK$1.76	40,982,000	–	(37,942,000)	(3,040,000)	–
			16.02.2022 to 15.02.2024	HK$1.92	40,982,000	–	–	(2,230,000)	38,752,000
			16.02.2022 to 15.02.2025	HK$1.97	40,982,000	–	–	(2,230,000)	38,752,000
			16.02.2022 to 15.02.2026	HK$2.00	40,982,000	–	–	(2,230,000)	38,752,000
			16.02.2022 to 15.02.2027	HK$2.02	40,982,000	–	–	(2,230,000)	38,752,000
	HK$0.86	06.07.2022	06.07.2022 to 05.07.2024 (note)	HK$2.98	11,126,000	–	–	(80,000)	11,046,000
			06.07.2022 to 05.07.2024	HK$3.13	11,126,000	–	–	(80,000)	11,046,000
			06.07.2022 to 05.07.2025	HK$3.19	11,126,000	–	–	(80,000)	11,046,000
			06.07.2022 to 05.07.2026	HK$3.23	11,126,000	–	–	(80,000)	11,046,000
			06.07.2022 to 05.07.2027	HK$3.27	11,126,000	–	–	(80,000)	11,046,000
	HK$0.86	21.07.2023	21.07.2023 to 20.07.2024	HK$0.79	–	1,074,000	–	–	1,074,000
			21.07.2023 to 20.07.2025	HK$0.94	–	1,074,000	–	–	1,074,000
			21.07.2023 to 20.07.2026	HK$1.12	–	1,074,000	–	–	1,074,000
			21.07.2023 to 20.07.2027	HK$1.17	–	1,074,000	–	–	1,074,000
					290,830,000	4,296,000	(39,820,000)	(12,360,000)	242,946,000
Exercisable at 1 January 2023/ 31 December 2023					–				–
Weighted average exercise price (HK$)					0.86	0.86	0.86	0.86	0.86

Note: The Board approved the extension of the vesting date and maturity date of 15,226,000 Award Shares granted on 6 July 2022 for one more year. In the opinion of the directors of the Company, the financial impact of the modification of terms of these Award Shares was insignificant.

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(II) Equity-settled share award scheme (Continued)

Share award scheme (Continued)

Movements in the number of award shares granted under the Share Award Scheme during the year and their related weighted average fair values are as follows:

2022

	Exercise price	Date of grant	Vesting period	Fair value per award share at the grant date	Number of Award shares: Outstanding at 1 January 2022	Granted during the year	Outstanding at 31 December 2022
Directors	HK$0.86	16.02.2022	16.02.2022 to 15.02.2023	HK$1.76	—	1,878,000	1,878,000
			16.02.2022 to 15.02.2024	HK$1.92	—	1,878,000	1,878,000
			16.02.2022 to 15.02.2025	HK$1.97	—	1,878,000	1,878,000
			16.02.2022 to 15.02.2026	HK$2.00	—	1,878,000	1,878,000
			16.02.2022 to 15.02.2027	HK$2.02	—	1,878,000	1,878,000
	HK$0.86	06.07.2022	06.07.2022 to 05.07.2023	HK$2.98	—	4,180,000	4,180,000
			06.07.2022 to 05.07.2024	HK$3.13	—	4,180,000	4,180,000
			06.07.2022 to 05.07.2025	HK$3.19	—	4,180,000	4,180,000
			06.07.2022 to 05.07.2026	HK$3.23	—	4,180,000	4,180,000
			06.07.2022 to 05.07.2027	HK$3.27	—	4,180,000	4,180,000
Employee and others	HK$0.86	16.02.2022	16.02.2022 to 15.02.2023	HK$1.76	—	40,982,000	40,982,000
			16.02.2022 to 15.02.2024	HK$1.92	—	40,982,000	40,982,000
			16.02.2022 to 15.02.2025	HK$1.97	—	40,982,000	40,982,000
			16.02.2022 to 15.02.2026	HK$2.00	—	40,982,000	40,982,000
			16.02.2022 to 15.02.2027	HK$2.02	—	40,982,000	40,982,000
	HK$0.86	06.07.2022	06.07.2022 to 05.07.2023	HK$2.98	—	11,126,000	11,126,000
			06.07.2022 to 05.07.2024	HK$3.13	—	11,126,000	11,126,000
			06.07.2022 to 05.07.2025	HK$3.19	—	11,126,000	11,126,000
			06.07.2022 to 05.07.2026	HK$3.23	—	11,126,000	11,126,000
			06.07.2022 to 05.07.2027	HK$3.27	—	11,126,000	11,126,000
					—	290,830,000	290,830,000
Exercisable at 1 January 2022/ 31 December 2022					—		—
Weighted average exercise price (HK$)					N/A	0.86	0.86

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46a. The Company (Continued)

(II) Equity-settled share award scheme (Continued)

Share award scheme (Continued)

The weighted average grant date fair value per unit for unvested award shares at 31 December 2023 was RMB1.94 (2022:RMB1.87).

For unvested award shares at the end of the reporting period, the exercise price was HK$0.86 (2022: HK$0.86) per share.

The fair value of award shares granted during the years ended 31 December 2023 and 2022 was estimated as at the date of grant, using a binomial model, taking into account the terms and conditions upon which the award shares were granted. The following table lists the inputs to the model used:

	Award shares granted on 21 July 2023				Award shares granted on 16 February 2022					Award shares granted on 6 July 2022				
	Tranche 1	Tranche 2	Tranche 3	Tranche 4	Tranche 1	Tranche 2	Tranche 3	Tranche 4	Tranche 5	Tranche 1	Tranche 2	Tranche 3	Tranche 4	Tranche 5
Maturity date	11 August 2024	11 August 2025	11 August 2026	11 August 2027	9 March 2023	9 March 2024	9 March 2025	9 March 2026	9 March 2027	27 July 2023	27 July 2024	27 July 2025	27 July 2026	27 July 2027
Fair value per award share as at the grant date	HK$0.79	HK$0.94	HK$1.12	HK$1.17	HK$1.76	HK$1.92	HK$1.97	HK$2.00	HK$2.02	HK$2.98	HK$3.13	HK$3.19	HK$3.23	HK$3.27
Expected volatility	48.77%	68.92%	86.18%	82.45%	97.38%	102.87%	90.39%	82.50%	76.52%	82.77%	99.10%	90.54%	83.54%	78.08%
Expected dividend yield	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Share price (grant date)	HK$1.59	HK$1.59	HK$1.59	HK$1.59	HK$2.52	HK$2.52	HK$2.52	HK$2.52	HK$2.52	HK$3.8	HK$3.8	HK$3.8	HK$3.8	HK$3.8
Exercise price	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86	HK$0.86
Risk-free interest rate	4.38%	4.10%	3.83%	3.66%	0.47%	0.86%	1.25%	1.42%	1.60%	2.08%	2.18%	2.29%	2.33%	2.38%
Award share life	1	2	3	4	1	2	3	4	5	1	2	3	4	5

The expected volatilities were based on the historic volatility (calculated based on the expected life of the award share), adjusted for any expected changes to future volatility based on publicly available information. Expected dividends were based on historical dividends. Changes in the subjective input assumptions could materially affect the fair value estimate. Risk-free interest rates were based on Generic Hong Kong Government Bond's yield.

The closing prices of the Company's shares immediately before the grant date of the award shares granted on 16 February 2022, 6 July 2022 and 21 July 2023 were HK$2.42, HK$3.83 and HK$1.58, respectively.

During the year ended 31 December 2023, share-based payment expenses in respect of the Award Shares of RMB152,801,000 (2022: 185,068,000) have been recognised in profit or loss. The unvested award shares outstanding at 31 December 2023 had a weighted average remaining contractual life of 1.74 years (2022:2.29 years). In respect of the share award exercised during the year, the weighted average closing price of the Company's shares immediately before the dates of exercise was HK$1.49 (2022: N/A).

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46b. Share option plan of GNE

Equity-settled share option scheme

GNE's new share option scheme was adopted pursuant to a resolution passed on 15 October 2014 ("New Share Option Scheme") for the primary purpose of providing incentives to the directors of GNE and eligible employees. Under the New Share Option Scheme, the board of directors of GNE may grant options to eligible employees, including the directors of GNE, to subscribe for shares in GNE. Additionally, GNE may, from time to time, grant share options to independent third parties for settlement in respect of goods or services provided to GNE.

On 26 February 2021 and 3 November 2021, the GNE granted 370,516,250 and 60,500,000 share options (before adjustment of Share consolidation) to the employees and directors under the New Share Option Scheme respectively. Each share option entitles the holder to subscribe for one share of HK$0.00416 and HK$0.00416 of the GNE at an exercise price (before adjustment of Share consolidation) of HK$0.384 and HK$0.357 respectively. The contractual life of these share options is the period from the date on which an option certificate is issued after acceptance by the grantees and expiring on 25 February 2031 and 2 November 2031 respectively. Further details are set out in the GNE's announcement dated 26 February 2021 and 3 November 2021 respectively.

The following table discloses the terms and conditions of the grants are as follows, whereby all options (before adjustment of Share consolidation) are settled by physical delivery of shares:

	Number of options	Vesting conditions	Contractual life of options
Options granted to directors of GNE:			
24 July 2015	8,052,800	Exercisable in five even tranches immediately from 24 July of each year from 2015 to 2019	Expire at the close of business on 23 July 2025
3 November 2021	60,500,000	Exercisable in four even tranches immediately from 3 November of each year from 2022 to 2025	Expire at the close of business on 2 November 2031
Options granted to employees:			
23 October 2014	52,343,000	Exercisable in five even tranches immediately from 24 November of each year from 2014 to 2018	Expire at the close of business on 22 October 2024
24 July 2015	73,511,998	Exercisable in five even tranches immediately from 24 July of each year from 2015 to 2019	Expire at the close of business on 23 July 2025
26 February 2021	370,516,250	Exercisable in four even tranches immediately from 26 February of each year from 2022 to 2025	Expire at the close of business on 25 February 2031

46. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

46b. Share option plan of GNE (Continued)

Equity-settled share option scheme (Continued)

The following table discloses movements of GNE's share options:

2022

					Number of shares issuable under options				
	Exercise price	Adjusted exercise price	Date of grant	Exercisable period	Outstanding at 1 January 2022	Outstanding at 1 January 2022 Adjusted for share consolidation	Forfeited during the year	Impact of Distribution in Specie	Outstanding at 31 December 2022
Directors of GNE	HK$0.357	HK$7.14	3.11.2021	3.11.2021 to 2.11.2031	60,500,000	3,025,000	(100,000)	(63,425,000)	—
Former director (Note)	HK$0.606	HK$12.12	24.07.2015	24.07.2015 to 23.07.2025	8,052,800	402,640	—	(8,455,440)	—
Employees and others providing similar services	HK$1.1798	HK$23.596	23.10.2014	24.11.2014 to 22.10.2024	52,343,200	2,617,157	(201,320)	(54,759,037)	—
	HK$0.606	HK$12.12	24.07.2015	24.07.2015 to 23.07.2025	73,511,998	3,675,596	(226,485)	(76,961,109)	—
	HK$0.384	HK$7.68	26.02.2021	26.02.2021 to 25.02.2031	350,913,750	17,545,686	(1,563,000)	(366,896,436)	—
					545,321,748	27,266,079	(2,090,805)	(570,497,022)	—
Exercisable at 1 January 2021/ 31 December 2021					52,343,200	2,617,160			—
Weighted average exercise price (HK$)					0.4906	9.8119	9.6677	9.8124	—

Note: While Mr. Sha Hongqiu retired from office as a non-executive Director with effect from the conclusion of the annual general meeting of GNE held on 17 June 2020, his share options remain exercisable under the New Share Option Scheme.

During the year ended 31 December 2022, share-based payment expense of RMB12,841,000 had been recognised in profit or loss in discontinued operation in respect of equity-settled share option scheme.

47. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flow were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Dividend payables RMB'000 (note 30)	Interest payables RMB'000 (note 30)	Amounts due to related companies (non-trade) RMB'000 (note 31)	Loans from related companies RMB'000	Bank and other borrowings RMB'000 (note 33)	Lease liabilities RMB'000 (notes 34)	Notes payables RMB'000	Other financial liabilities RMB'000 (note 35)	Total RMB'000
At 1 January 2022	31,721	236,044	2,489,143	32,325	8,582,876	785,120	3,115,367	—	15,272,596
Financing cash flows	(6,000)	(262,256)	770,162	(21,954)	8,679,656	(420,658)	(701,025)	—	8,037,925
Exchange realignment	—	(5,351)	—	—	65,223	13,491	274,201	—	347,564
Finance costs	—	—	—	4,440	442,427	29,892	185,085	15,859	677,703
Interest capitalised (note 8)	—	—	—	—	10,913	—	—	—	10,913
Initial recognition	—	—	—	—	—	—	—	278,093	278,093
Recognition upon disposal of subsidiaries	—	—	22,310	—	—	—	—	—	22,310
Dividends declared to non-controlling interests	6,780	—	—	—	—	—	—	—	6,780
Disposal of subsidiaries	—	—	—	—	(98,000)	(22,198)	—	—	(120,198)
New leases entered	—	—	—	—	—	119,700	—	—	119,700
Lease terminated	—	—	—	—	—	(76,609)	—	—	(76,609)
Reclassify to interest payable from notes payable	—	185,085	—	—	—	—	(185,085)	—	—
Non-cash settlement of discounted bills	—	—	—	—	(2,284,466)	—	—	—	(2,284,466)
Derecognition upon Distribution in Specie	(32,501)	(57,787)	(5,174)	(14,811)	(2,172,775)	(277,655)	(2,688,543)	—	(5,249,246)
At 31 December 2022	—	95,735	3,276,441	—	13,225,854	151,083	—	293,952	17,043,065
Financing cash flows	**(1,439,723)**	**(49,922)**	**(2,642,454)**	**—**	**17,145,174**	**(160,298)**	**—**	**—**	**12,852,777**
Exchange realignment	**—**	**—**	**—**	**—**	**(1,444)**	**(168)**	**—**	**—**	**(1,612)**
Finance costs (note 8)	**—**	**—**	**45,107**	**—**	**319,607**	**10,380**	**—**	**42,743**	**417,837**
Interest capitalised (note 8)	**—**	**—**	**—**	**—**	**162,784**	**—**	**—**	**—**	**162,784**
Initial recognition	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**189,000**	**189,000**
Dividends declared	**1,439,723**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**1,439,723**
New leases entered	**—**	**—**	**—**	**—**	**—**	**145,374**	**—**	**—**	**145,374**
Non-cash settlement of discounted bills	**—**	**—**	**—**	**—**	**(15,584,970)**	**—**	**—**	**—**	**(15,584,970)**
At 31 December 2023	**—**	**45,813**	**679,094**	**—**	**15,267,005**	**146,371**	**—**	**525,695**	**16,663,978**

Note: The cash flows from dividends payables, interest payables, amounts due to related companies (non-trade), loans from related companies, bank and other borrowings, lease liabilities, notes payables and other financial liabilities make up the net amount of proceeds and repayments in the consolidated statement of cash flows.

48. RETIREMENT BENEFITS SCHEMES

(a) The PRC

The Group's full-time employees in the PRC are covered by a government sponsored defined contribution pension scheme, and are entitled to a monthly pension from their retirement dates. The PRC Government is responsible for the pension liability to these retired employees. The Group is required to make annual contributions to the retirement plan at a rate of 20% (2022: 20%) of employees' salaries, which are charged to profit or loss as an expense when the contributions are due. During the year ended 31 December 2022, subject to the discretions of respective municipal government in the PRC, certain retirement benefit concession were given due to COVID-19.

(b) Hong Kong

The Group participates in a pension scheme, which was registered under the Mandatory Provident Fund Schemes Ordinance (the "MPF Ordinance"), for all its employees in Hong Kong. The scheme is a defined contribution scheme and is funded by contributions from employers and employees according to the provisions of the MPF Ordinance.

Pursuant to the Hong Kong Employment Ordinance, the Group has the obligation to pay long service payment ("LSP") to qualifying employees in Hong Kong upon retirement, subject to a minimum of 5 years' employment period, based on the formula of "last monthly wages (before termination of employment) × 2/3 × years of service". Last monthly wage is capped at $22,500 while the amount of long service payment shall not exceed $390,000. This obligation is accounted for as a post -employment defined benefit plan. The Mandatory Provident Fund Schemes Ordinance permits the withdrawal of accrued benefits derived from an employer's MPF contributions for the purpose of offsetting LSP payable to an employee under the Employment Ordinance. The LSP obligation, if any, is presented on a net basis.

The Employment and Retirement Schemes Legislation (Offsetting Arrangement) (Amendment) Ordinance 2022 (the "Amendment Ordinance") was gazetted in June 2022 and will take effect on 1 May 2025 (the "Transition Date"). Under the Amended Ordinance, accrued benefits derived from an employer's mandatory MPF contributions after the Transition Date can only be applied to offset the pre-Transition Date LSP obligation but no longer eligible to offset the post-Transition Date LSP obligation. Furthermore, the LSP obligation before the Transition Date will be calculated based on the last monthly wages immediately preceding the Transition Date.

As at 31 December 2023 and 2022, the amount of provision for long service payment obligation is insignificant.

(c) The USA

In 2015, GNE established a 401(k) savings trust plan ("401(k) Plan"), a defined contribution plan and is funded by employers and employees in the USA that qualifies as an Inland Revenue Service ("IRS") deferred salary arrangement under Section 401(k) of the US Internal Revenue Code. Under the 401(k) Plan, participating employees may elect to contribute up to a maximum amount subject to certain IRS limitations.

48. RETIREMENT BENEFITS SCHEMES (Continued)

(d) Japan

GNE Group participates in an employee's pension fund for all its employees in Japan. The scheme is a defined contribution scheme and is funded by contribution from employers and employees according to Employee's Pension Insurance Act.

During the year ended 31 December 2023, total amounts contributed by the Group to the schemes in the PRC, Hong Kong, the USA and Japan and charged to profit or loss for continuing operations, which represent contributions payable to the schemes by the Group at rates specified in the rules of the schemes, are approximately RMB175,054,000 (2022: RMB131,457,000).

49. RELATED PARTY DISCLOSURES

Other than as disclosed elsewhere in the consolidated financial statements, during the year, the Group entered into the following material transactions with related parties:

	2023 RMB'000	2022 RMB'000
Transactions with companies in which Mr. Zhu Gongshan and his family have control:		
Sales of wafer	**627,517**	—
Rental income and rental related income	**66,343**	20,292
Management fee income	**8,640**	8,453
Service fee expense	**(12,922)**	(7,660)
Interest expense	**(568)**	(2,608)
Management fee expense	**—**	(460)
Purchase of energy service	**—**	(1,148)
Acquisitions of property, plant of equipment	**(892)**	(284)
Rental expense	**(7,783)**	(5,287)
Purchase of coal	**(106,195)**	(130,413)
Donation expenses	**—**	(7,000)
Processing fee income	**65,574**	—
Related utility service fee income	**19,426**	—
Electricity fee expense	**(2,145)**	—

49. RELATED PARTY DISCLOSURES (Continued)

	2023 RMB'000	2022 RMB'000
Transactions with joint ventures and associates:		
Sales of other raw materials	**208,584**	401,610
Interest income	**—**	244
Management fee and related utility service fee income	**155,033**	171,830
Rental Income	**10,528**	6,655
Service fee income	**50,528**	6,130
Interest expense	**(58,426)**	(8,866)
Purchase of polysilicon	**(153,607)**	(799,686)
Purchase of silicon rods	**(3,369,685)**	(4,182,352)
Acquisitions of property, plant of equipment	**(203,376)**	(24,204)
Electricity fee expenses	**(3,298)**	(1,933)
Consultancy service fee expense	**(9,526)**	(3,742)
Purchase of water	**—**	(177)
Fund management expense	**(16,988)**	(1,736)
Processing fee income	**8,175**	—
Guarantee fee income	**13,887**	2,826
Purchase of industrial silicon powder	**(684,592)**	—
Sales of land, property and equipment	**37,157**	—
Purchase of steam	**(63)**	—
Transactions with other related parties (Note a):		
Sales of polysilicon and other raw materials	**6,072,119**	8,968,246
Service income	**—**	715
Repair and maintenance expense	**—**	(680)
Processing fee income	**79,606**	317,585
Acquisitions of property, plant of equipment	**(10,092)**	(1,446)
Purchase of polysilicon and other raw materials	**(64)**	(29,558)
Purchase of steam	**(5,666)**	(4,236)
Service fee expense	**(1,516)**	—

Note a: The other related parties represent the non-controlling shareholders and the fellow subsidiaries of non-controlling shareholders of subsidiaries of the Company.

49. RELATED PARTY DISCLOSURES (Continued)

At 31 December 2023, the Group provided total guarantees of approximately RMB2,500,000,000 (2022: RMB2,500,000,000) to several banks and financial institutions in respect of banking and other facilities of Xinjiang Goens. The Directors consider that the fair value of the guarantees at the date of inception, and the ECL as at 31 December 2023 and 2022 was insignificant.

As at 31 December 2023, the companies in which Mr. Zhu Gongshan and his family have control provided guarantee to the Group for certain of the Group's bank and other borrowings with maximum amount of nil (2022: RMB250,000,000).

Details of balances and other arrangements with related parties are disclosed in the consolidated statement of financial position and notes 27 and 31.

* English name for identification only

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES

50a. General information of subsidiaries

Details of the Group's material subsidiaries at the end of the reporting period are set out below.

Name of subsidiary	Place of establishment/ operations	Particulars of issued share capital/ paid-up capital	Attributable effective interest held by the Company		Principal activities
			2023 %	2022 %	
Directly held:					
Incorporated in the Cayman Islands					
Universe Solar Energy Holdings Inc. 環宇光伏電力控股有限公司	Cayman Islands/ Hong Kong	US$10,500	100	100	Investment holding
Incorporated in the BVI					
Elite Time 傑泰環球有限公司	BVI/Hong Kong	US$1	100	100	Investment holding
Indirectly held:					
Solar material business ***Established in the PRC***					
江蘇中能硅業科技發展有限公司 Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd*[2]	PRC	RMB10,493,623,834	100	100	Manufacture and sale of polysilicon
江蘇協鑫硅材料科技發展有限公司 Jiangsu GCL Silicon Material Technology Development Co., Ltd.*[2]	PRC	RMB3,099,650,000	100	100	Manufacture and sale of ingot and wafer
高佳太陽能股份有限公司 Konca Solar Cell Co., Ltd.*[2]	PRC	RMB1,184,570,000	70.19	70.19	Manufacture and sale of ingot and wafer
蘇州協鑫光伏科技有限公司 Suzhou GCL Photovoltaic Technology Co., Ltd.*[2]	PRC	RMB990,298,120	100	100	Manufacture and sale of wafer
協鑫科技 (蘇州)有限公司 GCL-Poly (Suzhou) New Energy Co., Ltd*[2]	PRC	RMB4,940,000,000	100	100	Investment holding and trading of wafer
河南協鑫光伏科技有限公司 Henan GCL Photo voltaic Technology Co., Ltd.*[2]	PRC	RMB373,500,000	100	100	Manufacture and sale of ingot

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (Continued)

50a. General information of subsidiaries (Continued)

Name of subsidiary	Place of establishment/ operations	Particulars of issued share capital/ paid-up capital	Attributable effective interest held by the Company		Principal activities
			2023 %	2022 %	
Indirectly held: (Continued)					
Solar material business (Continued) *Established in the PRC (Continued)*					
阜寧協鑫光伏科技有限公司 Funing GCL Photovoltaic Technology Co., Ltd.*[2]	PRC	RMB312,621,612	100	100	Manufacture and sale of solar products
寧夏協鑫晶體科技發展有限公司 Ningxia GCL Monocrystalline Silicon Technology Development Co., Ltd.*[2]	PRC	RMB301,000,000	100	100	Manufacture and sale of solar products
Kunshan GCL Optoelectronic Material Co., Ltd* ("Kunshan GCL")[1(b), 2] 昆山協鑫光電材料有限公司	PRC	RMB95,569,291	49.23	51.52	Research and development, manufacture and sale of perovskite solar cells technology
內蒙古鑫元硅材料科技有限公司 Inner Mongolia Xin Yuan Silicon Material Technology Co., Ltd.*[2] ("Inner Mongolia Xin Yuan")	PRC	RMB3,767,500,000	56.77	56.77	Manufacture and sale of polysilicon
內蒙古鑫環硅能科技有限公司 Inner Mongolia Xin Huan Silicon Energy Technology Co., Ltd.*[2] ("Inner Mongolia Xin Huan")	PRC	RMB4,500,000,000	60	88.3	Manufacture and sale of polysilicon
樂山協鑫新能源科技有限公司 Leshan GCL New Energy Technology Co., Ltd.* ("Leshan GCL")[1(a), 2]	PRC	RMB3,050,000,000	45.90	44.44	Manufacture and sale of polysilicon
江蘇蘇能光伏科技發展有限公司 Jiangsu Suneng Photovoltaic Technology Development Co., Ltd*[2]	PRC	RMB1,342,000,000	100	100	Investment holding
句容協鑫光伏科技有限公司 Jurong GCL Photovoltaic Technology Co., Ltd*[2]	PRC	RMB90,000,000	100	100	Manufacture and sale of solar products
徐州協鑫低碳產業投資合夥企業 (有限合夥) Xuzhou GCL Low Carbon Industry Investment Partnership (Limited Partnership)*[2]	PRC	RMB621,000,000	100	100	Equity investment, investment management, asset management
蘇州協鑫工業應用研究院有限公司 GCL Applied Industrial Research Institute (Suzhou) Ltd.*[2]	PRC	RMB240,000,000	100	100	Research and development and sales of solar related products
蘇州協鑫商業管理有限公司 Suzhou GCL Business Management Co., Ltd.*[2]	PRC	RMB130,000,000	100	100	Business management, real estate development and real estate consulting service

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (Continued)

50a. General information of subsidiaries (Continued)

Name of subsidiary	Place of establishment/ operations	Particulars of issued share capital/ paid-up capital	Attributable effective interest held by the Company 2023 %	2022 %	Principal activities
Indirectly held: (Continued)					
寧夏協鑫光伏科技有限公司 Ningxia GCL Photovoltaic Technology Co., Ltd.*[2]	PRC	RMB310,000,000	100	100	Manufacture and sale of polysilicon
四川協鑫新能源科技發展有限公司 Sichuan GCL New Energy Technology Development Co., Ltd.*[2]	PRC	RMB155,000,000	100	100	Research and development and sales of electronic special materials
Incorporated in Hong Kong					
GCL Solar Energy Technology Holdings Limited 協鑫光伏電力科技控股有限公司	Hong Kong	HK$1	100	100	Investment holding
Richmore International Development Limited 富多國際發展有限公司	Hong Kong	HK$1	100	100	Investment holding
Corner Star Limited 各星有限公司	Hong Kong	HK$1	100	100	Own a technical know-how
Solar farm business					
Established in the PRC					
桑日協鑫光伏科技有限公司 Sangri GCL Photovoltaic Technology Co., Ltd.*[2]	PRC	RMB62,000,000	100	100	Operation of solar farm
徐州協鑫光伏電力有限公司 Xuzhou GCL Solar Energy Co., Ltd.*[2]	PRC	RMB84,000,000	100	100	Operation of solar farm
江蘇國能新能源科技有限公司 Jiangsu Guoneng Solar Technology Co., Ltd.*[2]	PRC	RMB10,000,000	100	100	Operation of solar farm
蘇州協鑫光伏電力科技有限公司 Suzhou GCL Photovoltaic Technology Co., Ltd.*[2]	PRC	RMB422,000,000	100	100	Investment holding
大同縣協鑫光伏電力有限公司 Datong Xian GCL Solar Energy Co., Ltd.*[2]	PRC	RMB144,600,000	100	100	Operation of solar farm
大同縣鑫能光伏電力有限公司 Datong Xian Xinneng Solar Energy Co., Ltd.*[2]	PRC	RMB32,600,000	100	100	Operation of solar farm
Incorporated in Hong Kong					
GCL Solar Energy Limited	Hong Kong	HK$1	100	100	Investment holding
Incorporated in the USA					
GCL Solar Energy. Inc.	USA	US$200	100	100	Construction and sale of solar farm projects
Incorporated in Luxembourg					
Berimor Investments S.a.r.l.	Luxembourg/ Hong Kong	EUR12,500	100	100	Investment holding

* English name for identification only

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (Continued)

50a. General information of subsidiaries (Continued)

1(a) Despite the Group indirectly holds less than 50% of the effective equity interest of Leshan GCL, the Group is able to exercise control over the Leshan GCL by having entered into an acting in concert agreement with the non-controlling shareholders ("Leshan Acting in Concert Agreement"). Pursuant to the Leshan Acting in Concert Agreement, when dealing with affairs related to Leshan GCL requiring consideration and approval by shareholders at general meetings, the non-controlling shareholders shall vote in accordance with the instruction of the Group, except: (i) any connected transactions between the Group and Leshan GCL; or (ii) any matter that obviously harms the interest of Leshan GCL or the non-controlling shareholders.

1(b) Despite the Group indirectly holds less than 50% of the effective equity interest of Kunshan GCL, the Group is able to exercise control over the Kunshan GCL by having entered into an acting in concert agreement with the non-controlling shareholders ("Kunshan Acting in Concert Agreement"). Pursuant to the Kunshan Acting in Concert Agreement, when dealing with affairs related to Kunshan GCL requiring consideration and approval by shareholders at general meetings, the non-controlling shareholders shall vote in accordance with the instruction of the Group.

2. Domestic PRC Companies

The above table lists the subsidiaries of the Group which, in the opinion of the Directors, principally affected the results or assets of the Group. To give details of other subsidiaries would, in the opinion of the Directors, result in particulars of excessive length.

Other than the convertible bond to a non-controlling shareholder of a subsidiary as disclosed in note 30, none of the subsidiaries had issued any debt securities as at 31 December 2023 and 2022.

50b. Details of non-wholly-owned subsidiaries that have material non-controlling interests

The table below shows details of non-wholly-owned subsidiaries of the Group that have material non-controlling interests:

Name of subsidiary	Place of incorporation and principal place of business	Proportion of ownership interests and voting rights held by non-controlling interests		(Loss) profit allocated to non-controlling interests		Accumulated non-controlling interests	
		2023	2022	**2023 RMB'000**	2022 RMB'000	**2023 RMB'000**	2022 RMB'000
GNE	Bermuda and Hong Kong	**N/A**	N/A	**—**	(579,270)	**—**	—
Inner Mongolia Xin Yuan	PRC	**43.23%**	43.23%	**315,451**	(187,266)	**1,724,528**	1,437,583
Inner Mongolia Xin Huan	PRC	**40%**	11.68%	**(58,916)**	(1,213)	**1,736,931**	130,787
Leshan GCL	PRC	**54.1**	55.56%	**622,990**	187,337	**1,566,780**	693,124
Individually immaterial subsidiaries of the Group with non–controlling interests				**(62,497)**	30,056	**702,454**	611,143
				817,028	(550,356)	**5,730,693**	2,872,637

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (Continued)

50b. Details of non-wholly-owned subsidiaries that have material non-controlling interests (Continued)

Summarised financial information in respect of non-wholly-owned subsidiaries that have material non-controlling interests is set out below. As at 31 December 2023 and 2022, Inner Mongolia Xin Yuan, Inner Mongolia Xin Huan and Leshan GCL are the subsidiaries of the Group that has material non-controlling interests. The summarised financial information below represents amounts before intragroup eliminations.

	Inner Mongolia Xin Yuan	
	2023	2022
	RMB'000	RMB'000
Current assets	**3,225,358**	3,910,581
Non-current assets	**8,873,084**	7,404,145
Current liabilities	**(4,385,935)**	(7,046,526)
Non-current liabilities	**(3,656,916)**	(889,265)
Net assets	**4,055,591**	3,378,935
Non-controlling interests of Inner Mongolia Xin Yuan	**1,724,528**	1,437,583
Revenue	**6,085,992**	51,138
Profit/(loss) and total comprehensive income for the year	**729,786**	(374,877)
Profit/(loss) allocated to non-controlling interest	**315,451**	(187,266)
Net cash outflow from operating activities	**(1,938,104)**	(1,118,261)
Net cash outflow from investing activities	**(492,859)**	(2,254,730)
Net cash inflow from financing activities	**2,563,541**	4,053,958
Net cash inflow	**132,578**	680,967

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (Continued)

50b. Details of non-wholly-owned subsidiaries that have material non-controlling interests (Continued)

	Inner Mongolia Xin Huan	
	2023	2022
	RMB'000	RMB'000
Current assets	**2,076,526**	689,525
Non-current assets	**7,412,699**	897,119
Current liabilities	**(1,626,745)**	(467,026)
Non-current liabilities	**(3,498,122)**	—
Net assets	**4,364,358**	1,119,618
Non-controlling interests of Inner Mongolia Xin Huan	**1,736,931**	130,787
Revenue	**166,316**	—
Loss and total comprehensive income for the year	**(125,261)**	(10,381)
Loss allocated to non-controlling interest	**(58,916)**	(1,213)
Net cash outflow from operating activities	**(443,267)**	(7,969)
Net cash outflow from investing activities	**(6,015,605)**	(448,667)
Net cash inflow from financing activities	**6,664,959**	1,130,000
Net cash inflow	**206,087**	673,364

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (Continued)

50b. Details of non-wholly-owned subsidiaries that have material non-controlling interests (Continued)

	Leshan GCL	
	2023	2022
	RMB'000	RMB'000
Current assets	**6,584,025**	5,992,868
Non-current assets	**2,560,839**	1,484,207
Current liabilities	**(1,271,288)**	(2,638,641)
Non-current liabilities	**(2,013,676)**	(1,800,000)
Net assets	**5,859,900**	3,038,434
Non-controlling interests of Leshan GCL	**1,566,780**	693,124
Revenue	**6,756,930**	1,913,843
Profit and total comprehensive income for the year	**2,021,466**	822,881
Profit allocated to non-controlling interest	**622,990**	187,337
Net cash inflow from operating activities	**1,816,511**	2,393,864
Net cash outflow from investing activities	**(1,712,656)**	(4,697,757)
Net cash inflow from financing activities	**483,487**	2,391,929
Net cash inflow	**587,342**	88,036

51. DISCONTINUED OPERATION

As set out in note 15 to the financial statements, a special interim divided by way of distribution of shares of shares of GNE was declared and distributed to the shareholders during the year ended 31 December 2022. Upon the completion of Distribution in Specie, the Group's effective interest in GNE was changed from 44.44% to 7.44%. The principal activities of GNE are the development, construction, operation and management of solar farms, which represent a separate line of major business and the Distribution in Specie constitutes the classification of GNE's operation as discontinued operation. Accordingly, the results of new energy business are presented as a discontinued operation in the consolidated financial statements.

The loss for the period from the discontinued operation is analysed as follows:

	2022 RMB'000
Revenue#	819,569
Cost of sales#	(446,143)
Gross profit	373,426
Other income#	57,309
Other gains and losses, net	(532,029)
Impairment loss on expected credit loss model, net	(138,867)
Administrative expenses#	(362,458)
Share of profits of associates	112,511
Finance costs	(438,196)
Loss before tax	(928,304)
Income tax expense	(17,340)
Loss after tax	(945,644)
Reclassification of exchange differences upon completion of Distribution in Specie	3,013
Loss from discontinued operation	(942,631)
Cash flow from discontinued operation	
Net cash generated from operating activities	1,206,879
Net cash generated from investing activities	1,357,284
Net cash used in financing activities	(1,901,852)
Net cash inflow	662,311

The inter-company transactions between continuing operations of the Group and GNE Group before Distribution in Specie have been eliminated against the revenue, cost of sales, other income and administrative expenses of discontinued operation.

52. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

Statement of financial position

	2023 RMB'000	2022 RMB'000
NON-CURRENT ASSETS		
Interest in subsidiaries	**23,167,854**	21,993,674
Amounts due from subsidiaries (Note)	**6,860,157**	7,626,453
	30,028,011	29,620,127
CURRENT ASSETS		
Prepayments and deposits	**85,811**	59,444
Amounts due from subsidiaries (Note)	**11,384,665**	12,167,615
Investments at fair value through profit or loss	**72,442**	—
Bank balances and cash	**468,019**	336,546
	12,010,937	12,563,605
CURRENT LIABILITIES		
Other payables	**66,459**	10,712
NET CURRENT ASSETS	**11,944,478**	12,552,893
TOTAL ASSETS LESS CURRENT LIABILITIES	**41,972,489**	42,173,020
NET ASSETS	**41,972,489**	42,173,020
CAPITAL AND RESERVES		
Share capital (note 37)	**2,344,280**	2,359,838
Reserves	**39,628,209**	39,813,182
TOTAL EQUITY	**41,972,489**	42,173,020

Note: As at 31 December 2023, the non-current portion of amounts due from subsidiaries included (i) the amount of nil (2022: RMB807,218,000) with interest bearing at 5% per annum which will be due over twelve months from the end of the reporting period and (ii) the amount of RMB6,860,157,000 (2022: RMB6,819,235,000) that are non-interest bearing and are not expected to be realised within twelve months from the end of the reporting period and are considered to be quasi-equity loan. ECL for amounts due from subsidiaries and bank balances are assessed on a 12-month ECL basis as there had been no significant increase in credit risk since initial recognition and impairment allowance is considered to be insignificant.

52. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (Continued)

Movement in the Company's reserves

	Share premium RMB'000	Shares held for share award scheme RMB'000	Capital redemption reserve RMB'000	Investments revaluation reserve RMB'000	Treasury shares RMB'000	Share Award Reserve RMB'000	Capital reserve RMB'000	Share options reserve RMB'000	(Accumulated losses)/ Retained Earnings RMB'000	Total RMB'000
At 1 January 2022	38,446,790	(236,629)	22,202	(93,157)	—-	—-	19,206	72,334	(10,823,974)	27,406,772
Profit for the year	—	—	—	—	—	—	—	—	14,692,465	14,692,465
Profit and total comprehensive expense for the year	—	—	—	—	—	—	—	—	14,692,465	14,692,465
Exercise of share options	22,062	—	—	—	—	—	—	(13,202)	—	8,860
Forfeitures of share options	—	—	—	—	—	—	—	(1,146)	1,146	—
Dividend by way of distribution in specie (note 15)	(1,963,482)	—	—	—	—	—	—	—	—	(1,963,482)
Transaction costs attributable to the distribution in specie	(19,052)	—	—	—	—	—	—	—	—	(19,052)
Repurchase of share	—	—	—	—	(57,971)	—	—	—	—	(57,971)
Equity-settled share-based payment	—	—	—	—	—	185,068	—	—	—	185,068
Purchase of shares under share award scheme	—	(439,478)	—	—	—	—	—	—	—	(439,478)
At 31 December 2022	36,486,318	(676,107)	22,202	(93,157)	(57,971)	185,068	19,206	57,986	3,869,637	39,813,182
Profit for the year	—	—	—	—	—	—	—	—	1,236,861	1,236,861
Profit and total comprehensive expense for the year	—	—	—	—	—	—	—	—	1,236,861	1,236,861
Exercise of share options	1,347	—	—	—	—	—	—	(805)	—	542
Forfeitures of share options	—	—	—	—	—	—	—	(3,530)	3,530	—
Repurchase of share	—	—	—	—	(182,010)	—	—	—	—	(182,010)
Cancellation of shares	(224,372)	—	15,609	—	239,981	—	—	—	(15,609)	15,609
Dividend paid	—	—	—	—	—	—	—	—	(1,439,723)	(1,439,723)
Equity-settled share-based payment	—	—	—	—	—	152,801	—	—	—	152,801
Exercise of share award	—	51,332	—	—	—	(57,279)	—	—	36,894	30,947
At 31 December 2023	36,263,293	(624,775)	37,811	(93,157)	—	280,590	19,206	53,651	3,691,590	39,628,209

Note: Differences between the reserves of the Company and of the Group, as disclosed in the consolidated statement of changes in equity, represented the consolidation adjustments arising from the reverse acquisition by GCL Solar in 2009. For more details, please refer to 2009 annual report of the Group.

53. EVENTS AFTER REPORTING PERIOD

The Group entered into various continuing connected transactions (the "CCTs") after the year ended 31 December 2023. For the details of the CCTs, please refer to the announcements of the Company dated 15 March 2024.

Apart from the above, there were no significant event after the year ended 31 December 2023 and up to the date of this annual report.

CORPORATE INFORMATION

Chairman

Zhu Gongshan

Executive Directors

Zhu Gongshan
Zhu Yufeng *(Vice Chairman)*
Zhu Zhanjun *(Vice Chairman & Joint CEO)*
Lan Tianshi *(Joint CEO)*
Sun Wei
Yeung Man Chung, Charles *(CFO and Company Secretary)*

Independent Non-executive Directors

Ho Chung Tai, Raymond
Yip Tai Him
Shen Wenzhong

Composition of Board Committees

Audit Committee

Yip Tai Him *(Chairman)*
Ho Chung Tai, Raymond
Shen Wenzhong

Remuneration Committee

Ho Chung Tai, Raymond *(Chairman)*
Yip Tai Him
Zhu Yufeng

Nomination Committee

Yip Tai Him *(Chairman)*
Ho Chung Tai, Raymond
Yeung Man Chung, Charles

Corporate Governance Committee

Ho Chung Tai, Raymond *(Chairman)*
Yip Tai Him
Yeung Man Chung, Charles

Strategy & Investment Committee

Ho Chung Tai, Raymond *(Chairman)*
Zhu Gongshan
Yip Tai Him
Shen Wenzhong
Zhu Zhanjun
Yeung Man Chung, Charles

Environmental, Social and Governance Committee

Shen Wenzhong *(Chairman)*
Ho Chung Tai, Raymond
Yip Tai Him
Yeung Man Chung, Charles

Company Secretary

Yeung Man Chung, Charles

Authorized Representatives

Zhu Zhanjun
Yeung Man Chung, Charles

Auditor

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9/F Leighton Centre
77 Leighton Road
Causeway Bay
Hong Kong

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P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

Principal Place of Business in Hong Kong

Unit 1703–1706, Level 17
International Commerce Centre
1 Austin Road West
Kowloon, Hong Kong

Cayman Islands Principal Share Registrar and Transfer Office

Suntera (Cayman) Limited
Suite 3204, Unit 2A
Block 3, Building D
P.O. Box 1586
Gardenia Court
Camana Bay
Grand Cayman, KY1-1100
Cayman Islands

Hong Kong Branch Share Registrar and Transfer Office

Tricor Investor Services Limited
17/F Far East Finance Centre
16 Harcourt Road
Hong Kong

Legal Advisers to the Company

As to Hong Kong law

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Hong Kong

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Hong Kong

As to Cayman Islands law

Conyers Dill & Pearman
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P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

Company's Website

www.gcltech.com

INFORMATION FOR INVESTORS

Listing Information

Listing: Main Board of the Hong Kong Stock Exchange Limited
Stock Code: 3800

Share Information

Board Lot Size: 1,000 shares
Issued Shares as at 31 December 2023: 26,938,930,973 shares

Enquiries Contact

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GLOSSARY OF TERMS

In this report, the following expressions have the meanings set out below unless defined in the context of this report:

"Board" or "Board of Directors"	board of Directors
"China" or "PRC"	the People's Republic of China, for the purposes of this report, excludes Hong Kong and Macau Special Administrative Region of the PRC
"Company" or "GCL Technology"	GCL Technology Holdings Limited (協鑫科技控股有限公司) (formerly known as GCL-Poly Energy Holdings Limited (保利協鑫能源控股有限公司)), a company incorporated in the Cayman Islands with limited liability, the shares of which are listed on the Main Board of the Stock Exchange (stock code: 3800)
"Director(s)"	director(s) of the Company or any one of them
"GCL Solar Energy"	GCL Solar Energy Limited, a company incorporated in Hong Kong with limited liability, which is a subsidiary of the Company
"GCL System Integration"	GCL System Integration Technology Co., Ltd (協鑫集成科技股份有限公司) (a company incorporated in the PRC with its shares listed on the SME Board of the Shenzhen Stock Exchange) (stock code: 002506)
"GNE"	GCL New Energy Holdings Limited (協鑫新能源控股有限公司), a company incorporated in Bermuda with limited liability, the shares of which are listed on the Main Board of the Stock Exchange (stock code: 451), which is an associate company of the Company.
"Group"	GCL Tech and its subsidiaries
"GW"	gigawatts
"Jiangsu Zhongneng"	Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd.* (江蘇中能硅業科技發展有限公司), a company incorporated in the PRC and a subsidiary of the Company
"Kunshan GCL"	Kunshan GCL Optoelectronic Material Co. Ltd* (昆山協鑫光電材料有限公司)
"Listing Rules"	The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
"Mr. Zhu"	Mr. Zhu Gongshan, the Chairman and an executive Director
"Mr. Zhu Yufeng"	son of Mr. Zhu and an executive Director

"MT"	metric tonnes
"MW"	megawatts
"MWh"	megawatt hour
"PRC"	the People's Republic of China
"PV"	photovoltaic
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Suzhou GCL Research"	Suzhou GCL Industrial Applications Research Co., Ltd.* (蘇州協鑫工業應用研究院有限公司), a subsidiary of the Company and a company established in the PRC
"U.S."	United States of America
"W"	watts
"Xinjiang Goens"	Xinjiang Goens Energy Technology Co., Limited* (新疆戈恩斯能源材料科技有限公司), a company incorporated in the PRC and an associate of the Company
"Yangzhou GCL"	Yangzhou GCL Photovoltaic Technology Co., Ltd* (揚州協鑫光伏科技有限公司), a company incorporated in the PRC and a subsidiary of the Company
"Yangzhou Power"	Yangzhou Harbour Sludge Power Co., Ltd* (揚州港口污泥發電有限公司), a company incorporated in the PRC
"Zhu Family Trust"	the discretionary trust known as "Asia Pacific Energy Fund", of which Mr. Zhu and his family (including Mr. Zhu Yufeng, an executive Director and son of Mr. Zhu) are beneficiaries

* English name for identification only

GCL