



ANNUAL REPORT **2022**
Shanghai Electric Group Company Limited
(A joint stock limited company incorporated in the People's Republic
of China with limited liability)

Performance Highlights



Total revenue of the Company for 2022 was

¥ 117,623 million

a decrease of

9.7% year-on-year



Basic loss per share of the Company for 2022 was

¥ 0.23 yuan

basic loss per share of the Company for the corresponding period of last year was

¥ 0.64 yuan



Losses attributable to owners of the Company for 2022 was

¥ 3,566 million

losses attributable to owners of the Company for the corresponding period of last year was

¥ 9,988 million



New orders for 2022 amounted to

¥ 133.27 billion

a decrease of

7.6% year-on-year



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Chairlady's Statement



Chairlady and CEO **Leng Weiqing**

In 2022, the international and regional situation were complex, the world economy recovered weakly, and the domestic economy was still facing the triple pressures of "shrinking demand, disrupted supply and weakening expectations". In the face of the complex and severe internal and external environment, we actively seized the opportunity of national strategy, comprehensively promoted the implementation of the Group's "14th Five-Year Plan" strategy, and worked together throughout the Group and forged ahead in unity to coordinate the management improvement and promote business development, keeping the overall operation of the Company stable and orderly.

During the reporting period for the year ended 31 December 2022 (the "Reporting Period"), the Company achieved the revenue of RMB117,623 million, representing a year-on-year decrease of 9.7%; and the gross profit margin of the Company was 16.2%, representing a year-on-year increase of 1 percentage point. The net losses attributable to owners of the Company for 2022 was RMB3,566 million, and net losses attributable to owners of the Company for the corresponding period of last year was RMB9,988 million. The basic loss per share of the Company for 2022 was RMB0.23 yuan, basic loss per share for the corresponding period of last year was RMB0.64 yuan. The main reasons for the net losses attributable to shareholders of the Company for the year of 2022 are as follows: (1) during the Reporting Period, some of domestic production and operation subsidiaries and invested enterprises of the Company were affected by factors such as rising raw material prices and rising logistics costs, resulting in an increase in operating costs related to production and operation; (2) during the Reporting Period, some of overseas engineering businesses of the Company were affected by various factors such as the international situation, Russia-Ukraine conflicts, overseas inflation and projects execution, resulting in a substantial increase in engineering construction costs and collection of receivables less than expected; (3) during the Reporting Period, due to the impact of the capital market, the value of financial assets measured at fair value held by the Company fluctuated.

During the Reporting Period, the Company obtained new orders in the amount of RMB133.27 billion. Among the new orders of the Company, orders for energy equipment amounted to RMB68.38 billion (of which orders for nuclear power equipment, coal-fired power equipment, energy storage equipment and wind power equipment amounted to RMB5.88 billion, RMB16.46 billion, RMB10.87 billion and RMB17.70 billion, respectively), orders for industrial equipment amounted to RMB42.12 billion, and orders for integration services amounted to RMB22.77 billion. As at the end of the Reporting Period, our orders on hand amounted to RMB268.53 billion. Among our orders on hand by the end of the Reporting Period, orders for energy equipment amounted to RMB155.44 billion (of which orders for nuclear power equipment, coal-fired power equipment, energy storage

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equipment and wind power equipment amounted to RMB27.90 billion, RMB52.80 billion, RMB7.77 billion and RMB39.24 billion, respectively), orders for industrial equipment amounted to RMB15.68 billion, and orders for integration services amounted to RMB97.41 billion.

During the Reporting Period, the main business operation of the Company is as follows:

Embrace Energy Reform and Seize the New Track of Carbon Peaking and Carbon Neutrality

Shanghai Electric takes the docking of the national strategy of "carbon peaking and carbon neutrality" and the comprehensive green and low-carbon transformation as the main line of development, and accelerates the layout of new track of green and low-carbon fields, and focuses on the development of new energy industry in fields of wind power, photovoltaic, energy storage and hydrogen energy.

In the field of energy storage, we have accelerated the deployment of diversified energy storage, actively tapping into multiple routes such as electrochemical energy storage, molten salt energy storage, compressed air energy storage and flywheel energy storage. Among them, in electrochemical energy storage systems, we already have full coverage from battery packs to battery management systems (BMS), energy management systems (EMS), and power conversion system (PCS). Our redox flow energy storage battery production line has production capacity of 200MW/1GWh (referring to the maximum power and maximum storage capacity) and has the comprehensive capability in designing system-level energy storage power plants. A mutually synergistic and independent and outstanding lithium battery industry chain ecosystem has initially been developed including the lithium battery energy storage products at the terminal of energy and the lithium battery production line equipment at the terminal of industry. During the Reporting Period, energy storage demonstration project of Anhui Jinzhai Intelligent Energy Storage New Energy

Technology Co., Ltd., which adopted the Lithium iron phosphate battery energy storage system developed by Shanghai Electric, was officially connected to the grid for power supply.

In the field of hydrogen energy, relying on our technology accumulated in the field of alkaline water electrolysis and PEM (Proton Exchange Membrane) electrolysis for production of hydrogen, we have established Shanghai Hydrogen Era Technology Co., Ltd. to fully build up the core competitiveness across the whole industry chain including "production", "storage", "hydrogenation" and "utilization" of hydrogen energy and enter the research and development, system integration and other fields of hydrogen energy technology so as to provide customers with high-end green hydrogen equipment and hydrogen energy comprehensive utilization system solutions.

In the field of wind power, during the Reporting Period, the first EW8.5-230 product for the "Poseidon" Haishen multibrid platform and the first EW11.0-208 product for the "Petrel" Haiyan multibrid platform, both we independently developed, achieved bulk deliveries. We won the bid for the world's first research and demonstration project on the integration of floating offshore wind power and fish farming equipment, which will enable the sharing of "platform structure, ocean space and operational functions" on multiple levels and in multiple spaces.

In the field of solar power generation, we successfully won the bid of a 110MW molten salt steam generation system project in Aksai Kazakh Autonomous County. The projects we undertook in overseas market, including the four photovoltaic projects in West Holcombe, Bishop, Outwood and Ingham in the UK, the Yakai photovoltaic project in Japan and the Kord photovoltaic project in Australia were successfully connected to the grid for power supply. The Dubai Photovoltaic Thermal Power Plant Project we undertake is a photovoltaic power generation complex project with the world's largest installed capacity, and some units of the project have entered commercial operation.





Adhere to Scientific and Technological Innovation and Lead the New Driving Force of Development

We deeply implement the development philosophy of "science and technology is the primary productive force, talent is the primary resource, and innovation is the primary driver of growth", adhere to the industrial development path of "technology empowerment, innovation drive, and talent leadership", uphold the strategic mission of building self-reliance and strength in science and technology, and embody the responsibility of "being the most important force of the country".

During the Reporting Period, the technical strength of core industries of Shanghai Electric continued to improve, and obtained achievements in a number of independent technological research

and development projects. In the field of nuclear power, in addition to continuing to promote the industrialization of the third generation pressurized water reactor, as to the area of advanced nuclear power systems, we have focused on promoting the scientific research and development of major equipment for national key development reactors such as high-temperature gas cooled reactors, lead bismuth reactors, thorium based molten salt reactors, sodium cooled fast reactors, and CRAFT fusion reactors, as well as the development of small reactors and integrated heating reactors. In the field of energy storage, we have developed a series of products such as the second generation air-cooled lithium battery energy storage system products, MW grade flywheel energy storage motors, compressed air energy storage motors, and created core technical equipment for new energy. In the field of hydrogen energy, we have launched the first alkaline water electrolysis

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hydrogen production equipment with a single unit hydrogen production capacity of $1500\text{Nm}^3/\text{h}$ and the PEM electrolysis hydrogen production equipment with a single unit hydrogen production capacity of $50\text{Nm}^3/\text{h}$. Both can meet the needs for integrated and large-scale green hydrogen equipment through modular design. In the field of carbon capture, we are implementing carbon capture projects for two coal-fired power plants of Guoyue Group in Shaoguan and Chenzhou with the capacity of 100,000 tons per annum to capture carbon dioxide and refine to food-grade dry ice. In the field of wind power, the first 8MW-class medium to high speed offshore multibrid permanent magnet wind turbine which we independently developed was successfully launched. The Company focused on technology of temperature and efficiency enhancement of high-temperature subcritical units in the field of coal-fired power, and carried out research and development of renovation technology for 300MW and 600MW class coal-fired power equipment. In the field of industrial basic components, we actively participated in the joint development and formulation of high-lock bolt product standards for composite structures of civil aircraft. In the field of environmental protection,

we successfully developed ultra-low emission integration technology and equipment of catalytic ceramic fibre filter tube, which achieved multi-pollutant integrated purification of the waste incineration flue gas, with the comprehensive technology reaching the leading level in China. In the field of seawater desalination, we undertook the Shandong Yulong Petrochemical Thermal Film Coupling Seawater Desalination Demonstration Project with a total scale of 160,000 tons/day, which uses our self-developed low-temperature waste heat resource cascade utilization thermal film coupling process package and overall solution.

Our 14th Five-Year Plan strategy further defines the development direction of the new track supported by hardcore technology and continuous investment in scientific and technological research and development in key areas. We have been selected into the list of "Creating World-class Professional, Refined, Featured and Innovative Demonstration Enterprises" of the State-owned Assets Supervision and Administration Commission. During the Reporting Period, we applied for a total of 51 scientific research projects of the national key research

and development programme of the Ministry of Science and Technology, the special programme for enterprise innovation development and capacity enhancement of the Municipal State-owned Assets Supervision and Administration Commission, the special programme for promoting high-quality industrial development of the Municipal Economic and Information Commission, the scientific research programme of the Municipal Science and Technology Commission and the special programme for strategic emerging industries development of the Municipal Development and Reform Commission, covering renewable energy, hydrogen energy, energy storage and smart grid, carbon peaking and carbon neutrality and other fields.

In terms of attracting scientific and technological talents, we formulated the "Fourteen Measures of New Talent Policy of Shanghai Electric on New Industry and New Track (《上海電氣新產業新賽道人才新政十四條》)". Guided by "strategic guidance in a step ahead", "first-tier talent planning" and "market-based incentives", we focus on the first battlefield of the transformation of the old and new development drivers, and improve the top-level design of talents in new industries, so as to further build an innovative and open ecosystem of scientific and technological talents.

Deeply Cultivate High-end Equipment and Drive the Transformation and Upgrading of Advantageous Industries

We closely focus on the national strategy of "advancing new industrialization" and "accelerating to boost China's strength in manufacturing", continue to deepen the high-end equipment field, and promote the transformation and upgrading of advantageous industries.

Our nuclear power business continued to maintain the top position in the industry in terms of the comprehensive market share. During the Reporting Period, we have delivered the first RUV wet winding engine main pump of the "Guohe One" in the world. With the first successful grid connection of the Unit No. 3 of Karachi Nuclear Power Plant in Pakistan, an overseas demonstration project of "Hualong One", in which Shanghai

Electric provided the main equipment of nuclear and conventional islands, and the completion of 168 hours of trial operation of the Unit No. 6 of Fuqing Nuclear Power Plant, a demonstration project of "Hualong One", in which Shanghai Electric provided the reactor vessel internals, the China's third-generation nuclear power "Hualong One" demonstration projects in China and abroad have fully completed and put into production, which has strongly underpinned China's leapfrogging from a nuclear power big country to a nuclear power strong country. During the Reporting Period, we undertook a project of high temperature gas-cooled reactor steam generator of fourth-generation nuclear power, becoming the first domestic manufacturer of complete set of main core mechanical equipment for the high temperature reactor nuclear islands.

In the field of coal-fired power equipment, we are widely recognized by our customers for our secondary reheat technology with high technology level and excellent quality service. During the Reporting Period, we have won the bids for the complete set of main power generation equipment for the 1×600MW ultrasupercritical secondary reheat project of Xiamen Huaxia Power International Development Co., Ltd. (廈門華夏國際電力有限公司), the turbine generator equipment of 2×1000MW secondary reheat project of Chang'an Yiyang Power Generation Co., Ltd. (長安益陽發電有限公司), the electromechanical furnace auxiliary and main equipment for the 2×1000MW secondary reheat project Phase III of CRC Puqi and the 1×1000MW secondary reheat project Phase II of Wenergy Qianyingzi, etc. In the field of gas turbine equipment, we have successfully developed an ultra-low emission combustion system for Class F gas turbine, achieving a technical index of raising the turbine inlet temperature by 20°C and reducing NOx emissions below 15 ppm, and reaching the international advanced level. we won bids for a number of F-class gas turbine projects, such as Wenergy Peak Modulation Power Plant, Huaihe Energy project, Jiangyin Thermal Power, Wuxi West Area Phase II, Zhejiang Energy Zhenhai and Huaneng Nanshan. As at the end of the Reporting Period, we had signed long-term service contracts for 38 units of gas turbines in 19 projects.

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In the field of elevator equipment, Shanghai Mitsubishi Elevator Co., Ltd. ("SMEC"), a subsidiary of the Company, signed the project of the 10m/s ultra-high speed LEHY-H elevators for Changsha Xinchu - Jingtian Plaza (長沙新楚·敬天廣場), symbolizing the official operation of SMEC's self-developed highest speed elevator products for commercial use. During the Reporting Period, SMEC successively won the bids for several major projects such as Line 7, Line 8 and second dispatch center project of the Zhengzhou Rail Transit, as well as the renovation and expansion projects of Urumqi Airport, Zhuhai Airport and Lanzhou Zhongchuan International Airport. SMEC actively expand to develop service business, and the proportion of revenue from services business such as elevator installation, renovation and maintenance to the revenue of elevator business of SMEC has been continuously increased.

For our business in industrial basic parts such as blades, bearings, fasteners and tools, we focused on the vision of "becoming a world-leading provider of solutions on industrial basic parts and the major force in replacement of imported medium- and high-end basic parts in China", continued to promote business integration and industrial synergy and has developed "professional, refined, featured and innovative" business clusters with high quality.

In the field of aviation assembly and manufacturing lines, we have relied on our extreme manufacturing capabilities and integrated equipment strength to provide safe and controllable intelligent solutions for high-end manufacturing customers such as aircraft manufacturer and aviation engine manufacturer. During the Reporting Period, the Airbus A320 series aircraft Asian final assembly line upgrade and transformation project we undertook successfully completed delivery, and has been put into operation for the first A321 aircraft; the world's first domestic large aircraft C919, which we participated in the assembly line manufacturing, was successfully delivered to China Eastern Airlines, effectively ensuring the process quality and construction accuracy during the manufacturing process of domestic large aircraft.

Deepen the Integration of Digitalisation and Manufacturing and Promote the Extended Development of Industrial Chain

We adhere to the philosophy of open innovation and win-win cooperation, strive to promote the two-wheel drivers of "industrial intelligentization and service industrialization" and the interaction of "energy internet and industrial internet", and build a variety of industrial applications and solutions in the fields of smart energy, smart manufacturing, and smart infrastructure.

We create tailor-made digital solutions for users based on our experience in the energy, manufacturing and digital fields. During the Reporting Period, we won the bid for the project of digital service platform of photovoltaic integrated operation and management of Pingzhuang Coal Group to help users achieve centralised monitoring, comprehensive data analysis and unified operation and maintenance management. We won the bid for the "Carbon Neutrality" digitalisation project of State Grid Jibei Electric Power Company Limited to provide digitalized upgrade services for the zero-carbon transformation of power supplies warehouses in the relevant regional power supply bureaus. Shanghai Electric Central Research Institute was involved in the overall planning of comprehensive energy for Shanghai State-owned Digital Innovation Base - "Digital Sea (數字江海)" in Fengxian District, Shanghai, building the overall energy structure for "Digital Sea", including core functions such as the energy-carbon dual control digital platform, virtual power plants, intelligent micro-grid clusters, liquid flow batteries, PEDF (photovoltaic, energy storage, direct current and flexibility) buildings, as well as various intelligent applications.

We provide professional, standardised, technologically advanced, accurate and efficient products and services to help the construction of urban digital intelligence. During the Reporting Period, we won the bid for the automated communication and maintenance project of

Shanghai Pudong New District Public Security system, achieving a breakthrough in the digital field of serving the urban governance. Shanghai Lingang middle-volume Line 2 (Line T2), for which we provided the intelligent digital rail transit system (iDRT), has been officially put into operation. We provided core system equipment and integrated solutions for this line, including digital rail, operation control and management, integrated communications and platform intelligence. In addition, we have won the bid for the integrated operation and maintenance project of station electromechanical facilities and equipment for Shanghai Metro Line 5, making a breakthrough in the field of integrated operation and maintenance of station electromechanical equipment.

By the end of the Reporting Period, the "SEunicloud" industrial internet platform of Shanghai Electric had accessed more than 230,000 units of equipment with a total value of more than RMB154 billion, including wind turbines, elevators and machine tools, providing digital solutions for various fields such as wind farms, energy storage and photovoltaics. SMEC launched LNK smart elevator digital solution, an industry-leading digital solution for "elevator management" that will provide customers with more intelligent operation and maintenance management services.

Promote Management Improvement and Lay Solid Foundation for High-quality Development

In 2022, we listed management improvement as an important work goal of the Group, formed a series of management optimization measures related to industry capacity improvement, organizational flattening, operation quality improvement, overall coordination efficiency improvement and other aspects, and provided guarantee for the solid implementation of the "14th Five-Year Plan" strategic plan of the Group.

During the Reporting Period, the management reform work throughout the Group was

implemented smoothly and orderly. We focused on the optimization of quality of economic operation, paid special attention to key quality indicators, improved the risk prevention and control system, and improved the overall governance efficiency of the Group. We strengthened internal coordination, established a procurement platform for bulk raw material, optimized the supply chain management system, and further improved our cost control and procurement pricing capabilities. We established the director-in-charge mechanism for key energy customers, integrated the comprehensive advantages of Shanghai Electric in the whole industrial chain, and laid a solid foundation for the extensive development of services for key customers in all business areas. We continued to promote the optimization of business structure through measures including internal potential tapping, promoting the revitalization of inefficient assets, accelerating the turnover of operational assets, and withdrawing from the operational assets of non-core projects.

The year of 2023 represents the first year for the Group to fully implement the spirit of the 20th National Congress of the Communist Party of China. We will closely focus on the general working tone of "pursuing progress while ensuring stability, adhering to integrity and innovation and unswervingly following the path of high-quality development", seize the opportunities of high-end, intelligence and green strategies, focus on the main responsibility and main businesses, maintain firm strategic concentration, gather development consensus, promote transformation and upgrading, lead the high-quality development of the Company with Chinese modernization, and make great efforts to open up a new situation for the fully realisation of the strategic objectives of the "14th Five-Year Plan" of Shanghai Electric.

Leng Weiqing

Chairlady and CEO

Shanghai, the PRC

29 March 2023

Corporate Profile

Corporate Information

Legal name of the Company (Chinese)	上海電氣集團股份有限公司
Abbreviated legal name of the Company (Chinese)	上海電氣
Legal name of the Company (English)	Shanghai Electric Group Company Limited
Abbreviated legal name of the Company (English)	Shanghai Electric
Company's legal representative	Leng Weiqing
Company's authorized representatives	Leng Weiqing, Liu Ping
Company's alternative authorized representative	Zhou Zhiyan
Joint Company Secretaries	Zhou Zhiyan, Leung Kwan Wai

Contact Person and Contact Details

	Secretary to the Board
Name	Zhou Zhiyan
Correspondence address	No. 110 Sichuan Middle Road, Huangpu District, Shanghai
Telephone	+86 (21) 33261888
Fax	+86 (21) 34695780
Email	ir@shanghai-electric.com

Summary of Basic Information

Registered address	30/F, Maxdo Center, No.8 Xingyi Road, Shanghai (zip code: 200336)
Business address	No. 110 Sichuan Middle Road, Huangpu District, Shanghai (zip code: 200002)
Company website	http://www.shanghai-electric.com
Company email	service@shanghai-electric.com

Information Disclosure and Place for Inspection of Annual Report of the Company

Company's designated newspapers for information disclosure	China Securities Journal, Shanghai Securities News, Securities Times
The Company's annual reports available at	Office of the Board of the Company
Website designated for publishing annual report required by China Securities Regulatory Commission	www.sse.com.cn
Website designated for publishing annual report required by The Stock Exchange of Hong Kong Limited	www.hkexnews.hk

Summary Information of the Company's Shares

Class of Shares	Place of Listing of Shares	Abbreviation of Shares	Stock Code
A shares	The Shanghai Stock Exchange	上海電氣	601727
H shares	The Stock Exchange of Hong Kong Limited	SH Electric	02727

Share Registrar and Transfer Office

A Shares	H Shares
Shanghai Branch of China Securities Depository and Clearing Corporation Limited	Computershare Hong Kong Investor Services Limited

Other Relevant Information

Date of incorporation of the Company	1 March 2004
Place of incorporation of the Company	Shanghai, PRC
Name of domestic auditors appointed by the Company	PricewaterhouseCoopers Zhong Tian LLP
Business address of domestic auditors appointed by the Company	42nd Floor, Qiantan Center, No. 588 Dongyu Road, Pudong New District, Shanghai, PRC
Legal advisers appointed by the Company as to PRC laws	Grandall Law Firm (Shanghai)
Legal advisers appointed by the Company as to Hong Kong laws and U.S. laws	Clifford Chance

Five-year Financial Summary

Unit: million Currency: RMB

	2018	2019	2020	2021 (Restatement)	2022
Revenue and Profit					
Revenue	101,158	127,509	137,285	130,261	117,623
Profit /(loss) before tax	6,008	7,263	6,346	(10,290)	(1,975)
Tax	(677)	(1,279)	(1,080)	50	(338)
Profit /(loss) for the year	5,331	5,984	5,266	(10,240)	(2,313)
Attributable to:					
Owners of the Company	2,980	3,720	3,758	(9,988)	(3,566)
Non-controlling interests	2,351	2,264	1,508	(252)	1,253
Dividend	905	-	1,127	-	-
Earnings per share attributable to ordinary equity holders of the Company					
Basic Profit/(loss) for the year (cents)	20	25	25	(64)	(23)
Assets and liabilities					
Non-current assets	66,794	81,323	87,457	91,026	86,867
Current assets	151,728	199,201	227,946	209,776	201,154
Current liabilities	(119,623)	(164,061)	(183,492)	(168,879)	(163,525)
Net current assets	32,105	35,140	44,454	40,897	37,629
Total assets less current liabilities	98,899	116,463	131,911	131,923	124,496
Non-current liabilities	(25,262)	(24,873)	(25,061)	(33,778)	(30,301)
Net assets	73,637	91,589	106,849	98,144	94,194
Equity attributable to owners of the Company	57,290	63,346	66,401	58,134	54,862
Non-controlling interests	16,347	28,243	40,448	40,010	39,332

Notes: 1. As approved at 2019 annual general meeting, the Company prepares only one set of financial statements in accordance with the PRC Accounting Standards for Business Enterprises from 2020 onwards. In the above table, the financial summary for the years 2018 and 2019 represents the data in the financial statements prepared in accordance with the Hong Kong Financial Reporting Standards, and the financial summary for the years 2020 to 2022 represents the data in the financial statements prepared in accordance with the PRC Accounting Standards for Business Enterprises.

2. The Ministry of Finance promulgated the "Notice on Implementing the Accounting Standards for Business Enterprises and Effectively Completing the 2022 Annual Report (Cai Kuai [2022] No. 32)" (《關於嚴格執行企業會計準則切實做好企業2022年年報工作的通知》(財會[2022]32號)) in 2022, and the "Q & A on the Implementation of Long-term Equity Investment Standards" (《長期股權投資準則實施問答》) in 2023. In accordance with the aforesaid notices, the Company changed its accounting policies and retrospectively adjusted comparative figures of operating revenue, operating costs, selling expenses and investment income in the financial statements of the Company for the year 2022.

Key Accounting Data and Financial Indicators

Unit: '000 Currency: RMB

Key accounting data and financial indicators	2022	2021	Year-on-year increase/ decrease (%)
Total assets	288,020,852	300,802,190	(4.25)
Net assets attributable to shareholders of the parent company	54,862,313	58,134,328	(5.63)
Net assets per share attributable to shareholders of the parent company (RMB/share)	3.51	3.70	(5.39)
Revenue	117,623,118	130,261,250	(9.70)
Operating profit /(loss)	(2,024,458)	(10,838,464)	N/A
Profit /(loss) before tax	(1,975,298)	(10,289,639)	N/A
Net profit /(loss) attributable to shareholders of the parent company	(3,566,484)	(9,987,908)	N/A
Basic earnings per share (RMB/share)	(0.23)	(0.64)	N/A
Weighted average return on net assets (%)	(6.31)	(15.69)	N/A
Net cash flows generated from operating activities	8,482,815	(10,554,000)	N/A
Net cash flows per share generated from operating activities (RMB/share)	0.54	(0.67)	N/A



Share Capital Structure

As at 31 December 2022	Number of shares	Approximate percentage of issued share capital
A shares	12,655,327,092	81.23%
H shares	2,924,482,000	18.77%
Total	15,579,809,092	100.00%

Disclosure of Interests

Substantial Shareholders' and Other Persons' Interests and Short Positions in Shares and Underlying Shares

The followings are interests and short positions of substantial shareholders as at 31 December 2022 as recorded in the register required to be kept by the Company pursuant to Section 336 of the Securities and Futures Ordinance, Hong Kong ("SFO") and as to the knowledge of the Company:

Name of Substantial Shareholder	Class of shares	Identity	Note	Number of shares	Nature of Interest	Approximate percentage of shareholding in the relevant class of shares (%)	Approximate percentage of shareholding in the total issued share capital of the Company (%)
State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government	A	Interest of controlled corporation	1	8,617,782,662	Long position	68.10	55.31
	H	Interest of controlled corporation	1	313,642,000	Long position	10.72	2.01
Shanghai Electric Holding Group Co., Ltd.	A	Beneficial owner	1	7,442,101,913	Long position	58.81	47.77
	H	Beneficial owner	1	280,708,000	Long position	9.60	1.80
	H	Interest of controlled corporation	1,2	32,934,000	Long position	1.13	0.21
Shanghai State-owned Capital Investment Co., Ltd.	A	Beneficial owner	1	785,298,555	Long position	6.21	5.04
Shenergy (Group) Company Limited	A	Beneficial owner	1	390,382,194	Long position	3.08	2.51

Notes: 1. Shanghai Electric Holding Group Co., Ltd. (上海電氣控股集團有限公司)("SEGC", formerly known as "Shanghai Electric (Group) Corporation(上海電氣(集團)總公司)", completed the industrial and commercial change registration on 28 January, 2022), Shanghai State-owned Capital Investment Co., Ltd. (上海國有資本投資有限公司) and Shenergy (Group) Company Limited (申能(集團)有限公司) were wholly owned by State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government (上海市國有資產監督管理委員會) and accordingly, their interests in the A shares and H shares of the Company were deemed to be the interests of State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government.

2. Shanghai Electric Holding Group Co., Ltd. (上海電氣控股集團有限公司) through its wholly-owned subsidiary, Shanghai Electric Group Hongkong Company Limited (上海電氣集團香港有限公司), held H shares of the Company.

Save as disclosed above, the Company is not aware of any other person having any interests or short positions in the shares or underlying shares of the Company as at 31 December 2022 required to be recorded in the register kept by the Company pursuant to Section 336 of the SFO.

Disclosure of Interests

Directors', Supervisors' and Chief Executives' Interests and Short Positions in Shares, Underlying Shares and Debentures

As at 31 December 2022, none of the directors, supervisors or chief executives of the Company (as defined in the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the "Hong Kong Listing Rules")) of the Company had or was deemed to have any interests or short positions in the shares, underlying shares or debentures of the Company or any of its associated corporations (as defined in the SFO), as recorded in the register required to be kept by the Company under Section 352 of the SFO, or as otherwise required to be notified by the directors, supervisors or chief executives to the Company and the Stock Exchange of Hong Kong Limited (the "Stock Exchange") pursuant to the "Model Code for Securities Transactions by Directors of Listed Issuers" set out in Appendix 10 of the Hong Kong Listing Rules. Also, no right to acquire the aforementioned interests had been granted to the directors, supervisors or chief executives of the Company.





Directors, Supervisors, Senior Management and Staff

Changes in Shareholdings and Remuneration of Directors, Supervisors and Senior Management

Name	Position	Gender	Age	Current term of office commencing on	Current term of office ending on	Number of shares held at the beginning of the year	Number of shares held at the end of the year	Changes in the number of shares for the year	Reason for the change	Total remuneration received from the Company during the Reporting Period (RMB in ten thousand) (before tax)
Leng Weiqing	Executive Director, Chairlady of the Board and Chief Executive Officer	Female	54	23 August 2021 (Executive Director and Chairlady of the Board) 27 August 2021 (Chief Executive Officer)	To present (Note 1)					87.135
Liu Ping	Executive Director and President	Male	52	8 November 2021 (Executive Director) 23 August 2021 (President)	To present (Note 1)					92.240
Zhu Zhaokai	Executive Director	Male	54	18 September 2018	To present (Note 1)					97.040
Yao Minfang	Non-executive Director	Female	55	18 September 2018	To present (Note 1)					
Li An	Non-executive Director	Female	61	18 September 2018	To present (Note 1)					
Xi Juntong	Independent Non-executive Director	Male	59	18 September 2018	To present (Note 1)					25
Xu Jianxin	Independent Non-executive Director	Male	67	14 November 2019	To present (Note 1)					25
Liu Yunhong	Independent Non-executive Director	Male	46	25 November 2020	To present (Note 1)					25
Cai Xiaoqing	Supervisor, Chairman of the Supervisory Committee	Male	58	28 June 2021	To present (Note 1)					93.055
Han Quanzhi	Supervisor	Male	58	18 September 2018	To present (Note 1)					
Yuan Shengzhou	Supervisor (employee representative)	Male	57	20 May 2019	To present (Note 1)					90

Name	Position	Gender	Age	Current term of office commencing on	Current term of office ending on	Number of shares held at the beginning of the year	Number of shares held at the end of the year	Changes in the number of shares for the year	Reason for the change	Total remuneration received from the Company during the Reporting Period (RMB in ten thousand) (before tax)
Dong Jianhua	Vice president	Male	57	18 September 2018	To present (Note 1)	594,000	0	-594,000	Note 2	121.473
Chen Ganjin	Vice president	Male	54	18 September 2018	To present (Note 1)	594,000	0	-594,000	Note 2	113.837
Gu Zhiqiang	Vice president	Male	58	18 September 2018	To present (Note 1)	594,000	0	-594,000	Note 2	113.256
Jin Xiaolong	Vice president	Male	55	18 September 2018	To present (Note 1)	594,000	0	-594,000	Note 2	114.418
Yang Hong	Vice president	Female	50	30 September 2020	To present (Note 1)	342,000	0	-342,000	Note 2	113.837
Zhou Zhiyan	Chief Financial Officer, secretary to the Board	Male	59	14 January 2022	To present (Note 1)					100
Tong Liping	Chief Legal Officer	Female	51	18 September 2018	To present (Note 1)	396,000	0	-396,000	Note 2	120
Fu Min	Chief Auditor	Female	50	18 April 2022	To present (Note 1)					75.818
Gan Pin	Non-executive Director, Vice Chairman of the Board (resigned)	Male	60	17 May 2021	27 September 2022	20,000	20,000	0		72.774
Zhang Mingjie	Chief Operating Officer (resigned) (Note 3)	Male	59	23 February 2022	29 March 2023	396,000	0	-396,000	Note 2	113.5

- Notes: 1. The terms of the fifth session of the Board and the Supervisory Committee of the Company expired on 17 September 2021. As the nomination of candidates and relevant work for the new session of the Board and the Supervisory Committee have not been completed, the election of the members of the Board and the Supervisory Committee will be postponed so as to maintain the continuity and stability of the work of the Board and the Supervisory Committee. The terms of the special committees of the Board and the senior management of the Company will be extended correspondingly. All the members of the fifth session of the Board and the Supervisory Committee and of the senior management of the Company will continue to fulfill their respective obligations and responsibilities in accordance with the relevant laws and regulations and the articles of association of the Company until the completion of the election of the new session of the Board and the Supervisory Committee.
2. The relevant senior management are the participants under the Restricted A Share Incentive Scheme of the Company. On 17 January 2022, the 2022 first extraordinary general meeting, the 2022 first A share class meeting and the 2022 first H share class meeting of the Company considered and approved the Proposal on Terminating the Implementation of the Restricted A Shares Incentive Scheme and Repurchase and Cancellation of Restricted Shares that Have Been Granted But Not Yet Unlocked. The Company terminated the Restricted A Share Incentive Scheme and repurchased and cancelled a total of 126,162,000 restricted shares granted but not yet unlocked held by 2,099 participants. The Company completed the procedures for the repurchase and cancellation of the shares at Shanghai Branch of China Securities Depository and Clearing Corporation Limited for the above restricted shares on 17 March 2022.
3. Mr. Zhang Mingjie served as the chief investment officer of the Company from 18 September 2018. Due to the adjustment of duties, Mr. Zhang Mingjie served as the chief operating officer of the Company from 23 February 2022 and no longer served as the chief investment officer. On 29 March 2023, Mr. Zhang Mingjie resigned as the chief operating officer of the Company due to the reason of age.

Directors, Supervisors, Senior Management and Staff

Major Work Experience

Leng Weiqing

Ms. Leng currently serves as the secretary of the Party Committee, an executive Director, the chairlady of the Board, the chief executive officer of the Company, the secretary of the Party Committee and the chairlady of the board of directors of SEGC, the chairlady of the Board of SMEC, the chairlady of the Board of Mitsubishi Electric Shanghai Mechanical & Electrical Elevator Co. Ltd., member of the 14th National Committee of the Chinese People's Political Consultative Conference, a representative to the 15th Shanghai Municipal People's Congress, a representative of the 12th Party Congress of Shanghai. Ms. Leng served as an assistant researcher at the Enterprise Personnel Division of the Organization Department of Shanghai Municipal Party Committee, where she was also an assistant researcher of the Economic Personnel Division. She was a member of the Party Committee of Shanghai Municipal State-owned Assets Supervision and Administration Commission, the deputy head and the head of the Leading Personnel Management Division of Shanghai Municipal State-owned Assets Supervision and Administration Commission. She was the vice president of SEGC and the secretary of the Party Committee of Shanghai Electric Power Generation Group. She was also a member of the Organization Department, head of the Enterprise Personnel Division, and deputy director of the Organization Department of Shanghai Municipal Party Committee. She served as the head of the office at Shanghai Municipal Party Organization Committee. Ms. Leng obtained a bachelor degree in education, an EMBA degree and the qualification of a senior economist.

Liu Ping

Mr. Liu currently serves as the deputy secretary of the Party Committee, an executive Director and the president of the Company, vice chairman of the board of directors of SEGC, chairman of the board of directors of Shanghai Mechanical & Electrical Industry Co., Ltd. (上海機電股份有限公司) and chairman of the board of directors of Shanghai Prime Machinery Company Limited. Mr. Liu served as the executive vice manager of the Finance Department of Shanghai Textile Holdings (Group) Company, the deputy general manager of Shanghai Dragon Corporation, the deputy general manager of the Commerce Business Department of Shanghai Fosun High Technology (Group) Co., Ltd., the deputy chief accountant of Shanghai Textile Holdings (Group) Company, the general manager of the Assets Operation Department of and the Chief Finance Officer of Shangtex Holding Co., Ltd., the Chief Finance Officer of Shanghai Textile Holdings (Group) Company, the vice president of Shangtex Holding Co., Ltd., a member of the standing committee under and a member of Shanghai Changning District Party Committee, the deputy Changning District chief, the president, the deputy secretary of the Party Committee of and a director of Bright Food (Group) Co., Ltd. Mr. Liu obtained a master's degree of engineering majoring in mechanical manufacturing from Shanghai Jiao Tong University and has the qualification of an engineer.

Zhu Zhaokai

Mr. Zhu currently serves as the deputy secretary of the Party Committee and an executive Director of the Company and the chairman of labor union of the Company, the executive vice chairman of labor union of Shanghai Mechanical and Electrical Union, a director of SEGC, president of the Party School of SEGC and dean of SEC Li Bin Technician College. Mr. Zhu served as the deputy secretary of the Party Committee and secretary of Commission for Discipline Inspection of the turbine factory of Shanghai Electric Power Generation Equipment Co., Ltd. and Shanghai Turbine Works Co., Ltd. from 2001 to 2009, and the secretary of the Party Committee and an executive director of the turbine factory of Shanghai Electric Power Generation Equipment Co., Ltd. and Shanghai Turbine Works Co., Ltd. from 2009 to 2011. He served as head of the human resources department of SEGC from 2011 to 2018 and the secretary of the Party Committee of Shanghai Electric Power Generation Group from 2013 to 2018. Mr. Zhu graduated from Hefei University of Technology with a bachelor's degree in engineering and from Shanghai Jiao Tong University with a master's degree in business administration. He is a senior economist.

Yao Minfang

Ms. Yao currently serves as a non-executive Director of the Company. Ms. Yao was the principal and then deputy manager of the investment department of Shenergy Company Limited from 2000 to 2006. She has been the deputy manager, and then the manager of the investment department, a deputy chief engineer, the director of the Technical Innovation Center, the deputy chief economist of Shenergy (Group) Company Limited, a director of Board of Shenergy Company Limited, chairlady of board of directors of Shanghai LNG Company Ltd. and chairlady of board of directors of Shenneng Yangshan LNG Co., Ltd. from September 2006. Ms. Yao graduated from the dynamics department of the University of Shanghai for Science and Technology with a master's degree and is a senior engineer of professor level.

Li An

Ms. Li currently serves as a non-executive Director of the Company, a consultant of Shanghai Municipal Government and a director of Shanghai Pharmaceuticals Holding Co., Ltd. Ms. Li served as the director of the Property Rights Division and the Center of Property Rights of Shanghai Municipal State owned Assets Supervision and Administration Commission from November 2009 to August 2014. She was the vice president of Shanghai Guosheng Group Company Limited from August 2014 to January 2017, and served as the director and vice president of Shanghai Guosheng Group Company Limited from January 2017 to October 2021. She was appointed as a consultant of Shanghai Municipal Government in June 2021. Ms. Li holds a bachelor's degree in Engineering and is an engineer.

Xi Juntong

Dr. Xi currently serves as an independent non-executive Director of the Company. He is a professor of Mechanical Manufacture and Automation and at the State Key Laboratory of Mechanical System and Vibration and a doctoral supervisor of Shanghai Jiao Tong University. He is the executive deputy dean of Shanghai Intelligent Manufacturing Institute (上海智能製造研究院), independent director of Shanghai Hi-tech Control System Co., Ltd.(上海海得控制系統股份有限公司), independent director of Shanghai Friendless Electronics Technology Co., Ltd. And (上海柏楚電子科技股份有限公司) and independent director of Shang Gong Group Co., Ltd. (上工申貝(集團)股份有限公司), general manager of Shanghai Jiaotong University-Lingang Group Intelligent Manufacturing Innovation Technology Co., Ltd. (上海交大臨港智能製造創新科技有限公司), general manager of Shanghai Smart Manufacturing R&D and Transformation Functional Platform (上海市智能製造研發與轉化功能型平臺). Dr. Xi is primarily engaged in research in the fields of digital manufacturing and intelligent manufacturing technologies. He was honored with 6 awards including the second prize of the National Science and Technology Progress Award and the scientific and technological progress and technological invention awards of Shanghai. His major concurrent academic posts mainly include deputy director of the Special Committee of Manufacturing Automation of Chinese Mechanical Engineering Society, a member of the Special Committee of Additive Manufacturing of Chinese Mechanical Engineering Society, an executive member of China Intelligent Manufacturing Industry Innovation Alliance (中國智能製造產業技術創新聯盟), the vice president of Shanghai Mechanical Engineering Society (上海機械工程學會), and the secretary general of Shanghai Intelligent Manufacturing Industry Innovation Alliance (上海智能製造產業技術創新聯盟).

Directors, Supervisors, Senior Management and Staff

Xu Jianxin

Dr. Xu currently serves as an independent non-executive Director of the Company, the senior vice president of Shanghai Purest Investment Management Co., Ltd., an independent director of Shanghai Shimao Co., Ltd. (上海世茂股份有限公司), an independent director of QST Corporation Ltd. (上海矽睿科技股份有限公司) and an independent director of Shanghai Jin Jiang International Hotels Company Limited (上海錦江國際酒店股份有限公司). From February 1982 to November 1997, Dr. Xu served as a lecturer and associate professor of accounting at Shanghai University of Finance and Economics. From November 1997 to December 2014, he served as the deputy chief accountant, director, chief financial officer, and chief economist of Orient International (Holding) Co., Ltd. Since January 2015, he has served as the senior vice president of Shanghai Purest Investment Management Co., Ltd. Dr. Xu graduated from Shanghai University of Finance and Economics with a doctorate. He is a professor-level senior accountant and a Chinese Certified Public Accountant.

Liu Yunhong

Dr. Liu currently serves as an independent non-executive Director of the Company, the deputy head of the Institute of International M&A and Investment of Renmin University of China and the head of Foresea Life Insurance (Shanghai) Research Institute, an independent director of Sinolink Securities Co., Ltd., an independent director of Everbright Securities Co., Ltd., an independent director of Bank of Guiyang Co., Ltd., an independent director of BOCOM International Trust Co., Ltd. (交銀國際信托有限公司), an adjunct professor and tutor of postgraduates of Renmin University of China, Shanghai University of Finance and Economics and East China University of Political Science and Law. Dr. Liu has served as the head of Legal and Compliance Division of Guotai Asset Management Co., Ltd., did post-doctoral research work at the Shanghai Stock Exchange, served as general manager of Investment Banking Department of Aerospace Securities Co., Ltd. and successively served as the general manager of the Investment Banking Department and the assistant to president of Hwabao Securities Co. Ltd. Dr. Liu obtained a doctorate's degree in law from Renmin University of China, and is a post-doctoral fellow in economics and law and a research fellow.

Cai Xiaoqing

Mr. Cai currently serves as a supervisor and the chairman of the supervisory committee of the Company. Mr. Cai was formerly the assistant engineer, engineer, senior engineer, deputy director of the general department, director, research fellow, deputy head (in-charge) and head of the Shanghai Academy of Spaceflight Technology, 805 Research Institute. He was the deputy director of the Integrated Planning Office, director of Science and Technology Division and Equipment Industry Division of Shanghai Municipal Economic Committee. He also served as the deputy district mayor of Minhang District of Shanghai and the president and the deputy secretary of Party Committee of INESA (Group) Co., Ltd. Mr. Cai has a master degree in engineering, a degree in EMBA and the qualification of research fellow.

Han Quanzhi

Mr. Han currently serves as a supervisor of the Company. He has successively served as a salesman and chief salesman of engineering and construction department of Shanghai Hongqiao Economic & Technological Development Zone United Development Co., Ltd., a deputy manager, the assistant to general manager, deputy general manager of the project management department, deputy director and director of general office, director of foreign affairs office, deputy general manager of the real estate branch of Shanghai Hongqiao Economic & Technological Development Zone United Development Co., Ltd., a member of Party Committee and deputy general manager of Shanghai Land Minhong (Group) Co., Ltd. Mr. Han graduated from the Department of Architectural Engineering of Shanghai Institute of Urban Construction, majoring in industrial and civilian construction. Mr. Han is an engineer.

Yuan Shengzhou

Mr. Yuan currently serves as an employee representative of the supervisory committee, the executive vice chairman of labor union of the Company and the executive vice chairman of labor union of Shanghai Mechanical and Electrical Union. Mr. Yuan served as the secretary of the Youth League Committee, the director of general office and the deputy secretary of the Party Committee, the secretary of the commission for discipline inspection, the chairman of labor union, the chairman of supervisory committee, the secretary of the Party Committee, and an executive director of Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd., the deputy secretary of the Party Committee and the vice president of Shanghai Electric Environmental Protection Group, and a supervisor of the supervisory committee of SEGC. Mr. Yuan holds a postgraduate degree and a bachelor's degree in engineering and is a senior political affairs specialist.

Dong Jianhua

Mr. Dong is currently a vice president of the Company, a director of SEGC and the chairman of the board of directors of Shanghai Highly (Group) Co., Ltd, a director of Shanghai Proton and Heavy Ion Center Asset Management Co., Ltd. (上海質子重離子醫院有限公司), the chairman of the supervisory committee of Shanghai Guosheng Capital Management Co., Ltd. (上海國盛資本管理有限公司), the secretary of the Party Committee of Anxin Trust Co., Ltd. He was formerly the vice president and chief financial officer of SEGC and chairman of the supervisory committee of the Company. Prior to joining SEGC, Mr. Dong was the assistant to the head and the deputy head of Infrastructure Office, the deputy head and head of the Fixed Assets Investment and Audit Office, the head of the Financial Audit Office of Shanghai Municipal Audit Bureau between 1987 and 2008. Mr. Dong has been involved in professional auditing for more than 20 years. Mr. Dong graduated from Shanghai Tongji University with a bachelor's degree in engineering. He also obtained a master's degree in business administration from Shanghai Jiao Tong University. Mr. Dong is a professor-level senior economist.

Directors, Supervisors, Senior Management and Staff

Chen Ganjin

Mr. Chen is currently a vice president of the Company, a director of CLP Combined Heavy Gas Turbine Technology Co., Ltd. (中電聯合重型燃氣輪機技術有限公司). He was formerly the chairman of the board of directors and the secretary of the Party Committee of Shanghai Boiler Works, Ltd., the general manager of Shanghai Diesel Engine Co., Ltd., the general manager and the secretary of the Party Committee of Shanghai Rail Traffic Equipment Development Co., Ltd., the president of Shanghai Electric Heavy Industry Group, the chairman of Shanghai Heavy Machinery Plant Co., Ltd., the vice president and chief operation officer of the Company, the secretary of the Party Committee and general manager of Shanghai Zhangjiang (Group) Company Limited and vice chairman of Shanghai Electric Transmission and Distribution Group Co., Ltd. Mr. Chen graduated from Xi'an Jiaotong University with a bachelor's degree in engineering, majoring in thermal energy and power engineering of power stations. Mr. Chen obtained a master's degree in business administration from China Europe International Business School and a master's degree in professional accounting from The Chinese University of Hong Kong. Mr. Chen is a senior engineer.

Gu Zhiqiang

Mr. Gu is currently a vice president of the Company, the secretary of the Party Committee of Shanghai Electric Environmental Protection Group, the secretary of the Party Committee and chairman of the board of directors of Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd, chairman of the board of directors of Shanghai Electric Kangda Medical Instrument Group Co., Ltd. He served as the assistant to the general manager and deputy general manager of SEC Power Generation Environment Protection Engineering Co., Ltd., representative of SEGIC in Europe, head of the environmental protection department of the Company, the chairman and general manager of Shanghai Electric (Anhui) Investment Co., Ltd. Mr. Gu graduated from Shanghai Jiao Tong University with a bachelor's degree in engineering and obtained an EMBA degree from Shanghai National Accounting Institute and Arizona State University, United States of America. Mr. Gu is a professor-level senior engineer.

Jin Xiaolong

Mr. Jin is currently a vice president of the Company, the president and the deputy secretary of the Party Committee of Shanghai Electric Power Generation Group, person in charge of power station branch of Shanghai Electric Group Company Limited, chairman of the board of directors of Shanghai Electric Power Generation Equipment Co., Ltd. and the secretary of the Party Committee and the chairman of the board of directors of Shanghai Electric New Energy Development Co., Ltd. He served as operation manager of Maxon Combustion Equipment (Shanghai) Co., Ltd (麥克森燃燒設備(上海)有限公司), the secretary of the Party Committee and deputy general manager of Shanghai Faiverley Transport Co., Ltd., the secretary of the Party Committee and deputy general manager of Lingang Factory of Shanghai Electric Power Generation, the vice president of Shanghai Electric Power Generation Group, the executive director and the general manager of Shanghai Electric Wind Power Equipment Co., Ltd, the vice chairman and general manager of Shanghai Electric Wind Energy Co., Ltd. and Siemens Wind Power Turbines (Shanghai) Co., Ltd. and the secretary of the Party Committee and the chairman of the board of directors of Shanghai Electric Wind Power Group Co., Ltd. Mr. Jin graduated from Harbin Institute of Technology with a bachelor's degree in engineering and obtained a master's degree in business administration from Webster University. Mr. Jin is a professor-level senior economist.

Yang Hong

Ms. Yang currently serves as a vice president of the Company, head of science and technology management department of the Company, the chairlady of the board of directors of Shanghai Automation Instrumentation Co., Ltd. (上海自動化儀錶有限公司), the dean of the central research institute of the Company, vice chairlady of board of directors of AECC Commercial Aircraft Engine Co., Ltd. (中國航發商用航空發動機有限公司). Ms. Yang used to serve as the chief engineer, the head of technology department, the director of the Design Institute, the secretary of the Party Branch, the general manager and deputy secretary of the Party Committee of the turbine factory of Shanghai Electric Power Generation Equipment Co., Ltd (上海電氣電站設備有限公司上海汽輪機廠) and Shanghai Turbine Works Co., Ltd (上海汽輪機廠有限公司) and the vice president of Shanghai Electric Power Generation Group (上海電氣電站集團) and Shanghai Electric Power Generation Equipment Co., Ltd (上海電氣電站設備有限公司). Ms. Yang graduated from Xi'an Jiaotong University. Ms. Yang holds a master degree in engineering and is a senior engineer at a professor level.

Zhou Zhiyan

Mr. Zhou currently serves as the chief financial officer, secretary to the Board and joint company secretary of the Company, the chairman of the board of directors of Shanghai Electric Enterprise Service Co., Ltd. Mr. Zhou served as chief financial officer of the mechanical basic parts business department, executive deputy head of the overseas business department, deputy head of the assets and finance department, head of the finance department, head of the financial budget department, deputy chief accountant and deputy chief economist of SEGC, general manager and deputy secretary of the Party Committee of Shanghai Electric Industrial Corporation, head of the investment management department, investment director and chief financial officer of Shanghai Electric Assets Management Company Limited, vice chairman, general manager of Shanghai Prime Machinery Company Limited and deputy secretary of Party Committee and chairman of Shanghai Prime Machinery Company Limited. Mr. Zhou graduated from the School of Accounting of Shanghai Industry and Commerce Institute majoring in finance and accounting and obtained an MBA degree from Shanghai Jiao Tong University. He is a senior accountant.

Tong Liping

Ms. Tong currently serves as the chief legal officer and the solicitor of the Company. Ms. Tong has long been engaged in in-house legal works and is experienced in managing corporate legal affairs with rich knowledge in relevant laws. She served as the director of the legal and audit office and head of legal department of Shanghai Electric Power Generation Group from 2004 to 2010, director of the legal affairs centre of the Company from 2006 to 2008, and taking up the responsibility of the deputy head and head of the legal department and then the chief legal counsel of the Company since 2008. Ms. Tong graduated from Fudan University with a master's degree in law and is a professor-level senior economist.

Fu Min

Ms. Fu is currently the chief auditor and the head of the audit and risk control department of the Company. Ms. Fu served as the staff member, deputy principal staff member and principal staff member of the foreign investment application audit division, the assistant to the director, the deputy director and the director of the financial audit division, the director of the regional audit division, the director of the economic responsibility audit division of Shanghai Municipal Audit Bureau and a first-class researcher. Ms. Fu holds a master's degree in business administration from Shanghai University of Finance and Economics and is a senior auditor.

Directors, Supervisors, Senior Management and Staff

Employments with Shareholder Entities of the Company

Name	Name of shareholder entity	Position in shareholder entity	Term of office commencing on	Term of office ending on
Leng Weiqing	SEGC	Secretary of the Party Committee, chairlady of the board of directors	2021-8	to present
Liu Ping	SEGC	Vice chairman of the board of directors	2022-1	to present
Zhu Zhaokai	SEGC	Director	2022-1	to present
Dong Jianhua	SEGC	Director	2018-8	to present
Dong Jianhua	Shanghai Highly (Group) Co., Ltd.	Chairman of the board of directors	2017-12	2023-8
Gu Zhiqiang	Shanghai Electric Kangda Medical Instrument Group Co., Ltd.	Chairman of the board of directors	2019-11	to present
Yang Hong	Shanghai Automation Instrumentation Co., Ltd.	Chairlady of the board of directors	2020-10	to present
Yao Minfang	Shenergy (Group) Company Limited	Deputy chief economist	2020-3	2023-2
Yao Minfang	Shanghai LNG Company Ltd.	Chairlady of the board of directors	2020-3	2023-2
Yao Minfang	Shenneng Yangshan LNG Co., Ltd.	Chairlady of the board of directors	2021-12	2023-2



Employments with Other Companies or Organizations

Name	Name of company/organization	Position held	Term of office commencing on	Term of office ending on
Leng Weiqing	Mitsubishi Electric Shanghai Mechanical & Electrical Elevator Co. Ltd.	Chairlady of the board of directors	2021-8	to present
Li An	Shanghai Tunnel Engineering Co. Ltd. (上海隧道工程股份有限公司)	Director	2015-10	2022-1
Li An	Shanghai Pharmaceuticals Holding Co., Ltd.	Director	2016-6	to present
Li An	Shanghai Lingang Economic Development (Group) Co., Ltd.	Director	2017-3	2022-7
Xi Juntong	Shanghai Jiao Tong University	Professor of Mechanical Manufacture and Automation and at the State Key Laboratory of Mechanical System and Vibration and Doctoral Supervisor	2003-4	to present
Xi Juntong	Shanghai Intelligent Manufacturing Institute(上海智能製造研究院)	Executive deputy dean	2015-12	to present
Xi Juntong	Shanghai Jiaotong University-Lingang Group Intelligent Manufacturing Innovation Technology Co., Ltd.	General manager	2016-10	to present
Xi Juntong	Shanghai Hi-tech Control System Co., Ltd.	Independent director	2018-5	2024-6
Xi Juntong	Shanghai Friendless Electronics Technology Co., Ltd.	Independent director	2018-7	2024-6
Xi Juntong	Shang Gong Group Co., Ltd.	Independent director	2020-6	2023-6
Xi Juntong	Shanghai Smart Manufacturing R&D and Transformation Functional Platform	General manager	2020-5	to present
Xu Jianxin	Shanghai Purest Investment Management Co., Ltd.	Senior vice president	2015-1	to present
Xu Jianxin	Shanghai Shimao Co., Ltd.	Independent director	2021-6	2024-6
Xu Jianxin	QST Corporation Ltd.	Independent director	2021-6	to present
Xu Jianxin	Shanghai Jin Jiang International Hotels Company Limited	Independent director	2022-6	To present
Liu Yunhong	the Institute of International M&A and Investment of Renmin University of China	Deputy head	2016-5	to present
Liu Yunhong	Foresea Life Insurance (Shanghai) Research Institute	Head	2019-6	to present
Liu Yunhong	Sinolink Securities Co., Ltd.	Independent director	2022-6	to present
Liu Yunhong	Everbright Securities Co., Ltd.	Independent director	2020-12	to present
Liu Yunhong	Bank of Guiyang Co., Ltd.	Independent director	2018-2	to present
Liu Yunhong	BOCOM International Trust Co., Ltd.	Independent director	2022-8	to present
Dong Jianhua	Shanghai Proton and Heavy Ion Center Asset Management Co., Ltd. (上海質子重離子醫院有限公司)	Director	2015-4	to present
Dong Jianhua	Shanghai Guosheng Capital Management Co., Ltd. (上海國盛資本管理有限公司)	Chairman of the Supervisory Committee	2018-1	to present
Dong Jianhua	Anxin Trust Co., Ltd.	the secretary of the Party Committee	2022-10	to present
Chen Ganjin	CLP Combined Heavy Gas Turbine Technology Co., Ltd. (中電聯合重型燃氣輪機技術有限公司)	Director	2017-1	to present
Yang Hong	AECC Commercial Aircraft Engine Co., Ltd. (中國航發商用航空發動機有限公司)	Vice chairlady of board of directors	2020-11	to present

Directors, Supervisors, Senior Management and Staff



Remunerations of Directors, Supervisors and Senior Management

Procedures for determining the remunerations of Directors, Supervisors and senior management

The remunerations of our Directors and Supervisors (non-employee representatives) are determined in general meeting, while the remunerations of our senior management are determined by the board of directors of the Company.

Basis for determining the remunerations of Directors, Supervisors and senior management

The remunerations of our Directors and Supervisors (non-employee representatives) are determined based on a number of factors, such as the operating results of the Company, their responsibilities, performance and market conditions. The remunerations of our Supervisors (employee representatives) and Senior Management are determined based on their responsibilities and performance appraisal in respect of the completion of annual operation plan.

Remunerations paid to Directors, Supervisors and senior management

Remunerations were paid to the Directors, Supervisors and senior management of the Company based on their respective entitlement.

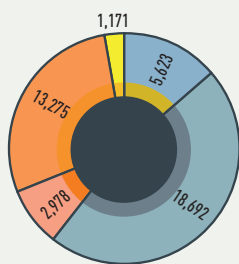
Total actual remunerations received by all Directors, Supervisors and senior management up to the end of Reporting Period

RMB15,933.83 thousand

Changes in Directors, Supervisors and Senior Management

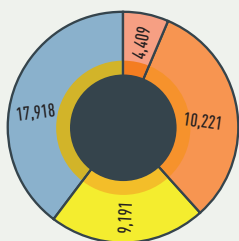
Name	Position	Change	Reason for the change
Zhou Zhiyan	Chief Financial Officer and Secretary to the Board	Appointed	Work requirements
Fu Min	Chief Auditor	Appointed	Work requirements
Zhang Mingjie	Chief Operating Officer	Appointed	Adjustment of duties
Gan Pin	Former non-executive Director and Vice Chairman of the Board	Resigned	Age concern
Zhang Mingjie	Former Chief Investment Officer	Resigned	Adjustment of duties

Statistical Chart of Function



- Production personnel
- Sales personnel
- Technical personnel
- Financial personnel
- Administration personnel

Statistical Chart of Education Level



- Postgraduate and above
- Undergraduate
- Tertiary education
- Secondary education and below

Employees of the Company and Major Subsidiaries

Number of current employees of the Company	179
Number of current employees of the major subsidiaries	41,560
Total number of current employees	41,739
Number of retired employees for whom the Company and its major subsidiaries are responsible for the retirement benefits	465

Function		Education Level	
Categories by function	Number of persons	Categories by education level	Number of persons
Production personnel	18,692	Postgraduate and above	4,409
Sales personnel	2,978	Undergraduate	17,918
Technical personnel	13,275	Tertiary education	9,191
Financial personnel	1,171	Secondary education and below	10,221
Administrative personnel	5,623		

Gender		Number of persons
Categories by gender		
Male		32,181
Female		9,558

Directors, Supervisors, Senior Management and Staff

Remuneration Policy

The Company set up a comprehensive system which synchronized the increase of employees' salaries with the improvement in labor productivity; thus, the level of wage increase of the Company and the wages adjustment of employees of various work positions can be determined reasonably. At the same time, while taking into account the internal fairness of the employee's salary income, the Company adheres to the performance orientation by taking the performance target as the foundation, strengthening the rigid assessment, and deducting all the performance salary of the year for those who fail to pass the annual assessment, so as to reasonably widen the salary gap. In the event of receiving party and government disciplinary punishment for violation of discipline and law, a salary recourse and deduction system has been established. Besides, the Company constantly insists on the general requirement of "Dual Inclination, Dual Care" and implements policies that tilted towards scientific and technological staff and the front-line technical workers.

Training Program

During the Reporting Period, the Company, following the strategy of the Group, adhered to the demand-oriented approach and proceeded with the establishment of training system and training base. It emphasized training for core employees, especially for leading cadres and strategically needed talent, and promoted staff training on a full coverage basis, so as to boost the business development of the Group and enhance the value of human capital.

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Labor Outsourcing

Total remuneration paid for labor outsourcing	RMB116 million
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Services Contracts with Directors and Supervisors

None of the Directors and Supervisors of the Company has entered into any service contract with the Company which is not terminable by the Company within one year without payment of compensation (other than statutory compensation).

Directors' and Supervisors' Interests in Transactions, Arrangements or Contracts of Significance

During the year, none of the Directors, Supervisors or any of their respective associates had a material interest, whether directly or indirectly, in any transaction, arrangement or contract of significance to which the Company, its holding company, or any of its subsidiaries or fellow subsidiaries was a party.

Management Contracts

During the Reporting Period, the Company did not have any subsisting contract (except the service contracts entered into with any Directors, Supervisors or full-time employees of the Company) under which any individual or entity undertakes the management and administration of the whole or any substantial part of the business of the Company.

Permitted Indemnity Provision

The Company has maintained appropriate insurance coverage for Directors, Supervisors and senior management's liabilities in respect of potential legal actions against its Directors, Supervisors and senior management arising out of the business activities of the Company.

Share Incentive Scheme

On 22 January 2019, the Board considered and approved the relevant resolution in relation to the proposed adoption of Restricted A Share Incentive Scheme ("the Incentive Scheme"). The purpose of the Incentive Scheme was to establish and improve the long-term incentive mechanism of the Company, attract and retain talents, fully motivate the Directors, senior and middle management and key technical (business) personnel of the Company, and align the interests of the shareholders and the Company with those of the core team members of the Company so that all parties would make joint efforts for the Company's long-term development. On 6 May 2019, the resolution in respect of the proposed adoption of the Incentive Scheme was considered and approved at the 2019 first extraordinary general meeting, 2019 first A share class meeting and 2019 first H share class meeting. On 6 May 2019, upon consideration by the Board, the Company approved the grant of 136,500,000 restricted shares to 2,235 participants at the grant price of RMB3.03. As at 20 May 2019, the Company received subscription funds in an aggregate amount of RMB404,741,340.00 paid by 2,194 participants for subscription of 133,578,000 restricted shares. All participants made capital contribution in cash, including RMB133,578,000.00 included in the share capital and RMB271,163,340.00 transferred to the capital reserve. The Company completed the registration of restricted shares under the Incentive Scheme of the Company with Shanghai Branch of China Securities Depository and Clearing Corporation Limited on 21 June 2019.

In accordance with the provisions of the Incentive Scheme, if there is any capitalization issue, bonus issue, dividends distribution, share subdivision, rights issue, additional issue or share consolidation and other matters of the Company affecting the total share capital or the share price of the Company after completion of the registration of the Restricted Shares granted to the Participants, the Company shall make adjustments to the repurchase price of the Restricted Shares yet to be unlocked accordingly. On 29 April 2020, the Board considered and approved relevant resolution. As the Company implemented

Directors, Supervisors, Senior Management and Staff

the 2018 profit distribution in August 2019, the repurchase price of the Incentive Scheme was adjusted from RMB3.03 per share to RMB2.96854 per share. On 17 December 2021, the Board considered and approved the relevant resolution. As the Company implemented the 2020 profit distribution of the Company in August 2021, the repurchase price of the Incentive Scheme was adjusted from RMB2.96854 per share to RMB2.89676 per share.

On 29 April 2020, the Board considered and approved relevant resolution, pursuant to which, in accordance with the requirements under the Restricted Share Incentive Scheme, the Company intended to repurchase and cancel the 7,416,000 Restricted Shares which had been granted to 95 Participants but not yet unlocked, due to the fact that the personal circumstances of such 95 Participants under the Incentive Scheme had changed and therefore they were no longer within the scope of the incentive. On 29 June 2020, the Resolution on Repurchase and Cancellation of Partial Restricted Shares was considered and approved at the Company's 2019 annual general meeting, 2020 first A share class meeting and 2020 first H share class meeting. The Company completed the procedures for the repurchase and cancellation of the above restricted shares at Shanghai Branch of China Securities Depository and Clearing Corporation Limited on 18 September 2020.

On 17 December 2021, the Board considered and approved the relevant resolution. The Company intended to terminate the Incentive Scheme in accordance with the relevant provisions of the Trial Measures on Implementation of Share Incentive Schemes by State-Owned Listed Companies (Domestic) and other relevant laws and regulations. Pursuant to the relevant requirements of Article 51 of the Administrative Measures on Share Incentives of Listed Companies issued by China Securities Regulatory Commission and the Incentive Scheme, any termination of an incentive scheme by the Company should be subject to consideration and approval at the general meeting, the A share class meeting and the H share class meeting of the Company and the restricted shares that had not yet been unlocked should be repurchased and cancelled. The Company intended to repurchase and cancel all of the 126,162,000 Restricted Shares which was granted to 2,099 Participants but not yet unlocked at a repurchase price of RMB2.89676 per share. The above matters were considered and approved at the 2022 first extraordinary general meeting, the 2022 first A share class meeting and the 2022 first H share class meeting of the Company held on 17 January 2022. The Company completed the procedures for the repurchase and cancellation of the above restricted shares at Shanghai Branch of China Securities Depository and Clearing Corporation Limited on 17 March 2022.

During the Reporting Period, save as disclosed above, there is no existing effective share schemes of the Company.

Corporate Governance Report

The Board of the Company firmly believes that corporate governance is essential to the success of the Company and has adopted various measures to establish a listed corporation with high level of transparency in corporate governance and an excellent performance in operation.

The Company will periodically review and update the existing practices to keep abreast of the latest developments in corporate governance.

Model Code for Securities Transactions by Directors

The Company has adopted the code provisions regarding the purchase and sale of the Company's shares by the Directors of the Company as set out in the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") in Appendix 10 of the Hong Kong Listing Rules. All Directors and Supervisors of the Company confirmed that they had complied with the requirements contained in the Model Code throughout the year 2022. The Company was not aware of any non-compliance with the Model Code by any of its employees.



Board of Directors

By the end of the Reporting Period, the Board comprised eight Directors, including three executive Directors, namely Ms. Leng Weiqing, Mr. Liu Ping and Mr. Zhu Zhaokai; two non-executive Directors, namely Ms. Yao Minfang and Ms. Li An; and three independent non-executive Directors, namely, Dr. Xi Juntong, Dr. Xu Jianxin and Dr. Liu Yunhong. Mr. Gan Pin resigned as non-executive Director on 27 September 2022. During the Reporting Period, the number of independent non-executive Directors represented no less than one-third of the total number of Directors.

Members of the Board have different professional backgrounds with expertise in various aspects such as corporate management, technology development, financial management, strategic investment and human resources management. Their biographical particulars are set out in the section headed "Directors, Supervisors, Senior Management and Staff" of this annual report.

The independent non-executive Directors of the Company are aware of the rights and obligations of directors and independent non-executive directors of listed companies. During the Reporting Period, the independent non-executive Directors attended the Board meetings in prudent, responsible, proactive and earnest manner. Fully leveraging on their experience and expertise, they made tremendous efforts in improving corporate governance and facilitating major decision-making process, expressed fair and objective opinions on matters concerning significant events and connected transactions of the Company, enhanced the scientific development and standardization of the Board's decision-making process and safeguarded interests of the Company and its shareholders as a whole effectively.

Each of the independent non-executive Directors has confirmed his independence with the Company as required under Rule 3.13 of the Hong Kong Listing Rules annually. The Company has received the annual confirmations from such Directors and considered them independent in 2022.

Rights and duties of the Board and the management have been clearly specified in the Articles of Association to ensure adequate check and balance for sound corporate governance and internal controls. The Board formulates

Corporate Governance Report

overall development strategies of the Group, monitors its financial performance and maintains effective supervision over the management. Members of the Board act in an effort to maximize the long-term interests of shareholders and achieve business goals and development direction of the Group amidst the prevailing economic and market conditions. The management is responsible for daily operation and management. The management of the Company, under the leadership of the President, is responsible for implementing various resolutions made by the Board and organizing daily operation and management of the Company.

Every member of the Board has the right to access documents and relevant materials of the Board, to consult the Company Secretary and the Secretary to the Board on regulatory and compliance matters and to seek external professional advice when necessary to ensure independent views and input are available to the board. The Company Secretary and the

Secretary to the Board advise all Directors on the requirements under the Hong Kong Listing Rules and other applicable provisions to ensure the Company's compliance with and maintenance of excellent corporate governance. The Board believe that the implementation of the above mechanisms during the Reporting Period is effective.

Apart from the working relationship in the Company, there was no financial, operational, familial or other material relationship among the Directors, Supervisors and senior management.

The Company attaches great importance to the continuous training of its Directors on various areas. During the Reporting Period, the Company has updated Directors on the latest regulations in aspects such as business, law and finance in order to enhance their professional knowledge on a continuous basis.

Attendance record of Directors at Board meetings and general meetings

Name of Directors	Independent Non-executive Director	Attendance at Board meetings						Attendance at general meetings
		Required attendance in Board meetings during the year	Attendance in person	Attendance via other communication means	Attendance by proxy	Absence	Absence for two consecutive meetings in person	Attendance record at general meetings
Leng Weiqing	No	14	14	10	0	0	No	1
Liu Ping	No	14	14	10	0	0	No	3
Zhu Zhaokai	No	14	14	10	0	0	No	1
Yao Minfang	No	14	14	11	0	0	No	4
Li An	No	14	14	12	0	0	No	0
Xi Juntong	Yes	14	14	12	0	0	No	3
Xu Jianxin	Yes	14	14	11	0	0	No	4
Liu Yunhong	Yes	14	14	11	0	0	No	3
Gan Pin	No	11	11	9	0	0	No	0

Number of Board meetings convened during the year	14
Of which: Number of on-site meetings	1
Number of meetings convened via other communication means	10
Number of on-site meetings assisted by other communication means	3

Corporate Governance Functions

During the Reporting Period, the Board of the Company performed the following functions: to formulate and review the Company's policies and practices on corporate governance and make recommendations; to review and monitor the training and continuous professional development of Directors and senior management; to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements; to develop, review and monitor the ethics and compliance of employees and Directors; and to review the Company's compliance with the code provisions and disclosure in the "Corporate Governance Report".

During the Reporting Period, the Board is of the view that the Company has complied with the requirements of the code contained in Appendix 14 of the Hong Kong Listing Rules (the "Code"), except for the deviation from requirement of C.2.1 of the Code concerning the separation of the roles of the chairman and chief executive officer. Pursuant to code provision C.2.1, roles of the chairman and chief executive officer should be separate and should not be performed by the same individual. The division of responsibilities between the chairman and chief executive officer should be clearly established and set out in writing. During the Reporting Period, the chairman of the Board and chief executive officer of the Company were assumed by one person, who was mainly responsible for the strategic decisions of the Company. The executive director and president of the Company were assumed by another person, who was fully responsible for the daily operation and execution of the Company. The Company considers that the roles and responsibilities of the Board and the management are clear and there is no concentration of management power.

Strategy Committee

The strategy committee of the Board of the Company (the "Strategy Committee") currently comprises Ms. Leng Weiqing, Mr. Liu Ping, Dr. Xi Juntong and Dr. Xu Jianxin, and is chaired by Ms. Leng Weiqing.

One meeting was held by the Strategy Committee during the Reporting Period. At the meeting, the Strategy Committee mainly listened to the reports on the implementation of Shanghai Electric "14th Five-Year Plan", the implementation of the new energy business plan, the implementation of the technology development plan and the implementation of the human resources plan, and also discussed the strategic plan of the Company.

Attendance record of committee members at the meeting of the Strategic Committee during the Reporting Period

Name of Strategic Committee Member	Actual attendance/ attendance required
Leng Weiqing (Chairlady of the Committee)	1/1
Liu Ping	1/1
Xi Juntong	1/1
Xu Jianxin	1/1

Corporate Governance Report

Audit Committee

The audit committee of the Board of the Company (the "Audit Committee") is mainly responsible for reviewing and overseeing the risk management of the Company, financial reporting procedures and internal control system, reporting the results of such review and making recommendations to the Board, and overseeing as well as assessing the establishment of sound risk management system of the Company and the completeness and effectiveness of its implementation on a regular basis in accordance with the requirements in relation to corporate risk management under Code on Corporate Governance as set out in Appendix 14 of the Hong Kong Listing Rules. The Audit Committee is also responsible for reviewing the quarterly, interim and annual financial statements, connected transactions, the appointment of and remuneration for auditors. The Audit Committee currently comprises Dr. Xu Jianxin, Dr. Xi Juntong, Dr. Liu Yunhong, independent non-executive Directors, and Ms. Yao Minfang, a non-executive Director, and is chaired by Dr. Xu Jianxin, an independent non-executive Director.

Fourteen meetings were held by the Audit Committee during the Reporting Period. At these meetings, the Audit Committee has reviewed and overseen the risk management of the Company, financial reporting procedures and internal control system, reported its results of review and made recommendations to the Board. The Audit Committee has also reviewed the quarterly, interim and annual financial reports of the Company, material connected transactions and continuing connected transactions and the appointment of and remuneration for auditors, discussed the audit plan and progress with auditors and listened to the report on the 2022 internal audit plan of the Company given by the internal audit department.

Attendance record of committee members at the meetings of the Audit Committee during the Reporting Period

Name of Audit Committee Member	Actual attendance/ attendance required
Xu Jianxin (Chairman of the Committee)	14/14
Xi Juntong	13/14
Liu Yunhong	14/14
Yao Minfang	14/14

Nomination Committee

The nomination committee of the Board of the Company (the "Nomination Committee") is mainly responsible for reviewing and making recommendations to the Board and the general meeting of the Company on the selection of candidates as the Directors of the Company, the selection criteria and procedures. The Nomination Committee currently comprises Dr. Xi Juntong, Mr. Zhu Zhaokai and Dr. Xu Jianxin, and is chaired by Dr. Xi Juntong.

The Company has formulated the "Board Diversity Policy of Shanghai Electric Group Company Limited", which includes the requirements of compliance with relevant laws, regulations and the Articles of Association by candidates for Directors of the Company to ensure the effective discussions at the Board and enable the Board to make scientific, prompt and careful decisions. The Nomination Committee will select the candidates for Directors based on objective criteria, which contain certain diversified factors, including but not limited to, gender, age, cultural and education background, locality, professional experience, skills, knowledge and terms of office of the candidates for Directors and other regulatory requirements; the degree of suitability of the professional background and skills of the candidates for Directors with the business features and future development requirements of the Company. As at the end of the Reporting Period, three of the eight members of the Board of the Company were women, accounting for 37.5%, and the gender diversity was well achieved.

No meeting was held by the Nomination Committee during the Reporting Period.



Corporate Governance Report



Remuneration Committee

The remuneration committee of the Board of the Company (the "Remuneration Committee") is mainly responsible for making recommendations to the Board regarding the formulation of a proper and transparent procedure for the overall remuneration policy and structure for Directors and senior management of the Company. The Remuneration Committee currently comprises Dr. Xi Juntong, Dr. Xu Jianxin and Dr. Liu Yunhong, and is chaired by Dr. Xi Juntong.

One meeting was held by the Remuneration Committee during the Reporting Period, at which the issues considered were the remuneration proposal for the Directors, Supervisors and the senior management of the Company. According to clause 11(b) of the Terms of Reference for the Remuneration Committee, the Remuneration Committee has been delegated to determine the specific remuneration packages of all executive Directors and senior management.

Attendance record of committee members at the meeting of the Remuneration Committee during the Reporting Period

Name of Remuneration Committee Member	Actual attendance/ attendance required
Xi Juntong (Chairman of the Committee)	1/1
Xu Jianxin	1/1
Liu Yunhong	1/1



Corporate Governance Report

Directors' and Auditors' Responsibilities for Accounts

The Directors of the Company acknowledge their responsibilities for the preparation of financial reports for each financial year, which shall give a true and fair view of the financial position, the results and cash flows of the Group for that financial year. In preparing the financial report for the year ended 31 December 2022, the Directors have selected and consistently applied suitable accounting policies, made judgments and estimates that are prudent and reasonable, and have prepared the financial report on a going concern basis. The Directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Group.

Supervisory Committee

The Supervisory Committee is a standing monitoring agency of the Company responsible for monitoring the Board and its members as well as senior management to avoid abuse of power that may harm the legitimate interests of shareholders, the Company and staff of the Company. The size and composition of the Supervisory Committee of the Company comply with the requirements of the relevant laws and regulations in the PRC.

Attendance record of committee members at the meetings of the Supervisory Committee during the Reporting Period

Name of Supervisor	Actual attendance/ attendance required
Cai Xiaoqing (Chairman of the Supervisory Committee)	10/10
Han Quanzhi	10/10
Yuan Shengzhou	10/10

Senior Management

As at the date of this report, the Company has ten senior management members in total, namely Ms. Leng Weiqing, Mr. Liu Ping, Mr. Dong Jianhua, Mr. Chen Ganjin, Mr. Gu Zhiqiang, Mr. Jin Xiaolong, Ms. Yang Hong, Mr. Zhou Zhiyan, Ms. Tong Liping and Ms. Fu Min. The details of their duties, biographical details and remuneration are set out in the section headed "Directors, Supervisors, Senior Management and Staff". Four members of the Company's senior management were women, accounting for 40% of the total number of senior management, and gender diversity has been well achieved.

Risk Management and Internal Controls

According to the related requirements set out in the Corporate Governance Code in Appendix 14 of the Hong Kong Listing Rules, the Company has established comprehensive risk management and internal control systems, including a system with a proper structure and organization and a system with relevant standards and relevant management principles for risk management and internal controls, to continually implement for risk management and internal controls. The Company is of the view that such systems are basically effective and sufficient. The intention of the establishment of such a risk management and internal control system is to enhance the management and operation of the Company as far as scientific approach for decision making proper compliance with governing rules and regulations as well as its effectiveness are concerned. The system should also help to increase the risk control capability and ensure the continuous, stable and healthy development of all kinds of businesses of the Company. However, this is only a reasonable rather than an absolute guarantee against material untruthful representation or losses, as the intention is to manage instead of eliminating the risk of not achieving the business targets.

The Board acknowledges that it has the responsibility to examine the risk management and internal control systems of the Company and through the Audit Committee reviews the effectiveness of such systems at least once every year. The Board of the Company and the Audit Committee oversee and evaluate the completeness and effectiveness in relation to the design and implementation of the risk management and internal control systems, as well as review and approve the mid-to-long-term planning, annual audit plan as well as evaluation report on risk management and internal control evaluation report. The management of the Company is responsible for the establishment and improvement of the risk management and internal control systems of the Company, the review of working plans and annual report on risk management and internal controls. The risk management and internal control department of the Company is responsible for the design and establishment of the risk management and internal control systems, as well as annual organization of risks identification, evaluation and remedial measures and report, so as to promote execution of the internal controls and optimization of the system procedures. The audit department of the Company is responsible for regular evaluations of the effectiveness of risk management and internal controls, as well as the appointment of accounting firms to conduct financial reporting internal control audit, so as to identify potential risks and internal control defects in a timely manner, ensure that the relevant operational departments and subsidiaries implemented rectification measures and the effective operation of the risk management and internal controls system of the Company.

In respect of the identification, assessment, management procedures and business processes that are exposed to possible material risks, the Company has established basically-improved relevant internal control measures and systems and procedures, such as management and internal control on key work flows including the preparation and disclosure of financial reports and processing and announcement of

Corporate Governance Report

inside information. Regular internal control measures were established through specific procedures to prevent risks in key segments and reduce the impacts of risks. In terms of the disclosure of inside information, the Company has established standardized control procedures to collect, organize, validate, review and disclose information. The Company will ensure that the information is kept confidential before it is fully disclosed to the public. For information that is difficult to keep confidential, the Company will disclose it in a timely manner to protect the benefit of investors and stakeholders.

During the Reporting Period, the Company continued to optimize its risk management and internal control systems, and improved and implemented the risk assessment, response and reporting mechanism of the Company. In 2022, first of all, the Company strengthened its risk control organization and established a sound risk prevention and control leadership team and working group to enhance the overall coordination of the Company's risk prevention and control work and to promote various risk prevention and control work in a steady and orderly manner. In addition, the Company insisted on conducting regular risk checks, implementing annual risk evaluation, strengthening prediction and analysis of trend and emerging risks, and formulating countermeasures and prevention and control measures to prevent new risks. Furthermore, the Company attached importance to sum-up and reflection on historical risk events, and improved the internal control process by inferring other things from one fact, conducted regular evaluations of the effectiveness of the internal control system, and promoted the publicity and implementation of the Internal Control Manual (《内部控制手冊》) and the internal control processes in its subsidiaries, thus to ensure the normal operation and development of the Company.

The internal audit department oversees and evaluates the effectiveness of the implementation of the risk management and internal control system, prepares the plan for evaluation work, calls for qualified personnel with professional capability to form the evaluation team and conducts evaluation for the risk management and internal controls of the Company. It makes warnings and rectification suggestions on risks and internal control deficiencies identified, urges for remedial actions to cope with risks and to rectify system for deficiencies

identified, prepares the risk management evaluation report and the internal control evaluation report and submits the reports to the Audit Committee, the Supervisory Committee and the Board of the Company for consideration, so as to enhance the effectiveness of the risk management and internal controls of the Company on an ongoing basis.

The Company appoints accounting firms to conduct financial reporting internal control audit every year, so as to identify internal control deficiencies in a timely manner, urge the relevant operational departments and subsidiaries to implement rectification measures and ensure the effective operation of the internal controls of the Company.

According to the relevant rules, the Company appointed PricewaterhouseCoopers Zhong Tian LLP to conduct an audit on the effectiveness of the internal controls in relation to financial reporting of the Company for 2022, for which an internal control audit report of internal control opinions for the financial report that has maintained effective in all major aspects was issued.

The Company consistently adheres to the principle of honesty and integrity in business operation, adopts a zero-tolerance policy for any violations against business ethics and anti-corruption regulations. In order to detect corrupt practices in a timely manner, the Company has established various reporting channels, including telephone reporting and on-site reporting, to obtain clues from internal and external parties.

General Meetings

The General Meeting is the highest authority of the Company which performs its duties according to laws and makes decisions on major issues of the Company. Annual general meetings or extraordinary general meetings of the Company are direct communication channels between the Board and the shareholders of the Company. Therefore, the Company attaches great importance to general meetings and encourages all shareholders to attend and express their opinions at the meetings.

Shareholders may convene an extraordinary general meeting and make proposals on the meeting in accordance with

Articles 87 and 64 of the Articles of Association, whose latest version was published on the websites of the Company and the Stock Exchange.

Communications with Shareholders

The Shareholders' Communication Policy sets out, among other things, the Company's means of communication with the Shareholders with the aim of ensuring that both individual and institutional Shareholders are given timely access to accurate, clear and balanced information to enable them to exercise their rights in an informed manner and to engage actively with the Company. The Board has reviewed the implementation of the Shareholders' Communication Policy during the year ended 31 December 2022. Having considered the active engagement by the Company with the Shareholders via the different means in accordance with the Policy, the Board is satisfied that the Shareholders' Communication Policy continues to be effective.

The Company releases its announcements, financial data and other relevant data on its website, which serves as a channel facilitating effective communication with investors. The shareholders may send any enquiry in writing to the Company's principal place of business in Hong Kong. The Company will properly handle all enquiries in time.

Company Secretary

During the Reporting Period, Mr. Zhou Zhiyan and Ms. Leung Kwan Wai acted as joint company secretaries of the Company. Both Mr. Zhou Zhiyan and Ms. Leung Kwan Wai participated in the relevant training during the Reporting Period and the time for training was no less than 15 hours in total. Ms. Leung Kwan Wai's principal contact with the Company is Mr. Zhou Zhiyan.

Ms. Leung Kwan Wai possesses the requisite qualifications of a company secretary as required under Rule 3.28 of the Hong Kong Listing Rules. Mr. Zhou Zhiyan currently does not possess the requisite qualifications set out in Rule 3.28 of the Hong Kong Listing Rules. In relation to the appointment of Mr. Zhou Zhiyan as a joint company secretary of the Company, the Company applied to the Stock Exchange for, and the Stock Exchange granted, a waiver (the "Waiver") from strict

compliance with the requirements under Rules 3.28 and 8.17 of the Hong Kong Listing Rules for a period of three years from the date of Mr. Zhou Zhiyan's appointment as a joint company secretary of the Company (the "Waiver Period") on the conditions that (i) Mr. Zhou Zhiyan must be assisted by Ms. Leung Kwan Wai as a joint company secretary during the Waiver Period in discharging his functions as joint company secretary of the Company; and (ii) the Waiver could be revoked if there are material breaches of the Hong Kong Listing Rules by the Company. The Company published an announcement stating the reasons, details and conditions of the Waiver, and the qualification and experience of both Mr. Zhou Zhiyan and Ms. Leung Kwan Wai. Before the end of the Waiver Period, the Company must demonstrate and seek confirmation from the Stock Exchange that, Mr. Zhou Zhiyan, having had the benefit of Ms. Leung Kwan Wai's assistance during the Waiver Period, has attained the relevant experience and is capable of discharging the functions of company secretary under Rule 3.28 of the Hong Kong Listing Rules such that a further waiver will not be necessary.

Disclosure of Information and Investor Relations

The Company recognizes the importance of good communications with its investors. The Office of the Board, the department which has duties covering investor relations, has arranged interviews, site visits and roadshows for investors from time to time. The team has also actively attended investors' forums to help investors gain a better understanding of the Company's operating results as well as its strategies and plans for future development. The Company will continue to make great efforts in investor relations work to further enhance its transparency.

Other Matters

During the Reporting Period, the Company amended once its Articles of Association, and such amendments were approved by way of a special resolution at the 2021 annual general meeting of the Company. For details of the amendments, please refer to the circular of the general meeting dated 7 June 2022, and the announcement on the voting results of the general meeting dated 28 June 2022.

Summary of General Meetings

Session of meeting	Date of meeting	Designated websites for publication of resolution(s)	Disclosure date of resolution(s)
2022 first extraordinary general meeting, 2022 first A share class meeting and 2022 first H share class meeting	17 January 2022	www.hkexnews.hk www.sse.com.cn	17 January 2022 18 January 2022
2021 annual general meeting	28 June 2022	www.hkexnews.hk www.sse.com.cn	28 June 2022 29 June 2022
2022 second extraordinary general meeting	22 July 2022	www.hkexnews.hk www.sse.com.cn	22 July 2022 23 July 2022
2022 third extraordinary general meeting	2 December 2022	www.hkexnews.hk www.sse.com.cn	2 December 2022 3 December 2022

Report of the Directors

The Directors present their report and the audited financial statements of the Company and the Group for the year ended 31 December 2022 on page 96 to 106.

Corporate Culture

The Company has established a corporate culture concept system that includes mission, vision, core values and spiritual spectrum. With "empower global industry, make life smarter" as its mission, the Company are committed to "become a world-class equipment group leading the industrial development".

Principal Activities

The principal business of the Company focuses on three major segments, energy equipment, industrial equipment and integration services. Details of the principal activities of the major subsidiaries of the Company are set out in note 7 to the financial statements. There were no significant changes in the principal activities of the Company during the year.

The energy equipment segment: design, manufacture and sales of nuclear power equipment, energy storage equipment, wind power equipment, coal-fired power generation and corollary equipment, gas-fired power generation equipment, high-end vessels for chemical industry as well as providing power grid and industrial intelligent power supply system solutions;

The industrial equipment segment: design, manufacture and sales of elevators, large and medium-sized electric motors, intelligent manufacturing equipment, industrial basic parts and construction industrialization equipment;

The integration services segment: providing energy, environmental protection and automation engineering and services, covering traditional and new energy, comprehensive use of solid wastes, sewage treatment, flue gas treatment, rail transit and etc.; providing industrial internet services; providing financial services, covering financing leases, factoring, asset management, insurance brokerage and etc.; providing property management services mainly based on industrial real estate, etc.

Business Review

During the Reporting Period, the Company achieved the revenue of RMB117,623 million, representing a year-on-year decrease of 9.7%. The net losses attributable to owners of

the Company for 2022 was RMB3,566 million, and net losses attributable to owners of the Company for the corresponding period of last year was RMB9,988 million.

The basic loss per share of the Company for 2022 was RMB0.23 yuan, basic loss per share for the corresponding period of last year was RMB0.64 yuan. The average return on net assets was a loss of 6.31% and last year was a loss of 15.69%. The Board of the Company proposed no final dividend for the year 2022.

During the Reporting Period, the energy equipment segment achieved revenue of RMB56,093 million, representing a year-on-year decrease of 4.52%. The revenue from energy storage business increased over the corresponding period of last year as affected by the continued growth of demand for equipment in the new energy industries, while the revenue from wind power equipment business decreased compared with the corresponding period of last year, which was caused by the peak of wind power installation last year as affected by industry policies. During the Reporting Period, the gross profit ratio of the energy equipment segment reached 18.05%, slight increased over the corresponding period of last year.

The industrial equipment segment achieved revenue of RMB40,533 million, representing a year-on-year decrease of 4.04%, which was mainly attributable to the year-on-year decrease in revenue from elevator business. During the Reporting Period, gross profit ratio of the industrial equipment segment was 15.58%, representing a year-on-year decrease of 0.78 percentage point.

The integration services segment achieved revenue of RMB26,708 million, representing a decrease of 31.16% as compared with the corresponding period of last year, which was mainly due to the decrease of revenue from engineering services. The gross profit ratio of the integration services segment was 8.36%, representing an increase of 2.33 percentage points as compared with the corresponding period of last year, which was mainly caused by the changes in the structure of engineering projects.

Analysis of principal business, assets and liabilities, and operational information by industry, and the Board's discussion and analysis on the future prospect of the Company are set out below.

Report of the Directors

Analysis of Principal Business

Analysis of changes of relevant items in the income statement and the statement of cash flows

Unit: 100 million; Currency: RMB

Items	For the year ended 31 December 2022	For the year ended 31 December 2021	Percentage of change (%)
Operating revenue	1,169.86	1,295.55	(9.70)
Operating cost	984.97	1,105.73	(10.92)
Selling and distribution expenses	38.53	46.01	(16.26)
General and administrative expenses	81.68	79.30	3.00
Financial expenses	13.01	11.27	15.44
Research and development expenditures	50.28	54.06	(6.99)
Net cash flows generated from operating activities	84.83	(105.54)	N/A
Net cash flows generated from investing activities	(73.17)	58.59	N/A
Net cash flows generated from financing activities	(12.57)	21.65	N/A

Net cash flows generated from operating activities: mainly due to the significant increase in net cash inflow from procurement and sales of goods and services as compared with the corresponding period of last year.

Net cash flows generated from investing activities: mainly due to the increase in cash paid to acquire investments as compared with the corresponding period of last year.

Net cash flows generated from financing activities: mainly due to the increase in cash repayments of borrowings as compared with the corresponding period of last year.

Analysis of Revenue and Costs

During the Reporting Period, the Company achieved the revenue of RMB117,623 million, representing a year-on-year decrease of 9.7%. The net losses attributable to owners of the Company for 2022 was RMB3,566 million, and net losses attributable to owners of the Company for the corresponding period of last year was RMB9,988 million.

Analysis of the principal businesses by segment and geographic location

Unit: 100 million; Currency: RMB

Principal businesses by segment						
By segment	Revenue	Operating costs	Gross profit margin (%)	YoY change in revenue (%)	YoY change in operating costs (%)	YoY change in gross profit margin (%)
Energy equipment	560.93	459.71	18.05	(4.52)	(4.74)	An increase of 0.18 percentage point
Industrial equipment	405.33	342.16	15.58	(4.04)	(3.15)	A decrease of 0.78 percentage point
Integration services	267.08	244.74	8.36	(31.16)	(32.87)	An increase of 2.33 percentage points
Principal businesses by geographic location						
By geographic location	Revenue	Operating costs	Gross profit margin (%)	YoY change in revenue (%)	YoY change in operating costs (%)	YoY change in gross profit margin (%)
Mainland China	992.04	802.88	19.07	(6.82)	(6.28)	A decrease of 0.46 percentage point
Other countries/ jurisdiction	184.19	182.09	1.14	(22.61)	(26.90)	An increase of 5.79 percentage points

Major customers

The sales revenue from the five largest customers of the Company was RMB7,318 million in aggregate for the Reporting Period, accounting for 6.22% of the total sales revenue. Among the top five customers, the sales of related parties were RMB1,525 million, accounting for 1.30% of the total annual sales.

Major suppliers

The purchases from the five largest suppliers of the Company amounted to RMB4,616 million in aggregate for the Reporting Period, accounting for 5.13% of the total purchases. Among the top five suppliers, the purchases of related parties were RMB2,278 million, accounting for 2.53% of the total annual purchases.

Analysis of costs

Unit: 100 million; Currency: RMB

By segment	Cost component	For the year ended 31 December 2022	Proportion in the total costs (%)	For the year ended 31 December 2021	Proportion in the total costs (%)	Percentage of change (%)
Energy Equipment	Raw materials	401.97	87.44	420.41	87.12	(4.39)
	Labor costs	31.58	6.87	32.14	6.66	(1.74)
	Other fees	26.16	5.69	30.01	6.22	(12.83)
	Total	459.71	100.00	482.56	100.00	(4.74)
Industrial Equipment	Raw materials	281.60	82.30	290.05	82.10	(2.91)
	Labor costs	29.08	8.50	29.32	8.30	(0.82)
	Other fees	31.48	9.20	33.92	9.60	(7.19)
	Total	342.16	100.00	353.29	100.00	(3.15)
Integration Services	Equipment	158.47	64.75	234.91	64.43	(32.54)
	Construction and installation	49.90	20.39	72.85	19.98	(31.50)
	Other fees	36.37	14.86	56.84	15.59	(36.01)
	Total	244.74	100.00	364.60	100.00	(32.87)

Explanatory note:

During the Reporting Period, the revenue from engineering projects of the Company decreased as compared with the corresponding period of last year, which led to the year-on-year decrease of cost of the integration services segment.

Report of the Directors

R&D Expenditure

	Unit: 100 million; Currency: RMB
R&D expenditure expensed in the Reporting Period	50.28
R&D expenditure capitalized in the Reporting Period	0.36
Total R&D expenditure	50.64
Percentage of total R&D expenditure to operating revenue (%)	4.33
Percentage of R&D expenditure capitalized (%)	0.71

Number of R&D staff	3,793
Percentage of R&D staff to total staff (%)	9.09

R&D Staff Education Level	Number of Persons
Doctor	102
Postgraduate	1,227
Undergraduate	2,270
Tertiary education	175
Secondary education and below	19

R&D Staff Age Level	Number of Persons
Below 30 years old (not including 30 years old)	876
30 years old-40 years old (including 30 years old, not including 40 years old)	1,763
40 years old-50 years old (including 40 years old, not including 50 years old)	861
50 years old-60 years old (including 50 years old, not including 60 years old)	268
Above 60 years old	25

During the Reporting Period, the technical strength of core industries of Shanghai Electric continued to improve. The research and development of the Company's main business segments are as follows:

Energy Equipment

In the field of gas power, based on the mastery of gas turbine design technology, we have developed intelligent service system for gas turbines. Equipped with functions such as 3D visualisation, information transmission and big data analysis, such system integrates the design mechanism of gas turbines, expert operation and maintenance experience with intelligent algorithms, and provides power plant users with intelligent services such as part-load performance optimisation, monitoring-based intelligent blowing, component maintenance tips and plant-wide revenue assessment and adaptive combustion stability adjustment, which can significantly improve the production and operation economy and operation flexibility of equipment of the power plants. The system has been installed in a number of gas turbine power plants including Beijing Energy Shangzhuang project, Huadian Nanqiao project, Datang Wanning project.

In the field of nuclear power, we have completed the development of the steam turbine and generator for Hualong One's 1,300MW-class nuclear power conventional island, with fully independent intellectual property rights and generator efficiency of 99.04%; completed the development of key equipment such as sodium-air heat exchanger, independent heat exchanger and fuel assembly transfer machine for 600MW sodium-cooled fast

reactors; completed the development of key raw materials and some key components for the main pump of the Guohe series wet winding motor, and achieved a breakthrough in homemade technology.

In the field of coal-fired power, we have developed a new high-efficiency 660MW class ultra-supercritical secondary reheat unit with #0 steam extraction, the first #0 steam extraction system matched with the secondary reheat unit, and the design heat consumption of 7010kJ/kWh under rated working conditions, with all indicators reaching the leading level of the same type of unit in China, and the reheat steam extraction grade is level 11+1, which is the single-axis turbine with the largest number of reheat grades in operation at present, further enhancing the unit's economy. In the field of technology on the comprehensive transformation of coal-fired power, we have made breakthrough in the "three-transformations linkage" technology for coal-fired units and completed the development of the first combined HP-IP casing supercritical turbine product in China (with the temperature of subcritical coal-fired units up to 600°C) in 2022. By now, Shanghai Electric has fully mastered the independent development capability for all main equipment for the parameter upgrading of sub-critical coal-fired generating units.

In the field of energy storage, we have successfully launched 1000V grade 500kW/630kWh, 1500V grade 1.25MW/1.5MW/1.725MW PCS device and inverter booster integrated machines. We have completed the development of 100Ah and 200Ah long life lithium-ion battery cells, developed the 4-6P high-rate battery system with self-developed cells to meet the highest 6x scenario demand of UPS scenario at this stage; successfully developed the 125kW/250kWh integrated container-type redox flow battery energy storage system, the 250kW/500kWh container-type energy storage system, and with that, we have completed the manufacture of 1MW/2MWh all-vanadium redox flow battery energy storage equipment, and have a series of container-type redox flow energy storage products with power of 125kW/250kW and capacity of 250~625kWh; developed high-power high-speed monopole flywheel energy storage motor, which has many advantages such as high efficiency, high instantaneous power, fast response speed, long service life and low environmental impact; developed the heat storage and exchange single-tank molten salt heat storage system which is the first of its kind in China and is environmental friendly and pollution-free as compared with natural gas boilers.

In the field of hydrogen energy, Shanghai Electric has independently developed 1500Nm³/h alkaline water electrolysis hydrogen production equipment with DC power consumption below 4.2kWh/Nm³, which is significantly superior than the national first-class energy efficiency standard for large-scale electrolyzer and has reached the current international leading level.

In the field of wind power, during the Reporting Period, our self-developed S112 blade for the EW8.5-230 wind turbine rolled off the production line successfully, and the unit was installed through the way of hoisting at the offshore wind power project at Bozhong Site B of Shandong Energy.

In the field of automated production lines for new energy vehicle power batteries, we have successfully developed double-layer extrusion coating machine equipment for semi-solid state batteries (positive electrode composite collector coating machine and negative electrode silicon-carbon coated composite coating machine), achieving a head start in the field of semi-solid state battery equipment.

In the field of grid and industrial intelligent power supply system solutions, we have developed a new dual-function motor with interchangeable modes of power generator and condenser to meet the needs of the grid, with the performance index of a fast dynamic response synchronous condenser and a reactive power output range of -150MVar~300MVar. It can switch flexibly between operation modes of power generator and condenser in line with the requirements of grid and give full play to the integrated performance of active power support during high load periods and reactive power support during low load periods, effectively improving system regulation performance and regulation capability. In the UHV field, the Company has successfully developed 1100kV reactors and 1000kV transformers.

Report of the Directors

Industrial Equipment

In the field of elevator technology, the 10m/s high-speed elevator and the 8m/s double-cabin elevator, both of which have been developed in-house with full intellectual property rights, have been successfully launched into the market and have achieved sales results, with overall performance reaching TUV GOOD level. LNK intelligent elevator digital solution, which integrated 9 categories of digital products with high security, high real-time and high stability characteristics, has been implemented in a number of key projects such as Shanghai Centre through the approach of "elevator equipment" + "digital product service".

In the field of motors, we have developed YX3-355-560 series of high-voltage three-phase asynchronous motors, and the efficiency of the whole series of products has reached the first-class energy efficiency, ranking the first in the same type of products certified by the Ministry of Industry and Information Technology.

In the field of bearings, the Company achieved breakthroughs in the domestically produced metro A-type axlebox bearings and the loading application, fully mastered the independent design and manufacturing technology of metro bearings, and the performance indicators of the bearings reaching the advanced level of similar products in the world. Furthermore, a set of real-time monitoring system of metro axlebox bearing health status was jointly developed to satisfy the needs of ensuring metro bearing safety, which has, in combination with the cloud transmission technology, achieved remote real-time inspection of the running health status of bearings.

Integration Services

In the field of industrial internet, we built "Smart OPS Energy Storage Intelligent Operation and Maintenance System", "Intelligent Carbon Brain System of Carbon Asset Management System" and "Feng Yun System" based on our self-developed "SEunicloud" industrial internet platform, which enables intelligent operation and maintenance management of various power plants such as energy storage plants, coal-fired power plants, gas-fired power plants and wind farms.

In the field of intelligent transport, we developed the electronic interlocking DDOC, the basic and core system for rail signal systems, which applies a number of mainstream technologies, including modern electronic information technology and reliability redundancy technology, to achieve an optimized signal control system with the highest safety integrity level of SIL4.

In the field of solid waste treatment, the Company developed an advanced thermal conversion system for organic solid waste, targeting a wide range of difficult-to-treat solid and hazardous waste under small to medium scale, to efficiently recycle chemical energy from solid raw materials and achieve high level of energy utilisation.

In the field of flue gas treatment, the Company developed technology and equipment of catalytic ceramic fibre filter tube for ultra-low flue-and-gas emission integration, which can be widely used in industries such as waste incineration, sintering machines, non-ferrous metal smelting, coking furnaces, glass kilns, hazardous waste incineration and biomass power plants. At present, the core equipment has already been developed for market-oriented project applications.

Analysis of Assets and Liabilities

Unit: 100 million; Currency: RMB

Items	By the end of the current period	Proportion to total assets by the end of the current period (%)	By the end of the preceding period	Proportion to total assets by the end of the preceding period (%)	Percentage of change in amount compared with the end of the preceding period (%)
Accounts receivable	382.80	13.29	334.29	11.11	14.51
Inventories	308.72	10.72	328.79	10.93	(6.10)
Short-term borrowings	86.61	3.01	118.36	3.93	(26.82)
Long-term borrowings	216.48	7.52	238.45	7.93	(9.21)
Notes payable	160.70	5.58	165.79	5.51	(3.07)
Accounts payable	573.97	19.93	613.04	20.38	(6.37)
Contract liabilities	387.43	13.45	391.60	13.02	(1.06)



Report of the Directors

Analysis of Operational Information by Industry

Shanghai Electric is the world's leading provider of industrial grade green intelligent system solutions. Information on the industries in which our main businesses operate is set out below:

Energy Equipment

In terms of nuclear energy, the domestic nuclear power industry is ushering into an important period with strategic opportunities alongside with the strategic goal on peak carbon dioxide emissions and carbon neutrality. The government work report issued at the beginning of 2021 put forward that the government shall "take active and well-ordered steps to develop nuclear energy on the basis of ensuring its safe use", which embodies a great prospect for the industry. In March 2022, the National Development and Reform Commission and the National Energy Administration announced the 14th Five-Year Plan for Modern Energy Systems (《「十四五」現代能源體系規劃》), which states that "on the premise of securing safety, we will actively and orderly promote the construction of coastal nuclear power projects, by maintaining a steady pace of construction and properly allocate additional coastal nuclear power projects, conduct integrated nuclear energy demonstration projects, actively promote the demonstration projects of advanced reactor types such as high-temperature gas-cooled reactors, fast reactors, modular small reactors and offshore floating reactors, and promote the integrated use of nuclear energy in areas such as clean heating, industrial heating and seawater desalination". Therefore, during the period of 14th Five-Year Plan, the positioning of nuclear energy in China's low carbon clean energy system will be clearer, the function will be more prominent. It is expected that 6-8 units of nuclear energy will be constructed on a steady and ongoing basis every year.

In terms of wind power, the National Development and Reform Commission and the National Energy Administration issued the Implementation Plan for Promoting High-Quality Development of New Energy in the New Era (《關於促進新時代新能源高質量發展的實施方案》) in May 2022, proposing the goal of reaching a total installed capacity of over 1.2 billion kW of wind power and solar power by 2030. According to the statistics of the National Energy Administration, an additional capacity of 37.63 million kW of wind power was installed and on-grid nationwide in 2022. At present, the major wind turbine manufacturers have developed platform production capabilities with a variety of large megawatt models, and the overall competition for wind power will become more intense in the future.

In terms of thermal power, in the background of the strategic goals of peak carbon dioxide emissions and carbon neutrality, China has been implementing a comprehensive "three reforms linkages" (三改聯動) plan of coal-fired power generation stations, which includes energy-saving and carbon-reducing transformation, flexibility transformation and heating supply transformation. According to the Implementation Plan of Transformation and Upgrading of National Coal-fired Power Generating Units (《全國煤電機組改造升級實施方案》), during the "14th Five-Year Plan" period, the scale of energy-saving and carbon-reducing transformation of coal-fired power unit will be no less than 350 million kW, the scale of heating supply transformation of coal-fired power unit will strive to reach 50 million kW, while the scale of flexibility transformation of coal-fired power unit will reach 200 million kW. In September 2022, the Ministry of Industry and Information Technology, the Ministry of Finance, the

Ministry of Commerce, the State-owned Assets Supervision and Administration of the State Council and the General Administration of Market Supervision jointly promulgated the Action Plan on Accelerating the Innovative Development of Green and Low-Carbon Power Equipment (《加快電力裝備綠色低碳創新發展行動計劃》), which requires to accelerate construction of an equipment supply system to support clean energy production and green energy consumption, to promote the high-quality development of power equipment, thus helping to achieve the goal of peak carbon dioxide emissions. Shanghai Electric will develop products featuring characteristics required for future overall positioning of thermal power by strengthening the analysis of electric power industry and customer demand. We will also give full play to the leading role in technology, improve product quality and continuously launch green, efficient and clean thermal power equipment with "high performance parameters, high reliability, high stability, low energy consumption, low emission, and low pollution".

In terms of power grid, under the influence of 5G, Internet of Things and other advanced technologies, China's power industry has come into a new era of transformation and upgrading. The vigorous promotion of energy Internet in the future will also be helpful to the continuity of power grid investment. With the commencement of construction of major projects such as West-to-East Power Transmission, North-South Mutual Power Supply, Cross-regional Networking and Smart Grid, national adjustment to the energy structure of the power industry, and the new policies of new urbanization construction, investments in rail transit, grid connection of new energy and other fields during the 14th Five-Year Plan period, the power transmission and distribution equipment industry will embrace new development opportunities.

Industrial Equipment

There are more than 9 million elevators in use in China currently, of which the proportion of old elevators with an age over 15 years has been increasing. Due to the influence of the real estate market, the growth rate of demand for complete machine of elevator will slow down in the future, but the growth rate of elevator for old building renewal and installation, household elevator and other businesses will accelerate, and the elevator industry will still maintain a trend of steady growth in general. At present, there are approximately 700 complete machine manufacturers in the elevator industry with an annual production capacity of over 2 million units. It is expected that in the future, the competition in the elevator industry will remain fierce. With the expanding trend of overcapacity in the industry, the competition in the industry will show the trend of integration towards large companies.

Integration Services

Focusing on the national "Belt and Road" Initiative, we regard more than 50 countries and regions involved in the "Belt and Road" Initiative as key markets of engineering projects. We have sped up the construction of sales and project supporting outlets around the global market. At present, we have over twenty overseas branches in U.K., Japan, Australia, South Africa, Mexico and Panama, etc., and we will keep actively promoting construction of overseas outlets to achieve multi-regional sales and projects supporting capacity. We are exploring businesses of both centralized and distributed new energy simultaneously under the guidance of new energy resource development, and actively promote the integration of industry and finance as well.

Report of the Directors

Analysis on Investments

Equity interests in other listed companies held by the Company

Unit: '000; Currency: RMB

Stock code	Stock abbreviation	Initial investment amount	Source of funds	Carrying amount as at the beginning of the period	Gain or loss from the change of fair value during the period	Carrying amount as at the end of the period	Classification in accounts
600642	Shenergy	2,800	Own funds	19,942	(5,076)	14,866	Other non-current financial assets
600633	Zhejiang Daily Digital Culture	7,462	Own funds	38,609	(2,717)	35,892	Other non-current financial assets
000501	Wu Han Department Store Group Co., Ltd.	353	Own funds	2,039	134	2,172	Other non-current financial assets
600665	Tande Co., Ltd.	1,400	Own funds	2,455	467	2,922	Other non-current financial assets
601229	Bank of Shanghai	1,620	Own funds	34,627	(5,925)	28,702	Other non-current financial assets
00020	SenseTime -w	323,724	Own funds	383,828	(103,409)	280,419	Other non-current financial assets
09863	LeapMotor	507,151	Own funds	1,110,855	(270,950)	935,006	Other non-current financial assets
600515	Hainan Airport	8,475	Debt to equity swap	8,475	917	9,392	Trading financial assets
Total		852,985		1,600,830	(386,559)	1,309,371	



Disposal of Material Assets and Equity Interests

On 20 June 2022, the Board considered and approved the relevant proposal, agreeing to transfer 132,458,814 shares of Suzhou Thvow Technology Co., Ltd. (蘇州天沃科技股份有限公司) ("Thvow Technology") held by the Company to SEGC by way of a non-public agreement for a price of RMB4.26 per share at a total consideration of RMB564,274,547.64. On 20 June 2022, the Company entered into the Share Transfer Agreement with SEGC with conditions to be effective regarding the transaction. On 22 July 2022, the general meeting of the Company approved the aforesaid proposal. As at the end of the Reporting Period, the transaction has been implemented and completed.

The Board's Discussion and Analysis on the Future Prospect of the Company

Industry Competition Landscape and Development Trend

According to the forecast of the China Electricity Council, the national electricity supply and demand for 2023 are expected to be as follows:

Electricity Consumption Forecast

The macro economy and climate are important factors influencing the growth of electricity consumption demand. The national economy is expected to recover overall in 2023, boosting the growth rate of electricity consumption demand compared to 2022. Under normal weather conditions, the nation's overall social electricity consumption is expected to be 9.15 trillion kWh in 2023, an increase of approximately 6% compared to that of 2022.

Electricity Supply Forecast

Driven by the rapid development of new energy power generation, it is expected that the total installed capacity of new power generation and non-fossil energy generation will reach a further record high in 2023. It is expected that the total installed capacity of new power generation will reach approximately 250 million kW in 2023, including an additional 180 million kW of non-fossil power generation installed capacity. By the end of 2023, the national installed power generation capacity is expected to be approximately 2.81 billion kW, of which 1.48 billion kW will be generated by non-fossil energy sources, accounting for 52.5% of the total installed capacity. The installed capacity of hydropower will be 420 million kW, with on-grid wind power of 430 million kW, on-grid solar power of 490 million kW, nuclear power of 58.46 million kW and biomass power of around 45 million kW, and the installed capacity of solar power and wind power will exceed that of hydropower for the first time in 2023.

Forecast of Electricity Supply and Demand

The overlapping of various factors in power supply and demand has brought uncertainty to the power supply and demand environment. On the supply side, there are uncertainties in terms of precipitation, wind and solar resources, fuel supply and so on. In addition, the continuous losses of coal-fired power enterprises have brought about a shortage of investment in technical reform and maintenance, which has led to an increase in potential risks

of equipment, all of which have increased the uncertainties in electricity production and supply. As for electricity consumption, there is uncertainty in terms of macroeconomic growth, foreign trade exports and extreme weather conditions.

Based on electricity demand forecasts and taking into account new installations, cross-provincial and cross-regional power exchanges, power generation output and reasonable reserves, the national electricity supply and demand are expected to be tightly balanced in 2023, with some regions experiencing tight supply and demand during peak periods. During the peak summer season, power supply and demand in Eastern, Central and Southern China will be tight; power supply and demand in Northern, Northeastern and Northwestern China will be basically balanced. During the peak winter season, electricity supply and demand in Eastern, Central, Southern and Northwestern China were on the tight side; electricity supply and demand in Northern China were tightly balanced; and electricity supply and demand in Northeastern China were basically balanced.

Development Strategy of the Company

Shanghai Electric will follow the underlying principle of "pursuing progress while ensuring stability, adhering to integrity and innovation and unwaveringly following the path of high-quality development", implement the development path of "driven by science and technology and carrying out transformation and upgrading" and create a development situation with "openness, coordination and win-win cooperation". The Company will focus on promoting the linkage of "smart energy and intelligent manufacturing", the two-wheel drivers of "industrial intelligentization and service industrialization" and the interaction of "energy internet and industrial internet", speed up the low-carbon and digital transformation of industries, drive the cultivation and development of new driving forces with technology innovation and unwaveringly promote the Group to achieve high-quality development.

The Company will focus on the main path of high-quality development of main businesses with the improvement of operation quality and industrial competitiveness as the core target, namely, pursuing progress while ensuring stability in the scale of main businesses, continuously improving the return rate of net assets of main businesses, increasing the proportion of the equipment and service business, expanding the proportion of strategic emerging industries, improving the per capita efficiency and optimizing the asset structure.

To enhance the industrial competitiveness and optimize the industrial structure, the Company will focus on the innovation and transformation of existing industries and the cultivation of

Report of the Directors



strategic emerging industries. There are three paths for the innovation and transformation of existing industries, namely, improving the capabilities on systematic solutions, building the capabilities on service industrialization and cultivating new driving forces relying on the first echelon businesses. The Company will attach great importance to the cultivation of strategic emerging industries such as new energy equipment, automation equipment and software for intelligent manufacturing. Under the background of "carbon peaking and carbon neutrality" strategy, the Group will give full play to its advantages in efficient and clean energy equipment, vigorously layout the core equipment industry of "wind power, solar power, energy storage, hydrogen power". The Company will promote resource development and coordinate with its excellent equipment manufacturing, and help to realize the optimal combination of traditional energy and new energy by relying on technological innovation and institutional innovation, so as to contribute to the construction of a new power system with new energy as the main body. At the

same time, in order to implement the "manufacturing power" strategy, we need to vigorously develop the automation equipment and industrial software industry, and continuously improve the intelligent level of equipment manufacturing with digital empowerment.

In order to effectively promote high-quality development, the Group will build a scientific, efficient and powerful scientific and technological innovation system, an industrial system with innovation leading and coordinated development, an organizational system with orderly management and control, efficient and coordinated development, a corporate governance system with effective checks and balances, and a comprehensive, systematic, scientific and reasonable performance evaluation system from the aspects of scientific and technological innovation, industrial development, organization and management, corporate governance and talent construction, and build a strategic support system for human resources.

Operation Plans

In 2023, with the theme of "Science and Technology Innovation Year", we will firmly grasp the underlying principle of "pursuing progress while ensuring stability, adhering to integrity and innovation and unswervingly following the path of high-quality development". We will strive to improve the industrial development ability, overall profitability, reform and innovation ability, scientific and technological innovation ability and sustainable development ability, firmly promote the comprehensive implementation of the "14th Five-Year Plan" strategy of Shanghai Electric, fully promote high-quality development. The Company will focus on the following work:

Increase Investment in Science and Technology and Improve the Capability of Scientific and Technological Innovation

We will adhere to the path of technological innovation enabling industrial development, accelerate the construction of an open and coordinated independent innovation system, and further focus on technological source innovation, technological system innovation and technological mechanism innovation. In 2023, the R&D investment rate of the Company will not be less than 4% and the Company will further increase the R&D investment in the field of offshore floating wind turbines, hydrogen energy equipment, new energy storage and other new track fields, striving to achieve key technical breakthroughs. We will adhere to independent innovation, follow the guidance of national strategic objectives, consolidate the core functions of the Group's major equipment development, and carry out key technical breakthroughs in many fields, such as advanced energy equipment, key basic materials, and industrial machine. We will adhere to open cooperation, build a coordinated operation mechanism for tackling key problems, carry out collaborative innovation and joint innovation with upstream and downstream enterprises along the industrial chain, industry-university-research institutions and ecosystem partners, and form a joint force for collaborative development. We will focus on promoting the first set of demonstration projects and comprehensive solutions for major projects through the joint innovation with key customers.

Promote the Industrial Layout of the New Track Around the Industrial Development Strategy

The "14th Five-Year Plan" strategy of Shanghai Electric has defined the development strategy of focusing

on cultivating new energy equipment, intelligent manufacturing automation equipment and software and other strategic new industries. In the field of new energy, we will strengthen the top-level design, further form the development strategy of Shanghai Electric's new energy industry, make multi-point layout in the multi-energy complementation of "wind power, photovoltaic, energy storage and hydrogen energy" as well as the integrated business of "source-network-load-storage-hydrogen", promote the application of the first set of new energy equipment, integrate into the new energy business model, and improve the industrial competitiveness and industrial scale as soon as possible. In the fields of intelligent equipment, intelligent hardware and industrial software, we will increase investment, improve the level of intelligent manufacturing, and promote the digital transformation of enterprises to improve production efficiency and market competitiveness.

Focus on the Main Responsibility and Main Businesses and Promote Industrial Transformation and Upgrading

In our traditional advantage areas, we will focus on our main responsibility and main businesses, promote the improvement of industry quality and efficiency, achieve transformation and upgrading, and promote new development momentum through technological progress, structural optimization and intensified efforts in the layout of new businesses. We will accelerate the digital transformation, focus on the intelligent equipment production line business and manufacturing intelligent transformation, intelligentize and upgrade the old equipment, build a number of benchmark digital workshops and intelligent factories, and form a number of digital transformation solutions. We will accelerate the service industrialization and expand the service business of manufacturing enterprises, including providing R&D, design, transformation of scientific and technological achievements, and intellectual property applications for the industrial chain. We will accelerate the forward-looking layout of future industries, focus on the cultivation of new businesses and new products, and form business support for industrial transformation and upgrading.

Coordinate Internal and External Resources to Create Energy Integration Advantages

We will seize the development opportunities of high-end, intelligent and green manufacturing industry, integrate the

Report of the Directors

technical strength and practical experience of traditional energy, new energy, intelligent manufacturing, industrial Internet and other fields, coordinate the industrial chain resources of design, research and development, manufacturing, engineering, investment and other aspects, form synergy and integration advantages, improve the competitiveness of "new energy+" system solutions, and actively develop the comprehensive energy solutions under multiple application scenarios to form our new core competitiveness. We will gradually realize the transformation from "energy expert" to "energy administrator" by building energy integration advantages and creating new industrial clusters, and provide customers with life cycle services for energy in line with the "carbon peaking and carbon neutrality" background.

Innovate the Mechanism and System to Stimulate New Drivers and New Vitality

We always adhere to the principle that "talent is the primary resource", and high-quality development can only be achieved with a strong talent team. We will strengthen internal training and external introduction, and intensify efforts in the training and introduction of top technology leaders; improve the talent evaluation system, optimize the salary system, and promote the solid implementation of more innovative measures of market-oriented mechanism with tangible results; further transmit pressure and motivation, improve team capacity and market competitiveness, and create and stimulate endogenous power and innovation ecology for innovation.

Potential Risks

Market Risks

The overall growth rate of the Chinese economy is slowing down. Equipment manufacturing industry is highly correlated with national economic growth. Changes in macro economy, national policy amendment, infrastructure construction investment scale, urbanization progress and cyclical fluctuations in industry development may bring about impacts to the sustainable development of the Company. Meanwhile, the energy industry is at the critical point of the new and old system, and in the field of new energy such as wind power, market competition is everywhere and is becoming increasingly fierce, which brings the Company new opportunities and challenges.

In this regard, the Company will actively participate in the

national energy transformation strategy of "building new power system with new energy as the main body" to achieve the transformation and upgrading of the manufacturing industry and improve the modernization level of energy industry. The Company will continue to pay attention to and regularly analyze the possible impact of global and domestic macroeconomic trends on the Company so as to develop responsive measures in a timely manner. Meanwhile, the Company will timely adjust management measures to raise its management efficiency, and continuously improve core competitiveness and actively develop its business model in an innovative manner to address all challenges from changes in the markets.

Raw Material Prices Fluctuation Risks

The procurement cost of the Company's principal businesses has increased as a result of the rising price of bulk materials. Meanwhile, due to long cycle of some orders undertaken by the Company, the sharp fluctuations of raw material prices have greater impacts on the profitability of the Company.

In this regard, the Company will strengthen the monitoring and management of the quality of economic operation, pay close attention to changes in the operation quality, business structure and profitability of each business segment of the Group, continue to optimize the supply chain management system, further improve our cost control and pricing capabilities of purchase to actively control the risks on the Company from the fluctuations of raw material prices.

Exchange Rate Fluctuation Risks

The Company's businesses in power plant equipment, power plant engineering and power transmission and distribution engineering involve export business and their contract amounts are large and usually denominated in US dollars. In the process of production, the Company needs to purchase imported equipment and components and the contracts are also denominated in major foreign currencies, such as US dollars. As the international trade situation has become increasingly severe and the exchange rate of RMB is relatively volatile, the Company's export business may be exposed to the risk of profit and loss fluctuations due to factors such as changes in the exchange rate and capital repatriation.

In this regard, the Company will utilize more hedging instruments, improve the hedging mechanism on the

fluctuation of the exchange rate, and increase its RMB settlement scope in cross-border trades, lock-in certain exchange rates to reduce exchange risks and exercise better control over the costs of its overseas projects to avoid the adverse effects from exchange rate fluctuations.

Overseas Business Risks

Due to the continuous impact of factors such as macroeconomic environment and geopolitical uncertainty, some of the Company's overseas engineering projects are under various pressures such as delayed project progress, higher labor costs and rising raw material costs. The overseas inflation and fluctuation of the foreign exchange rate also exerted negative effects on the profitability of overseas engineering projects. Meanwhile, the environment for the expansion of overseas business is severe. The risks and uncertainties in the import and export business of the Company have increased as a result of tensions in international relations, and the possibility of risks arising from changes in the political and economic landscape of the locations where the Company operates overseas businesses has increased.

In this regard, the Company will pay close attention to and study the policy and environment of overseas markets, strengthen management and risk control and improve the hedging mechanism on the fluctuation of the exchange rate. The Company will engage in relevant insurance policies to cover related risks of its businesses and employees to maximize the protection over the interests of the Company. Meanwhile, the Company will implement its "localization strategy" in the overseas market, seeking to establish long-term cooperative relationships with the local customers so as to build up good market reputation in overseas.

Report of the Directors

Source of Funding and Indebtedness

As at 31 December 2022, the Group had an aggregate amount of bank and other borrowings and bonds of RMB39,056 million (2021: RMB44,686 million), representing a decrease of RMB5,630 million as compared with that of the beginning of the year. Borrowings and bonds repayable by the Group within one year amounted to RMB16,660 million, representing a decrease of RMB1,690 million as compared with that of the beginning of the year. Borrowings and bonds repayable after one year amounted to RMB22,396 million, representing a decrease of RMB3,939 million as compared with that of the beginning of the year. As at 31 December 2022, among the Group's bank and other borrowings:

(1) Unsecured bank borrowings

borrowings denominated in US dollars amounted to USD368,000 thousand in total (2021: USD295,600 thousand), equivalent to RMB2,562,973 thousand (2021: RMB1,884,659 thousand);

borrowings denominated in Euros amounted to EUR431,090 thousand in total (2021: EUR546,064 thousand), equivalent to RMB3,199,941 thousand (2021: RMB3,942,417 thousand);

borrowings denominated in Hong Kong dollars amounted to HKD525,018 thousand in total (2021: HKD548,501 thousand), equivalent to RMB468,983 thousand (2021: RMB448,454 thousand).

(2) Secured bank borrowings

borrowings denominated in US dollars amounted to USD4,502 thousand in total (2021: USD4,502 thousand), equivalent to RMB31,355 thousand (2021: RMB28,703 thousand);

borrowings denominated in Euros amounted to EUR5,180 thousand in total (2021: EUR5,703 thousand), equivalent to RMB38,451 thousand (2021: RMB41,171 thousand).

(3) Guaranteed bank borrowings

borrowings denominated in US dollars amounted to USD142,961 thousand in total (2021: USD167,835 thousand), equivalent to RMB995,667 thousand (2021: RMB1,070,064 thousand);

borrowings denominated in Euros amounted to EUR97,500 thousand in total (2021: EUR8,000 thousand), equivalent to RMB723,723 thousand (2021: RMB57,758 thousand).

All other unsecured bank borrowings are denominated in RMB.

As at 31 December 2022, gearing ratio of the Group, which

represents the ratio of the sum of interest-bearing bank borrowings and other borrowings and bonds to the sum of total equity of the shareholders plus interest-bearing bank borrowings and other borrowings and bonds, was 33.08%, representing a decrease of 1.29 percentage points as compared with 34.37% at the beginning of the year.

Pledge Assets

As at 31 December 2022, the Group's bank deposits amounted to RMB927 million (2021: RMB1,402 million), receivable financing with a carrying amount of RMB583 million (2021: RMB123 million), notes receivable with a carrying amount of RMB155 million (2021: RM370 million) and certain property and equipment with a carrying amount of RMB1,975 million (2021: RMB2,095 million) were secured to banks to obtain bank borrowings or credit facilities. Part of the Group's bank borrowings was secured by the Group's long-term receivables, with a carrying amount of RMB1,801 million (2021: RMB2,221 million).

Events After the Date of Financial Statements

On 29 March 2022, the proposal for profit distribution for 2022 that no dividend will be distributed was considered and approved at the seventy-eighth meeting of the fifth session of the Board and is subject to consideration and approved at the general meeting of the Company.

Contingent Liabilities

Please refer to note 9 to the financial statements for details.

Capital Commitments

Please refer to note 10 to the financial statements for details.

Use of Proceeds from Financing Activities and Capital Utilization Plan

On 7 November 2017, the Company completed the issue of A shares with an aggregate amount of RMB3 billion to eight specific investors including SEGC (the controlling shareholder of the Company) by way of non-public issuance. Proceeds from the non-public issuance were originally intended to be used to finance the projects including the Emerging Industrial Park Development Project at Gonghe New Road, the Innovative Industry Park Reformation Project at Beinei Road, the



Technology Innovative Park Reformation Project at Jinshajiang Branch Road, and the Industrial Research, Development and Design and High-end Equipment Manufacturing Base Project at Jungong Road. According to the requirements such as adjustments by government authorities to the planning of the relevant areas where the proceeds-funded projects are located, in light of the Company's business development and the change in market conditions and on the principles of satisfying the requirements for use of raised proceeds and reducing the risks associated with the implementation of proceeds-funded projects, as considered and approved at the second meeting of the fifth session of the Board and approved at the 2018 third extraordinary general meeting, 2018 first A share class meeting and 2018 first H share class meeting, the proceeds would not be used to finance the Emerging Industrial Park Development Project at Gonghe New Road, the Technology Innovative Park Reformation Project at Jinshajiang Branch Road and the Industrial Research, Development and Design and High-end Equipment Manufacturing Base Project at Jungong Road.

After consideration and approval of the fourth meeting of the fifth session of the Board and the approval of the 2019 first extraordinary general meeting, 2019 first A share class meeting and 2019 first H share class meeting, the Company applied part of the proceeds towards the completed acquisitions of the 100% equity interests in Wujiang Taihu Industrial Wastes Treatment Company Limited (吳江市太湖工業廢棄物處理有限公司) and the 100% equity interests in Ningbo Hi-Firm Environmental Protection Company Limited (寧波海鋒環保有限公司). After consideration and approval of the twentieth meeting of the fifth session of the Board and the approval of the 2019 second extraordinary general meeting, 2019 second A share class meeting and 2019 second H share class meeting, the Company adjusted the amount of raised funds used in the Innovative Industry Park Reformation Project at Beinei Road and used part of the raised funds in the project of Shanghai Electric Nantong Central Research Institute, and the remaining raised funds were used in permanent replenishment of working capital.

Report of the Directors

Overall Use of Proceeds Raised from the Placement of A Shares

Unit: 100 million Currency: RMB

Total amount of proceeds	30.00	Total proceeds invested during the year	0.22
Total proceeds used for other purposes instead of the scheduled one(s)	27.09		
Percentage of total proceeds used for other purposes instead of the scheduled one(s)	90.30%	Total cumulative proceeds invested	27.42

Projects with investment commitment	Project changed or not (including those with partial changes, if any)	Total amount of proceeds with investment commitment	Total investment after adjustment	Amount invested during the year	Cumulative amount invested as at the end of the Reporting Period	Date of achieving the project's designed serviceable condition	Benefits generated during the year	Achieved the estimated goal or not
Emerging Industrial Park Development Project at Gonghe Xin Road	Yes	10.55	-	-	-	-	N/A	N/A
Innovative Industry Park Reformation Project at Beinei Road	Yes	2.26	0.66	0.14	0.30	2022	N/A	N/A
Technology Innovative Park Reformation Project at Jinshajiang Branch Road	Yes	3.28	-	-	-	-	N/A	N/A
Industrial Research, Development and Design and High-end Equipment Manufacturing Base Construction Project at Jungong Road	Yes	11.66	-	-	-	-	N/A	N/A
Tax, surcharges and other expenses in relation to the restructuring	No	2.25	2.10	-	2.10	2018	N/A	N/A
Acquisition of 100% equity interests in Wujiang Taihu Industrial Wastes Treatment Company Limited	Yes	-	3.42	-	3.42	2019	N/A	N/A
Acquisition of 100% equity interests in Ningbo Hi-Firm Environmental Protection Company Limited	Yes	-	7.56	-	7.56	2019	N/A	N/A
Shanghai Electric Nantong Central Research Institute Project	Yes	-	7.26	0.08	5.19	2022	N/A	N/A
Permanent replenishment of working capital	Yes	-	8.85	-	8.85	2019	N/A	N/A
Total		30.00	29.85	0.22	27.42			

Changes in
proceeds-funded
project

As considered and approved at the second meeting of the fifth session of the Board of the Company held on 22 October 2018, the 2018 third extraordinary general meeting, 2018 first A share class meeting and 2018 first H share class meeting held on 10 December 2018, Shanghai Electric would no longer use any of the proceeds of RMB2,554 million to finance the Emerging Industrial Park Development Project at Gonghe New Road, the Technology Innovation Park Reformation Project at Jinshajiang Branch Road and the Industrial Research, Development and Design and High-end Equipment Manufacturing Base Project at Jungong Road, including proceeds of RMB2,549 million and interest income on the proceeds of RMB5 million.

As considered and approved at the fourth meeting of the fifth session of the Board of the Company held on 16 November 2018, the 2019 first extraordinary general meeting, 2019 first A share class meeting and 2019 first H share class meeting held on 6 May 2019, the Company proposed to use RMB342 million out of the proceeds to acquire the 100% equity interests of Wujiang Taihu Industrial Wastes Treatment Company Limited (吳江市太湖工業廢棄物處理有限公司) through its wholly-owned subsidiary Shanghai Electric Investment Company Limited ("SEI") from Orient Landscape Group Environmental Protection Limited Company (東方園林集團環保有限公司) ("Orient Landscape") and Taizhou Zongze Equity Investment Management LP (台州宗澤股權投資管理合夥企業(有限合夥)) ("Taizhou Zongze"), and use RMB756 million out of the proceeds to acquire the 100% equity interests of Ningbo Hi-Firm Environmental Protection Company Limited (寧波海鋒環保有限公司) from Orient Landscape and Taizhou Zongze. The Company had completed the abovementioned acquisitions through its wholly-owned subsidiary SEI and supplemented the self-owned funds early invested with the proceeds.

As considered and approved at the twentieth meeting of the fifth session of the Board of the Company on 27 September 2019, and as considered and approved at the 2019 second extraordinary general meeting, 2019 second A share class meeting and the 2019 second H share class meeting on 14 November 2019, the Company proposed to change the amount of total investment and implementation mode of as well as the amount of proceeds earmarked for the Innovative Industry Park Reformation Project at Beinei Road. The total investment would be adjusted to RMB130 million; a project company would be jointly established by Shanghai Electric Group Property Company Limited (上海電氣集團置業有限公司) ("SEC Property") and Shanghai Yuanying Investment Management Co., Ltd. (上海元盈投資管理有限公司), a controlled subsidiary of Shanghai Guorun Investment and Development Company Limited (上海國潤投資發展有限公司) to function as the implementation entity. The project company has a registered capital of RMB20 million, and is owned as to 60% by SEC Property through its contribution of self-financed funds in the amount of RMB12 million. Proceeds earmarked for the project was reduced from RMB226 million to RMB66 million, which would be provided to SEC Property by the Company through capital contribution, and in turn allocated to the project company by SEC Property by way of entrusted bank loans at an interest of 8% per annum for construction of Innovative Industry Park Reformation Project at Beinei Road. In addition, upon intensive research and deliberation, the Company proposed to appropriate RMB726 million from the RMB1,451 million previously set apart for proceeds-funded projects yet pending for confirmation to invest in the Shanghai Electric Nantong Central Research Institute Project, and use the remaining proceeds of RMB891 million (such funds comprise proceeds of RMB885 million and interest income therefrom of RMB6 million) to replenish working capital permanently.

Report of the Directors

<p>Upfront investment in the project to be invested through fund raising and replacement of such investment with the proceeds</p>	<p>On 17 April 2018, the Proposal in Relation to the Replacement of the Self-Pooled Upfront Investment in Projects to be Invested Through Fund Raising with the Proceeds was considered and approved at the sixty-fourth meeting of the fourth session of the Board of the Company, which proposed to replace the self-pooled upfront investment in projects to be invested through fund raising with RMB88 million out of the proceeds.</p> <p>PricewaterhouseCoopers Zhong Tian LLP reviewed the upfront investment in relation to the fund raising through non-public issuance of A shares, and issued the PricewaterhouseCoopers Zhong Tian Te Shen Zi(2018) No.1870 document, i.e., the Report and Verification Report on Upfront Investment with Self-pooled Funds in the Project to be Invested Through Funds Raising. Guotai Junan Securities Co., Ltd. also expressed opinions on the Company's replacement of the self-pooled upfront investment in projects to be invested through fund raising with the proceeds.</p>
<p>Provisional replenishment of working capital with the idle proceeds from fund raising</p>	<p>On 22 January 2018, the Proposal in Relation to the Company's Provisional Replenishment of Working Capital with Certain Idle Proceeds from Fund Raising was considered and approved at fifty-ninth meeting of the fourth session of the Board of the Company. It was approved that idle proceeds totaling not more than RMB2 billion would be used to replenish working capital on the condition that funding needs of the projects to be invested through fund raising can be assured and on a provisional basis. The Company utilized the aforesaid proceeds to replenish working capital on 23 January 2018. The Company returned all the above-mentioned proceeds totaling RMB2 billion for the replenishment of working capital to the special account for proceeds on 14 January 2019.</p> <p>On 18 January 2019, the Proposal in Relation to the Company's Provisional Replenishment of Working Capital with Certain Idle Proceeds from Fund Raising was considered and approved at the sixth meeting of the fifth session of the Board of the Company. It was approved that idle proceeds totaling not more than RMB2.5 billion would be used to replenish working capital on the condition that funding needs of the projects to be invested through fund raising can be assured and on a provisional basis. The Company utilized the aforesaid proceeds to replenish working capital on 21 January 2019 and returned all the above-mentioned proceeds on 9 November 2019.</p>
<p>Reasons for not meeting the schedule</p>	<p>Advance has been made in the application for approval of the project positioning of the Innovative Industry Park Reformation Project at Beinei Road as per requirements under the "50 Guidelines for Cultural and Creative Industries" of Shanghai. Approval from relevant government departments has been obtained for the project positioning, and meeting minutes have been issued. It was originally planned to complete the construction of the project by the end of 2021. Affected by the external environment, and in order to meet the needs of contracted customers for supporting facilities such as water, electricity and gas, the project adjusted the layout plan of certain pipelines and adjusted the construction arrangement, resulting in the failure to complete the construction of the project by the end of 2021. The construction of the project was completed in late 2022 and the project reached its designed serviceable condition. Due to the need to settle the various subcontracts of the project and the impact of the quality guarantee clause in the contracts, the proceeds were not fully utilised by the end of the Reporting Period.</p> <p>Shanghai Electric Nantong Central Research Institute Project was originally scheduled to be completed by the end of June 2021. Affected by the logistics and supply chain issues in Nantong, the construction of the project was delayed, resulting in the failure in the completion of the project by the end of June 2021. The completion and filing and other relevant procedures for the project were completed in late 2022 and the project reached its designed serviceable condition. Due to the need to settle the various subcontracts of the project and the impact of the quality guarantee clause in the contracts, the proceeds were not fully utilised by the end of the Reporting Period.</p>



Report of the Directors

Proposals for Profit Distribution or Transfer of Capital Reserves to Share Capital

As audited by PricewaterhouseCoopers Zhong Tian LLP, the net losses of the Company for 2022 as shown on the financial statements of the Company (not consolidated) prepared in accordance with the PRC GAAP was RMB3,131,640 thousand. The undistributed profits and the dividends payable on ordinary shares amounted to RMB1,905,104 thousand and RMB0 thousand at the beginning of 2022, respectively, and the distributable profits at the end of 2022 amounted to RMB -1,226,536 thousand.

Upon consideration by the Board of the Company, the proposed profit distribution plan for 2022 of the Company is no distribution of profit or conversion of capital reserves into share capital for the year 2022, which is subject to approval at the annual general meeting of the Company.

Final Dividend

The Board resolved that no final dividend will be distributed for the year ended 31 December 2022, which is subject to approval at the annual general meeting of the Company.

Closure of Register of Members

The Company will notify its shareholders on a later date about the date of the annual general meeting for the year ended 31 December 2022 as well as the corresponding arrangements for suspension of share transfer registration.

Contract of Significance

During the Reporting Period, save as disclosed in this report, neither the Company nor any of its subsidiaries had any contract of significance with its controlling shareholder or its subsidiaries, nor any contract of significance for the provision of services to the Company or any of its subsidiaries by a controlling shareholder or any of its subsidiaries (as defined in Appendix 16 of the Hong Kong Listing Rules).

Equity-linked Agreement

During the Reporting Period, no equity-linked agreements were entered into by the Company or subsisted during or at the end of the year that will or may result in the Company issuing shares, or requiring the Company to enter into any agreement that will or may result in the Company issuing shares.

Donations

The Group has earnestly performed its social responsibility. The total expenses of the Group for public welfare projects, charity donations, poverty alleviation donations and education sponsorship in 2022 amounted to RMB1.387 million approximately.

Compliance with Relevant Laws and Regulations

On 5 July 2021, the Company received an investigation notice (Hu Zheng Diao Cha Zi No. 2021-1-028) from the China Securities Regulatory Commission (the "CSRC"). As the Company was suspected to breach the relevant laws and regulations on information disclosure, the CSRC decided to initiate investigation proceedings against the Company in accordance with the Securities Law of the People's Republic of China (the "Securities Law"). In December 2022, the Company received the "Decision of Administrative Penalties" (Hu [2022] No. 29, Hu [2022] No. 31) (《行政處罰決定書》(滬[2022]29號、滬[2022]31號)) from the China Securities Regulatory Commission Shanghai Bureau (the "Bureau"). Regarding to the failure of Shanghai Electric to disclose relevant significant events in a timely manner, pursuant to the Article 197(1) of the Securities Law, the Bureau decided to issue a warning and impose a fine of RMB 2 million to the Company; regarding to the misrepresentation in the 2020 Annual Report of Shanghai Electric, pursuant to the Article 197 (2) of the Securities Law, the Bureau decided to order to correct, issue a warning and impose a fine of RMB 3 million to the Company. Regarding the misrepresentation in 2020 annual report of Shanghai Electric, in accordance with the provision of Article 197 (2) of the Securities Law, the Bureau decided to issue



a warning and impose a fine of RMB 0.5 million to Chen Ganjin, the vice president of the Company.

In January 2023, the Company received the "Decision on Disciplinary Action against Shanghai Electric Group Company Limited and Relevant Responsible Persons" ([2023] No. 3) issued by the Shanghai Stock Exchange, which publicly condemned the Company and Chen Ganjin, the vice president of the Company, and required the Company and its directors, supervisors, and senior management to take effective measures to rectify relevant violations and submit a rectification report to the Shanghai Stock Exchange. As of the issuance date of this report, the Company has completed rectification and submitted the rectification report.

Save as the above matters, as a public company listed in both Mainland China and Hong Kong, the Company has formulated and continuously improved various rules and regulations in strict compliance with the requirements of relevant laws and

regulations and normative documents of China and Hong Kong, including the Company Law of the People's Republic of China, the Code of Corporate Governance for Listed Companies in China, the Corporate Governance Code set out in Appendix 14 of the Hong Kong Listing Rules as well as the provisions of the Articles of Association of the Company, to regulate the operations of the Company. The Company is committed to maintaining and improving the Company's good image in the market.

Environmental Policy and Performance of the Company

The Company insists on taking sustainable development as a key point in its strategic development, and endeavors to develop circular economy, improve resource utilization efficiency and build up an eco-friendly manufacturing system in pursuit of green development.

Report of the Directors

The Company has a production safety and environmental protection committee ("the Committee"). The Committee is chaired by the President of the Company and is responsible for the management and operation of the production safety and environmental protection systems of the Group. The Committee members comprise the main responsible persons of the Group's major business divisions and production subsidiaries.

During the Reporting Period, the Company advocated energy conservation and consumption reduction, and reduced pollution to the environment arising from each stage of production process and activities through technological innovation. In addition, the Company provided its suppliers and customers with solutions on factory energy conservation, building energy conservation and air-conditioning energy conservation so as to make its humble contribution in promoting the completion of an efficient, visible and sustainable target for energy conservation for the society. In recent years, on the one hand, the Company has been actively promoting high-end technology and making efforts in developing clean

energy and green technology, trying to deepen its cultivation in technology fields for high efficiency and clean energy, as well as ultra-low emission and near zero emission, and to build up an industrial base; and on the other hand, the Company has been actively developing the environment protection business with a focus on environment protection facilities, integrated treatment of pollutants, and comprehensive utilization of resources. So far, the Company has built up its capability in general contracting in respect of power plant environmental facilities, solid waste treatment, sewage treatment, biomass power generation, and environment protection engineering projects.

During the Reporting Period, the Company has complied with the "Comply or Explain" provision under the Environmental, Social and Governance Reporting Guide as set out in Appendix 27 of the Hong Kong Listing Rules. The Company will separately prepare the environmental, social and governance report for 2022, which will be separately published by the end of April 2023.



Purchase, Redemption or Sale of Listed Securities of the Company

On 17 January 2022, the resolution in relation to the termination of implementation of the Restricted A Share Incentive Scheme of the Company and the repurchase and cancellation of the restricted shares granted but not yet unlocked was considered and approved at the 2022 first extraordinary general meeting, the 2022 first A share class meeting and the 2022 first H Share Class Meeting of the Company. The Company terminated the Restricted A Share Incentive Scheme and repurchased and cancelled a total of 126,162,000 restricted shares granted but not yet unlocked held by 2,099 participants. The Company completed the procedures for the repurchase and cancellation of the shares at Shanghai Branch of China Securities Depository and Clearing Corporation Limited for the above restricted shares on 17 March 2022.

Reserves

Details of the movements in the reserves of the Company and the Group during the year were set out in note 4(51), 4(52), 4(53) to the financial statements and the consolidated statement of changes in equity.

Property, Plant and Equipment

Details of the movements in the property, plant and equipment of the Company and the Group during the year were set out in note 4(22) to the financial statements.

Directors' Rights to Acquire Shares and Debentures

At no time during the year were rights to acquire

benefits by means of an acquisition of shares or debentures of the Company granted to any Directors or their respective spouse or minor children; or was the Company, its holding company, or any of its subsidiaries or fellow subsidiaries a party to any arrangement to enable the Directors to acquire such rights in any other body corporate.

Sufficiency of Public Float

Based on publicly available information and to the best knowledge of the Directors, the Board confirms that the Company has maintained sufficient public float as at the latest practicable date prior to the issue of this report.

Pre-emptive Rights Arrangement

Under the requirements of the PRC laws and the Articles of Association, the Company's shareholders have no preemptive rights.

Tax Relief and Exemption

The Board are not aware of any tax relief and exemption available to the Shareholders by reason of their holding of the Company's securities.

Leng Weiqing

Chairlady and CEO

Significant Events

The disclosure of the following matter will not, in the Directors' opinion, be harmful to the business of the Company.

Connected Transactions and Continuing Connected Transactions

According to the requirements of the Hong Kong Listing Rules, the connected transactions and continuing connected transactions between the Company and its subsidiaries (the "Group") and their connected persons for the year ended 31 December 2022 are disclosed in detail as follows:

Connected Transactions

Disposal of 15.24% Shares in Thvow Technology

In the past two years, due to the impact of rising procurement and construction costs and other factors, Thvow Technology, a controlled subsidiary of the Company, was facing difficulties in operation. In order to improve the sustainable operation capability and profitability of Thvow Technology, the Company originally intended to improve the asset quality of Thvow Technology by injecting 100% equity interest in Shanghai Boiler Works Co. Ltd. (上海鍋爐廠有限公司) into Thvow Technology. On 10 February 2022, the Board considered and approved the relevant resolution, pursuant to which Thvow Technology intended to issue shares to the Company to purchase 100% equity of Shanghai Boiler Works Co. Ltd. (上海鍋爐廠有限公司) held by the Company, and to raise supporting funds through the non-public issuance of shares to Shanghai Lixin Industrial Co., Ltd. (上海立昕實業有限公司), a consolidated 100% owned subsidiary of SEGC, the controlling shareholder of the Company. However, due to the recent changes in the external market environment, it was highly uncertain to continue to promote the above transaction. After prudent research and analysis and negotiation between the parties to the Transaction, the Company proposed to terminate the asset reorganisation. As the indirect controlling shareholder of Thvow Technology, and to further support the development of Thvow Technology by relying on the resources of SEGC, SEGC planned to acquire the Company's shares in Thvow Technology after due negotiation between the parties.

On 20 June 2022, the Board agreed to terminate the issuance of shares by Thvow Technology to purchase 100% equity of Shanghai Boiler Works Co. Ltd. (上海鍋爐廠有限公司) and to raise supporting funds from the connected parties, and

approved the Company to transfer 132,458,814 shares it held in Thvow Technology to SEGC by way of non-public agreement transfer, at a consideration of RMB4.26 per share, totaling RMB564,274,547.64 (the "Transaction"). On 20 June 2022, the Company and SEGC entered into the Share Transfer Agreement with conditions precedent regarding the Transaction. The Transaction was approved at the EGM of the Company held on 22 July 2022. On 5 December 2022, the Company received the confirmation letter for securities transfer and registration issued by China Securities Depository and Clearing Corporation Limited. The securities transfer and registration procedures of share transfer involved in the Transaction have been completed. As at the end of the Reporting Period, the Company does not hold any equity interest in Thvow Technology, and only holds the voting rights of 131,290,074 shares of Thvow Technology through voting right proxy.



Continuing Connected Transactions

Continuing Connected Transactions with SEGC

Framework sales agreement

The Company entered into framework sales agreement with SEGC on 29 October 2019, pursuant to which the Group agrees to provide electrical engineering products, electrical equipment, and other related services to SEGC and its subsidiaries and associates (the "Parent Group"). Pursuant to the agreement, the annual cap of the relevant sales for the years ended 31 December 2020, 2021 and 2022 is RMB700,000,000, RMB700,000,000 and RMB700,000,000.

The above framework sales agreement was entered into in the ordinary course of business of the Group and is on normal commercial terms. The pricing basis shall be:

- where there is government (including local government) prescribed price, such price shall apply; where there is no such government prescribed price,

- the price shall fall within the band of government guidance price; where there is no such government guidance price,
- the market price shall apply; where there is no market price for a particular service,
- the price as agreed among both parties shall apply.

The term of the framework sales agreement is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The actual sales to the Parent Group for the year ended 31 December 2022 was RMB 293.92 million.

On 19 October 2022, the Company entered into framework sales agreement with SEGC which was approved by the general meeting of the Company. The annual cap of the relevant sales between the Group and the Parent Group for the years ended 31 December 2023, 2024 and 2025 is RMB700,000,000, RMB700,000,000 and RMB700,000,000.



Significant Events

Framework purchase agreement

The Company entered into framework purchase agreement with SEGC on 29 October 2019, pursuant to which the Group agrees to purchase certain component parts, such as turbine blades, coupling, AC motor and emergency trip control cabinet, automatic instrument equipment, other mechanical equipment and raw materials (including copper wires and insulation materials) from the Parent Group. Pursuant to the agreement, the annual cap of the relevant purchases for the years ended 31 December 2020, 2021 and 2022 is RMB500,000,000, RMB500,000,000 and RMB500,000,000.

The above framework purchase agreement was entered into in the ordinary course of business of the Group and is on normal commercial terms. The pricing basis shall be:

- where there is government (including local government) prescribed price, such price shall apply; where there is no such government prescribed price,
- the price shall fall within the band of government guidance price; where there is no such government guidance price,
- the market price shall apply; where there is no market price for a particular service,
- the price as agreed among both parties shall apply.

The term of the framework purchase agreement is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The actual purchase from the Parent Group for the year ended 31 December 2022 was RMB228.69 million.

On 19 October 2022, the Company entered into framework purchase agreement with SEGC which was approved by the general meeting of the Company. The annual cap of the relevant purchase between the Group and the Parent Group for the years ended 31 December 2023, 2024 and 2025 is RMB500,000,000, RMB500,000,000 and RMB500,000,000.

Framework comprehensive services agreement

The Company entered into framework comprehensive services agreement with SEGC on 29 October 2019, pursuant to which

the Group agrees to provide the Parent Group with certain services including but not limited to informationization, professional consultation and entrusted management. Pursuant to the agreement, the annual cap of the relevant comprehensive services for the years ended 31 December 2020, 2021 and 2022 is RMB200,000,000, 200,000,000 and 200,000,000.

The framework comprehensive services agreement was entered into in the ordinary course of business of the Group and is on normal commercial terms. The pricing basis shall be:

- where there is government (including local government) prescribed price, such price shall apply; where there is no such government prescribed price,
- the price shall fall within the band of government guidance price; where there is no such government guidance price,
- the market price shall apply; where there is no market price for a particular service,
- the price as agreed among both parties shall apply.

The term of the framework comprehensive services agreement is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The actual comprehensive services for the Parent Group for the year ended 31 December 2022 was RMB180.77 million.

On 19 October 2022, the Company entered into Provision of Comprehensive Services Framework Agreement and Acceptance of Comprehensive Services Framework Agreement with SEGC which was approved by the general meeting of the Company. The annual cap of comprehensive services provided by the Group to Parent Group for the years ended 31 December 2023, 2024 and 2025 is RMB400,000,000, RMB400,000,000 and RMB400,000,000, and the annual cap of comprehensive services accepted by the Group from the Parent Group for the year ended 31 December 2023, 2024 and 2025 is RMB200,000,000, RMB200,000,000 and RMB200,000,000.

Framework financial services agreement

On 29 October 2019, Shanghai Electric Group Finance Company Limited ("Finance Company"), a subsidiary of the

Company, entered into various financial services agreements with SEGC, pursuant to which Finance Company provides deposit and loan services to the Parent Group.

These framework financial services agreements were entered into in the ordinary course of business of the Group and are on normal commercial terms. The term of the framework financial services agreements is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The details of individual framework financial service agreement are as follows:

Framework deposit agreement

On 29 October 2019, Finance Company entered into a framework deposit agreement with SEGC in relation to the deposit services for the Parent Group provided by Finance Company. Pursuant to the agreement, for the years ended 31 December 2020, 2021 and 2022, the approved annual cap, representing the maximum daily balance of funds (including interests) that may be deposited, is RMB7,500,000,000, RMB7,500,000,000 and RMB7,500,000,000. On 19 October 2022, the Board of the Company proposed to revise the annual cap for maximum daily balance of relevant deposit services for the year ended 31 December 2022 to be RMB11,500,000,000, which took effect from the approval of general meeting of the Company dated 2 December 2022.

The interest rates offered by Finance Company for the deposits placed by the Parent Group shall be:

- subject to the relevant guidelines and regulations of the People's Bank of China ("PBOC"); and
- with reference to the relevant savings rates set by PBOC from time to time and are in line with the market rates.

The actual daily balance of funds from the Parent Group for the year ended 31 December 2022 did not exceed the approved annual cap of RMB11,500,000,000. Besides, the Parent Group received interest income of RMB74.72 million for the deposits from Finance Company for the year ended 31 December 2022.

Framework loan agreement

On 29 October 2019, Finance Company entered into a

framework loan agreement with SEGC in relation to the loan and bill discounting services provided by Finance Company and the payment shall be in accordance with the face amount of the instrument. Pursuant to the agreement, for the years ended 31 December 2020, 2021 and 2022, the approved annual cap, representing the maximum daily balance of loans that may be extended and discounted bills that may be purchased (including interests), is RMB7,500,000,000, RMB7,500,000,000 and RMB7,500,000,000. On 19 October 2022, the Board of the Company proposed to revise the annual cap for maximum daily balance of relevant loan and bill discounting services for the year ended 31 December 2022 to be RMB11,500,000,000, which took effect from the approval of general meeting of the Company dated 2 December 2022.

The interest rates offered by Finance Company for all loan services and purchases of discounted bills provided to the Parent Group shall be:

- subject to the relevant guidelines and regulations of the PBOC; and
- with reference to the relevant rates set by PBOC from time to time and are in line with the market rates.

The actual daily balance of outstanding loans and discounted bills from the Parent Group (including interests) in the year ended 31 December 2022 did not exceed the approved annual cap of RMB11,500,000,000. Besides, the Parent Group paid interest of RMB137.25 million, which was derived from loans and discounted bills, to Finance Company for the year ended 31 December 2022.

On 19 October 2022, Finance Company entered into Financial Services Framework Agreement with SEGC which was approved by the general meeting of the Company. Pursuant to the agreement, Finance Company will provide financial services including deposit services, loan and bill discounting services and intermediary business services to the Parent Group. The annual cap of maximum daily balance of deposit services of Parent Group for the year ended 31 December 2023, 2024 and 2025 is RMB15,000,000,000, RMB15,000,000,000 and RMB15,000,000,000, the annual cap of maximum daily balance of loan and bill services of the Parent Group for the year ended 31 December 2023, 2024 and 2025 is RMB15,000,000,000, RMB15,000,000,000 and RMB15,000,000,000, and the annual cap of intermediary business services of the Parent Group for the year ended 31 December 2023, 2024 and 2025 is RMB20,000,000, RMB20,000,000 and RMB20,000,000.

Significant Events



Continuing Connected Transactions with Siemens

On 23 January 2009, the Company entered into a framework purchase and sales agreement with Siemens Aktiengesellschaft ("Siemens", who indirectly owns more than 10% of the registered capital in certain subsidiaries of the Company), pursuant to which the Group would purchase certain power generation, distribution and transmission related electrical and mechanical components from Siemens and its subsidiaries and associates ("Siemens Group") to be used in various projects and products of the Group, and the Group would sell certain power generation equipment and related components to Siemens Group.

The above framework purchase and sales agreement expired on 23 January 2012. In October 2011, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.35 (1) of the Hong Kong Listing Rules, in accordance with which, the Company would be required to enter into a written agreement with Siemens in respect of the renewal continuing connected transactions. The waiver

was conditionally granted by the Stock Exchange on 4 November 2011, subject to and on the waiver conditions. On 8 December 2011, the Board of directors approved the waiver of written framework agreement and the renewal continuing connected transactions. On 29 May 2012, the independent shareholders of the Company approved the waiver of written framework agreement and the renewal continuing connected transactions.

In January 2015, the Company applied for exemption in strictly following the Hong Kong Listing Rules 14A.35(1) which provides that the Company shall enter into a framework agreement with Siemens on renewal continuing connected transactions. The waiver was conditionally granted by the Stock Exchange on 10 February 2015, subject to and on the waiver conditions, and the framework agreement and the updated annual caps of continuing connected transactions were approved by the Board.

In August 2017, the Company applied for exemption in strictly following the Hong Kong Listing Rules 14A.34 and 14A.51

which provides that the Company shall enter into a framework agreement with Siemens on renewal continuing connected transactions. The waiver was conditionally granted by the Stock Exchange on 14 September 2017 subject to and on the waiver conditions, and the framework agreement and the updated annual caps of continuing connected transactions were approved by the Board.

The Company will continuously enter into written agreement for updated continuing connected transactions and the cap of the updated continuing connected transactions will be priced according to the following pricing strategy now and in the future:

- in respect of the purchase transactions where the components and/or technologies are generally available in the market (mainly used in power transmission and distribution equipment), market price, which is determined by reference to the prevailing market rates for similar or the same components and/or technologies available on an arm's length basis from independent third parties, shall be considered for the consideration of the continuing connected transactions to be determined. The marketing departments of the relevant subsidiaries of the Company have been obtaining and will continue to obtain price quotations from suppliers in the market (including both independent suppliers and Siemens) once the relevant subsidiaries receive orders from the customers and will choose the supplier who provides the most favourable terms (especially the lowest price per unit of the same quality). The marketing department of the relevant subsidiaries will compare the price quotations from Siemens with at least two price quotations from independent suppliers before making the commercial decision. The internal control department of the relevant subsidiaries has conducted and will continue to conduct annual review to make sure the abovementioned procedure has been complied with throughout the year. During the past three years, the Company has purchased the same products provided by the Siemens Group from more than two independent suppliers every year and expects to stick to such practice if there is no material change to the current market conditions. With the access to the independent suppliers in the market from time to time, the Company has the opportunity to learn the market conditions on a timely basis and make an informed commercial decision; and

- in respect of the purchase transactions where the components and/or technologies can only be provided by the Siemens Group due to its unique technology (mainly used in power equipment) while similar components and/or technologies provided by other suppliers currently do not match well with the Company's certain power equipment which renders the contemporaneous quotations from independent third parties not available, the Group may refer to (i) prices of relevant transactions for the last year, (ii) market trend of the prices for similar components and/or technologies domestically and internationally, which has been and will be assessed by the marketing department of the relevant subsidiaries based on the public information in the fourth quarter of every year and (iii) business plan of the Group, and negotiate with the Siemens Group in good faith. With the historical purchase price as a benchmark price and the roughly estimated percentage of the increase or decrease of the market prices for similar components and/or technologies domestically and internationally, the Company should be able to assess the fairness and reasonableness of price quotations from the Siemens Group and make an informed commercial decision based on the market information to the largest extent possible.

On 6 October 2020, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.34 and Rule 14A.51 of the Hong Kong Listing Rules, in accordance with which, the Company would be required to enter into a written framework agreement with Siemens in respect of the continuing connected transactions. The waiver was conditionally granted by the Stock Exchange on 15 October 2020, subject to the fulfilment and achievement of the waiver conditions by the Company. On 15 October 2020, the Board of the Company approved the annual caps of the continuing connected transactions between the Company and the Siemens Group for the three years ending 31 December 2023. The approved annual caps of the relevant purchases for the three years ended 31 December 2023 are RMB 4,000,000,000, RMB 3,500,000,000 and RMB 3,000,000,000 and the approved annual cap of the relevant sales for the three years ended 31 December 2023 is RMB 300,000,000, RMB 300,000,000 and RMB 300,000,000.

For the year ended 31 December 2022, the actual purchases from the Siemens Group by the Group were RMB300.49 million and the sales of the Group to the Siemens Group is RMB123.83 million.

Significant Events

Framework Purchase Agreement with Mitsubishi Electric

Mitsubishi Electric Corporation ("Mitsubishi Electric") holds more than 10% of the equity interest in Shanghai Mitsubishi Elevator Co., Ltd. ("SMEC"), a subsidiary of the Company. Mitsubishi Electric Shanghai Mechanical & Electrical Elevator Co., Ltd. ("MESMEE") is held as to 40% by Shanghai Mechanical & Electrical Industry Co., Ltd., a 48.81% owned subsidiary of the Company, 40% by Mitsubishi Electric and 20% by Mitsubishi Electric Building Techno-service Co., Ltd., a wholly-owned subsidiary of Mitsubishi Electric.

Pursuant to the agreement, the annual cap of the purchases for the years ended 31 December 2020, 2021 and 2022 are all RMB3,500,000,000. The price of products to be purchased from MESMEE is determined principally at arm's length by commercial negotiations in accordance with general principles of fairness and reasonableness with reference to the market price. The term of the framework purchase agreement is three years commencing on 1 January 2020, renewable at the option of the Company by giving three months' notice prior to the expiry of the agreement.

The actual purchases from MESMEE by the Group for the year ended 31 December 2022 were RMB2,204.82 million.

On 19 October 2022, SMEC entered into purchase framework agreement with MESMEE which was approved by the general meeting of the Company. The annual cap of the relevant purchase between SMEC and MESMEE for the years ended 31 December 2023, 2024 and 2025 is RMB3,000,000,000, RMB3,000,000,000, and RMB3,000,000,000.

Framework Sales Agreement with SMEPC

State Grid Shanghai Municipal Electric Power Company ("SMEPC") hold more than 10% equity interest of Shanghai Electric Transmission and Distribution Group Co., Ltd., a subsidiary of the Company, and purchases transmission and distribution products from the Group since 2012.

As the Company devotes to increase sales and profits of transmission and distribution products, the company anticipated that the Group would continuously trade with SMEPC Group over the next couple of years. Therefore, in

February 2015, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.34 and Rule 14A.51 of the Hong Kong Listing Rules, in accordance with which, the Company would be required to enter into a written framework agreement for continuing connected transactions. The waiver was conditionally granted by the Stock Exchange on 22 April 2015 subject to and on the waiver conditions. On 24 April 2015, the Board of the Company approved the waiver of entering into framework agreement and the annual caps of continuing connected transactions.

In July 2017, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.34 and Rule 14A.51 of the Hong Kong Listing Rules, in accordance with which, the Company would be required to enter into a written framework agreement for continuing connected transactions. The waiver was conditionally granted by the Stock Exchange on 9 August 2017 subject to and on the waiver conditions. On 30 October 2017, the Board of the Company approved the waiver of entering into framework agreement and the annual caps of continuing connected transactions. On 29 April 2019, the Board of the Company suggested to revise the annual caps of continuing connected transactions.

As the Company needs to take part in open, strict and independent bidding process in order to obtain the orders and enter into each of the Continuing Connected Transactions, the Company will adopt the following methods and procedures to ensure that the bidding price is fair and reasonable:

- the sales department of the relevant subsidiary of the Group will collect all winning prices of the target product (including prices of other bid winners) in the preceding year and calculate an average winning price;
- the financial department of the relevant subsidiary of the Group will use such average winning price to calculate the profit margin based on its own costs;
- the sales department of the relevant subsidiary of the Group will propose a bidding price which represents a profit margin ranging from 5% to 10% upwards or downwards from the base margin based on the competition status for a particular bidding; and
- the management (refers to the senior general manager responsible for daily operations, usually composed of the general manager, the deputy

general manager in charge of sales, the person in charge of finance and the person in charge of the sales department, etc.) of the related subsidiaries of the Group will review and decide whether or not to approve such bidding price according to market conditions.

On 6 October 2020, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.34 and Rule 14A.51 of the Hong Kong Listing Rules, in accordance with which, the Company would be required to enter into a written framework agreement with SMEPC in respect of the continuing connected transactions. The waiver has been conditionally granted by the Stock Exchange on 15 October 2020 subject to and on the waiver conditions. On 15 October 2020, the Board of the Company approved the waiver of entering into framework agreement and annual caps of the continuing connected transactions between the Company and the SMEPC Group for the three years ending 31 December 2023. The approved annual caps of the relevant sales for the three years ended 31 December 2023 are RMB 6,000,000,000, RMB 6,200,000,000 and RMB 6,500,000,000.

The sales of the Group to the SMEPC Group is RMB3,927.28 million for the year ended 31 December 2022.

Significant Related Party Transactions

The Company confirms that it has complied with the requirements in accordance with Chapter 14A of the Hong Kong Listing Rules in respect of the above connected transactions. Save as disclosed above, significant related party transactions which do not constitute the connected transactions under the Hong Kong Listing Rules during the year have been disclosed in note 8 to the annual financial statements prepared in accordance with the PRC Accounting Standard for Business Enterprises.

Other Major Events

Litigations in Relation to SECT

Shanghai Electric Communication Technology Co., Ltd. ("SECT"), a controlled subsidiary of the Company, filed petitions to the court in 2021, to request Beijing Capital Group Co., Ltd (北京首都創業集團有限公司) ("Capital Company") and Beijing

Capital Group Company Limited Trading Branch (北京首都創業集團有限公司貿易分公司) ("Capital Trading") to settle the payment for goods in a total amount of approximately RMB1,193 million and the damages for breach of contract. In July 2022, SECT received the civil ruling issued by Shanghai No. 2 Intermediate People's Court (上海市第二中級人民法院) on the cases of SECT suing Capital Company and Capital Trading. The court held that after review, the facts involved in these cases were related to the contract fraud cases of Capital Company, which were filed and investigated by the Beijing Municipal Public Security Bureau. The court also held that the trial results of these cases must be based on the trial results of the contract fraud cases, and ruled that the cases be stayed.

SECT filed petitions to the court in 2021, to request Harbin Industrial Investment Group Co., Ltd. (哈爾濱工業投資集團有限公司) ("Harbin Industrial Investment") to settle the payment for goods in a total amount of approximately RMB392,973.5 thousand and the damages for breach of contract. In December 2021, SECT received the first - instance judgment regarding the cases of SECT suing Harbin Industrial Investment. In July 2022, SECT received the notice of response and the civil ruling issued by Shanghai Higher People's Court (上海市高級人民法院). The court held that after review, the cases should be based on the outcomes of other civil and commercial cases involving Sui Tianli and others and thus the appeal cases of Harbin Industrial Investment were ruled to be stayed by the court.

SECT filed petitions to the court in 2021, to request Fortune Industrial Corp. (富申實業公司) ("Fortune Industrial") to settle the payment for goods in a total amount of approximately RMB787,956.2 thousand and the damages for breach of contract. In November 2021, Fortune Industrial sued SECT for the return of the advance and payments for goods in a total amount of approximately RMB97,741.8 thousand. During the period from May to June 2022, Shanghai Yangpu District People's Court (上海市楊浦區人民法院) ruled that the cases regarding SECT suing Fortune Industrial were stayed. In July 2022, SECT received the civil ruling issued by Shanghai Yangpu District People's Court (上海市楊浦區人民法院) on the cases of Fortune Industrial suing SECT. The court held that after review, the cases should be based on the outcomes of other cases, which had not been concluded yet, and ruled that the cases are stayed.

Significant Events

SECT filed petitions to the court in 2021, to request Nanjing Changjiang Electronics Group Co., Ltd. (南京長江電子信息產業集團有限公司) ("Nanjing Changjiang") to settle the payment for goods in a total amount of approximately RMB2,089,000.8 thousand and the damages for breach of contract. During the period from May to June 2022, Shanghai Yangpu District People's Court (上海市楊浦區人民法院) ruled that the cases regarding SECT suing Nanjing Changjiang were stayed.

Jiangsu Zhongli Group Co., Ltd. (江蘇中利集團股份有限公司) ("Jiangsu Zhongli") brought a claim against SECT to request payment for goods, the corresponding interest and attorney's fee for litigation in a total amount of approximately RMB545,075.7 thousand in 2021. In July 2022, SECT received notice of response, civil complaint and civil ruling and other materials from Shanghai Yangpu District People's Court (上海市楊浦區人民法院). Jiangsu Zhongli applied for withdrawal of the lawsuits and re-litigated against SECT for payment for goods, the corresponding interest and attorney's fee for litigation in a total amount of approximately RMB544,348 thousand. Shanghai Yangpu District People's Court (上海市楊浦區人民法院), after consideration and review, held that as the cases had to be based on the outcomes of other case, and as the other case had not yet been concluded, the cases met the circumstances for statutory stay of litigation and ruled that the cases were stayed.

Material Litigations and Arbitrations in Relation to the Sasan Project in India

In June 2008, the Company and Reliance Infra Projects (UK) Limited (the "Reliance UK"), entered into the Equipment Supply and Service Contract (the "Contract") with a contracted amount of USD1,311,000,000, pursuant to which, the Company (as the supplier) shall provide major equipment and relevant services for the project of Sasan 6*600MW Ultra Large Supercritical Coal-fired Power Station in India, Reliance Infrastructure Limited (the "Reliance") issued the letter of guarantee for the payment obligations of Reliance UK under the Contract, and Sasan Power Limited (the "Sasan Power") owned and operated the power station. Since Reliance UK still failed to pay for the equipment purchased and other relevant payables to the Company after the project commenced commercial operation for several years, the Company filed to the Singapore International Arbitration Centre for arbitration in December 2019, requiring Reliance to pay for equipment purchased and other relevant payables in the amount of at least USD135,320,728.42 to the Company as agreed in the letter of guarantee issued by Reliance for Reliance UK (the "First Arbitration").

In August 2021, the Company received a complaint filed and sent by Sasan Power in the Bombay High Court of India. According to the complaint, Sasan Power sued Reliance, Reliance UK and the Company, requesting that the three respondents bear joint liability and compensate it for losses of 24,511,908,372 rupees (approximately RMB2.133 billion) (the "First Litigation"). In December 2021, the Company received a notice of acceptance for an arbitration brought by Reliance UK against the Company issued by the Singapore International Arbitration Center, pursuant to which Reliance UK request the Company to compensate for its losses of approximately USD388.75 million related to the contract. Reliance UK also believed that the letter of performance guarantee was unreasonably released and request the Company to issue a letter of performance guarantee in the amount of approximately USD120.175 million to guarantee its claims (the "Second Arbitration").

In July 2022, the Company's attorneys were informed through public information that the First Litigation has been disposed by the Bombay High Court of India on the grounds that the plaintiff did not meet the requirements for filing a complaint and failed to amend the complaint within the prescribed time.

In December 2022, the Company received the award issued by Singapore International Arbitration Centre for the First Arbitration, which orders Reliance to pay the Company the sum of USD146,309,239.27.

Gratuitous Transfer of Part of the Company's Shares by Controlling Shareholder

On 15 November 2021, SEGC entered into the Agreement on the Gratuitous Transfer of 5% shares of Shanghai Electric Group Company Limited from SEGC to Shanghai State-owned Capital Investment Co., Ltd. with Shanghai State-owned Capital Investment Co., Ltd., a wholly-owned subsidiary of Shanghai State-owned Assets Supervision and Administration Commission, to gratuitously transfer 785,298,555 A Shares (representing 5.04% of the Company's total share capital of 15,579,809,092 shares as at the end of the Reporting Period) to Shanghai State-owned Capital Investment Co., Ltd. The share transfer registration of the Gratuitous Transfer of the Shares was completed on 11 July 2022.

Pledge of Shares of the Company by Controlling Shareholder

SEGC completed the offering of 2020 Non-Public Issuance

of Exchangeable Corporate Bonds (Phase I) (the "20 Electric EB") using the A shares of the Company held by SEGC and its yields as the exchange objects on 3 February 2020, and completed registration procedures for the share pledge of 1,120,000,000 A shares of the Company on 15 January 2020. SEGC completed the offering of 2021 Non-Public Issuance of Exchangeable Corporate Bonds (Phase I) using the A shares of the Company held by SEGC and its yields as the exchange objects on 23 March 2021, and completed registration procedures for the share pledge of 254,545,455 A shares of the Company on 15 March 2021. In accordance with the maintenance guarantee ratio and additional guarantee mechanism set out in the "2021 Non-Public Issuance of Exchangeable Corporate Bonds by Shanghai Electric (Group) Corporation (Phase I) Offering Memorandum (for eligible investors)", SEGC completed registration procedures for the supplemental share pledge of 30,000,000 A shares of the Company on 17 August 2021.

20 Electric EB was delisted on 3 February 2023 and had been exchanged for a total of 435,478,937 shares of the Company. SEGC completed the pledge release procedures for the 684,521,063 tradable shares of the Company in the "Shanghai Electric (Group) Corporation - Shanghai Electric (Group) Corporation 2020 Non-Public Offering of Exchangeable Corporate Bonds (Phase 1) Designated Shares Pledge Account" on 7 February 2023 at China Securities Depository and Clearing Corporation Limited. After the pledge release, the number of the remaining pledged shares of SEGC was 284,545,455 shares.

Material Events After the Reporting Period

Disposal of 100% Equity Interest in Xinji Company

On 14 March 2023, the Board considered and approved the relevant resolution, pursuant to which, the Company was granted approval to transfer the 100% equity interest it held in Shanghai Xinji Machine Tool Co., Ltd. ("Xinji Company") to SEGC, at a consideration of the appraisal value of the total shareholders' equity in Xinji Company of RMB686,915,804.11, which is subject to the final equity valuation result filed with state-owned assets authorities.

Proposed Acquisition of Partial Equity Interests in Subsidiaries

On 29 March 2023, the Board considered and approved the relevant resolution, pursuant to which, the Company proposed to enter into the Agreements on Equity Transfer with ICBC Financial Assets Investment Co., Ltd., BOCOM Financial Asset Investment Company Limited and BOC Financial Asset Investment Co., Ltd. to acquire the 48.18% equity interests in Shanghai Electric Industrial Investment Co., Ltd., 39.42% equity interests in Shanghai Electric Group Shanghai Machinery Co., Ltd., 48.88% equity interests in Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd. and 42.20% equity interests in Shanghai Electric Nuclear Power Equipment Corporation Ltd. The total equity transfer price is RMB 10.004 billion.



Significant Events

Appointment, Removal and Remuneration of Auditors

Unit: million; Currency: RMB

		Currently appointed
Name of the PRC auditor	PricewaterhouseCoopers Zhong Tian LLP	
Remuneration of the PRC auditor		24.04
Number of years audited by the PRC auditor		9
		Remuneration
Auditor for Internal controls review	PricewaterhouseCoopers Zhong Tian LLP	2.48

AUDITOR'S REPORT

To the Shareholders of Shanghai Electric Group Co., Ltd.,

OPINION

What we have audited

We have audited the accompanying financial statements of Shanghai Electric Group Co., Ltd. (hereinafter "Shanghai Electric Group"), which comprise:

- the consolidated and company balance sheets as at 31 December 2022;
- the consolidated and company income statements for the year then ended;
- the consolidated and company cash flow statements for the year then ended;
- the consolidated and company statements of changes in shareholders' equity for the year then ended; and
- notes to the financial statements.

Our opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company's financial position of Shanghai Electric Group as at 31 December 2022, and their financial performance and cash flows for the year then ended in accordance with the requirements of Accounting Standards for Business Enterprises("CASs").

BASIS FOR OPINION

We conducted our audit in accordance with China Standards on Auditing ("CSAs"). Our statement under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of Shanghai Electric Group in accordance with the Code of Ethics for Professional Accountants of the Chinese Institute of Certified Public Accountants ("CICPA code"), and we have fulfilled our other ethical responsibilities in accordance with CICPA code.

KEY AUDIT MATTERS

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

- Revenue recognition relating to sales of goods, construction services and provision for onerous contracts
- Impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances
- Impairment assessment on goodwill

Key Audit Matters

How our audit addressed the Key Audit Matter

Revenue recognition relating to sales of goods, construction services and provision for onerous contracts

Referring to Note 2(22), Note 2(23), Note 2(32)(b), Note 4(42)(b) and Note 4(55) to the financial statements.

In 2022, Shanghai Electric Group's consolidated total revenue was RMB117,623,118 thousand, of which approximately 73% was resulted from sales of goods and approximately 15% was resulted from construction services. In 2022, the amount of provision for onerous contracts charged to the consolidated income statement was RMB1,783,519 thousand.

When the customers gain control over the relevant goods or services, Shanghai Electric Group recognises revenue in accordance with the amount of consideration which Shanghai Electric Group expects to be entitled to receive. Factors such as commodity prices and industry competition can have a significant impact on the gross profit of related contracts.

For sales of goods, we obtained an understanding, evaluated the design and tested the operating effectiveness of the key controls in respect of management's sales transactions from order approval to sales recording, as well as cash collection of accounts receivable.

We discussed with management and understood the revenue recognition policy for sales of goods of Shanghai Electric Group. By inspecting sales contracts on a sample basis, we analysed and evaluated whether the point of time when control transfers was consistent with the relevant accounting policies disclosed in the notes to the consolidated financial statements.

Key Audit Matters

How our audit addressed the Key Audit Matter

Revenue recognition relating to sales of goods, construction services and provision for onerous contracts (Continued)

We focused on revenue recognition relating to sales of goods, construction services and provision for onerous contracts and identified these as key audit matters based on the following reasons.

The focus on the revenue from sales of goods is due to its huge volume, large number of customers involved with goods distributed to many different areas. The amount of sales of goods recognised has a significant impact on the financial statements. Therefore, we need to deploy significant audit resources to execute the necessary audit procedures.

The focus on the revenue relating to construction services and provision for onerous contracts is due to the significant estimations and judgements involved. Shanghai Electric Group adopted the percentage of completion method to account for the revenue relating to construction services. Except for the revenues of a portion of contracts that were recorded by reference to the proportion of completed certified value to total contract value as the basis to estimate the progress, the revenues for the majority of contracts were recognised by reference to the proportion of costs incurred to date to the estimated total costs of the relevant contracts.

Furthermore, we tested revenue from sales of goods on a sample basis by performing the following procedures:

- examined the relevant supporting documents, including customer orders, sales contracts, goods delivery notes, customers' acceptance notes, invoices, etc.;
- tested sales transactions recorded before and after the balance sheet date by tracing to the supporting documents including the relevant customers' acceptance notes, etc. to assess whether revenue was recognised in the correct reporting periods.

For revenue relating to construction services and provision for onerous contracts, we obtained an understanding of management's internal control and assessment process of recording contract revenue, contract costs and the estimated unavoidable cost of the onerous contracts. We assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and the level of other inherent risk factors (such as their complexity, subjectivity, variability and sensitivity to management bias), and tested the operating effectiveness of key controls, including the controls related to record of the actual cost incurred and estimation of the total contract costs.

We compared the actual total costs of completed projects to management's prior estimation of projected total contract costs on a sample basis to assess management's historical estimation accuracy.

Key Audit Matters

How our audit addressed the Key Audit Matter

Revenue recognition relating to sales of goods, construction services and provision for onerous contracts (Continued)

Meanwhile, management of Shanghai Electric Group assessed whether the unavoidable contracts costs to fulfil contractual obligations exceeded the economic benefits expected to be received at balance sheet date, and set aside the provision for the onerous contracts based on the estimated least net cost of exiting from the contracts. We focused on revenue recognition relating to construction services and provision for onerous contracts due to the significant estimations and judgements involved in the estimation of the total contract costs, including existing or potential unpredictable expenditures to be incurred before completion or delivery. The estimations are subject to high degree of uncertainty and subjectivity.

We obtained the analyses on revenue and cost relating to construction services calculated by managements and agreed the total amount to the sales and operating cost ledgers. Meanwhile, we obtained the schedule of onerous contracts prepared by management and checked the mathematical accuracy of the calculation of the analyses on revenue and cost relating to construction services and the schedule of onerous contracts.

For the revenue of construction services recognised by reference to the proportion of completed certified value to total contract amount, we tested the completed certified value on a sample basis by performing the following procedures:

- obtained the certified value confirmed by the customers, the certifiers and Shanghai Electric Group; and
- sent the confirmations to the customers to verify the completed certified value.

For the revenue of construction services recognised by reference to the proportion of costs incurred to date to the estimated total costs of the relevant contracts, we tested the costs incurred on a sample basis by performing the following procedures:

- examined the supporting documents, including the contracts, invoices, equipment acceptance documents, progress confirmation slips, etc.; and
- tested the actual costs incurred before and after the balance sheet date by tracing to the supporting documents, including the equipment acceptance documents, progress confirmation slips, etc., to assess whether the actual costs incurred were recognised in the correct reporting periods.

Key Audit Matters**How our audit addressed the Key Audit Matter****Revenue recognition relating to sales of goods, construction services and provision for onerous contracts (Continued)**

Furthermore, for the revenue of construction services recognised by reference to the proportion of costs incurred to date to the estimated total costs of the relevant contracts together with the onerous contracts asserted by management, we tested the estimated total costs of such contracts on a sample basis by performing the following procedures:

- checked the components of the estimated total costs to the supporting documents, including purchase contracts, to identify any missing cost components;
- assessed the reasonableness of the estimated total costs through discussions with the project engineers and lawyers and reviewed the supporting documents;
- assessed the reasonableness of the estimated total contract cost by comparing the estimated total contract cost with the actual total costs for similar completed projects.

We recalculated the percentage of completion and the estimated gross profit recognised in the current period to assess the accuracy of revenue recognition relating to construction services.

Based on the above, we considered that management's estimations and judgements applied in the revenue recognition relating to sales of goods, construction services and provision for onerous contracts were supported by the evidences obtained and procedures performed.

Key Audit Matters

How our audit addressed the Key Audit Matter

Impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances

Referring to Note 2(9), Note 2(32)(a), Note 4(5), Note 4(6), Note 4(12), Note 4(14), Note 4(15)(a), Note 4(17)(a), Note 4(29) and Note 13(2) to the financial statements.

As at 31 December 2022, the net carrying amount of Shanghai Electric Group's trade acceptance notes receivable was RMB2,506,634 thousand, after netting off the accumulated provision for impairment of RMB1,111,947 thousand. Accounts receivable as at the same date amounted to RMB38,279,969 thousand, after netting off the accumulated provision for impairment of RMB17,195,975 thousand. Contract assets as at the same date amounted to RMB34,848,049 thousand, after netting off the accumulated provision for impairment of RMB1,464,194 thousand.

We obtained an understanding of management's internal control and assessment process in relation to the impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables, and loans and advances. We assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and the level of other inherent risk factors (such as their complexity, subjectivity, variability and sensitivity to management bias), and tested the operating effectiveness of key controls.

By comparing the actual write-offs or losses of trade acceptance notes receivable, accounts receivable, contract assets and finance lease receivables with the provision for bad debts accrued in previous years, we evaluated the reliability of management's policies and historical judgements adopted in estimating the provision for bad debts and impairment.

We performed the following procedures on assessing expected credit loss ("ECL") of trade acceptance notes receivable, accounts receivable and contract assets:

- for trade acceptance notes receivable, accounts receivable and contract assets with significantly different credit risk characteristics and occurrence of credit impairment, we performed the following procedures:
 - evaluated the criteria and rationality of management's judgement that trade acceptance notes receivable, accounts receivable and contract assets are featured with significantly different credit risk characteristics;
 - obtained the expected cash flow distribution prepared by management based on operating model for contract counterparties under different situations, and examined the accuracy of the classification of these counterparties on a sample basis;

Key Audit Matters

How our audit addressed the Key Audit Matter

Impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances(Continued)

Shanghai Electric Group provided for impairment of trade acceptance notes receivable, accounts receivable and contract assets based on the ECL during lifetime.

For trade acceptance notes receivable, accounts receivable and contract assets with significantly different credit risk characteristics and occurrence of credit impairment, management of Shanghai Electric Group evaluated the distribution of expected cash flows under multiple scenarios based on historical credit loss experience, operating model, current situations and forecasts of future conditions of contract counterparties under different situations, taking into account the professional legal advice from external lawyers and the asset preservation related to the litigation, and made corresponding provision for ECL according to ECL rate and the related probability weight under different scenarios.

For the trade acceptance notes receivable, accounts receivable and contract assets without occurrence of credit impairment or the ECL cannot be estimated for an individual financial asset at a reasonable cost, Shanghai Electric Group grouped accounts receivable in accordance with credit risk characteristics and measured the ECL based on groups. For the trade acceptance notes receivable, accounts receivable and contract assets in groups, Shanghai Electric Group made reference to the historical experience of credit losses, combining with the current situation and forecast of economic situation in the future, and prepared the model which refers to the days overdue and rate of the ECL during lifetime in order to measure the ECL.

- evaluated the rationality of management's assumptions of expected cash flow distribution based on operating model, and ECL rate and related probability weight under different scenarios according to historical credit loss experience of contract counterparties, statistics from third parties, open market disclosures, the latest developments in litigations provided by external lawyers and the asset preservation related to the litigation, etc.;
 - evaluated the results of management's sensitivity analysis using reasonably possible changes of the relevant key parameters;
 - recalculated the ECLs after adjusting the historical rates of default loss using forward looking factors.
- For the model used by management to calculate ECLs in groups, we performed the following procedures:
 - Evaluated the reasonableness of commercial acceptance bill receivable, account receivable and contract asset portfolio division and the measurement method of the expected credit loss model;
 - tested on a sample basis the accuracy of the historical credit default data used in the model to assess the rate of historical default loss;
 - reviewed the appropriateness of the economic indicators, economic scenarios and weights selected by management by assessing the historical correlation between asset portfolios and economic indicators, and verified the economic indicators adopted in the model against external data;
 - evaluated the results of management's sensitivity analysis of the forward-looking factors using reasonably possible changes of the relevant key parameters;

Key Audit Matters

How our audit addressed the Key Audit Matter

Impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances(Continued)

As at 31 December 2022, the net carrying amounts of Shanghai Electric Group's loans and advances and finance lease receivables were RMB6,383,634 thousand and RMB4,095,306 thousand, respectively, after netting off accumulated provision for impairment of RMB485,193 thousand and RMB1,371,524 thousand, respectively.

Shanghai Electric Group used a three-stage impairment model to calculate ECL by assessing if the credit risk has significantly increased since initial recognition for finance lease receivables and loans and advances. For the finance lease receivables and loans and advances with occurrence of credit impairment, and other finance lease receivables and loans and advances subject to separate assessment for impairment provision, ECL was separately determined and provision for bad debts was accrued individually. For the finance lease receivables and loans and advances without occurrence of credit impairment or the ECL cannot be estimated for an individual financial asset at a reasonable cost, Shanghai Electric Group grouped finance lease receivables and loans and advances in accordance with credit risk characteristics and measured the ECL based on groups.

- tested the accuracy of the ageing of trade acceptance notes receivable, accounts receivable and contract assets on a sample basis;
- recalculated the ECLs after adjusting the historical rates of default loss using forward looking factors.

We performed the following procedures on impairment provision of finance lease receivables and loans and advances:

- evaluated the appropriateness of the calculation methods adopted in the models used to arrive at ECLs, as well as evaluating the reasonableness of the grouping of assets, selection of the models, and the key parameters involved in the significant estimations and judgements;
- based on the financial and non-financial information of the lessees and borrowers and other external evidence and considerations, assessed on a sample basis the reasonableness of the classification of the three stages adopted in the model;
- inspected on a sample basis the accuracy and completeness of the critical data used in the model to calculate the ECL, including the historical data and the current data used. For the finance lease receivables and loans and advances classified in Stage 3 that are subject to separate impairment assessment, used sampling techniques to inspect and assess the reasonableness of the discounted cash flow models used by management;
- reviewed the appropriateness of the economic indicators, economic scenarios and weights selected by management by assessing the historical correlation between asset portfolios and economic indicators, and verified the economic indicators adopted in the model against external data;
- evaluated the results of management's sensitivity analysis of the forward-looking factors using reasonably possible changes of the relevant key parameters.

Key Audit Matters

How our audit addressed the Key Audit Matter

Impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances(Continued)

The major management judgements and assumptions adopted in the measurement of ECL mainly include:

- (1) selecting appropriate models to measure ECL and grouping businesses with similar credit risk characteristics into one separate portfolios;
- (2) establishing criteria for significant increase of credit risk and occurrence of default credit impairment;
- (3) selecting appropriate economic indices, economic scenarios and the weights used in forward-looking parameters, as well as establishing future cash flow forecasts for separate assessments of the finance lease receivables and loans and advances at the third stage.

Based on the above, we considered that management's judgements applied in the impairment provision assessment of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances were supported by the evidences obtained and procedures performed.

We considered impairment provision of trade acceptance notes receivable, accounts receivable, contract assets, finance lease receivables and loans and advances as a key audit matter since the estimations of impairment provision are subject to high degree of uncertainty and subjectivity. Shanghai Electric Group's measurement of ECL based on separate assessment involved significant managerial judgements and assumptions, and Shanghai Electric Group's measurement of ECLs based on groups involved both complex models and significant managerial judgements and assumptions.

Key Audit Matters

How our audit addressed the Key Audit Matter

Impairment assessment on goodwill

Referring to Note 2(19), Note 2(32)(b) and Note 4(26) to the financial statements.

As at 31 December 2022, the net carrying amount of Shanghai Electric Group's goodwill was RMB3,288,723 thousand, after netting off impairment for goodwill of RMB1,939,555 thousand. In 2022, the amount of goodwill impairment made by Shanghai Electric Group was RMB411,487 thousand.

Shanghai Electric Group recognised the corresponding impairment based on the excess of the carrying amount over the recoverable amount of the assets group or the portfolio of the assets group. The recoverable amount is determined by the higher of the fair value less cost of disposal of the asset group or the portfolio of the assets group and its value-in-use calculated based on the present value of expected future cash flows.

The key assumptions adopted in the calculation of the present value of the expected future cash flows include:

- growth rates in the forecast period
- growth rates in the stable period
- gross margin rate
- discount rate

We obtained an understanding of management's internal control and assessment process in relation to the impairment provision of goodwill. We assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and the level of other inherent risk factors (such as their complexity, subjectivity, variability and sensitivity to management bias), and tested the operating effectiveness of key controls.

For the value-in-use calculations using present value of expected future cash flows, we conducted the following procedures:

- compared and analysed the actual financial results of the relevant asset groups during the current year against the respective forecasts in previous year to evaluate the reliability of management's historical prediction of future cash flows.
- obtained management's calculation schedules of goodwill impairment and evaluated the appropriateness of the valuation methods used by management in estimating the recoverable amount by reference to the industry practice.
- compared the key parameters and input data used in the cash flow forecasts against the historical figures and approved budgets, etc.

Key Audit Matters

How our audit addressed the Key Audit Matter

Impairment assessment on goodwill (Continued)

In 2022, management used the market approach to determine the fair value less cost of disposal of an asset group. The methods adopted were the stock price of listed companies or the ratio of enterprise-value-to-EBITDA after necessary adjustments, in which the key assumptions involved mainly included the share price of the listed company, the ratio of enterprise-value-to-EBITDA, the controlling interest premium, and the discount for lack of marketability, etc.

We identified goodwill impairment assessment as a key audit matter since the balance of goodwill was significant, the estimation of goodwill impairment was subject to significant uncertainty and subjectivity, and testing of goodwill impairment involved significant management judgements.

- meanwhile, we evaluated management's key assumptions by implementing the following procedures:
 - compared the growth rates in the forecast period with the company's historical growth rates, relevant business plans and industry historical data;
 - compared the growth rates in the stable period with the economic data we obtained;
 - compared the projected gross margin rate with past performance, taking into consideration of market trends;
 - for the discount rate used in the model, we estimated an acceptable range independently by considering external data sources (including the market risk-free rate and the debt to asset ratio) and geographical factors, and compared that with the discount rate used in the cash flow model;
 - reviewed the appropriateness of the above key assumption parameters with reference to market information and industry parameters.
- in response to the sensitivity analysis prepared by management, we focused on and assessed the extent and likelihood of impairment due to the reasonably possible changes in key assumptions that have significant impacts on the present value of expected future cash flows.

Key Audit Matters**How our audit addressed the Key Audit Matter****Impairment assessment on goodwill
(Continued)**

- tested the accuracy of the calculation of the net present value of future cash flows.

For the fair value less cost of disposal of the asset group or the portfolio of the asset group, we conducted the following procedures:

- obtained management's calculation schedules of goodwill impairment and evaluated the appropriateness of the valuation methods used by management in estimating the recoverable amount by reference to the industry practice;
- evaluated the appropriateness of the selected controlling interest premium, discount for lack of marketability or market multiplier by assessing the industry, capital structure, and operating scale of enterprises;
- tested the accuracy of the calculation of fair value less cost of disposal.

Based on the above, we considered that management's judgements applied in impairment assessment of goodwill were supported by evidences obtained and procedures performed.

OTHER INFORMATION

Management of Shanghai Electric Group is responsible for other information. The other information comprises all the information included in 2022 annual report of Shanghai Electric Group other than the financial statements and our auditor's report thereon.

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

In conjunction with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the 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 MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management of Shanghai Electric Group is responsible for the preparation and fair presentation of these financial statements in accordance with CASs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Shanghai Electric 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 management either intend to liquidate Shanghai Electric Group or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing Shanghai Electric Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether these financial statements are free from material misstatements, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with CSAs 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 financial statements.

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is enough 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 internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether material uncertainty exists related to events or conditions that may cast significant doubt on Shanghai Electric 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 these 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 Shanghai Electric Group to cease to continue as a going concern.
- Evaluate the overall presentation (including the disclosures), structure and content of the financial statements, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain enough appropriate audit evidence regarding the financial information of the entities or business activities within Shanghai Electric 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.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS (CONT'D)

We communicate with those charged with governance 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 those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the 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.

PricewaterhouseCoopers Zhong Tian LLP

Signing CPA

Yang Xudong
(Engagement Partner)

Shanghai, the People's Republic of China
29 March 2023

Signing CPA

Dai Zhenghua

CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

ASSETS	Note	31 December 2022 Consolidated	31 December 2021 Consolidated
Current assets			
Cash at bank and on hand	4(1)	26,344,500	25,359,181
Clearing settlement funds		24,317	25,214
Placements with banks and other financial institutions	4(2)	24,613,553	28,992,175
Financial assets held for trading	4(3)	7,657,438	7,603,097
Derivative financial assets	4(4)	55,890	44,101
Notes receivable	4(5)	6,257,285	7,811,332
Accounts receivable	4(6)	38,279,969	33,429,218
Receivables financing	4(7)	2,105,589	1,145,493
Prepayments	4(8)	10,276,967	13,424,089
Other receivables	4(9)	6,156,517	8,710,708
Financial assets purchased under resale agreements	4(10)	1,131,206	188,202
Inventories	4(11)	30,871,914	32,879,469
Contract assets	4(12)	21,801,813	31,193,824
Assets held for sale		-	43,708
Current portion of non-current assets	4(13)	2,857,670	2,820,830
Other current assets	4(14)	22,719,005	16,105,203
Total current assets		201,153,633	209,775,844
Non-current assets			
Loans and advances	4(15)	1,590,952	2,138,138
Debt investments	4(16)	152,863	-
Other debt investments	4(17)	-	81,874
Long-term receivables	4(18)	3,328,725	4,258,199
Long-term equity investments	4(19)	11,183,753	11,401,990
Other non-current financial assets	4(20)	7,268,463	6,966,597
Investment properties	4(21)	660,172	822,975
Fixed assets	4(22)	20,282,308	19,889,387
Construction in progress	4(23)	3,427,951	5,024,094
Right-of-use assets	4(24)	1,402,169	1,441,832
Intangible assets	4(25)	12,582,986	12,956,893
Development expenditures	4(25)	35,818	40,636
Goodwill	4(26)	3,288,723	3,954,704
Long-term prepaid expenses	4(27)	555,484	608,848
Deferred tax assets	4(28)	7,733,152	8,078,305
Other non-current assets	4(29)	13,373,700	13,361,874
Total non-current assets		86,867,219	91,026,346
TOTAL ASSETS		288,020,852	300,802,190

CONSOLIDATED BALANCE SHEET (CONT'D)

AS AT 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

LIABILITIES AND SHAREHOLDERS' EQUITY	Note	31 December 2022 Consolidated	31 December 2021 Consolidated
Current liabilities			
Short-term borrowings	4(31)	8,660,895	11,836,366
Financial liabilities held for trading	4(32)	32,017	28,569
Derivative financial liabilities	4(4)	10,450	9,625
Notes payable	4(33)	16,069,558	16,578,854
Accounts payable	4(34)	57,396,886	61,303,577
Advances from customers	4(35)	786,313	738,047
Contract liabilities	4(36)	38,742,797	39,160,400
Deposits from customers, banks and other financial institutions	4(37)	6,076,565	5,198,722
Employee benefits payable	4(38)	4,958,030	4,358,557
Taxes payable	4(39)	2,030,487	2,180,202
Other payables	4(40)	7,859,473	8,602,557
Liabilities held for sale		-	35,568
Current portion of non-current liabilities	4(41)	9,120,361	8,274,340
Other current liabilities	4(42)	11,781,611	10,573,957
Total current liabilities		163,525,443	168,879,341
Non-current liabilities			
Long-term borrowings	4(43)	21,647,690	23,845,417
Bonds payable	4(44)	748,697	2,490,445
Lease liabilities	4(45)	1,077,425	1,027,996
Long-term payables	4(46)	562,855	583,015
Deferred income	4(47)	1,491,212	1,651,556
Long-term employee benefits payable	4(48)	175,854	224,673
Provisions	4(42)	3,592,976	2,912,930
Deferred tax liabilities	4(28)	836,321	775,648
Other non-current liabilities	4(49)	168,212	266,816
Total non-current liabilities		30,301,242	33,778,496
Total liabilities		193,826,685	202,657,837
Shareholders' equity			
Share capital	4(50)	15,579,809	15,705,971
Less: Treasury stocks	4(51)	-	(382,271)
Capital surplus	4(51)	21,837,822	22,045,560
Other comprehensive income	4(52)	(24,891)	(509,829)
Special reserve		143,786	149,948
Surplus reserve	4(53)	5,906,524	5,906,524
Retained earnings	4(54)	11,419,263	15,218,425
Total equity attributable to shareholders of the parent company		54,862,313	58,134,328
Minority interests		39,331,854	40,010,025
Total shareholders' equity		94,194,167	98,144,353
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		288,020,852	300,802,190

The accompanying notes form an integral part of these financial statements.

Legal representative:

Leng Weiqing

Principal in charge of accounting:

Zhou Zhiyan

Head of accounting department:

Si Wenpei

COMPANY BALANCE SHEET

AS AT 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

ASSETS	Note	31 December 2022 Company	31 December 2021 Company
Current assets			
Cash at bank and on hand		27,039,710	26,305,420
Notes receivable	16(1)	399,329	282,047
Accounts receivable	16(2)	10,193,882	8,591,815
Prepayments		12,345,129	15,106,847
Other receivables	16(3)	5,557,032	6,372,623
Inventories		130,080	101,012
Contract assets		4,031,958	5,100,413
Current portion of non-current assets		269,000	99,000
Other current assets		3,116,576	2,879,765
Total current assets		63,082,696	64,838,942
Non-current assets			
Long-term receivables		5,462,259	5,391,559
Long-term equity investments	16(4)	48,075,790	49,197,100
Other non-current financial assets		1,787,054	1,782,459
Investment properties		115,261	124,259
Fixed assets		1,542,295	1,623,292
Construction in progress		51,153	93,165
Right-of-use assets		39,859	75,483
Intangible assets		2,377,271	2,702,944
Long-term prepaid expenses		23,041	33,484
Deferred tax assets		2,309,575	2,275,432
Other non-current assets		5,817,118	5,176,679
Total non-current assets		67,600,676	68,475,856
TOTAL ASSETS		130,683,372	133,314,798

COMPANY BALANCE SHEET (CONT'D)

AS AT 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

LIABILITIES AND SHAREHOLDERS' EQUITY	Note	31 December 2022 Company	31 December 2021 Company
Current liabilities			
Short-term borrowings		5,811,000	4,223,947
Notes payable		4,410,137	4,146,970
Accounts payable		24,289,333	24,804,824
Contract liabilities		11,573,885	10,782,644
Employee benefits payable		1,097,799	709,834
Taxes payable		42,351	123,607
Other payables		2,723,703	3,307,858
Current portion of non-current liabilities		6,098,445	896,817
Other current liabilities		1,416,490	1,662,191
Total current liabilities		57,463,143	50,658,692
Non-current liabilities			
Long-term borrowings		17,963,957	21,828,309
Bonds payable		-	2,490,445
Lease liabilities		15,528	35,328
Long-term payables		17,537,377	17,539,608
Other non-current liabilities		148,060	107,745
Total non-current liabilities		35,664,922	42,001,435
Total liabilities		93,128,065	92,660,127
Shareholders' equity			
Share capital		15,579,809	15,705,971
Less: Treasury stocks		-	(382,271)
Capital surplus	16(5)	20,592,836	20,816,669
Other comprehensive income	16(6)	(30,627)	(30,627)
Surplus reserve	16(7)	2,639,825	2,639,825
Retained earnings	16(8)	(1,226,536)	1,905,104
Total shareholders' equity		37,555,307	40,654,671
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		130,683,372	133,314,798

The accompanying notes form an integral part of these financial statements.

Legal representative:

Leng Weiqing

Principal in charge of accounting:

Zhou Zhiyan

Head of accounting department:

Si Wenpei

CONSOLIDATED AND COMPANY INCOME STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	For the year ended 31	For the year ended 31	For the year ended 31	For the year ended 31
		December 2022	December 2021	December 2022	December 2021
		Consolidated	Consolidated	Company	Company
			(Restated, Note 2(33))		
Total revenue		117,623,118	130,261,250	21,242,991	18,291,990
Including: Revenue	4(55), 16(9)	116,985,807	129,554,848	21,242,991	18,291,990
Interest income		636,982	704,552	-	-
Fee and commission income		329	1,850	-	-
Total operating costs		(117,467,341)	(130,304,620)	(25,180,992)	(23,303,537)
Including: Operating cost	4(55), 16(9)	(98,496,897)	(110,572,826)	(21,426,401)	(19,739,294)
Interest costs		(87,168)	(103,242)	-	-
Fee and commission expenses		(754)	(917)	-	-
Taxes and surcharges	4(56)	(531,757)	(562,868)	(31,936)	(38,313)
Selling and distribution expenses	4(57)	(3,853,301)	(4,601,099)	(307,776)	(313,560)
General and administrative expenses	4(58)	(8,167,949)	(7,930,489)	(1,647,316)	(1,607,419)
Research and development expenses	4(59)	(5,028,466)	(5,405,769)	(213,561)	(234,709)
Financial expenses - net	4(60)	(1,301,049)	(1,127,410)	(1,554,002)	(1,370,242)
Including: Interest expenses		(1,757,576)	(1,161,087)	(1,895,424)	(1,488,718)
Interest income		504,533	316,627	348,064	189,596
Add: Other income	4(64)	1,077,991	996,998	38,650	53,824
Investment income	4(65), 16(10)	1,113,637	1,830,299	1,620,186	3,626,578
Including: Share of profit of associates and joint ventures		858,533	211,000	627,482	(610,422)
Losses arising from derecognition of financial assets measured at amortised cost		(8,992)	(16,108)	-	-
Exchange gains		21,394	991	-	-
(Losses)/Gains on changes in fair value	4(66)	(715,315)	1,705,848	(154,427)	391,190
Asset impairment losses	4(62)	(2,144,917)	(4,525,332)	(1,007,068)	(189,595)
Credit impairment losses	4(63)	(2,093,465)	(10,986,962)	(242,086)	(9,548,221)
Gains/(Losses) on disposal of assets	4(67)	560,440	183,064	515,573	(148)
Operating loss		(2,024,458)	(10,838,464)	(3,167,173)	(10,677,919)
Add: Non-operating income	4(68)	223,041	641,169	1,810	96,855
Less: Non-operating expenses	4(69)	(173,881)	(92,344)	(5,600)	(780)
Total loss		(1,975,298)	(10,289,639)	(3,170,963)	(10,581,844)
Less: Income tax expenses	4(70)	(337,708)	49,508	39,323	820,315
Net loss		(2,313,006)	(10,240,131)	(3,131,640)	(9,761,529)
Attributable to shareholders of the parent company		(3,566,484)	(9,987,908)		
Minority interests		1,253,478	(252,223)		

CONSOLIDATED AND COMPANY INCOME STATEMENTS (CONT'D)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	For the year ended 31 December 2022	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2021
		Consolidated	Consolidated	Company	Company
			(Restated, Note 2(33))		
Other comprehensive income, net of tax		489,995	(211,215)	-	-
Attributable to shareholders of the parent company		484,938	(199,970)	-	-
Other comprehensive income that will not be subsequently reclassified to profit or loss		22,390	766	-	-
Changes arising from remeasurement of net liability or net asset of defined benefit plan		22,390	766	-	-
Other comprehensive income that will be subsequently reclassified to profit or loss		462,548	(200,736)	-	-
Changes in fair value of other debt investments		(10,419)	(25,655)	-	-
Provision for credit impairment of other debt investments and receivables financing		(15,981)	23,593	-	-
Effective portion of gains or losses on hedging instruments in a cash flow hedge		1,821	-	-	-
Differences on translation of foreign currency financial statements		487,127	(198,674)	-	-
Attributable to minority shareholders		5,057	(11,245)	-	-
Total comprehensive income		<u>(1,823,011)</u>	<u>(10,451,346)</u>	<u>(3,131,640)</u>	<u>(9,761,529)</u>
Attributable to shareholders of the parent company		(3,081,546)	(10,187,878)		
Attributable to minority shareholders		<u>1,258,535</u>	<u>(263,468)</u>		
Earnings per share					
Basic earnings per share (RMB Yuan)	4(71)	RMB(0.23)	RMB(0.64)		
Diluted earnings per share (RMB Yuan)	4(71)	<u>RMB(0.23)</u>	<u>RMB(0.64)</u>		

The accompanying notes form an integral part of these financial statements.

Legal representative:

Leng Weiqing

Principal in charge of accounting:

Zhou Zhiyan

Head of accounting department:

Si Wenpei

CONSOLIDATED AND COMPANY CASH FLOW STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	For the year ended 31 December 2022 Consolidated	For the year ended 31 December 2021 Consolidated	For the year ended 31 December 2022 Company	For the year ended 31 December 2021 Company
Cash flows from/(used in) operating activities					
Cash received from sales of goods or rendering of services		117,510,597	135,776,016	23,549,604	23,213,824
Refund of taxes and surcharges		1,563,829	751,816	83,461	333,646
Cash received relating to other operating activities	4(72)	9,810,329	6,321,157	456,300	509,696
Sub-total of cash inflows		128,884,755	142,848,989	24,089,365	24,057,166
Cash paid for goods and services		93,675,145	120,831,688	22,207,465	27,258,609
Cash paid to and on behalf of employees		12,032,673	12,356,631	576,671	712,377
Payments of taxes and surcharges		4,498,553	5,380,559	91,701	471,666
Cash paid relating to other operating activities	4(72)	10,195,569	14,834,111	2,209,044	3,570,765
Sub-total of cash outflows		120,401,940	153,402,989	25,084,881	32,013,417
Net cash flows from/(used in) operating activities	4(73)	8,482,815	(10,554,000)	(995,516)	(7,956,251)
Cash flows (used in)/from investing activities					
Cash received from disposal of investments		11,885,630	15,818,311	2,874,143	3,057,078
Cash received from returns on investments		1,245,244	2,987,686	1,754,091	3,191,641
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		503,054	1,477,775	220,413	405,584
Net cash received from disposal of subsidiaries and other business units	4(73)	195,679	1,999,854	-	-
Cash received relating to other investing activities	4(72)	3,763,013	3,294,045	1,535,000	4,838,301
Sub-total of cash inflows		17,592,620	25,577,671	6,383,647	11,492,604
Cash paid to acquire fixed assets, intangible assets and other long-term assets		4,045,088	4,308,930	64,289	262,731
Cash paid to acquire investments		20,848,343	15,059,277	484,929	2,081,090
Net cash paid to acquire subsidiaries and other business units	4(73)	15,719	68,140	-	-
Cash paid relating to other investing activities	4(72)	-	282,257	5,824,700	7,606,283
Sub-total of cash outflows		24,909,150	19,718,604	6,373,918	9,950,104
Net cash flows (used in)/from investing activities		(7,316,530)	5,859,067	9,729	1,542,500
Cash flows (used in)/from financing activities					
Cash received from capital contributions		154,943	3,350,092	-	-
Including: Cash received by subsidiaries from capital contributions by minority shareholders		154,943	3,350,092	-	-
Cash received from borrowings		28,041,765	25,756,943	20,463,917	17,522,620
Cash received from bonds		3,750,000	1,500,000	-	1,500,000
Cash received relating to other financing activities	4(72)	-	318,803	-	-
Sub-total of cash inflows		31,946,708	30,925,838	20,463,917	19,022,620
Cash repayments of borrowings		25,606,271	19,374,930	19,932,907	13,763,756
Cash repayments of bonds		3,000,000	2,842,153	-	2,842,153
Cash payments for distribution of dividends, profits or interest expenses		3,207,796	4,396,015	1,956,335	2,825,195
Including: Cash payments for dividends or profits to minority shareholders by subsidiaries		1,668,109	1,588,959	-	-
Cash paid relating to other financing activities	4(72)	1,389,609	2,147,808	14,877	50,404
Sub-total of cash outflows		33,203,676	28,760,906	21,904,119	19,481,508
Net cash flows (used in)/from financing activities		(1,256,968)	2,164,932	(1,440,202)	(458,888)
Effect of foreign exchange rate changes on cash and cash equivalents					
		294,462	(143,585)	87,549	(31,125)
Net increase/(decrease) in cash and cash equivalents					
		203,779	(2,673,586)	(2,720,710)	(6,903,764)
Add: Cash and cash equivalents at the beginning of the year		43,581,329	46,254,915	19,655,420	26,559,184
Cash and cash equivalents at the end of the year	4(73)	43,785,108	43,581,329	16,934,710	19,655,420

The accompanying notes form an integral part of these financial statements.

Legal representative:

Leng Weiqing

Principal in charge of accounting:

Zhou Zhiyan

Head of accounting department:

Si Wenpei

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	Attributable to shareholders of the parent company									Total shareholders' equity
		Share capital	Capital surplus	Treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Sub-total	Minority interests	
Balance at 31 December 2020		15,181,353	19,338,140	(382,271)	(130,122)	138,313	5,906,524	26,348,897	66,400,834	40,448,508	106,849,342
Movements for the year ended 31 December 2021											
Total comprehensive income											
Net loss		-	-	-	-	-	-	(9,987,908)	(9,987,908)	(252,223)	(10,240,131)
Other comprehensive income		-	-	-	(199,970)	-	-	-	(199,970)	(11,245)	(211,215)
Total comprehensive income for the year		-	-	-	(199,970)	-	-	(9,987,908)	(10,187,878)	(263,468)	(10,451,346)
Capital contribution and withdrawal by shareholders											
Equity component of convertible bonds	4(44)	524,618	2,166,673	-	-	-	-	-	2,691,291	-	2,691,291
Injection of capital from minority shareholders	4(51)	-	(44,868)	-	-	-	-	-	(44,868)	3,413,944	3,369,076
Addition of subsidiaries	5	-	-	-	-	-	-	-	-	86,270	86,270
Disposal of subsidiaries	5	-	-	-	-	-	-	-	-	(224,891)	(224,891)
Capital withdrawal by minority shareholders	4(51)	-	591,121	-	-	-	-	-	591,121	(1,525,976)	(934,855)
Share-based payments included in owners' equity	4(51)	-	(5,506)	-	-	-	-	-	(5,506)	-	(5,506)
Others	4(52)	-	-	-	(179,737)	-	-	-	(179,737)	65,094	(114,643)
Profit distribution											
Appropriation to surplus reserve	4(53)	-	-	-	-	-	-	-	-	-	-
Appropriation to general risk reserve	4(53)	-	-	-	-	-	-	-	-	-	-
Distribution to shareholders	4(54)	-	-	-	-	-	-	(1,127,375)	(1,127,375)	-	(1,127,375)
Distribution to minority shareholders of subsidiaries		-	-	-	-	-	-	-	-	(1,947,376)	(1,947,376)
Appropriation to staff and workers' bonus and welfare fund	4(54)	-	-	-	-	-	-	(15,189)	(15,189)	(39,528)	(54,717)
Special reserve											
Appropriation in the current year		-	-	-	-	82,932	-	-	82,932	32,920	115,852
Use in the current year	4(54)	-	-	-	-	(71,297)	-	-	(71,297)	(35,472)	(106,769)
Balance at 31 December 2021		15,705,971	22,045,560	(382,271)	(509,829)	149,948	5,906,524	15,218,425	58,134,328	40,010,025	98,144,353

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (CONT'D)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	Attributable to shareholders of the parent company								Minority interests	Total shareholders' equity
		Share capital	Capital surplus	Treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Sub-total		
Balance at 31 December 2021		15,705,971	22,045,560	(382,271)	(509,829)	149,948	5,906,524	15,218,425	58,134,328	40,010,025	98,144,353
Movements for the year ended 31 December 2022											
Total comprehensive income											
Net loss		-	-	-	-	-	-	(3,566,484)	(3,566,484)	1,253,478	(2,313,006)
Other comprehensive income		-	-	-	484,938	-	-	-	484,938	5,057	489,995
Total comprehensive income for the year		-	-	-	484,938	-	-	(3,566,484)	(3,081,546)	1,258,535	(1,823,011)
Capital contribution and withdrawal by shareholders											
Injection of capital from minority shareholders	4(51)	-	16,095	-	-	-	-	-	16,095	84,223	100,318
Addition of subsidiaries	5	-	-	-	-	-	-	-	-	84,241	84,241
Repurchase and cancellation of shares under equity incentive plan	4(51)	(126,162)	(256,109)	382,271	-	-	-	-	-	-	-
Disposal of subsidiaries	5	-	-	-	-	-	-	-	-	(423,873)	(423,873)
Share-based payments included in owners' equity	4(51)	-	32,276	-	-	-	-	-	32,276	-	32,276
Others		-	-	-	-	-	-	-	-	29	29
Profit distribution											
Appropriation to surplus reserve	4(53)	-	-	-	-	-	-	-	-	-	-
Appropriation to general risk reserve	4(53)	-	-	-	-	-	-	-	-	-	-
Distribution to shareholders		-	-	-	-	-	-	-	-	-	-
Distribution to minority shareholders of subsidiaries	4(54)	-	-	-	-	-	-	(209,305)	(209,305)	(1,615,868)	(1,825,173)
Appropriation to staff and workers' bonus and welfare fund	4(54)	-	-	-	-	-	-	(23,373)	(23,373)	(65,866)	(89,239)
Special reserve											
Increase in the current year		-	-	-	-	75,606	-	-	75,606	39,719	115,325
Use in the current year		-	-	-	-	(81,768)	-	-	(81,768)	(39,311)	(121,079)
Balance at 31 December 2022		15,579,809	21,837,822	-	(24,891)	143,786	5,906,524	11,628,568	54,815,893	39,378,274	94,194,167

The accompanying notes form an integral part of these financial statements.

Legal representative:

Leng Weiqing

Principal in charge of accounting:

Zhou Zhiyan

Head of accounting department:

Si Wenpei

COMPANY STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	Share capital	Capital surplus	Treasury stock	Other comprehensive income	Surplus reserve	Retained earnings	Total shareholders' equity
Balance at 31 December 2020		15,181,353	18,655,502	(382,271)	249,980	2,639,825	12,794,008	49,138,397
Movements for the year ended 31 December 2021								
Total comprehensive income								
Net loss		-	-	-	-	-	(9,761,529)	(9,761,529)
Other comprehensive income	16(7)	-	-	-	-	-	-	-
Total comprehensive income for the year		-	-	-	-	-	(9,761,529)	(9,761,529)
Equity component of convertible bonds	4(44), 16(6)	524,618	2,166,673	-	-	-	-	2,691,291
Share-based payments included in owners' equity	4(51), 16(6)	-	(5,506)	-	-	-	-	(5,506)
Repurchase and cancellation of shares under equity incentive plan	16(7)	-	-	-	(280,607)	-	-	(280,607)
Profit distribution								
Distribution to shareholders	4(54), 16(9)	-	-	-	-	-	(1,127,375)	(1,127,375)
Balance at 31 December 2021		15,705,971	20,816,669	(382,271)	(30,627)	2,639,825	1,905,104	40,654,671

The accompanying notes form an integral part of these financial statements.

Legal representative:

Leng Weiqing

Principal in charge of accounting:

Zhou Zhiyan

Head of accounting department:

Si Wenpei

COMPANY STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (CONT'D)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

Item	Note	Share capital	Capital surplus	Treasury stock	Other comprehensive income	Surplus reserve	Retained earnings	Total shareholders' equity
Balance at 31 December 2021		15,705,971	20,816,669	(382,271)	(30,627)	2,639,825	1,905,104	40,654,671
Movements for the year ended 31 December 2022								
Total comprehensive income								
Net loss		-	-	-	-	-	(3,131,640)	(3,131,640)
Other comprehensive income	16(7)	-	-	-	-	-	-	-
Total comprehensive income for the year		-	-	-	-	-	(3,131,640)	(3,131,640)
Share-based payments included in owners' equity	4(51), 16(6)	-	32,276	-	-	-	-	32,276
Repurchase and cancellation of shares under equity incentive plan	16(7)	(126,162)	(256,109)	382,271	-	-	-	-
Balance at 31 December 2022		15,579,809	20,592,836	-	(30,627)	2,639,825	(1,226,536)	37,555,307

Legal representative:
Leng Weiqing

Principal in charge of accounting:
Zhou Zhiyan

Head of accounting department:
Si Wenpei

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

1 GENERAL INFORMATION

Shanghai Electric Group Co., Ltd. (“the Company”), formerly Shanghai Electric (Group) Company Limited (“Electric Limited”), is a joint venture co-funded by Shanghai Electric Holdings Group Co., Ltd. (formerly Shanghai Electric (Group) Corporation, hereinafter “Electric Holdings”), Guangdong Zhujiang Investment Co., Ltd., Fuxi Investment Holding Co., Ltd. (“Fuxi Investment”), Shenergy (Group) Co., Ltd (“Shenergy Group”), Shanghai Baosteel Group Corporation (“Baosteel Group”) and Shantou Mingguang Investment Co., Ltd. on 1 March 2004 upon the approval of the State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government (Hu Guo Zi Wei Chong [2004] No. 79). The original registered capital of the Company was RMB9,010,950 thousand, including capital contribution by Electric Holdings with its equity and fixed assets in 17 companies at the considerations of RMB6,257,765 thousand and RMB3,185 thousand respectively, accounting for 69.48% of shareholding, and cash contribution of RMB2,750,000 thousand by other shareholders, accounting for 30.52% of shareholding.

Electric Holdings entered into a share transfer agreement with Fuxi Investment on 19 August 2004 to transfer 4.99% of its equity in the Company to Fuxi Investment; and entered into another share transfer agreement with Baosteel Group on 27 August 2004 to acquire 4.99% of the equity in the Company held by Baosteel Group. Upon completion of the transfers, Electric Holdings held 69.48% of the equity in the Company.

On 8 September 2004, pursuant to the resolution at the 5th shareholders' meeting, and upon the approval of the Shanghai Municipal People's Government in the Reply on Approving the Setting Up of Shanghai Electric Group Co., Ltd. (Hu Fu Fa Gai Shen [2004] No. 008) dated 28 September 2004, Electric Limited was changed into a stock limited liability company. After the change, the share capital was RMB9,189,000 thousand.

On 24 March 2005, pursuant to the resolution at the 4th session of the 1st Board of Director, and as approved by China Securities Regulatory Commission (“CSRC”) in Zheng Jian Guo He Zi [2005] No. 6 dated 26 January 2005, the Company issued overseas listed foreign shares with a par value of RMB1 per share in Hong Kong, with an issuing size of 2,702,648 thousand shares. Meanwhile, Electric Holdings and Shenergy Group reduced their state-owned shares by selling 270,264 thousand shares. The issue price of the public offering was HKD1.70 per share. After the issue, the share capital of the Company increased to RMB11,891,648 thousand.

On 12 November 2008, pursuant to the resolution at the shareholders' meeting, the Company issued 616,039 thousand RMB-dominated ordinary shares with a par value of RMB1 per share publicly to all shareholders of Shanghai Electric Power T&D Co., Ltd. excluding the Company to merge with Shanghai Electric Power T&D Co., Ltd., upon the approval of CSRC in the Reply on Approving the Merger of Shanghai Electric Group Co., Ltd. with Shanghai Electric Power T&D Co., Ltd. (Zheng Jian Xu Ke [2008] No. 1262) and the Reply on Approving the Initial Public Offering of Shanghai Electric Group Co., Ltd. (Zheng Jian Xu Ke [2008] No. 1233). After this issue, the share capital of the Company increased to 12,507,687 thousand shares.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

1 GENERAL INFORMATION (CONT'D)

On 13 May 2010, pursuant to the resolution at the shareholders' meeting, the Company issued 315,940 thousand RMB-dominated ordinary shares with a par value of RMB1 per share privately, with an issue price of RMB7.03 per share, upon the approval of CSRC in the Reply on Approving the Non-public Offering of Shanghai Electric Group Co., Ltd. (Zheng Jian Xu Ke [2010] No. 497). After this non-public issue, the share capital of the Company increased to 12,823,627 thousand shares.

On 18 January 2016, pursuant to the resolutions at the 1st interim shareholders' meeting in 2016, the 1st A-share shareholders' meeting in 2016 and the 1st H-share shareholders' meeting in 2016, the Company issued 606,843 thousand RMB-dominated ordinary shares with a par value of RMB1 per share and an issue price of RMB10.41 per share to Electric Holdings, upon the approval of CSRC in the Reply on Approving Shanghai Electric Group Co., Ltd. for Issuing Shares to Shanghai Electric (Group) Corporation to Purchase Assets and Raise Matching Fund (Zheng Jian Xu Ke [2016] No. 905) in order to make up the difference in the equity replacement where the Company replaces at a transaction consideration of RMB1 of its 100% equity in Shanghai Heavy Machinery Plant Co., Ltd. (SHMP) with Electric Holdings' several items of equities, including 100% equity in Shanghai Electric Industrial Co., Ltd. (Electric Industrial) and Shanghai Blower Works Co., Ltd. (SBW), 61% equity in Shanghai Denso Fuel Injection Co., Ltd. (Shanghai Denso) and 14.79% in Shanghai Rail Traffic Equipment Development Co., Ltd. (SRTED), and to acquire the land use rights of 14 parcels of land owned by Electric Holdings and the ancillary buildings and other assets therein. In 2016, the Company completed the non-public issue of 606,843 thousand RMB-dominated ordinary shares.

In 2017, as approved by the 37th and 42nd meetings of the 4th Board of Directors, the 1st interim shareholders' meeting in 2017, the 1st A share shareholders' meeting in 2017 and the 1st H share shareholders' meeting in 2017, the Company planned to issue 877,918 thousand RMB-dominated ordinary shares to Electric Holdings with an issue price of RMB7.55 per share in order to acquire 47.18% domestic shares of Shanghai Prime Machinery Company Limited (PMC), 50.10% equity in Thales SEC Transportation System Limited Company ("Thales SEC") (formerly Thales Saic Transportation System Limited Company), 100% equity in Shanghai Electric Group Asset Management Co., Ltd. ("Electric Asset Management"), the land use rights of 26 parcels of land owned by Electric Holdings and the ancillary buildings and other assets therein (hereinafter "Issuance of Shares to Purchase Assets"). Later, the Company received the approval of the issuance of 877,918 thousand shares to Electric Holdings from CSRC in Reply on Approving Shanghai Electric Group Co., Ltd. for Issuing Shares to Shanghai Electric (Group) Corporation to Purchase Assets and Raise Matching Funds (Zheng Jian Xu Ke [2017] No. 1390) dated 31 July 2017. In 2017, the Company completed the non-public issue of 877,918 thousand RMB-dominated ordinary shares.

In 2017, as approved by the 37th and 42nd meetings of the 4th Board of Directors of the Company, the 1st interim shareholders' meeting in 2017, the 1st A share shareholders' meeting in 2017 and the 1st H share shareholders' meeting in 2017, the Company issued non-public offering shares to no more than 10 specific investors including Electric Holdings and Shanghai Guosheng Group Investment Co., Ltd. to raise matching fund not exceeding RMB3 billion.

1 GENERAL INFORMATION (CONT'D)

On 31 July 2017, the Company received approval of non-public offering of shares to raise matching fund not exceeding RMB3 billion by CSRC in the Reply on Approving Shanghai Electric Group Co., Ltd. for Issuing Shares to Shanghai Electric (Group) Corporation to Purchase Assets and Raise Matching Fund (Zheng Jian Xu Ke [2017] No. 1390). As at 20 October 2017, the Company completed the issuance of 416,089 thousand RMB-dominated ordinary shares with an issue price of RMB7.21 per share.

On 16 February 2015, the Company issued 6 million of A-share convertible bonds (“Electric Convertible Bonds”, code: 113008) with a par value of RMB100 per bond and the total amount was RMB6 billion. Such convertible bonds can be converted into the Company's A shares at a price of RMB10.72 per share from 3 August 2015. Such bond interest is calculated annually by single interest method and the principal is repaid in a lump sum upon maturity. As of the maturity date of the convertible bonds, the accumulative number of shares formed by the conversion was 903,762 thousand shares, and the company's shares increased accordingly to 15,705,971 thousand shares.

On 29 April 2019, the Company received approval of the equity incentive plan by the State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government in the Reply on Approving Shanghai Electric Group Co., Ltd. for Implementing the Restricted Shares Incentive Plan (Hu Guo Zi Wei Fen Pei [2019] No. 80). On 6 May 2019, as approved by the Company's 13th of the 5th Session of the Board of Directors of the Company, the 1st interim shareholders' meeting in 2019, the 1st A share shareholders' meeting in 2019, and the 1st H share shareholders' meeting in 2019, the Company granted 133,578 thousand shares with the granting price of RMB3.03 per share.

On 29 June 2020, pursuant to the resolutions at 2019 annual shareholders' meeting, the 1st A-share shareholders' meeting in 2020 and the 1st H-share shareholders' meeting in 2020, the Company repurchased and cancelled the restricted A shares that had been granted to 95 recipients (who were no longer qualified as participants in the incentive scheme) but not yet unlocked on 18 September 2020. The total number of restricted shares repurchased and cancelled was 7,416 thousand. After completion of the repurchase and cancellation, the number of remaining restricted shares under the incentive scheme of all participants totalled 126,162 thousand.

On 29 June 2020, pursuant to the resolutions at 2019 annual shareholders' meeting, the 1st A-share shareholders' meeting in 2020 and the 1st H-share shareholders' meeting in 2020, from 10 September 2020 to 30 October 2020, the Company repurchased and fully cancelled 48,430 thousand H shares, resulting in the reduction of the registered capital of the Company accordingly.

On 17 January 2022, the Proposal on Termination of the Restricted A Shares Under the Incentive Plan and Repurchase and Cancellation of Granted but Locked-up Restricted Shares was reviewed and approved at the 1st extraordinary shareholders' meeting in 2022, 1st A Share shareholders' meeting in 2022 and the 1st H Share shareholders' meeting in 2022. The Company plans to repurchase and cancel a total of 126,162 thousand restricted shares that have been granted to 2,099 participants but not yet unlocked on 17 March 2022. After completion of the repurchase and cancellation, the Company's shares were reduced by 126,162 thousand. As at 31 December 2022, the shares of the Company were 15,579,809 thousand.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

1 GENERAL INFORMATION (CONT'D)

In addition, Electric Holdings increased or reduced the Company's shares through the centralised price bidding system of Shanghai Stock Exchange ("SSE"). As at 31 December 2022, Electric Holdings held 7,442,102 thousand A shares and 313,642 thousand H shares of the Company, totalling 7,755,744 thousand shares, accounting for 49.78% of the total share capital of the Company.

The parent company and ultimate holding company of the Company is Electric Holdings.

The Company performed the business registration formalities for integrating the original business license, the organisation code certificate, and the certificate of taxation registration into one document on 17 February 2016. After integration, the united social credit code of the Company's business license is 91310000759565082B. Other registration items on the Company's business license remain the same. The RMB-denominated ordinary A shares and the overseas listed foreign H shares issued by the Company were listed on SSE and the Stock Exchange of Hong Kong ("HKSE"), respectively. As at 31 December 2022, the share capital structure of the Company was detailed in Note 4(50).

The registered office of the Company's headquarters is F30, Shanghai Maxdo Centre, No. 8 Xingyi Road, Shanghai, China. The Company and its subsidiaries (collectively "the Group") operate in manufacturing industry and the approved scope of business includes:

- Energy equipment business segment: design, manufacture and sales of coal-fired power generation and auxiliary equipment, gas power generation equipment, wind power equipment, nuclear power equipment, energy storage equipment, high-end vessels for chemical industry; provision of power grid and industrial intelligent power supply system solutions;
- Industrial equipment business segment: design, manufacture and sales of elevators, large and medium sized electrical motors, intelligent manufacturing equipment, industrial base parts, construction industrialisation equipment; and
- Integration service business segment: provision of energy, environmental protection and automation engineering and services, covering traditional and new energy, comprehensive utilization of solid waste, sewage treatment, flue gas treatment, rail transit, etc; provision of industrial Internet services; provision of financial services, including financial leasing, factoring, asset management, insurance brokerage, etc; provision of property management services based on industrial real estate, etc.

The major subsidiaries included in the scope of consolidation for the year are detailed in Note 6, and the subsidiaries newly included in the consolidation scope for the year are detailed in Note 5(1), (3), subsidiaries that are no longer included in the consolidation scope for the year are detailed in Note 5(2).

These financial statements were authorised for issue by the Company's Board of Directors on 29 March 2023.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

The Group determines the specific accounting policies and accounting estimates based on the features of its production and operation, mainly represented in the measurement of ECL of notes receivable, receivables, contract assets, finance lease receivables and loans and advances (Note 2(9)), valuation of inventories (Note 2(10)), depreciation of fixed assets, amortisation of intangible assets and right-of-use assets (Note 2(14), (17)), criterion for capitalisation of development expenditures (Note 2(17)), measurement of investment properties (Note 2(13)), impairment assessment on goodwill (Note 2(19)), onerous contracts recognition (Note 2(22)), and revenue recognition (Note 2(23)), etc.

Details of the Group's critical judgements, critical accounting estimates and key assumptions applied in determining significant accounting policies are set out in Note 2(32).

(1) Basis of preparation

The financial statements are prepared in accordance with the Accounting Standard for Business Enterprises - Basic Standard, and the specific accounting standards and other relevant regulations issued by the Ministry of Finance on 15 February 2006 and in subsequent periods (hereafter collectively referred to as “the Accounting Standards for Business Enterprises” or “CASs”); and are also prepared in accordance with the Public Information Disclosure and Compilation Rules for Public Offering of Securities No. 15- General Provisions for Financial Reporting issued by China Securities Regulatory Commission.

The financial statements are prepared on a going concern basis.

The new Hong Kong Companies Ordinance came into effect on 3 March 2014. Certain related matters in the financial statements have been disclosed in accordance with the requirements of the Hong Kong Companies Ordinance.

(2) Statement of compliance with the Accounting Standards for Business Enterprises

The financial statements of the Company for the year ended 31 December 2022 are in compliance with the Accounting Standards for Business Enterprises, and truly and completely presented the consolidated and company's financial position of the Company as at 31 December 2022 and their financial performance, cash flows and other information for the year then ended.

(3) Accounting year

The Company's accounting year starts on 1 January and ends on 31 December.

(4) Recording currency

The recording currency of the Company and the Company's domestic subsidiaries is Renminbi (“RMB”).

Subsidiaries overseas, joint ventures and associates of the Group determine their recording currencies according to the major economic environment in which they operate. The financial statements are presented in RMB.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(5) Business combinations

(a) Business combinations involving enterprises under common control

The consideration paid and net assets obtained by the combining party in a business combination are measured at the carrying amount. If the combined party is acquired from a third party by the ultimate controlling party in a prior year, the consideration paid and net assets obtained by the combining party are measured based on the carrying amounts of the combined party's assets and liabilities (including the goodwill arising from the acquisition of the combined party by the ultimate controlling party) presented in the consolidated financial statements of the ultimate controlling party. The difference between the carrying amount of the net assets obtained from the combination and the carrying amount of the consideration paid for the combination is treated as an adjustment to capital surplus (share premium). If the capital surplus (share premium) is not sufficient to absorb the difference, the remaining balance is adjusted against retained earnings. Costs directly attributable to the combination are included in profit or loss in the period in which they are incurred. Transaction costs associated with the issue of equity or debt securities for the business combination are included in the initially recognised amounts of the equity or debt securities.

(b) Business combinations involving enterprises not under common control

The cost of combination and identifiable net assets obtained by the acquirer in a business combination are measured at fair value at the acquisition date. Where the cost of the combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as goodwill; where the cost of combination is lower than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised in profit or loss for the current period. Costs directly attributable to the combination are included in profit or loss in the period in which they are incurred. Transaction costs associated with the issue of equity or debt securities for the business combination are included in the initially recognised amounts of the equity or debt securities.

(6) Preparation of consolidated financial statements

The consolidated financial statements comprise the financial statements of the Company and all of its subsidiaries.

Subsidiaries are consolidated from the date on which the Group obtains control and are de-consolidated from the date that such control ceases. For a subsidiary that is acquired in a business combination involving enterprises under common control, it is included in the consolidated financial statements from the date when it, together with the Company, comes under common control of the ultimate controlling party. The portion of the net profit realised before the combination date is presented separately in the consolidated income statement.

In preparing the consolidated financial statements, where the accounting policies and the accounting periods of the Company and subsidiaries are inconsistent, the financial statements of the subsidiaries are adjusted to align with the accounting policies and the accounting period of the Company. For subsidiaries acquired from business combinations involving enterprises not under common control, the individual financial statements of the subsidiaries are adjusted based on the fair value of the identifiable net assets at the acquisition date.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(6) Preparation of consolidated financial statements (Cont'd)

All significant intra-group balances, transactions and unrealised profits are eliminated in the consolidated financial statements. The portion of subsidiaries' shareholders' equity and the portion of subsidiaries' net profits and losses and total comprehensive incomes for the period attributable to the Company are recognised as minority interests, net profit attributable to minority interests and total comprehensive incomes attributable to minority interests, and presented separately in the consolidated financial statements under shareholders' equity, net profit and total comprehensive income respectively. Where the loss for the current period attributable to the minority shareholders of the subsidiaries exceeds the share of the minority interests in the opening balance of owners' equity, the excess is deducted against minority interests. Unrealised profits and losses resulting from the sales of assets by the Company to its subsidiaries are fully eliminated against net profit attributable to owners of the parent. Unrealised profits and losses resulting from the sales of assets by a subsidiary to the Company are eliminated and allocated between net profit attributable to owners of the parent and net profit attributed to minority interests in accordance with the allocation proportion of the parent in the subsidiary. Unrealised profits and losses resulting from the sales of assets by one subsidiary to another are eliminated and allocated between net profit attributable to owners of the parent and net profit attributable to minority interests in accordance with the allocation proportion of the parent in the subsidiary.

If the accounting treatment of a transaction is inconsistent in the financial statements at the Group level and at the Company or its subsidiary level, adjustment will be made from the perspective of the Group.

(7) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits that can be readily drawn on demand, and short-term and highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(8) Foreign currency translation

(a) Foreign currency transactions

Foreign currency transactions are translated into RMB using the exchange rates prevailing at the dates of the transactions.

At the balance sheet date, monetary items denominated in foreign currencies are translated into recording currency using the spot exchange rates on the balance sheet date. Exchange differences arising from these translations are recognised in profit or loss for the current period, except for those attributable to foreign currency borrowings that have been taken out specifically for acquisition or construction of qualifying assets, which are capitalised as part of the cost of those assets. Non-monetary items denominated in foreign currencies that are measured at historical costs are translated at the balance sheet date using the spot exchange rates at the date of the transactions. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(8) Foreign currency translation (Cont'd)

(b) Translation of foreign currency financial statements

The asset and liability items in the balance sheets for overseas operations are translated at the spot exchange rates on the balance sheet date. Among the shareholders' equity items, the items other than "retained earnings" are translated at the spot exchange rates of the transaction dates. The income and expense items in the income statements of overseas operations are translated at the spot exchange rates of the transaction dates. The differences arising from the above translation are presented in other comprehensive income. The cash flows of overseas operations are translated at the spot exchange rates on the dates of the cash flows. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

(9) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. A financial asset or a financial liability is recognised when the Group becomes a party to the contractual provisions of the instrument.

(a) Financial assets

(i) Classification and measurement

Based on the business model for managing the financial assets and the contractual cash flow characteristics of the financial assets, financial assets are classified as: (1) financial assets at amortised cost; (2) financial assets at fair value through other comprehensive income; (3) financial assets at fair value through profit or loss.

The financial assets are measured at fair value at initial recognition. For financial assets at fair value through profit or loss, the related transaction costs are directly recognised in profit or loss. For other financial assets, the related transaction costs are included in initially recognised amounts. Accounts receivable or notes receivable arising from sales of goods or rendering of services excluding or without regard to significant financing components are initially recognised at the consideration that is entitled to be charged by the Group as expected.

Debt instruments

The debt instruments held by the Group refer to the instruments that meet the definition of financial liabilities from the perspective of the issuer, and are measured in the following three ways:

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(9) Financial instruments (Cont'd)

(a) Financial assets (Cont'd)

(i) Classification and measurement (Cont'd)

Measured at amortised cost:

The Group's business model for financial asset management aims to receive contractual cash flows. The contractual cash flow characteristics of such financial assets are consistent with basic loan arrangement, which means the cash flow generated at certain dates is only the payment for the principal and corresponding interest based on unpaid principal. The interest income of such financial assets is recognised using the effective interest method. Such financial assets mainly comprise cash at bank and on hand, notes receivable, accounts receivable, other receivables, debt investments and long-term receivables, etc. Debt investments and long-term receivables that are due within one year (inclusive) as from the balance sheet date are included in the current portion of non-current assets; debt investments with maturities of no more than one year (inclusive) at acquisition are included in other current assets.

Measured at fair value through other comprehensive income:

The Group's business model for the financial asset management aims to receive contractual cash flows and hold the financial assets for sale. The contractual cash flow characteristics of such financial assets are consistent with basic loan arrangement. Such financial assets are measured at fair value through other comprehensive income, except for the impairment gains or losses, foreign exchange gains and losses, and interest income calculated using the effective interest method which are recognised in profit or loss for the current period. Such financial assets mainly comprise receivables financing and other debt investments, etc. Other debt investments that are due within one year (inclusive) as from the balance sheet date are included in the current portion of non-current assets; other debt investments with maturities no more than one year (inclusive) at acquisition are included in other current assets.

Measured at fair value through profit or loss:

Debt instruments held by the Group that are not divided into those at amortised cost, or those measured at fair value through other comprehensive income, are measured at fair value through profit or loss and included in financial assets held for trading. At initial recognition, the Group designates a portion of financial assets as at fair value through profit or loss to eliminate or significantly reduce accounting mismatches. Financial assets that are due over one year as from the balance sheet date and are expected to be held over one year are included in other non-current financial assets. Others are included in financial assets held for trading.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(9) Financial instruments (Cont'd)

(a) Financial assets (Cont'd)

(i) Classification and measurement (Cont'd)

Equity instruments

Investments in equity instruments, over which the Group exerts no control, joint control or significant influence, are measured at fair value through profit or loss under financial assets held for trading; investments in equity instruments expected to be held over one year as from the balance sheet date are included in other non-current financial assets.

In addition, at initial recognition, a portion of certain investments in equity instruments not held for trading are designated as financial assets at fair value through other comprehensive income under investments in other equity instruments. The relevant dividend income of such financial assets is recognised in profit or loss for the current period.

(ii) Impairment

Loss provision for financial assets at amortised cost, investments in debt instruments at fair value through other comprehensive income, as well as contract assets, finance lease receivables, financial guarantee contracts and loan commitments is recognised on the basis of ECL.

Giving consideration to reasonable and supportable information on past events, current conditions and forecasts of future economic conditions that is available without undue cost or effort at the balance sheet date, as well as the default risk weight, the Group recognises the ECL as the probability-weighted amount of the present value of the difference between the cash flows receivable from the contract and the cash flows expected to collect.

For notes receivable, accounts receivable, receivables financing and contract assets caused by sales of goods, rendering of services and other daily operating activities, no matter whether there exists a significant financing component, the Group measures the loss provision based on the lifetime ECL. For finance lease receivables, the Group measures the loss provision according to the lifetime ECL.

As at each balance sheet date, the ECL of financial instruments at different stages other than aforesaid notes receivable, accounts receivable, receivables financing, contract assets and finance lease receivables is measured respectively. 12-month ECL provision is recognised for financial instruments in Stage 1 that have not had a significant increase in credit risk since initial recognition; lifetime ECL provision is recognised for financial instruments in Stage 2 that have had a significant increase in credit risk yet without credit impairment since initial recognition; and lifetime ECL provision is recognised for financial instruments in Stage 3 that have had credit impairment since initial recognition.

For the financial instruments with lower credit risk at the balance sheet date, the Group assumes there is no significant increase in credit risk since initial recognition, determines them as the financial instruments in Stage 1 and recognises the 12-month ECL provision.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(9) Financial instruments (Cont'd)

(a) Financial assets (Cont'd)

(ii) Impairment (Cont'd)

For the financial instruments in Stage 1 and Stage 2, the interest income is calculated based on book balance without deduction of impairment provision and the effective interest rate. For the financial instrument in Stage 3, the interest income is calculated based on amortised cost by using book balance less impairment provision appropriated and the effective interest rate.

For trade acceptance notes receivable, accounts receivable and contract assets with significantly different credit risk characteristics and occurrence of credit impairment, the Group evaluated the distribution of expected cash flows under multiple scenarios based on historical credit loss experience, operating model, current situations and forecasts of future conditions of contract counterparties under different situations, taking into account the professional legal advice from external lawyers and the asset preservation related to the litigation, and made corresponding provision for ECL according to ECL rate and the related probability weight under different scenarios.

Receivables without occurrence of credit impairment or the ECL cannot be estimated for an individual financial asset at a reasonable cost, the Group groups the receivables based on its judgement whether there are significant differences in customers' credit risk characteristics and measures the ECL based on groups. Basis for determining groupings is as follows:

1. Notes receivable

Grouping 1	Bank acceptance notes
Grouping 2	Trade acceptance notes

2. Accounts receivable

Grouping 1	Account receivable aging by industry
Grouping 2	sovereign credit account receivable

3. Receivables financing

Grouping 1	Bank acceptance notes
Grouping 2	Accounts receivable ageing

4. Contract assets

Grouping	Contract assets
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5. Other receivables

Grouping 1	Deposits and guarantees
Grouping 2	Employee reserve fund
Grouping 3	Others

6. Loans and discounts

Grouping 1	Loans and advances
Grouping 2	Discount of notes

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(9) Financial instruments (Cont'd)

(a) Financial assets (Cont'd)

(ii) Impairment (Cont'd)

7. Long-term receivables

Grouping Finance lease receivables

8. Other debt investments

Grouping Other debt investments

9. Financial assets purchased under resale agreements

Grouping Financial assets purchased under resale agreements

For bank acceptance notes receivable and receivables financing arising from sales of goods and rendering of services in the ordinary course of operating activities which are classified into groups, the Group calculates the ECL by referring to historical experience of credit losses, combining with the current situation and forecast of economic situation in the future, and based on exposure at default and the lifetime ECL rate.

For the trade acceptance notes receivable, accounts receivable and contract assets in groups, the Group makes reference to the historical experience of credit losses, combining with the current situation and forecast of economic situation in the future, and prepares the model which refers to the days overdue and the rate of the ECL during lifetime in order to measure the ECL.

For other receivables, loans and discounts, long-term receivables, other debt investments and financial assets purchased under resale agreements in groups, the Group calculates the ECL by referring to historical experience of credit losses, combining with the current situation and forecast of economic situation in the future, and based on exposure at default and the 12-month or lifetime ECL rate.

The Group recognises the loss provision made or reversed into profit or loss for the current period. For debt instruments held at fair value through other comprehensive income, the Group adjusts other comprehensive income while the impairment loss or gain is recognised in profit or loss for the current period.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(9) Financial instruments (Cont'd)

(a) Financial assets (Cont'd)

(iii) Derecognition

A financial asset is derecognised when any of the below criteria is met: (1) the contractual rights to receive the cash flows from the financial asset expire; (2) the financial asset has been transferred and the Group transfers substantially all the risks and rewards of ownership of the financial asset to the transferee; (3) the financial asset has been transferred and the Group has not retained control of the financial asset, although the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset.

On derecognition of investments in other equity instruments, the difference between the carrying amount and the sum of the consideration received and the cumulative changes in fair value that had been recognised directly in other comprehensive income, is recognised in retained earnings. On derecognition of other financial assets, the difference between the carrying amount and the sum of the consideration received and the cumulative changes in fair value that had been recognised directly in other comprehensive income, is recognised in profit or loss for the current period.

(b) Financial liabilities

Financial liabilities are classified as financial liabilities at amortised cost and financial liabilities at fair value through profit or loss at initial recognition.

Financial liabilities of the Group mainly comprise financial liabilities at amortised cost, including notes payable, accounts payable, other payables, borrowings and bonds payable, etc. Such financial liabilities are recognised initially at fair value, net of transaction costs incurred, and subsequently measured using the effective interest method. Financial liabilities that are due within one year (inclusive) are classified as current liabilities; those with maturities over one year but are due within one year (inclusive) from the balance sheet date are classified as current portion of non-current liabilities. Others are classified as non-current liabilities.

A financial liability is derecognised or partly derecognised when the underlying present obligation is discharged or partly discharged. The difference between the carrying amount of the derecognised portion of the financial liability and the consideration paid is recognised in profit or loss for the current period.

(c) Determination of fair value of financial instruments

The fair value of a financial instrument that is traded in an active market is determined at the quoted price in the active market. The fair value of a financial instrument that is not traded in an active market is determined by using a valuation technique. In valuation, the Group adopts valuation techniques applicable in the current situation and supported by adequate available data and other information, selects inputs with the same characteristics as those of assets or liabilities considered in relevant transactions of assets or liabilities by market participants, and gives priority to the use of relevant observable inputs. When relevant observable inputs are not available or feasible, unobservable inputs are adopted.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(10) Inventories

(a) Classification

Inventories include raw materials, work in progress, goods in stock, materials in transit, self-produced semi-finished goods, repair accessories, low-value consumables and others, and are measured at the lower of cost and net realisable value.

(b) Valuation method for inventory issued

Cost is determined using the weighted average method or specific-unit-cost method. The cost of goods in stock, self-produced semi-finished goods and work in progress comprise raw materials, direct labour and systematically allocated production overhead based on the normal production capacity. Repair accessories and low-value consumables are expensed when issued.

(c) Basis for determining net realisable values of inventories and method for making provision for decline in the value of inventories

Provision for a decline in the value of inventories is determined as the excess amount of the carrying amount of the inventories over their net realisable value. Net realisable value is determined based on the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale and related taxes.

(d) The Group adopts the perpetual inventory system.

(11) Purchased under resale agreements transactions

Assets held under resale agreements with a certain resale date shall not be recognised in the balance sheet. For financial assets measured at amortised cost, the cost of acquisition is recognised in financial assets purchased under resale agreements on the balance sheet if the maturity is within one year (inclusive) at acquisition. The difference between the sale and repurchase prices is treated as an interest expense and is accrued over the life of the agreement using the effective interest method.

(12) Long-term equity investments

Long-term equity investments comprise the Company's long-term equity investments in its subsidiaries, and the Group's long-term equity investments in its joint ventures and associates.

Subsidiaries are the investees over which the Company is able to exercise control. A joint venture is a joint arrangement which is structured through a separate vehicle over which the Group has joint control together with other parties and only has rights to the net assets of the arrangement based on legal forms, contractual terms and other facts and circumstances. An associate is the investee over which the Group has significant influence by participating in the financial and operating policy decisions.

Investments in subsidiaries are presented in the Company's financial statements using the cost method, and are adjusted to the equity method when preparing the consolidated financial statements; investments in joint ventures and associates are accounted for using the equity method.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(12) Long-term equity investments (Cont'd)

(a) Determination of investment cost

For long-term equity investments acquired through a business combination involving enterprises under common control, the investment cost shall be the absorbing party's share of the carrying amount of owners' equity of the party being absorbed in the consolidated financial statements of the ultimate controlling party at the combination date; for long-term equity investments acquired through a business combination involving enterprises not under common control, the investment cost shall be the combination cost.

For long-term equity investments acquired not through a business combination: for long-term equity investments acquired by payment in cash, the initial investment cost shall be the purchase price actually paid; for long-term equity investments acquired by issuing equity securities, the initial investment cost shall be the fair value of the equity securities issued.

(b) Subsequent measurement and recognition of profit or loss

Long-term equity investments accounted for using the cost method are measured at initial investment cost. Cash dividend or profit distribution declared by the investees is recognised as investment income in profit or loss for the current period.

For long-term equity investments that are accounted for using the equity method, where the initial investment cost exceeds the Company's share of the fair value of the investee's identifiable net assets at the time of acquisition, the investment is initially measured at cost. Where the initial investment cost is less than the Company's share of the fair value of the investee's identifiable net assets at the time of acquisition, the difference is included in profit or loss for the current period and the cost of the long-term equity investment is adjusted upwards accordingly.

Under the equity method, the Group recognises the investment income according to its share of net profit or loss of the investee. The Group does not recognise further losses when the carrying amounts of the long-term equity investment together with any long-term interests that, in substance, form part of the Group's net investment in investees are reduced to zero. However, if the Group has obligations for additional losses and the criteria with respect to recognition of provisions are satisfied, the Group continues recognising the investment losses and the provisions at the amount it expects to undertake. The Group's share of changes in the investee's owners' equity other than those arising from the net profit or loss, other comprehensive income and profit distribution is recognised in capital surplus with a corresponding adjustment to the carrying amount of the long-term equity investment. The carrying amount of the investment is reduced by the Group's share of the profit distribution or cash dividends declared by the investee.

Unrealised gains or losses on transactions between the Group and its investees are eliminated to the extent of the Group's equity interest in the investees, based on which the investment income or losses are recognised in the Company's financial statements. In preparing the consolidated financial statements, for the portion of unrealised gains and losses attributable to the Group arising from downstream transactions in which the Group invests or sells assets to the investee, the Group offsets the portion attributable to the Group in relation to unrealised income and costs or profit or loss from disposal of assets and adjusts the investment income accordingly on the basis of the offsetting in the Company's financial statements; for the portion of unrealised gains and losses attributable to the Group arising from upstream transactions in which the investee invests or sells assets to the Group, the Group offsets the portion of the unrealised gains and losses included in the carrying amount of the relevant assets attributable to the Group and adjusts the carrying amount of long-term equity investments accordingly on the basis of the offsetting in the Company's financial statements. Any losses resulting from transactions between the Group and its investees, which are attributable to asset impairment losses are not eliminated.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(12) Long-term equity investments (Cont'd)

(c) Basis for determining existence of control, joint control or significant influence over investees

Control is the power to govern an investee, so as to obtain variable returns from its involvement with the investee, and has the ability to use its power over the investee to affect the amount of the investor's returns.

Joint control is the agreed sharing of control over an arrangement, and the decision of activities relating to such arrangement requires the unanimous consent of the Group and other parties sharing control.

Significant influence is the power to participate in making the decisions on financial and operating policies of the investee, but is not control or joint control over making those policies.

(d) Impairment of long-term equity investments

The carrying amounts of long-term equity investments in subsidiaries, joint ventures and associates are reduced to the recoverable amounts when the recoverable amounts are below their carrying amounts (Note 2(19)).

(13) Investment properties

Investment properties, including land use rights that have already been leased out, buildings that are held for the purpose of leasing and buildings that are being constructed or developed for future use for leasing, are measured initially at cost. Subsequent expenditures incurred in relation to an investment property are included in the cost of the investment property when it is probable that the associated economic benefits will flow to the Group and their costs can be reliably measured; otherwise, the expenditures are recognised in profit or loss for the period in which they are incurred.

The Group adopts the cost model for subsequent measurement of investment properties which will be appreciated or amortised using the straight-line method over the useful life.

When an investment property is transferred to owner-occupied properties, it is reclassified as fixed asset or intangible asset at the date of the transfer. When an owner-occupied property is transferred out for earning rentals or for capital appreciation, the fixed asset or intangible asset is reclassified as investment properties at the date of the transfer. When reclassified, the carrying amount before the reclassification shall be recorded as the cost after the reclassification.

The investment property's estimated useful life, estimated net residual value and depreciation (amortisation) method applied are reviewed and adjusted as appropriate at each year-end.

An investment property is derecognised on disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. The net amount of proceeds from sale, transfer, retirement or damage of an investment property after its carrying amount and related taxes and expenses is recognised in profit or loss for the current period.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(13) Investment properties (Cont'd)

The carrying amount of an investment property is reduced to the recoverable amount if the recoverable amount is below the carrying amount (Note 2(19)).

(14) Fixed assets

(a) Recognition and initial measurement of fixed assets

Fixed assets comprise buildings, machinery and equipment, motor vehicles, office equipment and other equipment.

Fixed assets are recognised when it is probable that the related economic benefits will flow to the Group and the costs can be reliably measured. Fixed assets purchased or constructed by the Group are initially measured at cost at the time of acquisition. The fixed assets contributed by the state-owned shareholders at the reorganisation of the Company into a corporation entity are recognised based on the evaluated amounts approved by the state-owned assets administration department.

Subsequent expenditures incurred for a fixed asset are included in the cost of the fixed asset when it is probable that the associated economic benefits will flow to the Group and the related cost can be reliably measured. The carrying amount of the replaced part is derecognised. All the other subsequent expenditures are recognised in profit or loss for the period in which they are incurred.

(b) Depreciation method for fixed assets

Fixed assets are depreciated using the straight-line method to allocate the cost of the assets to their estimated net residual values over their estimated useful lives. For the fixed assets that have been provided for impairment loss, the related depreciation charge is prospectively determined based upon the adjusted carrying amounts over their remaining useful lives.

The estimated useful lives, the estimated net residual values expressed as a percentage of cost and the annual depreciation rates of fixed assets are as follows:

	Estimated useful lives	Estimated net residual values	Annual depreciation rates
Buildings	10 to 50 years	0 to 10%	1.8% to 10%
Machinery and equipment	5 to 20 years	0 to 10%	4.5% to 20%
Motor vehicles	5 to 12 years	0 to 10%	7.5% to 20%
Office equipment and other equipment	3 to 10 years	0 to 10%	9% to 33.3%

The estimated useful life and the estimated net residual value of a fixed asset and the depreciation method applied to the asset are reviewed, and adjusted as appropriate at each year-end.

(c) The carrying amounts of fixed assets are reduced to the recoverable amounts when the recoverable amounts are below their carrying amounts (Note 2(19)).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(14) Fixed assets (Cont'd)

(d) Disposal of fixed assets

A fixed asset is derecognised on disposal or when no future economic benefits are expected from its use or disposal. The amount of proceeds from disposal on sale, transfer, retirement or damage of a fixed asset net of its carrying amount and related taxes and expenses is recognised in profit or loss for the current period.

(15) Construction in progress

Construction in progress is measured at actual cost as incurred. Actual cost comprises construction costs, installation costs, borrowing costs that are eligible for capitalisation and other costs necessary to bring the construction in progress ready for its intended use. Construction in progress is transferred to fixed assets when the assets are ready for their intended use, and depreciation is charged starting from the following month. The carrying amount of construction in progress is reduced to the recoverable amount when the recoverable amount is below its carrying amount (Note 2(19)).

(16) Borrowing costs

The borrowing costs of the Group that are directly attributable to acquisition and construction of a fixed asset that needs a substantially long period of time for its intended use commence to be capitalised and recorded as part of the cost of the asset when expenditures for the asset and borrowing costs have been incurred, and the activities relating to the acquisition and construction that are necessary to prepare the asset for its intended use have commenced. The capitalisation of borrowing costs ceases when the asset under acquisition or construction becomes ready for its intended use and the borrowing costs incurred thereafter are recognised in profit or loss for the current period. Capitalisation of borrowing costs is suspended during periods in which the acquisition or construction of an asset is interrupted abnormally and the interruption lasts for more than 3 months, until the acquisition or construction is resumed.

For the specific borrowings obtained for the acquisition or construction of a fixed asset qualifying for capitalisation, the amount of borrowing costs eligible for capitalisation is determined by deducting any interest income earned from depositing the unused specific borrowings in the banks or any investment income arising in the temporary investment of those borrowings during the capitalisation period.

For the general borrowings obtained for the acquisition or construction of a fixed asset qualifying for capitalisation, the amount of general borrowing costs eligible for capitalisation is determined by applying the weighted average effective interest rate of general borrowings, to the weighted average of the excess amount of cumulative expenditures on the asset over the amount of specific borrowings. The effective interest rate is the interest rate used when the future cash flows of the borrowings over the estimated remaining deposit period or a shorter applicable period are discounted into the initial recognised amount of the borrowings.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(17) Intangible assets

Intangible assets include land use rights, technology transfer fee, patent and license, franchise, computer software and others, and are measured at cost.

The land use rights acquired by the Group are generally accounted for as intangible assets. Relevant land use rights and buildings of the self-constructed plant are accounted for as the intangible assets and fixed assets. If the costs paid for the land use rights and the buildings located thereon cannot be reasonably allocated between the land use rights and the buildings, all of the costs are recognised as fixed assets.

The franchise is the right granted by the governments and relevant departments or PPP project implementation institutions authorised by the governments for the Group's involvement in the public-private partnership ("PPP") project contracts. The right may enable the Group to provide public products and services applying PPP project assets during the operation period of PPP project contracts and charge an uncertain amount from the users of the public products and services.

The Group recognises the excess of the construction income recognised for a PPP project over the determinable amount of cash or other financial assets that the Group is entitled to collect as intangible assets, which are amortised on a straight-line basis over the period from the completion date of PPP project to the franchise termination date.

The estimated useful lives of the intangible assets are as follows:

	Useful lives
Land use rights	30 to 50 years
Franchise	Operation period under the contract
Patent and license	5 to 40 years
Technology transfer fee	5 to 15 years
Computer software and others	3 to 5 years

For an intangible asset with a finite useful life, review of its useful life and amortisation method is performed at each year-end, with adjustment made as appropriate.

The expenditure on an internal research and development project is classified into expenditure on the research phase and expenditure on the development phase based on its nature and whether there is material uncertainty that the research and development activities can form an intangible asset at the end of the project.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(17) Intangible assets (Cont'd)

Expenditure on the planned investigation, evaluation and selection for the internal research and development projects is regarded as expenditure on the research phase, which is recognised in profit or loss in the period in which it is incurred. Expenditure on design and test for the final application of the research and development projects before mass production is expenditure on the development phase, which is capitalised only if all of the following conditions are satisfied:

- the development project has been fully justified by technical team;
- the budget for the project development has been approved by management;
- market research analysis proved the products produced by the development project has marketing capabilities;
- adequate technical and financial supports are available for development of the development project and subsequent mass production and the ability to use or sell the intangible asset; and expenditure on the development project can be reliably collected.

Other development expenditures that do not meet the conditions above are recognised in profit or loss in the period in which they are incurred. Development costs previously recognised as expenses are not recognised as an asset in a subsequent period. Capitalised expenditure on the development phase is presented as capitalised development expenditures in the balance sheet and transferred to intangible assets at the date when the asset is ready for its intended use.

The carrying amounts of intangible assets are reduced to the recoverable amounts when the recoverable amounts are below their carrying amounts (Note 2(19)).

(18) Long-term prepaid expenses

Long-term prepaid expenses include the expenditure for improvements to fixed assets held under operating leases, and other expenditures that have been incurred but should be recognised as expenses over more than one year in the current and subsequent periods. Long-term prepaid expenses are amortised on the straight-line basis over the expected beneficial period and are presented at actual expenditure net of accumulated amortisation.

The long-term prepaid expenses are amortised on the straight-line basis as follows:

	Amortisation period
Improvements to fixed assets held under leases	5 to 10 years
Renovation expenditures	2 to 8 years
Decoration expenditures	5 years
Power expansion expenditures	10 years
Others	2 to 5 years

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(19) Impairment of long-term asset

Fixed assets, construction in progress, right-of-use assets, intangible assets with finite useful lives, investment properties measured using the cost model and long-term equity investments in subsidiaries, joint ventures and associates are tested for impairment if there is any indication that the assets may be impaired at the balance sheet date; intangible assets not ready for their intended use are tested at least annually for impairment, irrespective of whether there is any indication that it may be impaired. If the result of the impairment test indicates that the recoverable amount of an asset is less than its carrying amount, a provision for impairment and an impairment loss are recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset. Provision for asset impairment is determined and recognised on the individual asset basis. If it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of a group of assets to which the asset belongs is determined. A group of assets is the smallest group of assets that is able to generate independent cash inflows.

Goodwill that is separately presented in the financial statements is tested at least annually for impairment, irrespective of whether there is any indication that it may be impaired. In conducting the test, the carrying amount of goodwill is allocated to the related asset group or groups of asset groups which are expected to benefit from the synergies of the business combination. If the result of the test indicates that the recoverable amount of an asset group or a group of asset groups, including the allocated goodwill, is lower than its carrying amount, the corresponding impairment loss is recognised. The impairment loss is first deducted from the carrying amount of goodwill that is allocated to the asset group or group of asset groups, and then deducted from the carrying amounts of other assets within the asset group or group of asset groups in proportion to the carrying amounts of assets other than goodwill.

Once the above asset impairment loss is recognised, it will not be reversed for the value recovered in any subsequent periods.

(20) Employee benefits

Employee benefits refer to all forms of consideration or compensation given by the Group in exchange for service rendered by employees or for termination of employment relationship, which include short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits.

(a) Short-term employee benefits

Short-term employee benefits include employee wages or salaries, bonus, allowances and subsidies, staff welfare, premiums or contributions on medical insurance, work injury insurance and maternity insurance, housing funds, labour union funds and employee education costs. The short-term employee benefits actually occurred are recognised as a liability in the accounting period in which the service is rendered by the employees, with a corresponding charge to the profit or loss for the current period or the cost of relevant assets. Non-monetary benefits are measured at fair value.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(20) Employee benefits (Cont'd)

(b) Post-employment benefits

The Group classifies post-employment benefit plans as either defined contribution plans or defined benefit plans. Defined contribution plans are post-employment benefit plans under which the Group pays fixed contributions into a separate fund and will have no obligation to pay further contributions; and defined benefit plans are post-employment benefit plans other than defined contribution plans. During the reporting period, the Group's post-employment benefits mainly include basic pensions and unemployment insurance, both of which belong to the defined contribution plans except for a defined beneficial pension plan operated by part of overseas companies.

Basic pensions

The Group's employees participate in the basic pension plan set up and administered by local authorities of Ministry of Human Resource and Social Security. Monthly payments of premiums on the basic pensions are calculated according to the bases and percentage prescribed by the relevant local authorities. When employees retire, the relevant local authorities are obliged to pay the basic pensions to them. The amounts based on the above calculations are recognised as liabilities in the accounting period in which the service has been rendered by the employees, with a corresponding charge to profit or loss for the current period or the cost of relevant assets.

Defined benefit plan

Some overseas companies of the Group have set up a defined beneficial pension plan. The present value of defined benefit plan obligation is calculated annually by an independent actuary using projected unit credit method, which is based on quality corporate bond interest rate, similar as the duration and currency of the employee benefits obligation. The net liability of present value of defined benefit plan obligation net of the fair value of plan assets is presented as long-term benefits payable in the balance sheet. Service costs related to the plan (including current service cost, past service costs and settled gains or losses) and net interest calculated based on defined benefit plan net liability and applicable discount rate are recognised as profit and loss for the current period or cost of relevant assets and changes in remeasurement of defined benefit plans liabilities as other comprehensive income.

(c) Termination benefits

The Group provides compensation for terminating the employment relationship with employees before the end of the employment contracts or as an offer to encourage employees to accept voluntary redundancy before the end of the employment contracts. The Group recognises a liability arising from compensation for termination of the employment relationship with employees, with a corresponding charge to profit or loss for the current period at the earlier of the following dates: 1) when the Group cannot unilaterally withdraw an employment termination plan or a curtailment proposal; 2) when the Group recognises costs or expenses for a restructuring that involves the payment of termination benefits.

The termination benefits expected to be settled within one year since the balance sheet date are classified as other current liabilities.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(21) Dividend distribution

Cash dividends are recognised as liabilities in the period in which the dividends are approved by the shareholders' meeting.

(22) Provisions

Provisions for product warranties, onerous contracts, litigation, etc. are recognised when the Group has a present obligation, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

A provision is initially measured at the best estimate of the expenditure required to settle the related present obligation. Factors surrounding a contingency, such as the risks, uncertainties and the time value of money, are taken into account as a whole in reaching the best estimate of a provision. Where the effect of the time value of money is material, the best estimate is determined by discounting the related future cash outflows. The increase in the discounted amount of the provision arising from passage of time is recognised as interest expenses.

The carrying amount of provisions is reviewed at each balance sheet date and adjusted to reflect the current best estimate.

The loss provision of financial guarantee contracts and provision for loan commitments based on the ECL are presented as provisions by the Group.

The provisions expected to be settled within one year since the balance sheet date are classified as other current liabilities.

(23) Revenue recognition

The Group recognises revenue at the amount of the consideration which the Group expects to be entitled to receive when the customer obtains control over relevant goods or services. If there is a variable consideration in the contract, the Group determines the best estimate of the variable consideration based on the expected value or the most likely amount, and the transaction price including the variable consideration does not exceed the cumulative recognized revenue when the relevant uncertainty is eliminated for which a material reversal would occur. On the balance sheet date, the Group re-estimates the variable consideration that should be included in the transaction price.

The specific accounting policies for revenue from main activities of the Group are as follows:

Revenue from sales of goods

Revenue is recognised when the Group has delivered the products to the location specified in the sales contract and the customer has confirmed the acceptance of the products. The credit period granted to customers by the Group is determined based on their credit risk characteristics, which is consistent with industry practice, and there is no significant financing component.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(23) Revenue recognition (Cont'd)

The specific accounting policies for revenue from main activities of the Group are as follows (Cont'd):

Revenue from rendering of services

The Group provides service to external parties. The related revenue is recognised based on the stage of completion within a certain period, which is determined based on proportion of costs incurred to date to the estimated total costs. On the balance sheet date, the Group re-estimates the stage of completion to reflect the actual status of contract fulfilment.

When the Group recognises revenue based on the stage of completion, the amount with unconditional collection right obtained by the Group is recognised as accounts receivable, and the rest is recognised as contract assets. Meanwhile, loss provision for accounts receivable and contract assets are recognised on the basis of ECL (Note 2(9)). If the contract price received or receivable exceeds the amount for the completed service, the excess portion will be recognised as contract liabilities. Contract assets and contract liabilities under the same contract are presented on a net basis.

Revenue from construction services

The Group provides construction services to external parties and the revenue is recognised according to the stage of performance. The stage of performance is determined by reference to the proportion of costs incurred to date to the estimated total cost or the proportion of completed certified value to total contract value of the relevant contracts. Except for the revenues of a portion of contracts that were recorded by reference to the proportion of completed certified value to total contract value as the basis to estimate the progress, the revenues for the majority of contracts of the Group were recognised by reference to the proportion of costs incurred to date to the estimated total costs of the relevant contracts. At the balance sheet date, the Group re-estimates the stage of completion to reflect the actual status of contract performance.

When the Group recognises revenue based on the stage of performance, the amount with unconditional collection right obtained by the Group is recognised as accounts receivable, and the rest is recognised as contract assets. Meanwhile, loss provision for accounts receivable and contract assets are recognised on the basis of ECL (Note 2(9)). If the contract price received or receivable exceeds the amount for the completed construction service, the excess portion will be recognised as contract liabilities. Contract assets and contract liabilities under the same contract are presented on a net basis.

Contract costs include contract performance costs and contract acquisition costs. Costs incurred for provision of construction services are recognised as contract performance costs, which is carried forward to the operating cost of main operations based on the stage of completion when recognising revenue. Incremental costs incurred by the Group for the acquisition of engineering service contract are recognised as the contract acquisition costs. For contract acquisition costs with the amortisation period within one year, the costs are included in the current profit or loss when incurred. For contract acquisition costs with the amortisation period beyond one year, the costs are included in the current profit or loss on the same basis as recognition of revenue from rendering of engineering service under relevant contract. If the carrying amount of the contract costs is higher than the remaining consideration expected to be obtained by rendering of the service net of the estimated cost to be incurred, the Group makes provision for impairment on the excess portion and recognises it as asset impairment losses, and considers whether to make provisions about onerous contracts (Note 2(22)). As at the balance sheet date, based on whether the amortisation period of the contract performance costs is more than one year when initially recognised, the amount of the Group's contract performance costs net of related provision for asset impairment is presented as inventories or other non-current assets. For contract acquisition costs with amortisation period beyond one year at the initial recognition, the amount net of related provision for asset impairment is presented as other non-current assets.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(23) Revenue recognition (Cont'd)

The specific accounting policies for revenue from main activities of the Group are as follows (Cont'd):

Revenue from PPP project contracts

The Group provides PPP project asset construction, operation and maintenance thereafter, and other services as agreed in the PPP project contracts. When providing PPP project asset construction services or subcontracting these services to other parties, the Group judges whether it is acting as a principal or an agent based on if it has the control over relevant goods or services before being transferred to customers, and recognises revenue and contract assets during the construction period.

During the operation period, the Group is entitled to charge fees from those who obtain public products and services but there is an uncertainty to the charge amount. When the PPP project assets are ready for their intended use, the confirmed construction income shall be recognised as intangible assets, and the contract assets recognised during the relevant construction period shall also be included in intangible assets. During the operation period, where the Group is eligible to collect a determinable amount of cash or other financial assets, the consideration shall be recognised as receivables when the Group has the right to collect (only depending on the passage of time), and the contract assets recognised during the construction period shall be presented as contract assets or other non-current assets according to whether they are expected to be realised within one year as from the balance sheet date.

(24) Government grants

Government grants refer to the monetary or non-monetary assets obtained by the Group from the government, including tax return, financial subsidy, etc.

Government grants are recognised when the grants can be received and the Group can comply with all attached conditions. If a government grant is a monetary asset, it will be measured at the amount received or receivable. If a government grant is a non-monetary asset, it will be measured at its fair value. If it is unable to obtain its fair value reliably, it will be measured at its nominal amount.

Government grants related to assets refer to government grants which are obtained by the Company for the purposes of purchase, construction or acquisition of the long-term assets. Government grants related to income refer to the government grants other than those related to assets.

Government grants related to assets are recorded as deferred income and recognised in profit or loss on a reasonable and systemic basis over the useful lives of the assets.

Monetary government grants which are used to compensate the relevant costs or losses in the subsequent period are recognized as deferred revenue and recorded into the current profit and loss during the period when the relevant costs or losses are recognized. If it is used to compensate the incurred costs or losses, it will be directly recorded into the current profit and loss.

The Group applies the presentation method consistently to the similar government grants in the financial statements.

Government grants that are related to ordinary activities are included in operating profit, otherwise, they are recorded in non-operating income and expenses.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(25) Deferred tax assets and deferred tax liabilities

Deferred tax assets and liabilities are calculated and recognised based on the differences arising between the tax bases of assets and liabilities and their carrying amounts (temporary differences). Deferred tax asset is recognised for the deductible losses that can be carried forward to subsequent years for deduction of the taxable profit in accordance with the tax laws. No deferred tax liability is recognised for a temporary difference arising from the initial recognition of goodwill. No deferred tax asset or deferred tax liability is recognised for the temporary differences resulting from the initial recognition of assets or liabilities due to a transaction other than a business combination, which affects neither accounting profit nor taxable profit (or deductible loss). At the balance sheet date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled.

Deferred tax assets are only recognised for deductible temporary differences, deductible losses and tax credits to the extent that it is probable that taxable profit will be available in the future against which the deductible temporary differences, deductible losses and tax credits can be utilised.

Deferred tax liabilities are recognised for temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the Group is able to control the timing of reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. When it is probable that the temporary differences arising from investments in subsidiaries, associates and joint ventures will be reversed in the foreseeable future and that the taxable profit will be available in the future against which the temporary differences can be utilised, the corresponding deferred tax assets are recognised.

Deferred tax assets and liabilities are offset when:

- the deferred tax assets and liabilities are related to the same tax payer within the Group and the same taxation authority; and,
- that tax payer within the Group has a legally enforceable right to offset current tax assets against current tax liabilities.

(26) Share-based payments

The stock option plan and the restricted share incentive scheme implemented by the Group are both treated as equity-settled share-based payments.

The equity-settled share-based payments in exchange for employee services are measured at the fair value of the equity instruments granted to the employees at the granting date. The equity-settled share-based payments are exercisable after the services vesting period are completed or the performance requirements are met. At each balance sheet date within the vesting period, the Group makes the best estimate of the number of vested equity instruments according to the latest information such as changes in the number of employees with exercisable rights and whether they meet the performance requirements, etc. The services obtained in the current period shall, based on the best estimate, be included in the profit or loss for the current period at the fair value of the equity instruments at the granting date.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(26) Share-based payments (Cont'd)

Where the share-based payments cannot be exercised finally, its costs or expenses are not recognised unless the vesting conditions are market conditions or non-vesting conditions. In this regard, whether the market conditions or non-vesting conditions are satisfied or not, the payments are deemed to be exercisable only when the non-market conditions among all of the exercisable conditions are satisfied.

When the Group modifies the terms of a share-based payment scheme, if the modification increases the fair value of the equity instruments granted, the Group recognises the service additions based on the difference between the fair value of the equity instruments before and after the modification as of the date of modification. If the Group modifies vesting conditions in a favourable manner to the employees, the Group shall account for in accordance with modified vesting conditions. If the Group modifies vesting conditions in an unfavourable manner to employees, the Group shall not consider such modifications when accounting for, unless the Group cancels all or part of equity instruments granted. If the Group cancels a granted equity instrument, it is treated as an accelerated exercise on the date of cancellation, and the amount that would have been recognised over the remaining vesting period is immediately recognised in profit or loss for the current period, together with capital surplus.

If the Group needs to repurchase restricted shares that have lapsed or become null and void without being unlocked, the Group recognises liabilities and treasury stocks based on the number of restricted shares and at the pre-agreed repurchase price.

(27) Leases

Lease refers to a contract in which the lessor transfers the use right of the assets to the lessee in a certain period of time to obtain the consideration.

The Group as the lessee

At the commencement date, the Group shall recognise the right-of-use asset and measure the lease liabilities at the present value of the lease payments that are not paid at that date. Lease payments include fixed payments, the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and payments of penalties for terminating the lease if the lessee exercises an option to terminate the lease. Variable lease payments in proportion to sales are excluded from lease payments and recognised in profit or loss as incurred. Lease liabilities that are due within one year (inclusive) from the balance sheet date are included in the current portion of non-current liabilities.

Right-of-use assets of the Group comprise buildings, machinery and equipment, motor vehicles, computers and electronic equipment that are held under leases. Right-of-use assets are measured initially at cost which comprises the amount of the initial measurement of lease liabilities, any lease payments made at or before the commencement date and any initial direct costs, less any lease incentives received. If there is reasonable certainty that the Group will obtain ownership of the underlying asset by the end of the lease term, the asset is depreciated over its remaining useful life; otherwise, the asset is depreciated over the shorter of the lease term and its remaining useful life. The carrying amount of the right-of-use asset is reduced to the recoverable amount when the recoverable amount is below the carrying amount.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(27) Leases (Cont'd)

The Group as the lessee (Cont'd)

For short-term leases with a term of 12 months or less and leases of an individual asset (when new) of low value, the Group chooses to include the lease payments in the cost of the underlying assets or in the profit or loss for the current period on a straight-line basis over the lease term, instead of recognising right-of-use assets and lease liabilities.

The Group as the lessor

Lease that transfers substantially almost all the risks and rewards incidental to ownership of a lease asset is a finance lease. An operating lease is a lease other than a finance lease.

(a) Operating leases

Where the Group leases out self-owned buildings, machinery and equipment, and motor vehicles under operating leases, rental income therefrom is recognised on a straight-line basis over the lease term. Variable rental that is linked to a certain percentage of sales is recognised in rental income as incurred.

(b) Finance leases

At the lease commencement date, the Group recognises the lease payments receivable under a finance lease and derecognises the relevant assets. When the finance lease receivables are initially measured, the net lease investment is recorded as the carrying amount of the finance lease receivables. The net lease investment represents the sum of the unguaranteed residual value and the present value of the lease payments receivable that have not been received at the lease commencement date discounted at the interest rate implicit in the lease. The finance lease receivables are presented as long-term receivables; finance lease receivables due within one year (inclusive) as from the balance sheet date are included in the current portion of non-current assets.

(c) Sale-leaseback

The Group assesses whether the transfer of assets in the sale-leaseback transactions qualifies as a sale in accordance with Note 2(23).

When the transfer of assets in the sale-leaseback transactions qualifies as a sale, the Group, as the lessor, accounts for the asset acquisition and the asset lease in accordance with the above provisions. When the transfer of assets in the sale-leaseback transactions does not qualify as a sale, the Group, as the lessor, does not recognise the transferred assets. Instead, it recognises a financial asset with the equivalent amount of the transferred income, which is recognised as a receivable from the sale-leaseback transaction. The sale-leaseback receivable is presented as long-term receivables. The sale-leaseback receivable due within one year (inclusive) as from the balance sheet date is presented as current portion of non-current assets.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(28) Derivative financial instruments and hedging instruments

The Group uses derivative financial instruments held or issued to hedge its exposure on foreign exchange and interest rate risks. Derivative financial instruments are initially recognised at fair value on the date a derivative contract is entered into and are subsequently measured at their fair value. The derivative financial instrument is carried as assets when the fair value is positive and as liabilities when the fair value is negative.

The method for recognising changes in fair value of the derivative financial instrument depends on whether the derivative financial instrument is designated as a hedging instrument and meets the requirement for it, and if so, the nature of the item being hedged. For those not designated as or not qualified as the hedging instrument, including the derivative financial instruments aimed at providing hedge for specific interest and exchange rate risk but not satisfying the hedging accounting requirements, the changes in fair value are recognised in “gains on changes in fair value” in the income statement.

At the inception of the hedge, the Group documents the hedging relations between hedging instrument and hedged item, as well as risk management objectives and hedging strategies. The Group also documents its assessment, both at hedge inception and in subsequent periods, of whether the derivative financial instruments that are used in hedging businesses are highly effective in offsetting changes in fair values or cash flows of hedged items.

(a) Fair value hedges

A fair value hedge refers to a hedge of the exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, or to changes in the identifiable portion of the asset or liability of an unrecognised firm commitment. Such changes in value are attributable to a particular risk and could affect profit or loss.

For a hedging instrument satisfying the requirements for fair value hedge, the changes in its fair value together with the changes in fair value arising from exposures to the hedged item are recognised in the income statements for the current period, and their net impacts are recorded in the income statement for the current period as the ineffective portion of the hedge.

If a hedging relation no longer satisfies the requirements of hedge accounting, the adjustment to the carrying amount of a hedged item measured at amortised cost is amortised by using the effective interest method during the period from the termination date to the maturity date and included in the income statement for the current period. When a hedged item is derecognised, the unamortised adjustment to its carrying amount is directly included in the income statement for the current period.

(b) Cash flow hedge

A cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction, and ultimately could affect profit or loss.

The effective portion of changes in fair value of derivatives that are designated and qualified as cash flow hedge is recognised in other comprehensive incomes. The ineffective portion of the hedge is recognised in the income statement for the current period.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(28) Derivative financial instruments and hedging instruments (Cont'd)

(b) Cash flow hedge (Cont'd)

Accumulated gains or losses previously recognised in other comprehensive income are transferred to the income statement in the same period when the hedged item affects the income statement.

If the hedging instrument expires or is sold, or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, the accumulated gains or losses previously recognised in other comprehensive income remain in other comprehensive income until the forecast transaction occurs and then it will be reclassified to the income statement of the current period.

If the forecast transaction is not estimated to occur, the accumulated gains or losses previously recognised in other comprehensive income should be transferred to the income statement for the current period.

(c) Hedge of net investments in a foreign operation

Hedge of net investments in foreign operations is accounted for in the same method of cash flow hedges.

For hedging instruments that are designated as hedging instruments and qualified as a hedge of net investments in a foreign operation, the effective portion is included in other comprehensive income; while the ineffective portion is included in the income statement for the current period.

Gains and losses accumulated in other comprehensive income are included in the profit or loss for the current period when the foreign operation is all or partially disposed of.

(29) Held for sale and discontinued operations

A non-current asset or a disposal group is classified as held for sale when all of the following conditions are satisfied: (1) the non-current asset or the disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such non-current asset or disposal group; (2) the Group has entered a legally enforceable sales agreement with other party and obtained relevant approval, and the sales transaction is expected to be completed within one year.

Non-current assets (except for financial assets, investment properties measured at fair value and deferred tax assets) that meet the recognition criteria for held for sale are recognised at the amount equal to the lower of the fair value less costs to sell and the carrying amount, and the excess of the original carrying amount over the fair value less costs to sell is recognised as asset impairment loss.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(29) Held for sale and discontinued operations (Cont'd)

Such non-current assets and assets and liabilities included in disposal groups classified as held for sale are classified as current assets and current liabilities respectively, and are separately presented in the balance sheet.

A discontinued operation is a component of the Group that either has been disposed of or is classified as held for sale, and is separately identifiable and satisfies one of the following conditions: (1) it represents a separate major line of business or geographical area of operations; (2) it is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations; and (3) it is a subsidiary acquired exclusively with a view to resale.

The net profit from discontinued operations in the income statement includes operating profit or loss and disposal gains or losses of discontinued operations.

(30) Segment information

The Group identifies operating segments based on the internal organisation structure, management requirements and internal reporting system, and discloses segment information of reportable segments which is determined on the basis of operating segments.

An operating segment is a component of the Group that satisfies all of the following conditions: (1) the component is able to earn revenue and incur expenses from its ordinary activities; (2) whose operating results are regularly reviewed by the Group's management to make decisions about resources to be allocated to the segment and to assess its performance, and (3) for which the information on financial position, operating results and cash flows is available to the Group. Two or more operating segments that have similar economic characteristics and satisfy certain conditions can be aggregated into one single operating segment.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(31) Debt restructuring

Debt restructuring refers to a transaction in which the time, amount or method for repayment of debts is agreed between the creditor and the debtor or ruled by the court without changing the counterparty.

The Group as the creditor

For debt restructuring in which the debtor converts its debts to the Group into equity instruments and the Group accounts them for as financial assets after acquiring such equity investments, the financial assets obtained by the Group are initially measured at fair value. The difference between the initially recognised amounts of financial assets and the carrying amount on the date when the Group's debts are derecognised shall be included in profit or loss for the current period.

For debt restructuring in which the debtor offsets its debts to the Group against its inventories and other non-financial assets, the Group determines the initial cost of non-financial assets obtained at the fair value of waived debts and based on other relevant costs including taxes directly attributable to the assets that incurred before bringing the assets to current position and condition, or to be ready for their intended use. The difference between the fair value and carrying amount of debts waived by the Group is included in profit or loss for the current period.

(32) Critical accounting estimates and judgements

The Group continually evaluates the critical accounting estimates and key judgements applied based on historical experience and other factors, including expectations of future events that are believed to be reasonable.

(a) Critical judgements in applying the accounting policies

The critical accounting estimates and key assumptions that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next accounting year are outlined below:

Consolidation scope

Shanghai Mechanical & Electrical Industry Co., Ltd. ("SMEI") is an A-share listed company listing on SSE. The Group is the single largest shareholder of SMEI with 48.81% of shares. The remaining shares in SMEI are widely held by many other shareholders, none of whose shares exceed 5% (since the date when SMEI is consolidated by the Group). Meanwhile, since the date of consolidation, there has been no history of other shareholders exercise their votes collectively or to outvote the Group. Therefore, although the Group holds less than half of the voting rights in SMEI, the Group has substantial control over SMEI and includes it in the consolidation scope.

The Group holds 50% of the equity of Shanghai Electric Transmission and Distribution Group Co., Ltd. and 1% of its potential share warrant and can dominate the control of its significant financial and operating policy decisions. Therefore, the Group has substantial control over it and includes it in the consolidation scope as a subsidiary.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(a) Critical judgements in applying the accounting policies (Cont'd)

Consolidation scope (Cont'd)

The Group holds 28.39% of the shares of Shenzhen Yinghe Technology Co., Ltd. (“Yinghe Technology”), a company listed on the Shenzhen Stock Exchange, being the largest shareholder of the company. Wang Weidong, the second largest shareholder of Yinghe Technology, and Xu Xiaojun, the fifth largest shareholder of Yinghe Technology, relinquished their voting rights of a total of 19.01% of Yinghe Technology's shares. Therefore, the Group holds 35.06% of the voting rights of Yinghe Technology. In addition to the above shareholders, the remaining shares are widely held by many other shareholders. Therefore, although the Group holds less than half of the voting rights in Yinghe Technology, the Group has substantial control over Yinghe Technology and includes it in the consolidation scope.

Measurement of ECL

The Group calculates ECL through default risk exposure and ECL rate, and determines the ECL rate based on default probability and default loss rate. In determining the ECL rate, the Group uses data such as internal historical credit loss experience, etc., and adjusts historical data based on current conditions and forward-looking information.

When considering forward-looking information, the Group takes different macroeconomic scenarios into consideration. In 2022, the economic scenario weights of “benchmark”, “unfavourable” and “favourable” accounted for 60%, 30% and 10% (2021: 60%, 30% and 10%) respectively. The Group regularly monitors and reviews important macroeconomic assumptions and parameters for calculating ECL, including the risk of economic downturn, external market environment, technological environment, changes in customer profile, gross domestic product, production price index, industrial added value, broad money supply, completed investments in fixed-assets, etc. In 2022, the Group has considered the uncertainties under different macroeconomic scenarios and updated the relevant assumptions and parameters accordingly. The key macroeconomic parameters applied in various scenarios were mainly as follows:

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(a) Critical judgements in applying the accounting policies (Cont'd)

Measurement of ECL (Cont'd)

	Economic scenarios		
	Benchmark	Unfavourable	Favourable
Gross domestic product	5.10%	4.40%	6.70%
Production price index	-0.06%	-1.80%	2.40%
Industrial added value	5.47%	4.10%	7.00%
Broad money supply	9.57%	8.10%	10.30%
Completed investments in fixed assets	5.87%	3.40%	8.80%

In 2021, the key macroeconomic parameters applied by the Group in various scenarios were as follows:

	Economic scenarios		
	Benchmark	Unfavourable	Favourable
Gross domestic product	5.30%	4.60%	5.90%
Production price index	3.02%	0.50%	4.00%
Industrial added value	4.93%	3.50%	6.00%
Broad money supply	8.43%	7.40%	9.20%
Completed investments in fixed assets	5.67%	4.50%	7.80%

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(a) Critical judgements in applying the accounting policies (Cont'd)

Classification of financial assets

Significant judgements made by the Group in the classification of financial assets include business model and analysis on contractual cash flow characteristics.

The Group determines the business model for financial asset management on the grouping basis, and factors to be considered include the methods for evaluating financial asset performance and reporting the financial asset performance to key management personnel, the risks affecting financial asset performance and corresponding management methods, the ways in which related business management personnel are remunerated, etc.

When assessing whether contractual cash flow characteristics of financial assets are consistent with basic loan arrangement, key judgements made by the Group include: the possibility of changes in time schedule or amount of the principal during the lifetime due to reasons such as repayment in advance; whether interest only include time value of money, credit risks, other basic lending risks and considerations for costs and profits. For example, whether the amount of prepayment only reflects the principal outstanding and the interest based on the principal outstanding, as well as the reasonable compensation due to the early termination of the contract.

Determination of significant increase in credit risk and credit-impaired

When the Group classifies financial instruments into different stages, its determination for significant increase in credit risk and credit-impaired is as follows:

Judgement of the Group for significant increase in credit risk is mainly based on whether one or more of the following indicators changed significantly: business environment of the debtor, internal and external credit rating, significant changes in actual or expected operating results, significant decrease in value of collateral or credit rate of guarantor which affects the probability of default, etc.

Judgement of the Group on the occurred credit impairment is mainly based on whether it meets one or more of the following conditions: the debtor is suffering significant financial difficulties, engaged in other debt restructuring, or probably bankrupt, etc.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(b) Critical accounting estimates and key assumptions

The key assumptions concerning the future and key factors of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next accounting periods, are detailed below.

Revenue recognition of construction services

The Group recognises the revenue for a contract over a period using the percentage of completion method when the results of construction service can be estimated reliably. The performance of the contract is determined in accordance with the method stated in Note 2(23) and is accumulated during the accounting years of construction services.

Significant estimation and judgement are required in determining the percentage of completion, the contract performance costs incurred, the output of engineering completed, the estimated total contract revenue and contract cost and the recoverability of the contract costs. Management mainly makes judgement based on past experience. Changes in the estimations of total contract revenue and costs and the outcome of contract performance may have significant impact on the revenue, cost of sales and the profit or loss for the current or subsequent periods.

Impairment of inventories to net realisable value

Impairment of inventories to net realisable value is based on the assessment of the possibility to sell in the future and the net realisable value of inventories. Identification of impairment of inventories requires judgements and estimates from management on the basis of obtaining conclusive evidence and considering the purpose for holding inventories and impact of events after the balance sheet date. Difference between the actual results and original estimates will have an impact on the carrying amount of inventories and accrual or reversal of provision for decline in the value of inventories for the period in which the estimates are changed.

Recognition of provisions

The Group estimates and makes provision for product warranties, estimated onerous contracts, penalty for delayed delivery, litigation compensation, financial guarantee contracts, etc. based on contract terms, available information and past experience. When such contingency forms a present obligation and it is probable that an outflow of economic benefits may incur if the obligation is fulfilled, the obligation is measured at best estimate.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(b) Critical accounting estimates and key assumptions (Cont'd)

Enterprise income tax

The Group is subject to income taxes in numerous jurisdictions. There are many transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgement is required from the Group in determining the provision for income taxes in each of these jurisdictions. Where the final tax outcomes of these matters are different from the amounts that were initially recorded, such differences will impact the income tax and deferred income tax provisions in the period in which such determination is made.

Deferred tax assets

At the balance sheet date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to be applied to the period when the asset is realised or the liability is settled. When it is possible that taxable profit will be available to offset deductible losses, deferred tax assets are recognised with all unutilised deductible losses. It requires management to exercise significant judgement to estimate the time and amount of future taxable profit, in combination of tax planning strategy, so as to determine the amount of deferred tax assets.

As stated in Note 3(2), some subsidiaries of the Group are high-tech enterprises. The “High-Tech Enterprise Certificate” is effective for three years. Upon expiration, application for high-tech enterprise should be submitted again to the relevant government authorities. Based on the past experience of reassessment for high-tech enterprise upon expiration and the actual condition of the subsidiaries, management considers that the subsidiaries are able to obtain the qualification for high-tech enterprises in future years, and therefore a preferential tax rate of 15% is used to calculate the corresponding deferred income tax. If some subsidiaries cannot obtain the qualification for high-tech enterprise upon expiration, then the subsidiaries are subject to a statutory tax rate of 25% for the calculation of the deferred income tax, which increases the recognised net deferred tax assets and decreases the deferred tax expenses.

Estimated useful lives of fixed assets

Estimated useful lives of fixed assets are reviewed by the Group at least at each year-end. Estimated useful lives of the assets are determined by management based on past experience of similar assets and the expected technical renovation. If significant changes occur on the previous estimates, adjustment on depreciation expenses is carried out in the future period.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(b) Critical accounting estimates and key assumptions (Cont'd)

Impairment of non-current assets other than financial assets (except for goodwill)

The Group judges whether there exists impairment of non-current assets other than financial assets as at balance sheet date. Intangible assets with indefinite useful lives are tested for impairment annually. Non-current assets other than financial assets are subject to impairment tests when there is indication of impairment. An asset or asset group is impaired if the carrying amount exceeds their recoverable amounts, which is the higher of an asset's fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset. The fair value less costs to sell could be determined with reference to sales agreement price or observable market price of similar products in arm's length transaction less directly attributable incremental costs in assets disposal. Management should estimate the expected future cash flows of an asset or asset group, and determine an appropriate discount rate for the calculation of the present value of future cash flows.

Impairment of goodwill

The Group tests annually whether goodwill has suffered any impairment. The recoverable amount of asset groups or groupings of asset groups is the present value of the future cash flows expected to be derived from them. These calculations require use of estimates.

If management revises the gross margin, the growth rate in the forecast period and the growth rate in the stable period that are used in the calculation of the future cash flows of asset groups and groups of asset groups, while the revised rates are lower/higher than those currently used, the Group will need to recognise further impairment against the increase/decrease of goodwill for its subsidiary described in Note 4(26).

If management revises the pre-tax discount rate applied to the discounted cash flows to the reasonable and possible extent, and the revised pre-tax discount rate is higher/lower than the one currently applied, the Group will need to recognise further impairment against the increase/decrease of goodwill for its subsidiary.

If the actual gross margin/pre-tax discount rate is higher/lower than management's estimates, the impairment loss of goodwill previously provided for is not allowed to be reversed by the Group.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONT'D)

(32) Critical accounting estimates and judgements (Cont'd)

(b) Critical accounting estimates and key assumptions (Cont'd)

Evaluation of fair value

The fair value of a financial instrument that is not traded in an active market is determined by using a valuation technique. Valuation techniques include using prices of recent market transactions between knowledgeable and willing parties, reference to the current fair value of another financial asset that is substantially the same with this instrument, and discounted cash flow analysis, etc. When a valuation technique is used to determine the fair value of a financial instrument, management uses observable market inputs as opposed to entity-specific inputs to the maximum extent possible. The setting of the input involves certain judgements. If there is any discrepancy between the inputs and the actual results, material adjustments will be made to the fair value of the financial instruments.

(33) Significant changes in accounting policies

The Ministry of Finance released the Notice on Strictly Implementing the Accounting Standards for Business Enterprises and Effectively Completing the 2022 Annual Report (Cai Kuai [2022] No. 32) in 2022, and released the Q&A on Implementation of the Standard for Long-term Equity Investments in 2023. The above Q&A further standardises the specific offset line items for the unrealised gains and losses arising from transactions between investors and joint ventures or associates in the consolidated financial statements. In addition, the above notice specifies that if an enterprise adjusts its accounting treatment in accordance with the Q&A on implementation of the Accounting Standards for Business Enterprises issued by the Ministry of Finance, the comparatives in the financial statements should be adjusted and the related information should be disclosed. The Group and the Company have prepared the financial statements for the year ended 31 December 2022 by using the above notice and Q&A. The comparative financial statements for the year ended 31 December 2021 have been restated accordingly, with the specific impact as follows:

(a) Downstream transactions under which the Group sells assets to associates

The nature and the reasons of the changes in accounting policies	The line items affected	The amounts affected For the year ended 31 December 2021
		The Group
For the Situation that the Group provides construction engineering services and sells wind turbine products to affiliated enterprises. When preparing the consolidated financial statements, the Group offset the revenue, cost of sales and selling expenses with the shareholding portion attributable to the Group in relation to unrealised profits and losses arising from the above downstream transactions on the basis of offsetting against the Company's financial statements, and adjusted the investment income accordingly.	Revenue	(1,126,602)
	Cost of sales	909,933
	Selling expenses	28,454
	Investment income	188,215

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

3 TAXATION

(1) The main categories and rates of taxes applicable to the Group are set out below:

Category	Taxation base	Tax rate
Enterprise income tax	Taxable income	15%、20%、25%
Value-added tax (“VAT”)	Taxable value-added amount (Tax payable is calculated using the taxable sale amount multiplied by the applicable tax rate less deductible input VAT of the current period)	13%、9%、6%、5% or 3%
City maintenance and construction tax	The payment amount of VAT	1%、5%、7%

(2) Tax preference

(a) The Group's first-tier subsidiaries listed below were awarded the “High-tech Enterprise Certificate” with a valid period of three years by the Science and Technology Commission of Shanghai Municipality, the Shanghai Municipal Finance Bureau, the State Taxation Administration Shanghai Municipal Office and the Shanghai Municipal Bureau of Local Taxation, and are subject to enterprise income tax at the rate of 15% for the current year.

Name of the first-tier subsidiaries	Applicable period for high-tech enterprises preferential tax rate of 15%	
	Starting year	Ending year
Shanghai Electric Power Environmental Engineering Co., Ltd.	2022	2024
Thales SEC Transportation System Limited Company	2022	2024
Shanghai Electric Distributed Energy Technology Co., Ltd.	2022	2024
Shanghai Electric Guoxuan New Energy Technology Co., Ltd.	2022	2024
Shanghai Turbine Works Co., Ltd.	2022	2024
Zhangjiagang Twentsche Cable Co., Ltd.	2022	2024
Shanghai Electric Nuclear Power Equipment Co., Ltd.	2021	2023
Shanghai Electric SHMP Casting & Forging Co., Ltd.	2021	2023
Shanghai Electric - SPX Engineering & Technologies Co., Ltd.	2021	2023
Shanghai Denso Fuel Injection Co., Ltd.	2021	2023
Shanghai Electric Fuji Electric Power Technology Co., Ltd.	2021	2023
Shanghai Electric SHMP Pulverising & Special Equipment Co., Ltd.	2021	2023
Shanghai KSB Pump Co., Ltd.	2021	2023
Shenzhen Yinghe Technology Co., Ltd.	2021	2023
Shanghai Power Station Auxiliary Machinery Factory Co., Ltd.	2021	2023
Qingdao Huachen Weiye Electric Power Technology Engineering Co., Ltd.	2020	2022
Shanghai Electrical Automation Design and Research Institute C, Ltd.	2020	2022
Shanghai Electric Group Shanghai Electric Machinery Co., Ltd.	2020	2022
Shanghai Boiler Works Co., Ltd.	2020	2022
Shanghai Electric Power Generation Equipment Co., Ltd.	2020	2022
Shanghai Electric Gas Turbine Co., Ltd.	2020	2022
Shanghai No.1 Machine Tool Works Co., Ltd.	2020	2022
Shanghai Electric Wind Power Group Co., Ltd.	2020	2022
Shanghai Machine Tool Works Co., Ltd.	2020	2022
Shanghai Centrifuge Institute Co., Ltd.	2020	2022
Shanghai Electric Group Digital Technologies Co., Ltd.	2020	2022
Shanghai Tanzhen Laser Technology Co., Ltd.	2020	2022

3 TAXATION (CONT'D)

(2) Tax preference(Cont'd)

(b) According to the relevant regulations of the Announcement on Strengthening the Pre-Tax Deduction for Scientific and Technological Innovation issued by the Ministry of Finance, the State Administration of Taxation and the Ministry of Science and Technology (Announcement of Ministry of Finance, Taxation Administration, Ministry of Science and Technology No.28 [2022]), During the period from October 1, 2022 to December 31, 2022, new equipment purchased by some subsidiaries can be deducted in the calculation of taxable income in a lump sum in 2022, and 100% additional deduction before tax is allowed.

(3) Other remarks

The Group's first-tier subsidiaries registered overseas are subject to the tax rates prevailing in the countries in which they operate in compliance with the existing laws and regulations, interpretations and practices:

	Income tax rate
Sida Machine Tool Manufacturing Co., Ltd.	32.00%
Shanghai Electric (India) Limited Company	25.00%
Shanghai Electric (Vietnam) Limited Company	20.00%
Shanghai Electric Power Generation (Malaysia) Co., Ltd.	24.00%
Shanghai Electric Panama Co., Ltd.	25.00%
Shanghai Electric Group Europa Co., Ltd.	15.00%
Shanghai Electric Hong Kong Co., Ltd.	16.50%
Shanghai Electric Newage Company Limited	16.50%

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(1) Cash at bank and on hand

	31 December 2022	31 December 2021
Cash on hand	3,484	8,555
Cash at bank	22,821,311	21,507,321
Other cash balances	3,519,705	3,843,305
Including: Total overseas deposits	3,249,514	3,146,867
	<u>26,344,500</u>	<u>25,359,181</u>

As at 31 December 2022, other cash balances represented restricted cash at bank and on hand of RMB3,443,275 thousand (31 December 2021: RMB3,752,602 thousand), mainly including bank deposits in pledge of RMB 837,304 thousand yuan used as the guarantee for issuing unconditional and irrevocable letter of guarantee, letter of credit or banker's acceptance bill to the bank. Bank deposits of RMB 2,516,571 thousand (December 31, 2021: RMB 2,350,640 thousand) are Central Bank reserves of Shanghai Electric Group Finance Co., LTD. (the "Finance Company"), the subsidiary of the Group.

(2) Placements with banks and other financial institutions

	31 December 2022	31 December 2021
Deposits with domestic banks	<u>24,613,553</u>	<u>28,992,175</u>

As at 31 December 2022 and 31 December 2021, placements with banks and other financial institutions represented deposits with large commercial banks such as Industrial and Commercial Bank of China, Industrial Bank, China CITIC Bank, Pudong Development Bank, etc. by the Finance Company.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(3) Financial assets held for trading

	31 December 2022	31 December 2021
Investments in funds held for trading (a)	5,921,775	5,754,200
Investments in bonds held for trading	1,011,394	681,833
Investments in equity instruments held for trading	152,688	423,721
Wealth management products	231,175	430,793
Non-hedging derivative financial instruments	340,406	312,550
	7,657,438	7,603,097

The fair value of investments in bonds held for trading and investments in equity instrument held for trading is determined at the closing price of Shanghai Stock Exchange on the last trading day of the year; the fair value of investments in funds held for trading and wealth management products is mainly determined by open market disclosures or quoted prices.

(a) Investments in funds

The investments in funds held by the Group mainly include:

Name	Number of shares of the Group('000)	Primary activities undertaken by the funds	Issue size (total shares)	Total amount of the funds	Carrying amount as at 31 December 2022
Fund investment I	489,654	Investments in money market instruments with good liquidity	175.39 billion	175.39 billion	489,654
Fund investment II	407,947	Investments in money market instruments with good liquidity	152.35 billion	152.35 billion	407,947
Fund investment III	371,607	Investments in money market instruments with good liquidity	60.5 billion	60.5 billion	371,607
Fund investment IV	307,313	Investments in money market instruments with good liquidity	135.61 billion	135.61 billion	307,313
Fund investment V	304,092	Investments in money market instruments with good liquidity	126.26 billion	126.26 billion	304,092

The investments in funds held by the Group were the structured entities invested by the Group, which were not included in the consolidation scope. The Group's largest risk exposure on the funds was the carrying amount of the Group's shares in the funds as at the balance sheet date. The Group had neither obligation nor intention to provide financial support to the funds.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(4) Derivative financial assets and derivative financial liabilities

	31 December 2022	31 December 2021
Derivative financial assets - Forward foreign exchange contracts	6,209	6,322
Derivative financial assets - Options	49,681	37,779
	<u>55,890</u>	<u>44,101</u>
Derivative financial liabilities - Forward foreign exchange contracts	<u>10,450</u>	<u>9,625</u>

As at 31 December 2022, derivative financial assets and derivative financial liabilities were mainly options and forward foreign exchange contracts, with nominal amounts of RMB1,132,706 thousand and RMB132,229 thousand (31 December 2021: RMB1,503,729 thousand and RMB18,694 thousand).

(5) Notes receivable

	31 December 2022	31 December 2021
Trade acceptance notes	3,618,581	4,475,145
Bank acceptance notes	3,750,651	4,426,292
Less: Provision for bad debts	(1,111,947)	(1,090,105)
	<u>6,257,285</u>	<u>7,811,332</u>

(a) As at 31 December 2022, the Group's pledged notes were as follows:

Bank acceptance notes	35,982
Trade acceptance notes	119,113
	<u>155,095</u>

(b) As at 31 December 2022, the Group's notes receivable endorsed or discounted but unmatured were as follows:

	Derecognised	Not derecognised
Bank acceptance notes (i)	933,794	2,041,400
Trade acceptance notes	-	327,824
	<u>933,794</u>	<u>2,369,224</u>

(i) For the year ended 31 December 2022, a few of the bank acceptance notes were endorsed or discounted and derecognised by part of the Group's subsidiaries, who thereby classified the balance of other bank acceptance notes receivable as financial assets at amortised cost. Certain bank acceptance notes were discounted and endorsed frequently by some of the Group's subsidiaries for the purpose of daily treasury management, who thereby classified the balance of other bank acceptance notes receivable as financial assets at fair value through other comprehensive income (Note 4(7)).

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(5) Notes receivable (Cont'd)

(c) Provision for bad debts

For notes receivable arising from ordinary operating activities such as sales of goods and rendering of services, the Group recognises the lifetime ECL regardless of whether there exists a significant financing component.

- (i) As at 31 December 2022, the Group's trade acceptance notes receivable from subsidiaries within a third party group totalled RMB2,108,726 thousand, and the related contract liabilities amounted to RMB415,839 thousand. The Group evaluated the distribution of expected cash flows under multiple scenarios based on historical recoverability, current situations and forecasts of future conditions of different subsidiaries within the third party group, and made corresponding provision for ECL of RMB1,065,706 thousand according to the default loss rate and the related probability weight under various scenarios.

In addition, certain subsidiaries of the Group offset trade acceptance notes payable to the Group against their assets ("asset-for-debt transaction"). As at 31 December 2022, online signing procedures for related assets under the asset-for-debt transaction with respect to the trade acceptance notes of RMB188,455 thousand had been completed, and the Group derecognised receivables and recognised other non-current assets of RMB188,455 thousand accordingly.

- (ii) Notes receivable with provision for bad debts made on the grouping basis are analysed as follows:

Grouping - Grouping of bank acceptance notes:

As at 31 December 2022, the Group measured provision for bad debts based on the lifetime ECL. The Group expected that there was no significant credit risk associated with its bank acceptance notes in this grouping and did not expect that there would be any significant losses from non-performance by these banks. Therefore, there was no need to make provision for bad debts.

Grouping - Grouping of trade acceptance notes:

As at 31 December 2022, the Group measured provision for bad debts based on the lifetime ECL, which amounted to RMB46,241 thousand (31 December 2021: RMB99,995 thousand).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(6) Accounts receivable

	31 December 2022	31 December 2021
Accounts receivable	55,475,944	50,989,672
Less: Provision for bad debts	(17,195,975)	(17,560,454)
	<u>38,279,969</u>	<u>33,429,218</u>

	31 December 2022		31 December 2021	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Individual provision ((d)(iii))	16,092,875	(12,239,675)	15,552,463	(11,842,709)
Sovereign credit portfolio ((d)(iv))	690,314	(478,967)	1,140,600	(961,470)
Ageing grouping of accounts receivable by sector ((d)(v))	38,692,755	(4,477,333)	34,296,609	(4,756,275)
	<u>55,475,944</u>	<u>(17,195,975)</u>	<u>50,989,672</u>	<u>(17,560,454)</u>

(a) The ageing of accounts receivable was analysed as follows:

(i) The overdue ageing of accounts receivable was analysed as follows:

	31 December 2022	31 December 2021
Not overdue	21,607,854	15,635,655
Overdue within 1 year	9,289,613	14,364,601
Overdue 1 to 2 years	9,966,854	8,284,690
Overdue 2 to 3 years	5,893,128	6,081,529
Overdue 3 to 4 years	4,856,653	1,644,027
Overdue 4 to 5 years	631,620	1,095,355
Overdue over 5 years	3,230,222	3,883,815
	<u>55,475,944</u>	<u>50,989,672</u>

(ii) The ageing of accounts receivable was analysed based on invoice date as follows:

	31 December 2022	31 December 2021
Within 1 year	25,630,900	27,367,203
1 to 2 years	12,523,380	8,424,793
2 to 3 years	7,434,301	8,088,301
3 to 4 years	5,382,166	1,814,957
4 to 5 years	981,285	1,125,568
Over 5 years	3,523,912	4,168,850
	<u>55,475,944</u>	<u>50,989,672</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(6) Accounts receivable (Cont'd)

(b) As at 31 December 2022, the top five balances of accounts receivable measured at amortised cost aggregated by debtors were summarised and analysed as follows:

	Balance	Provision for bad debts	% of the aggregate balance of accounts receivable measured at amortised cost
Total balance of the five largest accounts receivable	12,552,917	7,619,833	22.63%

(c) Accounts receivable derecognised due to transfer of financial assets are analysed as follows:

For the year ended 31 December 2022, the Company had no accounts receivable that were derecognised after the Company had applied a non-recourse factoring (2021: Nil).

In 2022, the Group conducted the “asset-for-debt transaction” with the debtor for a very small number of accounts receivable to offset the assets of the debtor against the Group's accounts payable. As at 31 December 2022, the asset-for-debt transaction corresponding to accounts receivable of RMB13,632 thousand had been completed, and the Group derecognised corresponding accounts receivable and recognised other non-current assets of RMB13,632 thousand accordingly (31 December 2021: Nil).

(d) Provision for bad debts

(i) Movements of provision for bad debts of accounts receivable:

31 December 2021	17,560,454
Accrual in the current year	2,168,678
Reversal in the current year	(1,171,129)
Decrease due to disposal of subsidiaries	(1,311,561)
Write-off in the current year	(50,467)
31 December 2022	17,195,975

(ii) The provision for bad debts in 2022 amounted to RMB2,168,678 thousand and that recovered or reversed comprised RMB1,171,129 thousand, including provision for bad debts made on the individual basis amounting to RMB325,592 thousand.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(6) Accounts receivable (Cont'd)

(d) Provision for bad debts (Cont'd)

(iii) As at 31 December 2022, accounts receivable with provision for bad debts made on the individual basis were analysed as follows:

	Book balance	Lifetime ECL rate	Provision for bad debts	Reason
Accounts receivable 1	3,478,575	100%	3,478,575	(a)
Accounts receivable 2	2,191,732	52%	1,147,232	(a)
Accounts receivable 3	1,786,058	100%	1,783,648	(a)
Accounts receivable 4	1,784,472	50%-70%	1,094,583	(b)
Accounts receivable 5	1,193,017	54%	643,947	(a)
Others (involved more than 300 companies)	5,659,021	26%-100%	4,091,690	The other party in a difficult financial situation, unrecoverable by estimation
	<u>16,092,875</u>		<u>12,239,675</u>	

- (a) In 2021, the Group identified that accounts receivable of its subsidiary, Shanghai Electric Communication Technology Co., Ltd ("Communication Company"), were overdue in succession, with the collection of repayments stagnated. In order to reduce losses, Communication Company has initiated formal legal proceedings to related clients successively. As at 31 December 2022, Communication Company recognised the ECL by calculating the probability-weighted present value of the difference between the contractual cash flows from accounts receivable and cash flows expected to be received under different scenarios, taking into account the latest developments in litigation, professional legal advice from external lawyers and the asset preservation related to the litigation. As at 31 December 2022, the ECL accumulated to RMB7,053,402 thousand. Communication Company may accrue further losses if there is a material adverse change such as subsequent litigations or further deterioration of the counterpart's repayment ability.
- (b) As at 31 December 2022, the Group's receivables from a subsidiary within a third party group represented RMB1,784,472 thousand. The Group evaluated the distribution of expected cash flows under multiple scenarios based on the historical experience of credit losses, management mode, current situations and forecasts of future conditions of subsidiaries under different conditions within the third party group, and made accumulative provision for bad debt balance of RMB1,094,583 thousand according to the ECL rate and the related probability weight under various scenarios.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(6) Accounts receivable (Cont'd)

(d) Provision for bad debts (Cont'd)

- (iv) As at 31 December 2022, accounts receivable with a book value of RMB690,314 thousand, provision for bad debts of RMB478,967 thousand, net book value of RMB211,347 thousand (31 December 2021: book value of RMB1,140,600 thousand, provision for bad debts of RMB961,470 thousand, net book value of RMB179,130 thousand) were accounts receivable with sovereign credit risk.
- (v) As at 31 December 2022, except for the accounts receivable with sovereign credit risk mentioned in (iv), accounts receivable with ageing grouping by sector with provision for bad debts made on the grouping basis were analysed as follows:

	31 December 2022		
	Book balance		Provision for bad debts
	Amount	Lifetime ECL rate	Amount
Not overdue	21,232,417	0.1%-4%	424,296
Overdue within 1 year	8,355,404	5%-18%	817,511
Overdue 1 to 2 years	4,888,587	3%-37%	803,342
Overdue 2 to 3 years	2,063,067	17%-82%	772,179
Overdue 3 to 4 years	1,112,875	34%-100%	798,009
Overdue 4 to 5 years	407,896	54%-100%	304,096
Overdue over 5 years	632,509	78%-100%	557,900
	<u>38,692,755</u>		<u>4,477,333</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(6) Accounts receivable (Cont'd)

(d) Provision for bad debts (Cont'd)

(vi) As at 31 December 2021, except for the accounts receivable with sovereign credit risk mentioned in (iv), accounts receivable with provision for bad debts made on the grouping basis were analysed as follows:

	31 December 2021		
	Book balance		Provision for bad debts
	Amount	Lifetime ECL rate	Amount
Not overdue	14,705,795	0.1%-4%	265,205
Overdue within 1 year	10,127,168	5%-17%	1,104,240
Overdue 1 to 2 years	4,068,579	3%-37%	743,904
Overdue 2 to 3 years	2,124,461	17%-82%	521,641
Overdue 3 to 4 years	1,366,097	34%-100%	566,070
Overdue 4 to 5 years	781,428	54%-100%	547,213
Overdue over 5 years	1,123,081	78%-100%	1,008,002
	<u>34,296,609</u>		<u>4,756,275</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(7) Receivables financing

		31 December 2022	31 December 2021
Accounts receivable measured at fair value through other comprehensive income	(a)	49,387	53,849
Notes receivable measured at fair value through other comprehensive income	(b)	2,056,202	1,091,644
		2,105,589	1,145,493

(a) Accounts receivable measured at fair value through other comprehensive income

(i) The ageing of accounts receivable is analysed as follows:

	31 December 2022	31 December 2021
Not overdue	49,387	39,870
Overdue within 1 year	-	13,979
	49,387	53,849

(ii) As at 31 December 2022, accounts receivable were factored by part of the Group's subsidiaries for the purpose of daily treasury management, who thereby categorised the balance of accounts receivable as financial assets at fair value through other comprehensive income. The fair value of those accounts receivable was RMB49,387 thousand (31 December 2021: RMB53,849 thousand).

For the year ended 31 December 2022, the Group had no receivables financing that were derecognised after the Group had applied a non-recourse factoring (2021: Nil).

(b) Notes receivable measured at fair value through other comprehensive income

Certain bank acceptance notes were discounted and endorsed frequently by some of the Group's subsidiaries for the purpose of daily treasury management, who thereby classified the balance of the bank acceptance notes as financial assets at fair value through other comprehensive income.

As at 31 December 2022, the Group measured the provision for bad debts of notes receivable at fair value through other comprehensive income based on the lifetime ECL. The Group expected that its bank acceptance notes had similar credit risk characteristics and that there was no significant credit risk associated with its bank acceptance notes and did not expect that there would be any significant losses from non-performance by these banks. Therefore, provision for bad debts was not material.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(7) Receivables financing (Cont'd)

(b) Notes receivable measured at fair value through other comprehensive income (Cont'd)

As at 31 December 2022, notes receivable presented as receivables financing amounted to RMB583,089 thousand, which were pledged as collateral for bank acceptance notes (31 December 2021: RMB122,712 thousand).

As at 31 December 2022, except for Note 4(5)(b), the Group's notes receivable presented in receivables financing endorsed or discounted but unmatured were as follows:

	Derecognised	Not derecognised
Bank acceptance notes	3,998,366	-

(8) Prepayments

	31 December 2022	31 December 2021
Prepayments	10,276,967	13,424,089

(a) The ageing of prepayments is analysed as follows:

	31 December 2022		31 December 2021	
	Amount	% of total balance	Amount	% of total balance
Within 1 year	8,310,488	80.86%	8,522,835	63.49%
1 to 2 years	994,616	9.68%	1,884,551	14.04%
2 to 3 years	481,703	4.69%	856,592	6.38%
Over 3 years	490,160	4.77%	2,160,111	16.09%
	<u>10,276,967</u>	<u>100.00%</u>	<u>13,424,089</u>	<u>100.00%</u>

As at 31 December 2022, prepayments with ageing over one year amounted to RMB1,966,479 thousand (31 December 2021: RMB4,901,254 thousand), which mainly represented prepayments for equipment for contract projects. Those accounts were not settled for such projects had not been completed.

As at 31 December 2022, the five largest prepayments collected by debtors were analysed as follows:

	Amount	% of total prepayments
Total of the five largest prepayments	910,954	8.86%

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(9) Other receivables

	31 December 2022	31 December 2021
Receivables from related parties (Note 8(6))	1,860,284	1,876,058
Receivables from third parties	5,104,904	7,059,227
Dividends receivable (a)	96,210	107,304
Interest receivable (a)	98,700	139,248
	<u>7,160,098</u>	<u>9,181,837</u>
Less: Provision for bad debts	(1,003,581)	(471,129)
	<u>6,156,517</u>	<u>8,710,708</u>

(a) As at 31 December 2022, the Group made individual provision for bad debts for dividends receivable and interest receivable, the above receivables were in Stage 1 and no major bad debt provision was made.

(b) As at 31 December 2022, other receivables with provision for bad debts made on the individual basis were analysed as follows:

Stage 3	Book balance	Lifetime ECL rate	Provision for bad debts	Reason
Receivables 1	1,015,622	26%	260,521	Unrecoverable by estimation as for part, considering the guarantee obligations to be performed and relevant credit enhancement
Receivables 2	793,781	34%	271,493	Unrecoverable by estimation as for part, considering the guarantee obligations to be performed and relevant credit enhancement
Receivables 3	286,848	0%		No provision for bad debts, considering that the value - of the collateral is sufficient
Others	<u>593,576</u>	25%-100%	<u>327,483</u>	Unrecoverable by estimation as for part
	<u>2,689,827</u>		<u>859,497</u>	

(c) As at 31 December 2021, other receivables with provision for bad debts made on the individual basis were analysed as follows:

Stage 3	Book balance	Lifetime ECL rate	Provision for bad debts	Reason
Receivables	1,015,622	21%	212,114	Expected to be partially uncollectible after taking into account the debtor's creditworthiness and related credit enhancements

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(9) Other receivables (Cont'd)

(d) As at 31 December 2022 and 31 December 2021, other receivables with provision for bad debts made on the grouping basis were analysed as follows:

	31 December 2022			31 December 2021		
	Book balance	Provision for bad debts		Book balance	Provision for bad debts	
	Amount	Amount	Provision ratio	Amount	Amount	Provision ratio
Stage 1 - 12-month ECL Receivables within 1 year from related parties and third parties	2,449,023	12,136	0.1%-2%	6,055,999	35,213	0.1%-2%
Stage 2 - Lifetime ECL Receivables between 1 and 2 years from related parties	-	-	-	-	-	-
Stage 3 - Lifetime ECL						
1 to 2 years	546,315	5,281	0.1%-5%	675,415	10,663	0.1%-5%
2 to 3 years	585,664	32,427	1%-11%	460,057	8,014	1%-15%
Over 3 years	694,359	94,240	12%-100%	728,192	205,125	18%-100%
	1,826,338	131,948		1,863,664	223,802	

(e) Movements in provision for bad debts of other receivables were as follows:

	Stage 1	Stage 2	Stage 3	Total
	12-month ECL	Lifetime ECL	Lifetime ECL	
Balance at 31 December 2021	35,213	-	435,916	471,129
Increase in the current year	24,117	-	611,113	635,230
Reversal in the current year	(9,274)	-	-	(9,274)
Write-off and disposal	-	-	(3,877)	(3,877)
Decrease due to disposal of subsidiaries	(37,920)	-	(51,707)	(89,627)
Balance at 31 December 2022	12,136	-	991,445	1,003,581

(e) Movements in provision for bad debts of other receivables were as follows:

	Nature	Balance	Ageing	% of the total	Provision for bad
				balance of other receivables	
Other receivables 1	Related party loans	1,015,622	2 to 3 years	14%	260,521
Other receivables 2	Purchase deposits	793,781	Within 1 year	11%	271,493
Other receivables 3	Performance bond	401,154	1 to 2 years	6%	-
Other receivables 4	Purchase deposits	284,518	Within 1 year	4%	-
Other receivables 5	Purchase deposits	274,169	Within 1 year	4%	68,542
		2,769,244			600,556

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(10) Financial assets purchased under resale agreements

	31 December 2022	31 December 2021
Classification of amounts under resale agreements by collaterals:		
- Corporate bonds	667,050	188,202
- Local government bonds	299,250	-
- Treasury bonds	164,906	-
	1,131,206	188,202

The Group expected that the credit impairment risk of the financial assets purchased under resale agreements in Stage 1 was low, thus no provision for significant credit impairment losses was made.

(11) Inventories

(a) Inventories are summarised by categories as follows:

	31 December 2022			31 December 2021		
	Book balance	Provision for decline in the value of inventories	Carrying amount	Book balance	Provision for decline in the value of inventories	Carrying amount
Materials in transit	5,118	-	5,118	24,048	-	24,048
Raw materials	5,843,509	585,811	5,257,698	5,351,033	575,737	4,775,296
Self-produced semi-finished goods	907,369	85,019	822,350	1,036,247	43,429	992,818
Work in progress	13,738,424	933,352	12,805,072	13,914,983	950,310	12,964,673
Goods in stock (i)	14,174,796	2,700,395	11,474,401	16,256,850	2,619,837	13,637,013
Repair accessories	391,999	-	391,999	363,431	-	363,431
Low-value consumables	37,985	259	37,726	35,599	1,471	34,128
Others	77,550	-	77,550	88,062	-	88,062
	35,176,750	4,304,836	30,871,914	37,070,253	4,190,784	32,879,469

- (i) The Group recognises the products produced before intended use of related production line but have not yet been sold as finished goods, and the cost of the finished goods includes the incremental cost directly attributable to its production process and the amount of indirect manufacturing expenses allocated by reasonable methods.

Net realisable value of the Group is determined based on the estimated selling price less the estimated costs to completion, contract performance costs and estimated costs necessary to make the sales and related taxes. The reversal of provision for decline in the value of inventories in the current period is due to the rising product price, and the write-off is due to the sales of inventories in the current period.

As at 31 December 2022, the carrying amount of the inventories pledged as collaterals for bank mortgage loans was none (31 December 2021: Nil).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(11) Inventories (Cont'd)

(b) Provision for decline in the value of inventories is analysed as follows:

	31 December 2021	Increase in the current year	Decrease in the current year			Differences on translation of foreign currency financial statements	31 December 2022
		Provision	Reversal	Write-off	Decrease due to disposal of subsidiaries		
Raw materials	575,737	51,148	(36,447)	(1,265)	(5,048)	1,686	585,811
Self-produced semi-finished goods	43,429	48,351	(6,734)	(27)	-	-	85,019
Work in progress	950,310	1,949,618	(162,530)	(761,339)	(43,128)	421	933,352
Goods in stock (i)	2,619,837	96,989	(7,653)	(5,194)	(5,187)	1,603	2,700,395
Low-value consumables	1,471	1	(1,213)	-	-	-	259
	<u>4,190,784</u>	<u>1,146,107</u>	<u>(214,577)</u>	<u>(767,825)</u>	<u>(53,363)</u>	<u>3,710</u>	<u>4,304,836</u>

(12) Contract assets

	31 December 2022	31 December 2021
Contract assets	36,312,243	44,506,875
Less: Provision for impairment of contract assets	(1,464,194)	(1,637,696)
Less: Contract assets included in other non-current assets (Note 4(29))	(13,046,236)	(11,675,355)
	<u>21,801,813</u>	<u>31,193,824</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(12) Contract assets (Cont'd)

(a) For contract assets, the Group measures the loss provision based on the lifetime ECL regardless of whether there exists a significant financing component. As at 31 December 2022, the Group's contract assets with provision for impairment made on the individual basis were analysed as follows:

	Book balance	Lifetime ECL rate	Provision for impairment	Reason
Contract assets 1	191,192	63%	119,495	(i)
Contract assets 2	158,501	100%	158,501	(ii)
Contract assets 3	90,501	100%	90,501	The other party in a difficult financial situation, unrecoverable by estimation
Others				The other party in a difficult financial situation, unrecoverable for part by estimation
	<u>315,701</u>	5%-100%	<u>200,594</u>	
	<u>755,895</u>		<u>569,091</u>	

- (i) As at 31 December 2022, the Group's receivables from various subsidiaries within a third party group represented RMB191,192 thousand (31 December 2021: RMB275,587 thousand). The Group evaluated the distribution of expected cash flows under different scenarios based on historical recoverability, management mode, current situations and forecasts of future conditions of subsidiaries within the third party group under different conditions, and made corresponding provision for ECL of RMB119,495 thousand according to ECL rate and the related probability weight under different scenarios (31 December 2021: RMB150,578 thousand).
- (ii) As at 31 December 2022, the Group's receivables from a certain client represented RMB469,354 thousand (31 December 2021: RMB492,296 thousand), including contract assets of RMB158,501 thousand (31 December 2021: RMB181,443 thousand). As the client was short of funding and got involved in several litigations, the Group expected it was difficult to recover the contract assets, and therefore made provision for impairment of the contract assets in full.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(12) Contract assets (Cont'd)

(b) For contract assets, the Group recognises the lifetime ECL regardless of whether there exists a significant financing component. As at 31 December 2021, the Group's contract assets were not overdue. Contract assets with provision for impairment made on the individual basis were analysed as follows:

	Book balance	Lifetime ECL rate	Provision for impairment	Reason
Contract assets 1	275,587	55%	150,578	The other party in a difficult financial situation, unrecoverable for part by estimation
Contract assets 2	181,443	100%	181,443	The other party in a difficult financial situation, unrecoverable by estimation
Contract assets 3	47,651	100%	47,651	The other party in a difficult financial situation, unrecoverable by estimation
Others				The other party in a difficult financial situation, unrecoverable for part by estimation
	148,662	21%-100%	110,854	
	<u>653,343</u>		<u>490,526</u>	

(c) As at 31 December 2022, contract assets with provision for bad debts made on the grouping basis were analysed as follows:

Grouping - Contract assets:

	31 December 2022		
	Book balance	Provision for asset impairment	
	Amount	Lifetime ECL rate	Amount
Not overdue	<u>35,556,348</u>	<u>0.1%-3%</u>	<u>895,103</u>

(d) As at 31 December 2021, contract assets with provision for bad debts made on the grouping basis were analysed as follows:

Grouping - Contract assets:

	31 December 2021		
	Book balance	Provision for asset impairment	
	Amount	Lifetime ECL rate	Amount
Not overdue	<u>43,853,532</u>	<u>0.1%-3%</u>	<u>1,147,170</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(13) Current portion of non-current assets

		31 December 2022	31 December 2021
Lease receivables	4(18)	1,864,582	2,549,792
Current portion of other non-current assets arising from PPP project	4(29)	129,556	114,466
Loans and advances	4(15)	804,428	17,124
Other long-term receivables	4(18)	59,104	139,448
		<u>2,857,670</u>	<u>2,820,830</u>

(14) Other current assets

		31 December 2022	31 December 2021
Loans due within 1 year	(a)	3,988,254	4,849,548
Other debt investments due within 1 year (Note 4(17))	(b)	15,486,059	7,570,419
Input VAT to be offset		1,480,553	1,975,723
Discounted notes and other short-term debt investments	(c)	884,198	941,895
Prepaid VAT		683,772	337,329
Prepaid income tax		181,384	263,990
Others		14,785	166,299
		<u>22,719,005</u>	<u>16,105,203</u>

(a) Loans due within 1 year

	31 December 2022			31 December 2021		
	Total	Provision for impairment	Net book value	Total	Provision for impairment	Net book value
Loans	4,269,830	(281,576)	3,988,254	5,015,000	(165,452)	4,849,548

Loans represent that provided by Finance Company to related parties within Electric Holdings.

As at 31 December 2022, the balance of loans provided by shareholders who hold 5% (inclusive) voting rights in the Company was RMB1,487,500 thousand, of which the ageing within one year amounted to RMB187,500 thousand (31 December 2021: RMB6,500,000 thousand, of which the ageing within one year amounted to RMB5,000,000 thousand). The Group's balance of loans from other related parties is stated in Note 8.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(14) Other current assets (Cont'd)

(a) Loans due within 1 year (Cont'd)

Movement in the provision for impairment of loans is as follows:

	2022
Opening balance	165,452
Increase in the current year	116,124
Ending balance	281,576

Analysis on loans by guarantee is as follows:

	31 December 2022	31 December 2021
Credit loans	3,703,830	5,015,000
Guaranteed loans	566,000	-
	4,269,830	5,015,000

Movement in the provision for impairment of loans is as follows:

	Stage 1		Stage 2		Stage 3	
	12-month ECL		Lifetime ECL		Lifetime ECL (credit impaired)	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts	Book balance	Provision for bad debts
31 December 2021	5,000,000	163,295	15,000	2,157	-	-
Net increase/loss of this year	(730,170)	118,281	(15,000)	(2,157)	-	-
Net transfer of this year	(4,082,330)	(275,537)	4,082,330	275,537	-	-
31 December 2022	187,500	6,039	4,082,330	275,537	-	-

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(14) Other current assets (Cont'd)

(a) Loans due within 1 year (Cont'd)

(i) As at the balance sheet date, provision for bad debts of short-term loans in Stage 1 was analysed below:

	31 December 2022		
	Book balance	12-month ECL rate	Provision for bad debts
Stage 1	187,500	3%	6,039

	31 December 2021		
	Book balance	12-month ECL rate	Provision for bad debts
Individual provision	5,000,000	3%	163,295

(ii) As at the balance sheet date, provision for bad debts of short-term loans in Stage 2 was analysed below:

	31 December 2022		
	Book balance	12-month ECL rate	Provision for bad debts
Stage 2	4,082,330	7%	275,537

	31 December 2021		
	Book balance	12-month ECL rate	Provision for bad debts
Individual provision	15,000	14%	2,157

(b) Other debt investments due within 1 year

	31 December 2022	31 December 2021
Interbank deposits (Note 4(17))	15,486,059	7,570,419

The Group considers the risk of credit impairment on other debt investments due within one year to be low, all of which are in the first stage and the expected credit losses are not material.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(14) Other current assets (Cont'd)

(c) Discounted notes and other short-term debt investments

The maturity dates of the discounted notes and other short-term debt investments are analysed as follows:

	31 December 2022	31 December 2021
Within 3 months	263,846	11,547
3 to 6 months	-	17,920
6 months to 1 year	673,408	916,792
	<u>937,254</u>	<u>946,259</u>
Less: Provision for impairment	(53,056)	(4,364)
	<u>884,198</u>	<u>941,895</u>

Discount of notes represents the discount of bank acceptance notes and trade acceptance notes rendered by Finance Company.

Movement in provision for impairment of discounted notes and other short-term debt investments is as follows:

	2022	2021
Opening balance	4,364	67,040
Accrual/(Reversal) in the current year	48,692	(62,676)
Ending balance	<u>53,056</u>	<u>4,364</u>

(15) Loans and advances

	31 December 2022			31 December 2021		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Loans and advances	2,598,997	203,617	2,395,380	2,414,000	258,738	2,155,262
Less: Loans within 1 year	(909,997)	(105,569)	(804,428)	(20,000)	(2,876)	(17,124)
	<u>1,689,000</u>	<u>98,048</u>	<u>1,590,952</u>	<u>2,394,000</u>	<u>255,862</u>	<u>2,138,138</u>

Loans and advances are loans provided by Finance Company to related parties within Electric Holdings.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(15) Loans and advances (Cont'd)

Movement in the provision for impairment of loans and advances (including the current portion) is as follows:

	2022
Opening balance	258,738
Reversal in the current year	(55,121)
Ending balance	<u>203,617</u>

Loans and advances (including the current portion) are analysed based on guarantee method:

	31 December 2022	31 December 2021
Credit loans	1,319,997	2,414,000
Guaranteed loans	1,279,000	-
	<u>2,598,997</u>	<u>2,414,000</u>

Movement in the provision for impairment of loans and advances (including the current portion) is as follows:

	Stage 1		Stage 2		Stage 3	
	12-month ECL		Lifetime ECL		Lifetime ECL	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts	Book balance	Provision for bad debts
31 December 2021	1,500,000	48,989	914,000	209,749	-	-
Decrease in the current year	193,000	20,502	(8,003)	(75,623)	-	-
Increase in the current year	<u>(393,000)</u>	<u>(27,620)</u>	<u>373,003</u>	<u>24,824</u>	<u>19,997</u>	<u>2,796</u>
31 December 2022	<u>1,300,000</u>	<u>41,871</u>	<u>1,279,000</u>	<u>158,950</u>	<u>19,997</u>	<u>2,796</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(15) Loans and advances (Cont'd)

(a) As at 31 December 2022, the provision for bad debts of loan and advances (including the current portion) in Stage 1 was analysed as below:

	31 December 2022		
	Book balance	Lifetime ECL rate	Provision for bad debts
Individual provision	1,300,000	3%	41,871

As at 31 December 2021, the provision for bad debts of loans and advances (including the current portion) in Stage 1 was analysed as below:

	31 December 2021		
	Book balance	Lifetime ECL rate	Provision for bad debts
Individual provision	1,500,000	3%	48,989

(b) As at 31 December 2022, the provision for bad debts of loans and advances (including the current portion) in Stage 2 was analysed as below:

	31 December 2022		
	Book balance	Lifetime ECL rate	Provision for bad debts
Individual provision	1,298,997	7%-17%	161,746

As at 31 December 2021, the provision for bad debts of loans and advances (including the current portion) in Stage 2 was analysed as below:

	31 December 2021		
	Book balance	Lifetime ECL rate	Provision for bad debts
Individual provision	914,000	14%-26%	209,749

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(15) Loans and advances (Cont'd)

(c) As at 31 December 2022, the provision for bad debts of loans and advances (including the current portion) in Stage 3 was analysed as below:

	31 December 2022		
	Book balance	Lifetime ECL rate	Provision for bad debts
Individual provision	19,997	14%	2,796

As at 31 December 2021, the provision for bad debts of loans and advances (including the current portion) in Stage 3 was analysed as below:

	31 December 2021		
	Book balance	Lifetime ECL rate	Provision for bad debts
Individual provision	-	-	-

(16) Debt investments

	31 December 2022	31 December 2021
Treasury bonds	152,863	-

As at 31 December 2022, the Group's significant debt investments are listed as follows:

	Par value	Nominal interest rate	Effective interest rate	Maturity date
21 treasury bonds with interest payable	150,000	2.89%	2.67%	18 November 2031

As at 31 December 2022, the Group expected that the risk exposure of such debt instrument investments was low. Thus, no provision for significant credit losses was made.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(17) Other debt investments

	31 December 2022	31 December 2021
Investments in debt instruments -		
Interbank deposits ((a) and (b))	15,486,059	7,570,419
Bond investments (b)	-	81,874
	<u>15,486,059</u>	<u>7,652,293</u>
Including:		
- Costs	15,447,192	7,598,390
- Accumulated changes in fair value	38,867	53,903
Less: Other debt investments presented in other current assets (Note 4(14))	<u>(15,486,059)</u>	<u>(7,570,419)</u>
	<u>-</u>	<u>81,874</u>

For the year ended 31 December 2022, the Group disposed investments in debt instruments of RMB8,085,530 thousand at a consideration of RMB8,276,411 thousand and transferred the accumulated other comprehensive income of RMB190,881 thousand to investment income (Note 4(65)).

As at 31 December 2022, the Group expected that the risk exposure of such debt instrument investments was low. Thus, no provision for significant credit losses was made.

(a) Interbank deposits

The interbank deposits held by the Group mainly include:

Name of interbank deposits	Primary activities engaged in by the interbank deposits	Carrying amount as at 31 December 2022
Interbank deposits 1	A large deposit certificate issued by a bank deposit-type financial institution for individuals, non-financial enterprises, and institutional entities	883,153
Interbank deposits 2	A large deposit certificate issued by a bank deposit-type financial institution for individuals, non-financial enterprises, and institutional entities	498,603
Interbank deposits 3	A large deposit certificate issued by a bank deposit-type financial institution for individuals, non-financial enterprises, and institutional entities	497,571
Interbank deposits 4	A large deposit certificate issued by a bank deposit-type financial institution for individuals, non-financial enterprises, and institutional entities	491,436

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(17) Other debt investments (Cont'd)

(b) The related information on other debt investments measured at fair value is as follows:

	31 December 2022	31 December 2021
Bonds		
- Fair value	-	81,874
- Amortised cost	-	81,191
- Accumulation in other comprehensive income	-	683
Interbank deposits		
- Fair value	15,486,059	7,570,419
- Amortised cost	15,447,192	7,517,199
- Accumulation in other comprehensive income	38,867	53,220
Total		
- Fair value	15,486,059	7,652,293
- Amortised cost	15,447,192	7,598,390
- Accumulation in other comprehensive income	38,867	53,903

(18) Long-term receivables

	31 December 2022			31 December 2021		
	Book balance	Provision for impairment	Provision for impairment	Book balance	Provision for impairment	Provision for impairment
Finance lease and leaseback receivables (a)	5,466,830	(1,371,524)	4,095,306	7,110,753	(1,358,783)	5,751,970
Loans receivable from related parties (Note 8(6))	1,672,704	(604,795)	1,067,909	1,416,852	(276,976)	1,139,876
Others	94,400	(5,204)	89,196	60,464	(4,871)	55,593
	7,233,934	(1,981,523)	5,252,411	8,588,069	(1,640,630)	6,947,439
Less: Current portion of long-term receivables	(3,159,281)	1,235,595	(1,923,686)	(3,956,598)	1,267,358	(2,689,240)
	4,074,653	(745,928)	3,328,725	4,631,471	(373,272)	4,258,199

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(18) Long-term receivables (Cont'd)

(a) Finance lease and leaseback receivables

	31 December 2022	31 December 2021
Finance lease receivables	4,352,713	5,475,166
Less: Unrealised financing income	(825,214)	(1,048,650)
Balance of finance lease receivables	3,527,499	4,426,516
Receivables for sale-leaseback	1,939,331	2,684,237
Lease receivables - net	5,466,830	7,110,753
Less: Provision for bad debts	(1,371,524)	(1,358,783)
Net value of finance lease and leaseback receivables	4,095,306	5,751,970
Less: Current portion of finance lease and leaseback receivables	(1,864,582)	(2,549,792)
	2,230,724	3,202,178

As at 31 December 2022, there were no unguaranteed residual values in connection with finance lease arrangements or contingent lease arrangements of the Group that needed to be recorded.

(b) The maturity dates of finance lease receivables are analysed below:

	31 December 2022	31 December 2021
Within 1 year	1,671,539	1,758,505
1 to 2 years	633,102	961,497
2 to 3 years	542,170	761,132
Over 3 years	1,505,902	1,994,032
	4,352,713	5,475,166

(c) Movement in the provision for impairment of long-term receivables (including the current portion) is as follows:

	31 December 2021	Increase in the current year	Reversal in the current year	31 December 2022
Provision for bad debts	1,640,630	439,616	(98,722)	1,981,524

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(18) Long-term receivables (Cont'd)

(d) Movement in the provision for impairment of finance lease receivables (including the current portion)

	Stage 1		Stage 2		Stage 3	
	12-month ECL		Lifetime ECL		Lifetime ECL	
	Carrying amount	Provision for bad debts	Carrying amount	Provision for bad debts	Carrying amount	Provision for bad debts
31 December 2021	3,663,150	99,867	248,967	32,305	3,198,636	1,226,611
Net decrease in the current year	(1,234,000)	(33,312)	(36,844)	(3,345)	(373,079)	(196,508)
Transfer in the current year	(1,487,677)	(40,331)	297,440	(2,487)	1,190,237	42,818
Transfer from Stage 1 to Stage 2	(463,122)	(12,555)	463,122	12,555	-	-
Transfer from Stage 1 to Stage 3	(1,024,555)	(27,776)	-	-	1,024,555	27,776
Transfer from Stage 2 to Stage 3	-	-	(165,682)	(15,042)	165,682	15,042
Transfer from Stage 2 to Stage 1	-	-	-	-	-	-
(Decrease)/(Increase) in provision (Note 1)	-	(3,757)	-	(67)	-	249,730
31 December 2022	941,473	22,467	509,563	26,406	4,015,794	1,322,651

Note 1: The item mainly includes the probability of default caused by the regular update of the model parameters, the default exposure, the change of the default loss rate and the impact of the phase change on the measurement of ECL.

(i) As at 31 December 2022, the provision for bad debts of long-term receivables (including the current portion) in Stage 1 was analysed as below:

	Book balance	12-month ECL rate	Provision for bad debts
Provided on the grouping basis: Long-term receivables (including the current portion)	941,473	0.1%-3%	22,467

As at 31 December 2021, the provision for bad debts of long-term receivables (including the current portion) in Stage 1 was analysed as below:

	Book balance	12-month ECL rate	Provision for bad debts
Provided on the grouping basis: Long-term receivables (including the current portion)	3,663,150	0.1%-3%	99,867

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(18) Long-term receivables (Cont'd)

(d) Movement in the provision for impairment of finance lease receivables (including the current portion)

(ii) As at 31 December 2022, the provision for bad debts of long-term receivables (including the current portion) in Stage 2 was analysed as below:

	Book balance	Lifetime ECL rate	Provision for bad debts
Provision on the grouping basis:			
Long-term receivables (including the current portion)	509,563	4%-10%	26,406

As at 31 December 2021, the provision for bad debts of long-term receivables (including the current portion) in Stage 2 was analysed as below:

	Book balance	Lifetime ECL rate	Provision for bad debts
Provision on the grouping basis:			
Long-term receivables (including the current portion)	248,967	4%-21%	32,305

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(18) Long-term receivables (Cont'd)

(d) Movement in the provision for impairment of finance lease receivables (including the current portion)

(iii) As at 31 December 2022, the provision for bad debts of long-term receivables (including the current portion) in Stage 3 was analysed as below:

	Book balance	Lifetime ECL rate	Provision for bad debts	Reason
Finance lease receivables 1	923,518	17%	157,273	Unrecoverable by estimation
Finance lease receivables 2	278,884	41%	113,319	Legal disputes exist, unrecoverable by estimation
Finance lease receivables 3	201,112	69%	137,907	Legal disputes exist, unrecoverable by estimation
Others	2,612,280	35%	914,152	Unrecoverable by estimation
	<u>4,015,794</u>		<u>1,322,651</u>	

As at 31 December 2021, the provision for bad debts of long-term receivables (including the current portion) in Stage 3 was analysed as below:

	Book balance	Lifetime ECL rate	Provision for bad debts	Reason
Finance lease receivables 1	187,777	51%	96,162	Legal disputes exist, unrecoverable by estimation
Finance lease receivables 2	181,154	86%	156,226	Legal disputes exist, unrecoverable by estimation
Finance lease receivables 3	97,212	71%	68,805	Legal disputes exist, unrecoverable by estimation
Others	2,732,493	33%	905,418	Unrecoverable by estimation
	<u>3,198,636</u>		<u>1,226,611</u>	

(e) As at 31 December 2022, the Group did not enter into long-term receivables factoring contracts with recourse to obtain bank borrowings (31 December 2021: RMB34,088 thousand).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(19) Long-term equity investments

	31 December 2022	31 December 2021
Joint ventures (a)	1,842,679	1,750,611
Associates (b)	9,383,334	9,658,387
	<u>11,226,013</u>	<u>11,408,998</u>
Less: Provision for impairment of long-term equity investments	(42,260)	(7,008)
	<u>11,183,753</u>	<u>11,401,990</u>

(a) Joint ventures

	Movements in the current year										31			
	December 2021	Increase in investments	Other decreases	Share of net profit/(loss) under equity method	Share of other comprehensive income	Share of other changes in equity	Transfer-out due to disposal of subsidiaries	Transfer-out due to disposal of subsidiaries	Cash dividends or profits declared	Provision	Others	December 2022	Shareholding %	Provision for impairment
Shanghai Yun Zhong Xin Enterprise Development Co., Ltd. (i)	651,352	-	-	(2,363)	-	-	-	-	-	-	-	648,989	55.00	-
Shanghai Fanuc Intelligent Machines Co., Ltd.	382,807	-	-	153,676	-	-	-	-	(100,748)	-	-	435,735	49.00	-
Shanghai Yun Hong Enterprise Development Co., Ltd.	297,000	-	-	-	-	-	-	-	-	-	-	297,000	45.00	-
Shanghai Yun Hui Enterprise Development Co., Ltd. (ii)	221,557	-	-	(267)	-	-	-	-	-	-	-	221,290	60.00	-
Others	197,895	48,000	(77)	2,113	-	-	-	(13,260)	-	-	4,994	239,665	-	-
	<u>1,750,611</u>	<u>48,000</u>	<u>(77)</u>	<u>153,159</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(13,260)</u>	<u>(100,748)</u>	<u>-</u>	<u>4,994</u>	<u>1,842,679</u>	<u>-</u>	<u>-</u>

Please refer to Note 6(2) for information related to equity in joint ventures.

- (i) Shanghai Electric Group Real Estate Co., LTD., one of the subsidiaries of the Group, holds 55% of the shares in Shanghai Yun Zhong Xin Enterprise Development Co., Ltd. According to the articles of association of Shanghai Yun Zhong Xin Enterprise Development Co., Ltd., major financial and business decisions of the company must be unanimously voted by all shareholders, so it is accounted as a joint venture.
- (ii) Shanghai Electric Group Real Estate Co., LTD., one of the subsidiaries of the Group, holds 60% of the shares in Shanghai Yun Hui Enterprise Development Co., Ltd. According to the articles of association of Shanghai Yun Hui Enterprise Development Co., Ltd., major financial and business decisions of the company must be unanimously voted by all shareholders, so it is accounted as a joint venture.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(19) Long-term equity investments (Cont'd)

(b) Associates

	Movements in the current year													
	31 December 2021	Increase in investments	Decrease in investments	Share of net profit/loss under equity method	Share of other comprehensive income	Transfer- out due to disposal of subsidiaries	Associates reclassified as other non-current financial assets	Share of other changes in equity	Cash dividends or profits declared	Provision for impairment	Others	31 December 2022	Shareholding ratio	Provision for impairment
Shanghai Mitsubishi Electric Shangling Air Conditioner Electric Co., Ltd.	673,576	-	-	23,902	-	-	-	-	(12,445)	-	-	685,033	47.59	-
Ideal Wanlihui Semiconductor Equipment (Shanghai) Co., Ltd.(i)	-	665,455	-	(623)	-	-	-	-	-	-	-	664,832	12.00	-
Shanghai Rail Traffic Equipment Development Co., Ltd.	571,814	-	-	22,432	-	-	-	-	(13,206)	-	-	581,040	49.00	-
Shanghai Jintai Engineering Machinery Co., Ltd.	551,690	-	-	4,892	-	-	-	-	(3,540)	-	-	553,042	49.00	-
Shanghai Electric Investment (Dubai) Co., Ltd.	607,370	-	-	(129,808)	-	-	-	-	-	54,587	532,149	39.20	-	
Mitsubishi Electric Shanghai Mechanical & Electrical Elevator Co., Ltd.	479,700	-	-	35,528	-	-	-	-	(15,806)	-	-	499,422	40.00	-
Shanghai Yileng Carrier Air Conditioning Equipment Co., Ltd.	415,973	-	-	61,910	-	-	-	-	(90,434)	-	-	387,449	30.00	-
Haitong UniFortune International Leasing Co., Ltd. (ii)	324,807	-	-	30,851	-	-	-	-	(4,454)	-	30,373	381,577	2.03	-
Shanghai Ri Yong – JEA Gate Electric Co., Ltd.	280,427	-	-	23,053	-	-	-	-	(39,634)	-	-	263,846	30.00	-
Shanghai Pudong New Area Zhangjiang Petty Loan Limited Company	228,067	-	-	14,250	-	-	-	-	(12,425)	-	-	229,892	23.75	-
Zhejiang Zhuji Lianchuang Yongjun Equity Investment Partnership (Limited Partnership)	194,125	-	-	(1,593)	-	-	-	-	-	-	-	192,532	20.92	-
Shanghai Siemens Switchgear Co., Ltd.	189,174	-	-	95,855	-	-	-	-	(101,814)	-	-	183,215	45.00	-
Nanjing Panneng Power Technology Co., Ltd.	167,136	-	-	7,426	-	-	-	-	(7,500)	-	-	167,062	25.00	-
Nabtesco (China) Precision Machine Co., Ltd.	124,501	-	-	21,548	-	-	-	-	-	-	-	146,049	33.00	-
Shanghai Marathon Innovation Electric Co., Ltd.	146,091	-	-	16,767	-	-	-	-	(23,745)	-	-	139,113	45.00	-
Shanghai Danfoss Hydrostatic Transmission Co., Ltd.	140,799	-	-	46,171	-	-	-	-	(49,328)	-	-	137,642	40.00	-

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(19) Long-term equity investments (Cont'd)

(b) Associates (Cont'd)

	Movements in the current year											31 December 2022	Shareholding ratio	Provision for impairment
	31 December 2021	Increase in investments	Decrease in investments	Share of net profit/loss under equity method	Share of other comprehensive income	Transfer-out due to disposal of subsidiaries	Associates reclassified as other non-current financial assets	Share of other changes in equity	Cash dividends or profits declared	Provision for impairment	Others			
Shanghai Nabtesco Hydraulic Co., Ltd.	181,679	-	-	23,767	-	-	-	-	(68,233)	-	-	137,213	30.00	-
Legend Electric (Shenyang) Co., Ltd.	142,408	-	-	46,445	-	-	-	-	(54,600)	-	-	134,253	35.00	-
KSB Shanghai Pumps Co., Ltd.	132,487	-	-	13,618	-	-	-	-	(17,600)	-	-	128,505	20.00	-
Shanghai Voith Hydropower Equipment Co., Ltd.	122,449	-	-	9,069	-	-	-	-	(15,513)	-	-	116,005	20.00	-
Zhongfu Lianzhong Wind Power Technology Co., Ltd.	105,205	-	-	931	-	-	-	-	(389)	-	-	105,747	40.00	-
Shanghai Huaduo Equity Investment Fund Partnership (Limited Partnership)	92,761	-	-	-	-	-	-	-	-	-	-	92,761	22.94	-
Shanghai ABB Motor Co., Ltd.	78,999	-	-	17,126	-	-	-	-	(10,014)	-	-	86,111	25.00	-
Shanghai Schneider Power Distribution Electrical Apparatus Co., Ltd.	86,955	-	-	104,906	-	-	-	-	(113,953)	-	-	77,908	20.00	-
SEC Alstom (Shanghai Baoshan) Transformers Co., Ltd.	76,450	-	-	376	-	-	-	-	-	-	-	76,826	50.00	-
Shanghai Clyde Bergemann Machinery Co., Ltd.	73,644	-	-	455	-	-	-	-	-	-	-	74,099	30.00	-
Shanghai Schneider Industrial Control Co., Ltd.	83,844	-	-	59,152	-	-	-	-	(72,906)	-	-	70,090	20.00	-
Shanghai ABB Transformers Co., Ltd.	82,975	-	-	20,216	-	-	-	-	(33,792)	-	-	69,399	49.00	-
Carrier Air Conditioning Sales Service (Shanghai) Co., Ltd.	71,907	-	-	(1,161)	-	-	-	-	(10,500)	-	-	60,246	30.00	-

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(19) Long-term equity investments (Cont'd)

(b) Associates(Cont'd)

	Movements in the current year												31 December 2022	Shareholding ratio	Provision for impairment
	31 December 2021	Increase in investments	Decrease in investments	Share of net profit/loss under equity method	Share of other comprehensive income	Transfer- out due to disposal of subsidiaries	Associates reclassified as other non-current financial assets	Share of other changes in equity	Cash dividends or profits declared	Provision for impairment	Others				
Ningxia Ningbo Industrial Investment Fund (Limited Partnership)	553,660	-	(553,660)	-	-	-	-	-	-	-	-	-	23.00	-	
Chongqing Fuling Energy Industry Group Co., Ltd.	189,878	-	-	(3,375)	-	(186,503)	-	-	-	-	-	-	10.38	-	
Rudong Haixiang Offshore Wind Power Co., Ltd.	127,037	38,880	-	75,701	-	-	(241,618)	-	-	-	-	-	18.00	-	
Guangrao Guoxin Equity Investment Fund Management Centre (Limited Partnership)	99,983	-	-	-	-	(99,983)	-	-	-	-	-	-	12.50	-	
Ningxia Anneng Biomass Thermal Power Co., Ltd	35,236	-	-	(461)	-	-	-	-	-	(35,252)	477	-	49.00	(35,252)	
Rudong Hefeng Offshore Wind Power Co., Ltd.	34,563	10,800	-	19,239	-	-	(64,602)	-	-	-	-	-	5.00	-	
Others	2,184,009	230,765	(70)	(15,264)	-	(157)	-	-	(213,209)	-	181,942	2,368,016	-	(7,008)	
	9,651,379	945,900	(553,730)	643,301	-	(286,643)	(306,220)	-	(985,040)	(35,252)	267,379	9,341,074	-	(42,260)	

Please refer to Note 6(2) for related information on interests in associates.

- (i) Although Shanghai Electric Group Automation Engineering Co., Ltd., a subsidiary of the Group, holds 12.00% of shares in Ideal Wanlihui Semiconductor Equipment (Shanghai) Co., Ltd, the Group has the right to appoint directors to exert significant influence on the company, so it is accounted as an associate.
- (ii) Although Shanghai Electric Hong Kong Limited, a subsidiary of the Group, holds 2.03% of shares in Haitong UniFortune International Leasing Co., Ltd, the Group has the right to appoint directors to exert significant influence on the company, so it is accounted as an associate.

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(20) Other non-current financial assets

	31 December 2022	31 December 2021
Equity investments in unlisted companies	5,552,366	5,320,377
Stock and fund investments	1,716,097	1,646,220
	<u>7,268,463</u>	<u>6,966,597</u>

(a) The equity investments in unlisted companies held by the Group mainly include:

Company	31 December 2022	31 December 2021	Shareholding ratio	Cash dividends in the current year
Company 1	1,746,000	1,741,405	2.02%	-
Company 2	2,117,817	2,107,778	19.00%	38,000
Others	1,688,549	1,471,024		3,546
	<u>5,552,366</u>	<u>5,320,207</u>		<u>41,546</u>

(b) The stocks and fund investments held by the Group mainly include:

Stock & fund	Total market capitalisation	31 December 2022	31 December 2021
Stock 1	34.51 billion	935,006	1,110,855
Stock 2	74.301 billion	280,419	383,828
Stock 3	10.366 billion	35,892	38,609
Stock 4	83.961 billion	28,702	34,627
Stock 5	26.953 billion	14,866	19,942
Others		421,212	58,359
		<u>1,716,097</u>	<u>1,646,220</u>

The above stock and fund investments are included in other non-current financial assets due to the Group plans to hold on long-term basis.

(21) Investment properties

	31 December 2021	Transfer from fixed assets	Additions due to acquisition of subsidiaries	Increase in the current year	Decrease in the current year	31 December 2022
Cost	1,840,937	-	-	-	(108,132)	1,732,805
Accumulated depreciation	1,017,689	-	-	79,200	(24,529)	1,072,360
Provision for impairment	273	-	-	-	-	273
Net book value	<u>822,975</u>					<u>660,172</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(21) Investment properties (Cont'd)

For the year ended 31 December 2022, depreciation charged to investment properties was RMB79,200 thousand (2021: RMB80,061 thousand).

As at 31 December 2022, the carrying amounts of investment properties leased to associates and third parties were RMB31,020 thousand and RMB629,152 thousand, respectively. It is mainly used for its production and operation, and the Group conducts daily maintenance and management of the investment properties.

(22) Fixed assets

	Buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
Cost					
31 December 2021	15,255,312	20,018,902	515,043	2,050,180	37,839,437
Increase in the current year					
Purchase	1,293,082	344,888	27,507	122,717	1,788,194
Transfers from construction in progress	1,982,649	1,178,596	6,481	121,689	3,289,415
Business combinations involving enterprises not under common control		19,139	237	741	20,117
Transfer from investment properties	69,713				69,713
Decrease in the current year					
Disposal and retirement	(122,489)	(658,844)	(33,398)	(60,944)	(875,675)
Decrease due to disposal of subsidiaries	(1,340,787)	(994,711)	(17,238)	(13,577)	(2,366,313)
Differences on translation of foreign currency financial statements	141,069	315,577	2,473	82,790	541,909
31 December 2022	17,278,549	20,223,547	501,105	2,303,596	40,306,797
Accumulated depreciation					
31 December 2021	4,637,267	11,298,535	390,193	1,415,014	17,741,009
Increase in the current year					
Provision	665,305	1,206,390	20,641	190,223	2,082,559
Transfer from investment properties	12,768				12,768
Decrease in the current year					
Disposal and retirement	(55,733)	(267,829)	(19,281)	(274,800)	(617,643)
Decrease due to disposal of subsidiaries	(124,791)	(8,200)	(1,795)	(10,753)	(145,539)
Differences on translation of foreign currency financial statements	59,532	223,488	2,073	70,188	355,281
31 December 2022	5,194,348	12,452,384	391,831	1,389,872	19,428,435
Provision for impairment					
31 December 2021	85,157	120,868	635	2,381	209,041
Increase in the current year					
Provision	374,039	19,841	14	1,438	395,332
Decrease in the current year					
Disposal and retirement	-	(6,538)	-	(96)	(6,634)
Decrease due to disposal of subsidiaries	-	(1,685)	-	-	(1,685)
31 December 2022	459,196	132,486	649	3,723	596,054
Carrying amount					
31 December 2022	11,625,005	7,638,677	108,625	910,001	20,282,308
31 December 2021	10,532,888	8,599,499	124,215	632,785	19,889,387

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(22) Fixed assets (Cont'd)

- (a) As at 31 December 2022, the Group pledged intangible assets with a carrying amount of RMB11,368 thousand (31 December 2021: RMB85,954 thousand), fixed assets with a carrying amount of RMB126,141 thousand (31 December 2021: RMB125,451 thousand) and investment properties with a carrying amount of RMB0 thousand (31 December 2021: RMB6,774 thousand) to obtain short-term borrowings of RMB159,400 thousand (31 December 2021: RMB366,406 thousand). As at 31 December 2022, the Group pledged fixed assets with a carrying amount of RMB511,361 thousand (31 December 2021: RMB389,685 thousand) and intangible assets with a carrying amount of RMB1,325,872 thousand (31 December 2021: RMB1,010,138 thousand) to obtain long-term borrowings of RMB2,053,429 thousand.
- (b) For the year ended 31 December 2022, depreciation charged to fixed assets amounted to RMB2,082,559 thousand (2021: RMB1,713,952 thousand), including RMB1,468,087 thousand, RMB9,577 thousand, RMB463,055 thousand and RMB141,840 thousand (2021: RMB1,171,201 thousand, RMB10,885 thousand, RMB398,234 thousand and RMB133,632 thousand) charged to operating cost, selling and distribution expenses, general and administrative expenses and research and development expenses respectively.
- (c) In 2022, the costs of fixed assets transferred from construction in progress amounted to RMB3,289,415 thousand (2021: RMB2,956,723 thousand).
- (d) As at 31 December 2022, the Group's buildings with a net book value of RMB131,538 thousand (31 December 2021: a net book value of RMB188,610 thousand) were under processing for property certificate due to recent renovation or government planning. Management of the Company believes that there is no substantive legal obstacle for these property certificates, which will not adversely affect the Group's operations.
- (e) There were no terms of guaranteed residual values specified in the lease contract for machinery and equipment signed by the Group as the lessor.

(23) Construction in progress

	31 December 2022			31 December 2021		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Zhangye Lilong Project	1,317,616	-	1,317,616	-	-	-
Wujiang Taihu Lake Renovation Project	421,160	(124,663)	296,497	319,287	-	319,287
Jinchang Yongneng Project	309,495	-	309,495	-	-	-
Jinsha River Branch Road No. 200 Project	150,447	-	150,447	-	-	-
Ningbo Hi-Firm Integrated Treatment Project	137,345	-	137,345	131,884	-	131,884
Construction of lithium battery automation equipment production line	7,183	-	7,183	943,408	-	943,408
Yumen Xinneng CSP Project	-	-	-	1,588,171	-	1,588,171
Shanghai Electric Nantong Central Research Institute	-	-	-	469,674	-	469,674
Naiman Banner Ulan Errige 200,000 KW Wind Power Project	-	-	-	182,634	-	182,634
Heilongjiang Bei'an Project	-	-	-	162,425	-	162,425
Others	1,212,024	(2,656)	1,209,368	1,229,697	(3,086)	1,226,611
	3,555,270	(127,319)	3,427,951	5,027,180	(3,086)	5,024,094

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(23) Construction in progress (Cont'd)

(a) Movements in construction in progress

Project name	31 December 2021	Increase in the current year	Transfer to fixed assets in the current year	Decrease due to disposal of subsidiaries	Other decreases	Differences on translation of foreign currency financial statements	31 December 2022	Accumulated amount of capitalised borrowing costs	Including: Capitalised borrowing costs in the current year	Source of funds
Zhangye Lilong Project	-	1,317,616	-	-	-	-	1,317,616	4,843	4,843	Self-owned and financing
Wujiang Taihu Lake Renovation Project	319,287	101,873	-	-	-	-	421,160	28,826	9,426	Financing
Jinchang Yongneng Project	-	309,495	-	-	-	-	309,495	910	910	Self-owned and financing
Jinsha River Branch Road No. 200 Project	-	150,447	-	-	-	-	150,447	106	106	Financing
Ningbo Hi-Firm Integrated Treatment Project	131,884	5,461	-	-	-	-	137,345	23,470	-	Financing
Construction of lithium battery automation equipment production line	943,408	183,949	(1,120,174)	-	-	-	7,183	-	-	Raised funds and self-owned funds
Yumen Xinneng CSP Project	1,588,171	15,893	-	(1,604,064)	-	-	-	-	11,074	Raised funds and self-owned funds
Shanghai Electric Nantong Central Research Institute	469,674	194,927	(664,601)	-	-	-	-	-	-	Raised funds
Naiman Banner Ulan Errige 200,000 KW Wind Power Project	182,634	-	-	(182,634)	-	-	-	-	-	Self-owned funds
Heilongjiang Bei'an Project	162,425	516,069	(678,494)	-	-	-	-	-	-	Self-owned funds
Others	1,229,697	1,283,081	(826,146)	(124,855)	(359,674)	9,921	1,212,024	47,211	67,139	
Total	5,027,180	4,078,811	(3,289,415)	(1,911,553)	(359,674)	9,921	3,555,270	83,496	93,498	

For the year ended 31 December 2022, the capitalised interest amounted to RMB93,498 thousand (2021: RMB61,717 thousand).

(b) Budget of major construction in progress

Project name	Budget	31 December 2021	Increase in the current year	Transfer to fixed assets in the current year	Other decreases	Differences on translation of foreign currency financial statements	31 December 2022	Project investment as a percentage of budget	Project progress (%)	Accumulated amount of capitalised borrowing costs	Including: Capitalised borrowing costs in the current year	Capitalised current year rate in the (%)	Source of funds
Zhangye Lilong Project	2,198,938	-	1,317,616	-	-	-	1,317,616	60%	60%	4,843	4,843	3%	Self-owned funds
Wujiang Taihu Lake Renovation Project	408,330	319,287	101,873	-	-	-	421,160	95%	95%	28,826	9,426	5%	Financing
100 MW Wind Power Project in North of Jinchuan District, Jinchang City	521,880	-	309,495	-	-	-	309,495	59%	59%	910	910	4%	Self-owned and financing
Jinsha River Branch Road No. 200 Project	2,612,870	-	150,447	-	-	-	150,447	10%	10%	106	106	4%	Financing
Ningbo Hi-Firm Integrated Treatment Project	480,944	131,884	5,461	-	-	-	137,345	33%	33%	23,470	-	-	Financing

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(24) Right-of-use assets

	Buildings	Machinery and equipment	Motor vehicles	Computers and electronic equipment	Land use rights	Total
Cost						
31 December 2021	1,987,588	98,705	56,266	30,991	39,360	2,212,910
Increase in the current year						
New lease contracts	446,529	53,087	16,099	399	55,791	571,905
Decrease in the current year						
Change of lease contracts	(335,773)	(265)	(3,341)	(6,862)	-	(346,241)
Decrease due to disposal of subsidiaries	(35,245)	-	-	-	-	(35,245)
Differences on translation of foreign currency financial statements	8,340	8,213	5,185	1,672	-	23,410
31 December 2022	2,071,439	159,740	74,209	26,200	95,151	2,426,739
Accumulated depreciation						
31 December 2021	642,821	53,459	30,525	17,829	9,660	754,294
Increase in the current year						
Provision	358,855	17,792	13,129	1,534	10,164	401,474
Decrease in the current year						
Modification of leases	(129,681)	(231)	(3,313)	(293)	-	(133,518)
Decrease due to disposal of subsidiaries	(15,518)	-	-	-	-	(15,518)
Differences on translation of foreign currency financial statements	2,597	1,559	1,309	531	-	5,996
31 December 2022	859,074	72,579	41,650	19,601	19,824	1,012,728
Provision for impairment						
31 December 2021	16,784	-	-	-	-	16,784
31 December 2022	11,842	-	-	-	-	11,842
Carrying amount						
31 December 2022	1,200,523	87,161	32,559	6,599	75,327	1,402,169
31 December 2021	1,327,983	45,246	25,741	13,162	29,700	1,441,832

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(25) Intangible assets and development expenditures

(a) Intangible assets

	Land use rights	Franchising	Patent and license	Technology transfer fee	Computer software and others	Total
Cost						
31 December 2021	7,117,460	5,939,586	2,041,625	650,414	766,073	16,515,158
Increase in the current year						
Purchase	215,176	349,725	31,681	114,725	975	712,282
Business combinations involving enterprises not under common control	-	-	794	-	61	855
Transfer from development expenditure	-	-	11,771	-	-	11,771
Decrease in the current year						
Disposal and retirement	(262,396)	(71,348)	(21,029)	-	-	(354,773)
Decrease due to disposal of subsidiaries	(273,572)	-	(211,392)	-	(97,872)	(582,836)
Currency translation differences	-	-	2,297	899	5,096	8,292
31 December 2022	6,796,668	6,217,963	1,855,747	766,038	674,333	16,310,749
Accumulated amortisation						
31 December 2021	1,353,118	400,612	680,335	556,981	454,672	3,445,718
Increase in the current year						
Provision	206,219	234,874	30,769	26,760	57,069	555,691
Decrease in the current year						
Disposal and retirement	(75,788)	(86,212)	(2,938)	-	(152)	(165,090)
Decrease due to disposal of subsidiaries	(39,057)	-	(94,209)	-	(93,678)	(226,944)
Currency translation differences	-	-	1,007	529	4,305	5,841
31 December 2022	1,444,492	549,274	614,964	584,270	422,216	3,615,216
Provision for impairment						
31 December 2021	5,939	-	90,438	-	16,170	112,547
Increase in the current year						
Provision	-	-	-	-	-	-
Decrease in the current year						
Disposal and retirement	-	-	-	-	-	-
Decrease due to disposal of subsidiaries	-	-	-	-	-	-
Currency translation differences	-	-	-	-	-	-
31 December 2022	5,939	-	90,438	-	16,170	112,547
Carrying amount						
31 December 2022	5,346,237	5,668,689	1,150,345	181,768	235,947	12,582,986
31 December 2021	5,758,403	5,538,974	1,270,852	93,433	295,231	12,956,893

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(25) Intangible assets and development expenditures (Cont'd)

(a) Intangible assets (Cont'd)

For the year ended 31 December 2022, amortisation of intangible assets amounted to RMB555,691 thousand (2021: RMB334,456 thousand).

As at 31 December 2022, the Group had no land use rights of which a land use rights certificate was not obtained (31 December 2021: Nil).

As at 31 December 2022, the Group pledged intangible assets with a carrying amount of RMB11,368 thousand (31 December 2021: RMB85,954 thousand), fixed assets with a carrying amount of RMB126,141 thousand (31 December 2021: RMB125,451 thousand) and investment properties with a carrying amount of RMB0 thousand (31 December 2021: RMB6,774 thousand) to obtain short-term borrowings of RMB159,400 thousand (31 December 2021: RMB366,406 thousand). As at 31 December 2022, the Group pledged fixed assets with a carrying amount of RMB511,361 thousand (31 December 2021: RMB389,685 thousand) and intangible assets with a carrying amount of RMB1,325,872 thousand (31 December 2021: RMB1,010,138 thousand) to obtain long-term borrowings of RMB2,053,429 thousand.

(b) Development expenditures

Project name	31 December 2021	Increase in the current year	Decrease in the current year		31 December 2022
			Recognised in profit or loss	Transfer to intangible assets	
Academia Sinica Industrial Automation System	6,735	6,689	-	-	13,424
Development of Ballast Water Management System for High Load Ships	6,000	7,361	-	-	13,361
Research and development of intelligent production system equipment in the new PC field	299	7,457	-	(7,553)	203
Others	27,602	98,750	(113,304)	(4,218)	8,830
	<u>40,636</u>	<u>120,257</u>	<u>(113,304)</u>	<u>(11,771)</u>	<u>35,818</u>

As at 31 December 2022, the balance of the Group's development expenditures was RMB35,818 thousand (31 December 2021: RMB40,636 thousand). For the year ended 31 December 2022, the development expenditures of the Group were recognised as an intangible asset of RMB11,771 thousand (2021: RMB41,286 thousand).

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(26) Goodwill

	31 December 2021	Increase in the current year	Decrease in the current year	Differences on translation of foreign currency financial statements	Disposal of subsidiaries	31 December 2022
Goodwill						
Shenzhen Yinghe Technology Co., Ltd.	1,497,236	-	-	-	-	1,497,236
Nedschroef	1,445,198	-	-	29,379	-	1,474,577
Broetje-AutomationGmbH	1,008,072	-	-	20,493	-	1,028,565
Ningbo Hi-Firm Environmental Protection Company Limited	576,047	-	-	-	-	576,047
Suzhou Thvow Technology Co., Ltd.	323,080	-	-	-	(323,080)	-
Wujiang Taihu Industrial Wastes Treatment Company Limited	278,538	-	-	-	-	278,538
Others	368,910	4,405	-	-	-	373,315
Sub-total	5,497,081	4,405	-	49,872	(323,080)	5,228,278

	31 December 2021	Increase in the current year	Decrease in the current year	Differences on translation of foreign currency financial statements	Disposal of subsidiaries	31 December 2022
Less: Provision for impairment						
Broetje-AutomationGmbH	(570,387)	-	-	(3,660)	-	(574,047)
Nedschroef	(316,426)	-	-	(2,031)	-	(318,457)
Ningbo Hi-Firm Environmental Protection Company Limited	(277,575)	-	-	-	-	(277,575)
Wujiang Taihu Industrial Wastes Treatment Company Limited (a)	(121,048)	(157,490)	-	-	-	(278,538)
Shenzhen Yinghe Technology Co., Ltd. (b)	-	(253,997)	-	-	-	(253,997)
Others	(256,941)	-	-	-	20,000	(236,941)
Sub-total	(1,542,377)	(411,487)	-	(5,691)	20,000	(1,939,555)
Total	3,954,704	(407,082)	-	44,181	(303,080)	3,288,723

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(26) Goodwill (Cont'd)

The goodwill is summarised by operating segments (Note 7) as follows:

Operating segment		31 December 2022		
		Subdivision	Cost	Impairment
Industrial equipment	Industrial Basic Parts	1,541,554	(346,690)	1,194,864
	Intelligent manufacturing equipment	1,028,565	(574,047)	454,518
	Large and medium-sized motors	10,060	-	10,060
	Others	4,405	-	4,405
Energy equipment	Energy Storage	1,546,716	(269,086)	1,277,630
	Power Grid	155,036	(155,036)	-
	Power transmission and distribution	18,331	(18,331)	-
Integration service	Environmental Engineering and Service	881,565	(576,365)	305,200
	Industrial Internet	26,269	-	26,269
	Power transmission and distribution	7,651	-	7,651
	Wind Power	7,093	-	7,093
	Property management services	1,033	-	1,033
		5,228,278	(1,939,555)	3,288,723

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(26) Goodwill (Cont'd)

(a) The main assumptions applied in calculating discounted future cash flows are as follows:

2022	Industrial Basic Parts	Intelligent manufacturing equipment	Environmental Engineering and Service
Growth rates in the forecast period	-4%~18.97%	-8.91%~21.54%	3%~544%
Growth rates in the stable period	1.88%~2.0%	1.42%	0%
Gross margin	17.81%~58.0%	19.43%~23.35%	-9%~61%
Pre-tax discount rates	13.9%~14.0%	13.5%	8.7%~10.5%

2021	Industrial Basic Parts	Intelligent manufacturing equipment	Environmental Engineering and Service
Growth rates in the forecast period	-1.0%~9.12%	-8.5%~105.7%	3%~340%
Growth rates in the stable period	1.32%~2.0%	1.42%	0%
Gross margin	17.87%~57.0%	18.4%~23.4%	-17%~64%
Pre-tax discount rates	12.3%~14.0%	12%	10.5%~11%

The Group determines growth rates and gross margins based on past experience and forecast on future market development. Long-term sales growth rate is the weighted average growth rates applied by the Group to extrapolate cash flows beyond the three-to-five-year forecast periods, which do not exceed the long-term average growth rates of each product in the industry report. The discount rates used by the Group are the pre-tax interest rates that are able to reflect the risks specific to the related asset groups or groups of asset groups.

(a) Wujiang Taihu Industrial Wastes Treatment Company Limited is in the operating segment of integration service - environmental engineering and service. As at 31 December 2022, the Group used the present value of estimated future cash flows as the recoverable amount, after comparing the higher of the present value of estimated future cash flows and fair value less cost of disposal. The key assumptions of the present value of estimated future cash flows include discount rates and sales growth rates. Those calculations use cash flow projections based on financial budgets approved by management covering a five-year period and expected operating period, and a pre-tax discounted rate of 9% (2021:11%). The increase of the sales growth rate is based on industry growth forecast, CIC Industrial Research Institute estimates that in the next five years (2023 to 2027), the compound annual growth rate of hazardous waste disposal scale in China is about 9.27%. Considering that the development of manufacturing industry in Jiangsu and Zhejiang regions is better than the national average level, the group uses 10% growth rate. As Wujiang Taihu Industrial Waste Treatment Co., Ltd. expects higher unit waste disposal costs in the future, an impairment provision of goodwill RMB 157,490 yuan was made in 2022.

(b) Goodwill arising from merger of Yinghe Technology amounted to RMB1,497,236 thousand, which was in the operating segment of energy equipment. As at December 31, 2022, the net fair value minus disposal cost of the asset group of Yinghe Technology is higher than the present value by estimating future cash flow, so the company adopts the market method of net fair value minus disposal cost and determines the fair value of the asset group. When the market method is adopted, the fair value of the asset group is estimated by the stock price of the listed company after necessary adjustment. The key assumptions are the stock price of the listed company and the control premium. According to the results of the goodwill impairment test, an impairment provision of goodwill RMB 253,997 thousand was made in 2022.

On December 31, 2022, the contract assets of the Group mainly consist of the undue quality guarantee and other funds, including RMB 715,628 thousands of contract assets formed from PPP projects (December 31, 2021: RMB 845,348 thousand).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(27) Long-term prepaid expenses

	31 December 2021	Additions due to acquisition of subsidiaries	Increase in the current year	Amortisation in the current year	Other decreases	31 December 2022
Renovation expenditures	253,458	-	9,701	(46,043)	(29)	217,087
Decoration expenditures	124,688	-	1,669	(3,675)	(672)	122,010
Improvements to fixed assets held under leases	52,276	443	19,850	(42,574)	(3,597)	26,398
Others	178,426	-	94,812	(26,080)	(57,169)	189,989
	<u>608,848</u>	<u>443</u>	<u>126,032</u>	<u>(118,372)</u>	<u>(61,467)</u>	<u>555,484</u>

(28) Deferred tax assets and deferred tax liabilities

(a) Deferred tax assets before offsetting

	31 December 2022		31 December 2021	
	Deductible temporary differences and deductible losses	Deferred tax assets	Deductible temporary differences and deductible losses	Deferred tax assets
Asset impairment and provisions	21,434,788	4,599,053	25,656,772	4,860,774
Accrued expenses	13,900,922	2,495,039	14,318,929	2,605,742
Deductible losses	4,033,493	1,008,373	4,894,141	1,206,918
Offsetting of profits from internal transactions	273,214	68,304	421,806	102,254
Others	476,899	86,743	693,208	173,302
	<u>40,119,316</u>	<u>8,257,512</u>	<u>45,984,856</u>	<u>8,948,990</u>

Including:

Expected to be recovered within one year (inclusive)	4,631,572	4,719,083
Expected to be recovered after one year	3,625,940	4,229,907
	<u>8,257,512</u>	<u>8,948,990</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(28) Deferred tax assets and deferred tax liabilities(Cont'd)

(b) Deferred tax liabilities before offsetting

	31 December 2022		31 December 2021	
	Taxable temporary differences	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Changes in fair value of financial instruments	3,054,388	763,597	3,286,452	821,612
Assets assessment increment	608,632	152,158	698,646	169,438
Fair value adjustment for business combinations	1,005,144	251,286	1,713,415	416,357
Others	777,737	193,640	959,624	238,926
	<u>5,445,901</u>	<u>1,360,681</u>	<u>6,658,137</u>	<u>1,646,333</u>

Including:

Expected to be recovered within one year (inclusive)	957,237	1,060,538
Expected to be recovered after one year	403,444	585,795
	<u>1,360,681</u>	<u>1,646,333</u>

(c) Deductible temporary differences and deductible losses that are not recognised as deferred tax assets are analysed as follows:

	31 December 2022	31 December 2021
Deductible temporary differences	16,526,438	15,670,535
Deductible losses	9,036,423	4,415,239
	<u>25,562,861</u>	<u>20,085,774</u>

(d) Deductible losses that are not recognised as deferred tax assets will be expired in following years:

	31 December 2022	31 December 2021
2022	-	169,502
2023	127,577	194,344
2024	274,471	373,037
2025	431,930	464,677
2026	1,310,472	1,499,246
2027 and after	6,891,973	1,714,433
	<u>9,036,423</u>	<u>4,415,239</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(28) Deferred tax assets and deferred tax liabilities (Cont'd)

(e) Taxable temporary differences without recognising deferred tax liabilities

The Group expects that the amount of deferred income tax liabilities related to the distribution of dividends by its subsidiaries, joint ventures, and overseas associates or disposal of long-term equity investments is not significant.

(f) The net balances of deferred tax assets and deferred tax liabilities after offsetting are as follows:

	31 December 2022		31 December 2021	
	Offsetting amount	Balance after offsetting	Offsetting amount	Balance after offsetting
Deferred tax assets	524,360	7,733,152	870,685	8,078,305
Deferred tax liabilities	524,360	836,321	870,685	775,648

(29) Other non-current assets

	31 December 2022	31 December 2021
Contract assets (Note 4(12))	13,626,483	12,070,694
Others	327,464	1,686,519
	13,953,947	13,757,213
Less: Provision for impairment of contract assets (Note 4(12))	(580,247)	(395,339)
	13,373,700	13,361,874

As at 31 December 2022, the contract assets of the Group mainly consist of the undue quality guarantee and other funds, including RMB 715,628 thousands of contract assets formed from PPP projects (December 31, 2021: RMB 845,348 thousand).

In 2022, the Group's revenue from main operations comprised revenue from PPP project contracts of RMB937,270 thousand (2021: RMB766,786 thousand), including revenue from project construction services of RMB612,673 thousand (2021: RMB692,870 thousand). The Group's PPP project contracts primarily refer to water and waste treatment contracts. The Group provides PPP project asset construction, operation and maintenance thereafter, and other services as agreed in the PPP project contracts, with a total term of 20 to 30 years. The project assets of water treatment contract are mainly located in Jiangsu Province and Anhui Province, while those of waste treatment contract are mainly in Liaoning Province and Hebei Province. In 2022, there were no significant changes in the PPP project contracts.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(30) Provision for asset impairment and losses

Provision for credit impairment losses	31 December 2021	Increase in the current year Provision	Decrease in the current year					Differences on translation of foreign currency financial statements	31 December 2022
			Reversal	Write-off /Disposal	Decrease due to disposal of subsidiaries	Derecognition and transfer- out of receivables	Other transfer- out		
Provision for bad debts of notes receivable	1,090,105	119,417	(38,613)	-	(58,962)	-	-	-	1,111,947
Including: Provision for bad debts on the individual basis	990,110	97,561	(21,965)	-	-	-	-	-	1,065,706
Provision for bad debts on the grouping basis	99,995	21,856	(16,648)	-	(58,962)	-	-	-	46,241
Provision for bad debts of accounts receivable measured at amortised cost	17,560,454	2,287,534	(1,289,985)	(50,467)	(1,311,561)	-	-	-	17,195,975
Including: Provision for bad debts on the individual basis	11,842,709	1,277,441	(325,592)	(8,126)	(546,758)	-	-	-	12,239,674
Provision for bad debts on the grouping basis	5,717,745	1,010,093	(964,393)	(42,341)	(764,803)	-	-	-	4,956,301
Provision for credit impairment of receivables financing	13,391	6,293	-	-	-	(17,736)	-	-	1,948
Provision for impairment of other debt investments	8,801	12,782	-	(8,801)	-	-	-	-	12,782
Provision for bad debts of other receivables	471,129	635,230	(9,274)	(3,877)	(89,627)	-	-	-	1,003,581
Provisions - expected credit impairment of guarantees/commitments	316,563	23,937	(65,474)	(179,481)	130,000	-	-	-	225,545
Provision for bad debts of loans	424,189	163,307	(239,997)	-	137,694	-	-	-	485,193
Provision for impairment of discounted notes	4,364	48,692	-	-	-	-	-	-	53,056
Provision for bad debts of long-term receivables (including current portion)	1,640,630	439,616	-	(98,722)	-	-	-	-	1,981,524
Others	2,259	-	-	-	-	-	-	-	2,259
Sub-total	21,531,885	3,736,808	(1,643,343)	(341,348)	(1,192,456)	(17,736)	-	-	22,073,810

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(30) Provision for asset impairment and losses (Cont'd)

Provision for credit impairment losses	31 December 2021	Increase in the current year Provision	Decrease in the current year Reversal	Decrease in the current year				Differences on translation of foreign currency financial statements	31 December 2022
				Write-off /Disposal	Decrease due to disposal of subsidiaries	Derecognition and transfer-out of receivables	Other transfer-out		
Provision for decline in the value of inventories	4,190,784	1,146,107	(214,577)	(767,825)	(53,363)	-	-	3,710	4,304,836
Provision for impairment of investment properties	273	-	-	-	-	-	-	-	273
Provision for impairment of contract assets	1,637,696	449,061	(201,978)	-	(420,618)	-	-	33	1,464,194
Provision for impairment of fixed assets	209,041	395,332	-	(6,634)	(1,685)	-	-	-	596,054
Provision for impairment of construction in progress	3,086	124,233	-	-	-	-	-	-	127,319
Provision for impairment of intangible assets	112,547	-	-	-	-	-	-	-	112,547
Provision for impairment of long-term equity investments	7,008	35,252	-	-	-	-	-	-	42,260
Provision for impairment of goodwill	1,542,377	411,487	-	-	(20,000)	-	-	5,691	1,939,555
Provision for impairment of right-of-use assets	16,784	-	-	(4,942)	-	-	-	-	11,842
Sub-total	7,719,596	2,561,472	(416,555)	(779,401)	(495,666)	-	-	9,434	8,598,880
	29,251,481	6,298,280	(2,059,898)	(1,120,749)	(1,688,122)	(17,736)	-	9,434	30,672,690

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(31) Short-term borrowings

	31 December 2022	31 December 2021
Credit borrowings	8,057,412	9,092,899
Mortgage borrowings (a)	159,400	366,406
Pledge borrowings (b)	170,455	22,174
Guaranteed borrowings (c)	52,000	1,209,510
Discount borrowings (d)	221,628	234,050
Factoring borrowings (e)	-	911,327
	8,660,895	11,836,366

- (a) As at 31 December 2022, the Group pledged intangible assets with a carrying amount of RMB11,368 thousand (31 December 2021: RMB85,954 thousand), fixed assets with a carrying amount of RMB126,141 thousand (31 December 2021: RMB125,451 thousand) and investment properties with a carrying amount of RMB0 thousand (31 December 2021: RMB6,774 thousand) to obtain short-term borrowings of RMB159,400 thousand (31 December 2021: RMB366,406 thousand).
- (b) As at 31 December 2022, the Group pledged long-term receivables with a carrying amount of RMB485,344 thousand (31 December 2021: RMB50,472 thousand) and future collection rights with a carrying amount of RMB228,650 thousand (31 December 2021: Nil) to obtain short-term bank borrowings of RMB170,455 thousand (31 December 2021: RMB22,174 thousand).
- (c) As at 31 December 2022, the Company and its subsidiaries provided guarantees of RMB52,000 thousand for short-term borrowings of certain subsidiaries (31 December 2021: RMB1,209,510 thousand).
- (d) As at 31 December 2022, the Group discounted trade acceptance notes of RMB73,820 thousand and bank acceptance notes of RMB147,808 thousand to obtain short-term bank borrowings (As at 31 December 2021, the Group discounted trade acceptance notes of RMB110,988 thousand and bank acceptance notes of RMB123,062 thousand to obtain short-term bank borrowings).
- (e) As at 31 December 2022, the Group did not enter into accounts receivable factoring contracts with recourse to obtain bank borrowings (31 December 2021: RMB911,327 thousand).

As at 31 December 2022, the annual interest rate for short-term borrowings was 0.79% to 5.64% (31 December 2021: the annual interest rate was 0.40% to 6.00%).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(32) Financial liabilities held for trading

	31 December 2022	31 December 2021
Financial liabilities held for trading	32,017	28,569

As at 31 December 2022, financial liabilities held for trading comprised the fair value of the equities held by investors other than the Group in the structured entities included in the consolidation scope.

(33) Notes payable

	31 December 2022	31 December 2021
Trade acceptance notes	4,156,252	5,049,486
Bank acceptance notes	11,913,306	11,529,368
	16,069,558	16,578,854

(34) Accounts payable

	31 December 2022	31 December 2021
Accounts payable	57,396,886	61,303,577

- (i) As at 31 December 2022, accounts payable with ageing over one year amounted to RMB10,095,104 thousand (31 December 2021: RMB17,973,039 thousand), which mainly comprised payables for construction projects and payables for materials. Such accounts are unsettled for the projects are still under construction.

The ageing of accounts payable based on their recording dates is analysed as follows:

	31 December 2022	31 December 2021
Within 3 months	36,583,071	33,066,158
3 months to 6 months	3,633,310	4,603,012
6 months to 1 year	7,085,401	5,661,368
1 to 2 years	4,348,380	9,226,113
2 to 3 years	1,804,195	4,263,316
Over 3 years	3,942,529	4,483,610
	57,396,886	61,303,577

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(35) Advances from customers

	31 December 2022	31 December 2021
Share advances and others	786,313	738,047

As at 31 December 2022, there were no advances from customers with ageing over one year, except for share advances of RMB353,369 thousand (31 December 2021: RMB332,839 thousand). Such share advances were not recognised as they had not been settled.

(36) Contract liabilities

	31 December 2022	31 December 2021
Advances from goods and services	38,886,075	39,411,001
Less: Non-current portion of contract liabilities included in other non-current liabilities	(143,278)	(250,601)
	38,742,797	39,160,400

RMB36,418,137 thousand of the balance of contract liabilities as at 31 December 2021 was transferred to revenue in 2022. The balance of contract liabilities as at 31 December 2022 is expected to be transferred to revenue in 2023.

(37) Deposits from customers, banks and other financial institutions

	31 December 2022	31 December 2021
Current deposits	4,894,065	3,322,922
Time deposits	1,182,500	1,875,800
	6,076,565	5,198,722

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(38) Employee benefits payable

		31 December 2022	31 December 2021
Short-term employee benefits payable	(a)	4,728,402	4,198,399
Defined contribution plans payable	(b)	88,157	84,891
Termination benefits payable	(c)	141,471	75,267
		4,958,030	4,358,557

(a) Short-term employee benefits

	31 December 2021	Additions due to acquisition of subsidiaries	Increase in the current year	Decrease in the current year	31 December 2022
Wages or salaries, bonus, allowances and subsidies	2,971,124	63	9,776,868	(9,247,531)	3,500,524
Staff welfare	107,668	-	271,475	(372,962)	6,181
Staff and workers' bonus and welfare fund	1,008,516	-	89,239	(3,336)	1,094,419
Social security contributions	21,840	14	579,281	(559,245)	41,890
Including: Medical insurance	18,907	14	532,501	(511,413)	40,009
Work injury insurance	2,305	-	26,738	(28,015)	1,028
Maternity insurance	628	-	20,042	(19,817)	853
Housing funds	32,378	7	467,229	(467,203)	32,411
Labour union funds and employee education funds	56,873	5	139,727	(143,628)	52,977
	4,198,399	89	11,323,819	(10,793,905)	4,728,402

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(38) Employee benefits payable (Cont'd)

(b) Defined contribution plans

	31 December 2021	Additions due to acquisition of subsidiaries	Increase in the current year	Decrease in the current year	31 December 2022
Basic pensions	39,882	178	946,438	(941,577)	44,921
Unemployment insurance	3,637	18	32,038	(33,402)	2,291
Supplementary pensions (Note)	41,372	-	332,383	(332,810)	40,945
	84,891	196	1,310,859	(1,307,789)	88,157

Note: Monthly payments of premiums on the pension plans (including the basic pensions in Mainland of China and Mandatory Provident Fund (“MPF”) in Hong Kong) are made to relevant authorities and calculated according to the bases and percentages prescribed by the local authorities of Ministry of Human Resource and Social Security. Besides, the payments cannot be used to offset the amounts to be paid for employees by the Group in the future.

The Group also provides certain defined contribution plans (including the enterprise annuity plan in Mainland of China (the “Plan”) and the provident fund plan in Hong Kong) to some employees in Mainland of China and outside Mainland of China. The Group pays fixed contributions into a separate fund and will have no obligation to pay further contributions. In 2022, under the Plan in Mainland of China, the total returned contributions (the amount contributed by the Group for employees who left such Plan prior to vesting fully in such Plan) to the corporate account of the Plan amounted to RMB4,919 thousand (2021: RMB3,427 thousand). Such returned contributions had no impact on and were not utilised by the Group to reduce the level of contributions for existing employees participating in the Plan. In 2022, the Group had no contributions not collected under the defined contribution plans excluding the Plan in Mainland of China. Except for the above plans, the Group had no other defined contribution plans.

(c) Termination benefits payable

	31 December 2022	31 December 2021
Termination benefits	141,471	75,267

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(39) Taxes payable

	31 December 2022	31 December 2021
Enterprise income tax payable	981,906	958,694
VAT payable	850,872	1,012,930
Individual income tax payable	46,618	48,596
City maintenance and construction tax payable	38,437	35,510
Real estate tax payable	27,039	28,503
Land use tax payable	10,080	9,717
Others	75,535	86,252
	2,030,487	2,180,202

(40) Other payables

	31 December 2022	31 December 2021
Construction and fixed assets purchase expenses payable	984,375	342,113
Sales commission	956,132	904,194
Technical royalties	638,757	647,412
Guarantees and deposits	510,000	748,665
Dividends payable to minority shareholders	390,765	233,701
Payables to related parties	317,084	411,546
Maintenance cost within warranty period of elevators	240,194	291,007
Factoring fee	157,811	244,719
Transfer of factored accounts receivable	114,928	858,207
Relocation compensations and personnel replacement fees	82,788	41,101
Repurchase of shares under the incentive scheme	-	382,271
Others	3,466,639	3,497,621
	7,859,473	8,602,557

As at 31 December 2022, there were no dividends payable with ageing over one year (31 December 2021: Nil).

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(41) Current portion of non-current liabilities

	31 December 2022	31 December 2021
Current portion of long-term borrowings (Note 4(43))	5,482,574	6,514,065
Current portion of long-term payables (Note 4(46))	764,983	1,284,484
Current portion of bonds payable (Note 4(44))	2,516,608	-
Current portion of lease liabilities (Note 4(45))	356,196	475,791
	9,120,361	8,274,340

(42) Other current liabilities

	31 December 2022	31 December 2021
Accrued expenses (a)	6,280,898	6,132,925
Provisions (b)	5,500,713	4,441,032
	11,781,611	10,573,957

(a) Accrued expenses

	31 December 2022	31 December 2021
Provision for the cost of spare parts	5,377,676	4,955,199
Others	903,222	1,177,726
	6,280,898	6,132,925

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(42) Other current liabilities (Cont'd)

(b) Provisions

	31 December 2021	Increase in the current year	Reversal in the current year	Decrease in the current year	Changes in disposal of subsidiaries	31 December 2022
Estimated onerous contracts (Note)	2,582,889	2,144,328	(360,809)	(757,087)	(31,597)	3,577,724
Product warranty expenses	4,335,131	1,047,524	(43,664)	(435,310)	-	4,903,681
Expected credit impairment for guarantees/ commitments (Note 4(30))	316,563	23,937	(65,474)	(179,481)	130,000	225,545
	119,379	316,651	(24,000)	(3,405)	(21,886)	386,739
Others	7,353,962	3,532,440	(493,947)	(1,375,283)	76,517	9,093,689
	(2,912,930)					(3,592,976)
Less: Long-term provisions	4,441,032					5,500,713

Note: Factors such as commodity prices and industry competition can have a significant impact on the gross profit of related contracts. As at 31 December 2022, the Group assessed on whether unavoidable estimated total costs of meeting contractual obligations had exceeded the economic benefits expected to be received, and made provision for these onerous contracts based on the estimated least net cost of exiting from the contracts.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(43) Long-term borrowings

	31 December 2022	31 December 2021
Credit borrowings	16,905,114	14,380,371
Mortgage borrowings (a)	2,389,097	1,706,910
Pledge borrowings (b)	4,758,850	4,300,515
Guaranteed borrowings (c)	3,077,203	9,937,598
Factoring borrowings (d)	-	34,088
	27,130,264	30,359,482
Less: Current portion of long-term borrowings (Note 4(41))		
Credit borrowings	(3,400,662)	(843,956)
Mortgage borrowings	(346,558)	(256,019)
Pledged borrowings	(253,324)	(180,452)
Factoring borrowings	-	(34,088)
Secured borrowings	(1,482,030)	(5,199,550)
Sub-total	(5,482,574)	(6,514,065)
	21,647,690	23,845,417

- (a) As at 31 December 2022, RMB 343,146 thousand of the Group's bank mortgage loans (31 December 2021: Nil) were fixed asset syndicated loans borrowed by subsidiaries of the Group. Due to the uncompleted construction of the project, relevant procedures for mortgage/pledge guarantees have not been completed.

As at 31 December 2022, the Group pledged fixed assets with a carrying amount of RMB511,361 thousand (31 December 2021: RMB389,685 thousand) and intangible assets with a carrying amount of RMB1,325,872 thousand (31 December 2021: RMB1,010,138 thousand) to obtain long-term borrowings of RMB2,053,429 thousand.

- (b) As at 31 December 2022, the Group pledged long-term receivables with a book value of RMB 1,316,094 thousand (December 31 2021: RMB 2,170,377 thousand) to obtain long-term borrowings of RMB 1,854,400 thousand.

As at 31 December 2022, the Group pledged the future collection rights of several PPP projects and power generation projects to the bank to obtain long-term borrowings of RMB3,565,850 thousand (31 December 2021: RMB2,274,927 thousand).

- (c) As at 31 December 2022, the Company and its subsidiaries provided guarantees of RMB3,077,203 thousand for long-term borrowings of certain subsidiaries (31 December 2021: RMB9,937,598 thousand).

- (d) As at 31 December 2022, the Group did not enter into accounts receivable factoring contracts with recourse to obtain bank borrowings (31 December 2021: RMB34,088 thousand).

As at 31 December 2022, the interest rate range of long-term borrowings was 0.30% to 5.850% (31 December 2021: 0.55% to 5.635%).

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(44) Bonds payable

	31 December 2021	Increase in the current year	Exchange differences	Interest accrued at par value	Amortisation of premium or discount	Repayment in the current year	Share transfer in the current year	31 December 2021
18 Electric MTN001 (a)	2,490,445	-	-	4,548	5,541	-	-	2,500,534
22 Hufeng MTN001 (b)	-	750,000	-	16,074	(1,303)	-	-	764,771
	2,490,445							3,265,305
Less: Current portion of bonds payable (Note 4(41))	-							(2,516,608)
	2,490,445							748,697

- (a) The Group issued the first phase of 2018 medium-term notes of Shanghai Electric Group Co., Ltd. on 13 December 2018, with a maturity of 5 years. The value date is 17 December 2018, and the redemption date is 17 December 2023. The proposed total issuance is RMB2.5 billion, and the actual total issuance is RMB2.5 billion; the issuance interest rate is 4.15% (the Shanghai Interbank Offered Rate for the three months on 14 December 2018 rose by 1%), and the issuance is based on the face value.
- (b) The Group's subsidiary, Shanghai Electric Wind Power Group Co., Ltd. issued the first phase of 2022 green medium-term notes of Shanghai Electric Wind Power Group Co., Ltd. on 29 April 2022, with a maturity of 3 years. The value date is 29 April 2022, and the redemption date is 29 April 2025. The proposed total issuance is RMB7.5 billion, and the actual total issuance is RMB7.5 billion; the issuance interest rate is 3.18% and the issuance is based on the face value.

(45) Lease liabilities

	31 December 2022	31 December 2021
Lease liabilities	1,433,621	1,503,787
Less: Current portion of non-current liabilities (Note 4(41))	(356,196)	(475,791)
	1,077,425	1,027,996

As at 31 December 2022, the Group had no lease payable related to lease contracts signed but not yet performed (31 December 2021: Nil).

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(46) Long-term payables

	31 December 2022	31 December 2021
Related party loans (Note 8(6))	533,778	1,061,674
Guarantees for finance leases	543,441	553,452
Scientific research projects subsidies	6,820	8,751
Others	243,799	243,622
	1,327,838	1,867,499
Less: Current portion of long-term payables (Note 4(41))	(764,983)	(1,284,484)
	562,855	583,015

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(47) Deferred income

	31 December 2022	31 December 2021
Deferred income	1,491,212	1,651,556

As at 31 December 2022, liability items related to government grants were as follows:

Government grants	31 December 2021	Increase in the current year	Decrease in the current year	31 December 2022	Assets related/ Income related
Gotion Energy Storage System Base	255,480	880	(15,480)	240,880	Assets related
Goss China's new plant	121,475	-	(8,998)	112,477	Assets related
Test tower construction project	98,587	-	(4,950)	93,637	Assets related
Purchase subsidiary for R&D assets of turbine blade	53,228	-	(4,008)	49,220	Assets related
Key technologies R&D for deep peak-shaving ultra supercritical coal-fired boilers	53,200	-	(53,200)	-	Income related
Support funds for Nantong Guohai comprehensive development	50,627	-	(1,439)	49,188	Assets related
Special funds for supporting strategic emerging industry	45,686	3,984	(4,378)	45,292	Assets related
Yinghe lithium-ion power battery project	34,161	-	(5,189)	28,972	Assets related
Technological transformation II	33,734	-	(1,534)	32,200	Assets related
Tax refund	-	195,970	(195,970)	-	Income related
Other government grants related to assets	539,499	59,232	(100,794)	497,937	Assets related
Other government grants related to income	365,879	657,581	(682,051)	341,409	Income related
Total	1,651,556	917,647	(1,077,991)	1,491,212	

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(48) Long-term employee benefits payable

	31 December 2022	31 December 2021
Termination benefits (a)	82,080	92,650
Defined benefit plan (b)	93,774	132,023
	175,854	224,673

(a) Termination benefits

Some employees of the Group have already opted for early retirement. As at the balance sheet date, the main actuarial assumptions adopted by the Group to pay early retirement benefits are:

	31 December 2022	31 December 2021
Discount rate	2.07%~3.32%	2.12%~3.45%
Salary growth rate	10.36%	10.36%

The early retirement benefits included in profit or loss for the current period are:

	For the year ended 31 December 2022	For the year ended 31 December 2021
General and administrative expenses	(585)	2,390
Financial expenses	1,386	4,157

(b) Defined benefit plan

The defined benefit plan requires employee contributions. Contributions are made in two ways, namely, contributions to the plan based on the number of years of service and a fixed percentage of the employee's salary. Employees can also contribute to the plan at their discretion.

This plan exposes the Group to actuarial risks, such as investment risk, interest rate risk, longevity risk and salary risk.

Investment risk

The present value of defined benefit plan liabilities is calculated at a discount rate determined with reference to the yield of high-quality corporate bonds. If the return on the plan assets is lower than the discount rate, the plan will incur a deficit. Due to the long-term nature of plan liabilities, the Pension Fund Committee believes that it is appropriate to invest a reasonable portion of plan assets in funds invested by insurance companies to take advantage of the returns generated by the funds.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(48) Long-term employee benefits payable (Cont'd)

(b) Defined benefit plan (Cont'd)

Interest rate risk

The reduction in bond interest rates will lead to an increase in plan liabilities; however, this will be partially offset by an increase in the return on the planned debt investment.

Longevity risk

The present value of defined benefit plan liabilities is calculated by referring to the best estimate of the mortality rate of plan members during and after the employment period. An increase in the life expectancy of plan members will result in an increase in plan liabilities.

Salary risk

The present value of defined benefit plan liabilities is calculated by referring to the future salary of plan members. As a result, an increase in the salary of plan members will lead to an increase in plan liabilities.

The composition of the defined benefit plan is as follows:

	31 December 2022	31 December 2021
Non-current liabilities	93,774	132,023
Current liabilities	5,468	5,913
	99,242	137,936

The main actuarial assumptions adopted at the end of the reporting period are as follows:

	31 December 2022	31 December 2021
Discount rate	4.21%	1.31%
Expected future increase in retirement cost ratio	2.35%	1.75%
Expected increase in salary ratio	2.60%	2.25%

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(48) Long-term employee benefits payable (Cont'd)

(b) Defined benefit plan (Cont'd)

The amount of the above defined benefit plan recognised in the statement of profit or loss and other comprehensive income is as follows:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Service cost:		
Current service cost	(3,435)	3,387
Net interest expense	1,625	1,707
Expected return on plan assets	(228)	(73)
Defined benefit cost composition recognised in profit or loss	<u>(2,038)</u>	<u>5,021</u>
Remeasured net defined benefit liabilities:		
Obligation actuarial loss	(33,866)	(3,220)
Actuarial loss of plan assets	(53)	(191)
Defined benefit cost composition recognised in other comprehensive expenses	<u>(33,919)</u>	<u>(3,411)</u>
Total	<u>(35,957)</u>	<u>1,610</u>

Changes in the present value of defined benefit obligations are as follows:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Defined benefit obligation at the beginning of the year	144,540	177,734
Current service cost	(3,435)	3,387
Interest expenses	1,625	1,707
Obligation actuarial loss/(gain)	(33,866)	(3,220)
Benefits paid	(4,490)	(12,211)
Exchange differences for overseas plans	1,738	(22,857)
Defined benefit obligation at the end of the year	<u>106,112</u>	<u>144,540</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(48) Long-term employee benefits payable (Cont'd)

(b) Defined benefit plan (Cont'd)

Changes in the fair value of plan assets are as follows:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Fair value of plan assets at the beginning of the year	6,604	11,560
Expected return	228	73
Actuarial gain/(loss) of plan assets	53	191
Benefits paid	(204)	(3,988)
Exchange differences for overseas plans	189	(1,232)
Fair value of plan assets at the end of the year	<u>6,870</u>	<u>6,604</u>

The fair value of plan assets classified by category at the end of the reporting period is as follows:

	31 December 2022	31 December 2021
Insurance company investment funds	<u>6,870</u>	<u>6,604</u>

(49) Other non-current liabilities

	31 December 2022	31 December 2021
Long-term contract liabilities	132,197	239,339
Others	<u>36,015</u>	<u>27,477</u>
	<u>168,212</u>	<u>266,816</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(50) Share capital

	Movements in the current year						31 December 2022
	31 December 2021	Shares newly issued	Bonus share	Transfer from capital surplus	Others (a)	Sub-total	
Ordinary shares denominated in RMB	12,781,489	-	-	-	(126,162)	(126,162)	12,655,327
Foreign shares listed overseas	2,924,482	-	-	-	-	-	2,924,482
	15,705,971	-	-	-	(126,162)	(126,162)	15,579,809

	Movements in the current year						31 December 2021
	31 December 2020	Shares newly issued	Bonus share	Transfer from capital surplus	Others	Sub-total	
Ordinary shares denominated in RMB	12,256,871	-	-	-	524,618	524,618	12,781,489
Foreign shares listed overseas	2,924,482	-	-	-	-	-	2,924,482
	15,181,353	-	-	-	524,618	524,618	15,705,971

- (a) On 17 January 2022, upon review and approval at the Company's first interim shareholders' meeting in 2022, the 1st A-share shareholders' meeting in 2022, and the 1st H-share shareholders' meeting in 2022, the Company's equity incentive plan was terminated in January 2022, and 126,162 thousand restricted shares under the equity incentive plan were repurchased and cancelled in March 2022.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(51) Capital surplus

	31 December 2021	Increase in the current year	Decrease in the current year	31 December 2022
Share premium	15,653,488	-	-	15,653,488
Effect of convertible bond on equity	3,381,592	-	-	3,381,592
Capital contribution by shareholders due to equity incentive (a)	256,109	-	(256,109)	-
Subsidiaries relocation compensations	297,503	-	-	297,503
Profit commitment compensation	232,002	-	-	232,002
Amount recorded in owners' equity arising from share-based payments (b)	152,309	32,276	-	184,585
Others	2,072,557	16,095	-	2,088,652
	22,045,560	48,371	(256,109)	21,837,822

	31 December 2020	Increase in the current year	Decrease in the current year	31 December 2021
Share premium	15,653,488	-	-	15,653,488
Effect of convertible bond on equity	1,214,919	2,166,673	-	3,381,592
Capital contribution by shareholders due to equity incentive	256,109	-	-	256,109
Subsidiaries relocation compensations	297,503	-	-	297,503
Profit commitment compensation	232,002	-	-	232,002
Amount recorded in owners' equity arising from share-based payments (b)	157,815	(5,506)	-	152,309
Others	1,526,304	546,253	-	2,072,557
	19,338,140	2,707,420	-	22,045,560

- (a) In 2022, the Proposal on Termination of the Restricted A Shares Under the Incentive Plan and Repurchase and Cancellation of Granted but Locked-up Restricted Shares was reviewed and approved at the Company's first interim shareholders' meeting in 2022, the 1st A-share shareholders' meeting in 2022, and the 1st H-share shareholders' meeting in 2022. The Company repurchased and cancelled a total of 126,162 thousand restricted shares that have been granted to 2,099 participants but not yet unlocked, and accordingly reduced capital surplus by RMB256,109 thousand and cancelled 382,271 thousand treasury stocks.
- (b) Based on the equity incentive plan of the Company mentioned in Note 1, in 2022, the Group recognised related expenses of RMB32,276 thousand for the share-based payment and increased the capital surplus accordingly.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(52) Other comprehensive income

	Other comprehensive income in the balance sheet		Other comprehensive income in the income statement for year ended 31 December 2022					
	31 December 2021	Attributable to the parent company - net of tax	31 December 2022	Amount incurred before income tax	Less: Transfer-out of previous other comprehensive income in the current year	Less: Income tax expenses	Attributable to the parent company - net of tax	Attributable to minority interests after tax
Other comprehensive income items which will not be reclassified to profit or loss								
Changes arising from remeasurement of defined benefit plan	(3,534)	22,390	18,856	33,919	-	10,489	22,390	1,040
Other comprehensive income items which will be reclassified to profit or loss								
Changes in fair value of other debt investments	36,109	(10,419)	25,690	175,169	190,881	(3,928)	(10,419)	(1,365)
Provision for credit impairment of other debt investments and receivables financing	22,193	(15,981)	6,212	19,075	26,537	9,203	(15,981)	(684)
Gains or losses on cash flow hedge	20,217	1,821	22,038	2,428	-	607	1,821	-
Differences on translation of foreign currency financial statements	(564,303)	487,127	(77,176)	493,193	-	-	487,127	6,066
Other comprehensive income that will be reclassified to profit or loss under equity method	(30,908)	-	(30,908)	-	-	-	-	-
Others	10,397	-	10,397	-	-	-	-	-
	(509,829)	484,938	(24,891)	723,784	217,418	16,371	484,938	5,057

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(52) Other comprehensive income (Cont'd)

	Other comprehensive income in the balance sheet			Other comprehensive income in the income statement for year ended 31 December 2022					
	31 December 2020	Attributable to the parent company - net of tax	Reclassification of other comprehensive income	31 December 2021	Amount incurred before income tax	Less: Transfer-out of previous other comprehensive income in the current year	Less: Income tax expenses	Attributable to the parent company - net of tax	Attributable to minority interests after tax
Other comprehensive income items which will not be reclassified to profit or loss									
Changes arising from remeasurement of defined benefit plan	(4,300)	766	-	(3,534)	3,411	-	2,645	766	-
Other comprehensive income items which will be reclassified to profit or loss									
Changes in fair value of other debt investments	61,764	(25,655)	-	36,109	104,726	143,415	(9,672)	(25,655)	(3,362)
Changes in fair value of financing receivables (Note)	(214,417)	-	214,417	-	-	-	-	-	-
Provision for credit impairment of other debt investments and receivables financing (Note)	392,754	23,593	(394,154)	22,193	33,934	8,141	2,200	23,593	-
Gains or losses on cash flow hedge	20,217	-	-	20,217	-	-	-	-	-
Differences on translation of foreign currency financial statements	(365,629)	(198,674)	-	(564,303)	(206,557)	-	-	(198,674)	(7,883)
Other comprehensive income that will be subsequently transferred to profit or loss under equity method	(30,908)	-	-	(30,908)	-	-	-	-	-
Others	10,397	-	-	10,397	-	-	-	-	-
	(130,122)	(199,970)	(179,737)	(509,829)	(64,486)	151,556	(4,827)	(199,970)	(11,245)

Note: In 2021, as a result of changes in business model for managing accounts receivable, certain subsidiaries of the Group reclassified related receivables financing to accounts receivable and transferred out the accumulated gains or losses previously included in other comprehensive income, with a corresponding adjustment made to the carrying amount of accounts receivable.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(53) Surplus reserve

	31 December 2021	Appropriation in the current year	Decrease in the current year	31 December 2022
Statutory surplus reserve	4,096,610	-	-	4,096,610
Discretionary surplus reserve	29,816	-	-	29,816
Reserve fund	303,715	-	-	303,715
Enterprise expansion fund	349,926	-	-	349,926
Provision for general risk of Finance Company	1,126,457	-	-	1,126,457
	5,906,524	-	-	5,906,524

	31 December 2020	Appropriation in the current year	Decrease in the current year	31 December 2021
Statutory surplus reserve	4,096,610	-	-	4,096,610
Discretionary surplus reserve	29,816	-	-	29,816
Reserve fund	303,715	-	-	303,715
Enterprise expansion fund	349,926	-	-	349,926
Provision for general risk of Finance Company	1,126,457	-	-	1,126,457
	5,906,524	-	-	5,906,524

In accordance with the Company Law of the People's Republic of China and the Company's Articles of Association, the Company should appropriate 10% of net profit for the year to the statutory surplus reserve, and can cease appropriation when the statutory surplus reserve accumulated to more than 50% of the registered capital. The statutory surplus reserve can be used to make up for the loss or increase the share capital after approval from the appropriate authorities. Due to losses in the current year, no statutory surplus reserve has been appropriated (2021: Nil).

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(54) Retained earnings

	For the year ended 31 December 2022	For the year ended 31 December 2021
Retained earnings at the beginning of the year	15,218,425	26,348,897
Add: Net loss attributable to shareholders of the parent company	(3,566,484)	(9,987,908)
Appropriation to staff and workers' bonus and welfare fund	(23,373)	(15,189)
Dividends payable to the Company's ordinary shareholders and subsidiaries	(209,305)	(1,127,375)
Retained earnings at the end of the year	11,419,263	15,218,425

(55) Revenue and operating cost

	For the year ended 31 December 2022	For the year ended 31 December 2021
Revenue from main operations (Note 2(12))	114,496,488	126,998,474
Revenue from other operations	2,489,319	2,556,374
Interest income	636,982	704,552
Fee and commission income	329	1,850
	117,623,118	130,261,250

	For the year ended 31 December 2022	For the year ended 31 December 2021
Operating cost from main operations (Note 2(12))	97,521,681	109,264,153
Operating cost from other operations	975,216	1,308,673
Interest expenses	87,168	103,242
Fee and commission expenses	754	917
	98,584,819	110,676,985

Revenue from main operations includes revenue from sales of energy equipment, industrial equipment and integration service. Operating cost refers to those of products related to main operations. The Group's segment information has been listed in Note 7.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(55) Revenue and operating cost (Cont'd)

Details of revenue from main operations are as follows:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Sale of goods	86,126,054	91,793,950
Construction services	17,669,945	24,774,800
Rendering of services	10,700,489	10,429,724
	<u>114,496,488</u>	<u>126,998,474</u>

Details of revenue from other operations are as follows:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Sales of raw materials	1,205,183	1,313,613
Leasing fixed assets	656,952	534,633
Finance lease income	189,894	328,948
Rendering of non-industrial services	164,892	166,749
Sale of energy	35,220	25,673
Others	237,178	186,758
	<u>2,489,319</u>	<u>2,556,374</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(55) Revenue and operating cost (Cont'd)

	For the year ended 31 December 2022								
	Sales of goods			Construction services			Rendering of services	Others	Total
	Other Asian countries/ geographical areas		Other regions	Other Asian countries/ geographical areas		Other regions			
	China			China					
Revenue from main operations	77,706,678	987,138	7,432,238	7,913,907	9,117,196	638,842	10,700,489	-	114,496,488
Including: Recognised at a time point	77,706,678	987,138	7,432,238	-	-	-	249,618	-	86,375,672
Recognised within a period of time	-	-	-	7,913,907	9,117,196	638,842	10,450,871	-	28,120,816
Revenue from other operations	944,369	104,010	139,233	-	-	-	164,892	1,136,815	2,489,319
	78,651,047	1,091,148	7,571,471	7,913,907	9,117,196	638,842	10,865,381	1,136,815	116,985,807

	For the year ended 31 December 2021								
	Sales of goods			Construction services			Rendering of services	Others	Total
	Other Asian countries/ geographical areas		Other regions	Other Asian countries/ geographical areas		Other regions			
	China			China					
Revenue from main operations	83,610,979	1,028,814	7,154,157	9,624,678	13,913,992	1,236,130	10,429,724	-	126,998,474
Including: Recognised at a time point	83,610,979	1,028,814	7,154,157	-	-	-	175,087	-	91,969,037
Recognised within a period of time	-	-	-	9,624,678	13,913,992	1,236,130	10,254,637	-	35,029,437
Revenue from other operations	846,336	426,335	40,942	-	-	-	166,749	1,076,012	2,556,374
	84,457,315	1,455,149	7,195,099	9,624,678	13,913,992	1,236,130	10,596,473	1,076,012	129,554,848

- (i) As at 31 December 2022, the Group's income corresponding to the performance obligations that have been signed but not yet fulfilled or not yet completed was RMB38,886,075 thousand, of which RMB38,742,797 thousand was expected to be recognised in 2023 and RMB143,278 thousand was expected to be recognised in 2024 and beyond.
- (ii) In 2022, the Group did not receive any additional rewards for the early completion of labour services. The Group's revenue from sales of materials is recognised at a time point.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(56) Taxes and surcharges

	For the year ended 31 December 2022	For the year ended 31 December 2021
City maintenance and construction tax	150,970	141,144
Educational surcharge	115,333	107,186
Real estate tax	104,713	119,893
Stamp tax	86,392	110,057
Land use tax	31,819	35,197
Others	42,530	49,391
	531,757	562,868

The payment criterion is set out in Note 3.

(57) Selling and distribution expenses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Labour costs	1,235,861	1,205,112
Product warranty expenses	1,003,860	1,619,031
Agency fee and commission	424,546	447,182
General office expenses and market development expenses	325,464	371,826
Agent and technical service fees	237,025	224,344
Travel expenses	116,212	139,933
Bidding service fee	104,728	170,208
Packaging expenses	24,946	48,526
Depreciation of right-of-use assets	3,246	4,732
Others	377,413	370,205
	3,853,301	4,601,099

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(58) General and administrative expenses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Labour costs	4,520,021	4,186,465
Depreciation and amortisation	912,284	918,930
Professional service fees	676,242	738,355
General office expenses	654,347	668,212
Rental fees	146,857	155,158
Depreciation of right-of-use assets	134,894	147,347
Travel expenses	105,824	132,884
Repair expenses	95,314	88,660
Power energy expenses	56,014	64,587
Others	866,152	829,891
	8,167,949	7,930,489

(59) Research and development expenses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Labour costs	2,242,270	2,229,708
Direct input material costs	1,955,109	2,259,156
Depreciation and amortisation	195,228	227,800
Outsourced research expenses	169,814	202,931
Depreciation of right-of-use assets	23,956	24,948
Others	442,089	461,226
	5,028,466	5,405,769

(60) Financial expenses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Interest costs on borrowings	1,814,486	1,186,335
Add: Interest costs on lease liabilities	36,588	36,469
Less: Capitalised interest	(93,498)	(61,717)
Sub-total:	1,757,576	1,161,087
Less: Interest income	(504,533)	(316,627)
Exchange gains	(42,112)	133,518
Others	90,118	149,432
	1,301,049	1,127,410

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(61) Expenses by nature

The operating cost, interest costs, fee and commission expenses, selling and distribution expenses, general and administrative expenses and research and development expenses in the income statement are listed as follows by nature:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Consumption of raw materials	60,702,112	68,285,718
Machinery and services purchased	31,460,176	36,547,092
Labour costs	12,630,640	12,060,673
Depreciation and amortisation	2,835,822	2,273,590
Freight and package fees	1,299,464	1,505,798
Warranty expenses	1,003,860	1,619,031
General office expenses	760,941	786,169
Power energy expenses	722,371	721,886
Agency fee and commission	508,751	599,217
Technology commission fees and technical service fees	454,582	600,310
Depreciation of right-of-use assets	401,474	351,827
Rental	331,073	370,503
Consultation fee	284,225	303,832
Property cost	270,535	280,456
Travel expenses	268,356	330,621
Market development fee	176,378	238,277
Auditor fees - Audit services	26,520	30,710
- Non-audit services	400	760
Daily maintenance and repair expenses of fixed assets (i)	3,781	2,641
Others	1,493,074	1,705,231
Total	115,634,535	128,614,342

- (i) For the daily maintenance and repair expenses of fixed assets that do not meet the criteria of capitalisation, the Group included the costs related to the production and processing of inventories in the costs of inventories and recognised as cost of sale accordingly, and included the costs related to the research and development department, the administrative department and the sale department in research and development expenses, general and administrative expenses and selling and distribution expenses, respectively.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(62) Asset impairment losses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Losses on decline in the value of inventories	931,530	3,150,569
Impairment losses on goodwill	411,487	623,327
Impairment losses on fixed assets	395,332	20,159
Impairment losses on contract assets	247,083	698,170
Impairment losses on construction in progress	124,233	-
Impairment losses of long-term equity investments	35,252	2,294
Impairment of intangible assets	-	14,029
Losses on impairment of right-of-use assets	-	16,784
	2,144,917	4,525,332

(63) Credit impairment losses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Losses on bad debts of accounts receivable, other receivables and receivables financing	1,629,798	9,754,456
Losses on impairment of long-term receivables	439,616	126,597
Losses on bad debts of notes receivable	80,804	1,033,552
Impairment losses/(Reversal of losses) on discounted notes	48,692	(62,676)
Losses on impairment of other debt investments	12,782	8,801
(Reversal of losses)/Impairment losses on guarantees	(41,537)	105,079
(Reversal of losses)/Impairment losses on loans	(76,690)	21,153
	2,093,465	10,986,962

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(64) Other income

	For the year ended 31 December 2022	For the year ended 31 December 2021	
Tax refund	195,970	103,430	Income related
Rewards for key technologies R&D for and application of deep peak-shaving ultra supercritical coal-fired boilers	73,200	20,000	Income related
Financial support from Jing'an District	41,980	-	Income related
Support fund from Zizhu Development Park	40,060	31,609	Income related
Special funds for the economic development from Changning District	34,816	42,600	Income related
Financial subsidy from Lingang of Minhang District	34,274	-	Income related
Financial support fund for high-tech achievement transformation projects	31,321	41,785	Income related
Rewards from Hongkou District Investment Promotion Office	30,000	-	Income related
Financial support fund for economic development of Pudong New Area	27,172	-	Income related
Gotion Energy Storage System Base	15,480	-	Assets related
Other income related	422,428	626,140	Income related
Other assets related	131,290	131,434	Assets related
	1,077,991	996,998	

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(65) Investment income

	For the year ended 31 December 2022	For the year ended 31 December 2021
Investment income from long-term equity investment under equity method (Note 4(19))	858,533	211,000
Investment income obtained during the holding of other debt investments	2,152	7,362
Investment income obtained during the holding of other non-current financial assets	41,546	131,013
Investment income obtained during the holding of financial assets measured at amortised cost	1,514	147,471
Investment income obtained during the holding of financial assets held for trading	103,149	72,102
Investment (losses)/profits from disposal of subsidiaries	(56,045)	935,262
Investment income from disposal of other non-current financial assets	22	15,555
Investment (losses)/income from disposal of financial assets held for trading	(99,440)	51,726
Investment income from disposal of other debt investments	190,881	143,415
Losses arising from derecognition of financial assets measured at amortised cost	(8,992)	(16,108)
Others	80,317	131,501
	1,113,637	1,830,299

There is no significant restriction on recovery of investment income of the Group.

(66) Gains/(Losses) on changes in fair value

	For the year ended 31 December 2022	For the year ended 31 December 2021
Financial assets at fair value through profit or loss	(691,430)	1,725,898
Derivative financial instruments	(23,885)	(20,050)
	(715,315)	1,705,848

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(67) Gains on disposal of assets

	For the year ended 31 December 2022	For the year ended 31 December 2021	Amount recognised in non-recurring profit or loss in 2022
Gains on disposal of intangible assets (a)	515,365	6,986	515,365
Gains on disposal of fixed assets, investment properties and, construction in progress	45,075	176,078	45,075
	<u>560,440</u>	<u>183,064</u>	<u>560,440</u>

- (a) In 2022, gains on disposal of assets of the Group mainly came from the net income of land transfer from the Company. As at 31 December 2022, the Company had completed the transfer of all the above assets and collected all amounts.

(68) Non-operating income

	For the year ended 31 December 2022	For the year ended 31 December 2021
Insurance claims	42,711	53,290
Unpayable payables	12,418	25,098
Contract compensation income	47,634	280,725
Others	120,278	282,056
	<u>223,041</u>	<u>641,169</u>

(69) Non-operating expenses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Compensation expenditures	47,718	16,026
Donation expenditures	4,900	4,970
Others	121,263	71,348
	<u>173,881</u>	<u>92,344</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(70) Income tax expenses

	For the year ended 31 December 2022	For the year ended 31 December 2021
Current income tax calculated based on tax law and related regulations	1,126,490	1,583,469
Income tax annual filing difference for the current period	(8,745)	(8,651)
Deferred income tax	(780,037)	(1,624,326)
	337,708	(49,508)

The reconciliation from income tax calculated based on the applicable tax rates and loss presented in the consolidated income statement to the income tax expenses is listed below:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Total loss	(1,975,298)	(10,289,639)
Income tax expenses calculated at applicable tax rates provided by law (Note 1)	(493,825)	(2,572,410)
Effect of preferential tax rates of certain subsidiaries	(115,208)	(230,133)
Adjustment for tax filing difference of prior years	(8,745)	(8,651)
Effect on share of profit of joint ventures and associates	(175,212)	(44,317)
Income not subject to tax	(48,865)	(151,676)
Non-deductible expenses	44,181	30,585
Preferential tax for qualified expenses	(474,498)	(321,844)
Utilisation of temporary difference and deductible losses that are not recognised as deferred tax assets in previous years	(47,128)	(17,830)
Deductible temporary difference and deductible losses that are not recognised as deferred tax assets in the current year	1,657,008	3,266,768
Income tax expenses	337,708	(49,508)

Note 1: The Group's income tax is provided based on estimated taxable income in China and the applicable tax rates. Taxes on taxable income elsewhere have been calculated at the rates of tax prevailing in the countries in which the Group operates, based on existing legislation, interpretations and practices in respect thereof.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(71) Earnings per share

(a) Basic earnings per share

Basic earnings per share is calculated by dividing net loss for the current period attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding. Newly issued ordinary shares are included in the weighted average number of shares from the date consideration is receivable (which is generally the date of their issue) according to specific terms of the issuance contract.

Basic earnings per share is calculated as follows:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Consolidated net loss attributable to ordinary shareholders of the parent company	(3,566,484)	(9,987,908)
Weighted average number of ordinary shares outstanding (i) (Unit: 1,000 shares)	15,611,350	15,662,253
Basic earnings per share	RMB (0.23)	RMB (0.64)
Including:		
- Basic earnings per share from continuing operations (i):	RMB (0.23)	RMB (0.64)
- Basic earnings per share from discontinued operations:	-	-

- (i) As mentioned in Note 1, the Company implemented an equity incentive plan. In the calculation of basic earnings per share, the numerator is the consolidated net profit attributable to ordinary shareholders of the Company less the revocable cash dividends distributed in the current period attributable to shares that are expected to be unlocked in the future; the denominator does not include the number of restricted shares.

(b) Diluted earnings per share

Diluted earnings per share are calculated by dividing consolidated net profit attributable to ordinary shareholders of the parent company adjusted based on the dilutive potential ordinary shares by the adjusted weighted average number of outstanding ordinary shares of the Company. For the year ended 31 December 2022, the Company had no dilutive potential ordinary shares. Therefore, diluted earnings per share equal to basic earnings per share.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(72) Notes to the cash flow statement

(a) Cash received relating to other operating activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Net decrease in finance lease receivables from Lease Company	1,751,474	1,647,064
Income from government grants	917,647	873,961
Cash for interest, fee and commission	644,319	705,660
Interest income from parties excluding Finance Company and Lease Company	504,533	316,627
Income from leasing fixed assets	656,952	534,633
Net decrease in loans and advances to customers	4,245,003	-
Net increase in customer deposits and interbank deposits	877,843	909,046
Net decrease in deposits with central banks	-	801,080
Others	212,558	533,086
	9,810,329	6,321,157

(b) Cash paid relating to other operating activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Net increase in financial assets purchased under resale agreements and factoring	943,004	2,884,651
Net decrease in transfers of factored accounts receivable	743,279	2,562,979
General and administrative expenses	2,574,228	2,795,186
Selling and distribution expenses	2,602,199	2,533,851
Research and development expenses	2,567,012	2,948,182
Net increase in deposits with central banks	165,931	-
Cash for payment of interest, fee and commission	87,922	104,159
Net increase in loans and advances to customers	-	516,700
Others	511,994	488,403
	10,195,569	14,834,111

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(72) Notes to the cash flow statement (Cont'd)

(c) Cash received relating to other investing activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Net decrease in time deposit over three months	3,287,755	3,294,045
Net decrease in restricted cash at bank and on hand	475,258	-
	3,763,013	3,294,045

(d) Cash paid relating to other investing activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Net increase in restricted cash at bank and on hand	-	282,257

(e) Cash received relating to other financing activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Loans from related parties to the Group	-	318,803

(f) Cash paid relating to other financing activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Cash paid for acquisition of minority interests	-	934,855
Loans repaid by the Group to related parties	527,896	797,727
Repayments of lease liabilities	479,442	415,226
Repurchase of equity incentive	382,271	-
	1,389,609	2,147,808

In 2022, the total cash outflow related to leasing paid by the Group was RMB810,515 thousand (2021: RMB785,729 thousand), except for the above amount of payment of lease liabilities included in financing activities, and the rest of the cash outflow was included in operating activities.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(73) Supplementary information to the cash flow statement

(a) Supplementary information to the cash flow statement

Reconciliation from net loss to cash flows from operating activities

	For the year ended 31 December 2022	For the year ended 31 December 2021
Net loss	(2,313,006)	(10,240,131)
Add: Asset impairment losses	2,144,917	4,525,332
Credit impairment losses	2,093,465	10,986,962
Depreciation of right-of-use assets	401,474	351,827
Depreciation of investment properties	79,200	80,061
Depreciation of fixed assets	2,082,559	1,713,952
Amortisation of intangible assets	555,691	334,456
Amortisation of long-term prepaid expenses	118,372	145,121
Gains on disposal of fixed assets, intangible assets and other long-term assets	(560,440)	(282,772)
Financial expenses	1,715,464	1,294,605
Losses/(Gains) on changes in fair value	715,315	(1,705,848)
Investment income	(1,113,637)	(1,642,084)
Changes in deferred tax assets	345,153	(1,676,486)
Changes in deferred tax liabilities	195,219	(78,619)
Amortisation of deferred income	(1,077,991)	(996,998)
Changes in inventories	(1,252,250)	(6,043,723)
Changes in contract assets	(1,758,175)	(2,035,895)
Changes in contract liabilities	2,536,317	(5,697,738)
Changes in operating receivables	(5,671,477)	2,767,822
Changes in operating payables	9,252,399	(2,362,927)
Increase in special reserve	(5,754)	9,083
Net cash flows (used in)/from operating activities	8,482,815	(10,554,000)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(73) Supplementary information to the cash flow statement (Cont'd)

(a) Supplementary information to the cash flow statement (Cont'd)

Significant operating, investing and financing activities that do not involve cash receipts and payments

	For the year ended 31 December 2022	For the year ended 31 December 2021
Purchase of inventory paid by bank acceptance notes	3,779,293	3,444,012
Transfer of convertible bonds to shares	-	2,691,291
Newly added right-of-use assets in the current period	571,905	795,020
Asset-for-debt transaction (Note 4(5)(c)(i), Note 4(6)(c))	31,911	170,176
Trade-off between accounts receivable and long-term payables	-	652,832
Stock-for-debt transaction	-	8,475
	4,383,109	7,761,806

(b) Cash and cash equivalents

	31 December 2022	31 December 2021
Cash at bank and on hand	26,344,500	25,359,181
Placements with banks and other financial institutions	24,613,553	28,992,175
	50,958,053	54,351,356
Less: Time deposit over three months	(3,729,670)	(7,017,425)
Less: Restricted funds in monetary funds	(3,443,275)	(3,752,602)
	43,785,108	43,581,329

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(73) Supplementary information to the cash flow statement (Cont'd)

(c) Acquisition or disposal of subsidiaries

Acquisition of subsidiaries

	For the year ended 31 December 2022
Cash and cash equivalents in business combination incurred and paid in the current year	
Including: Rongche Hydraulic System (Shanghai) Co., Ltd.	517
Suzhou Moli Automation and Control Technology Co., Ltd.	12,743
Rongche Intelligent Technology (Shanghai) Co., Ltd.	3,922
	<u>17,182</u>
Cash and cash equivalents held by subsidiaries at acquisition date	
Including: Rongche Hydraulic System (Shanghai) Co., Ltd.	280
Suzhou Moli Automation and Control Technology Co., Ltd.	1,053
Rongche Intelligent Technology (Shanghai) Co., Ltd.	130
	<u>1,463</u>
Net cash paid to acquire subsidiaries and other business units	<u>15,719</u>

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(73) Supplementary information to the cash flow statement (Cont'd)

(c) Acquisition or disposal of subsidiaries (Cont'd)

Disposal of subsidiaries

	For the year ended 31 December 2022
Cash and cash equivalents received from disposal of subsidiaries in the current year	814,250
Including: Suzhou Thvow Technology Co., Ltd.	564,275
Shanghai Electric (Bei'an) New Energy Co., Ltd.	238,043
Shanghai Electric Nantong Guohai Water Treatment Co., Ltd.	-
Shanghai Electric Matechstone (Yancheng) Engineering Co., Ltd.	11,932
Less: Cash and cash equivalents held by subsidiaries at the date when control is lost	
Including: Suzhou Thvow Technology Co., Ltd.	616,733
Shanghai Electric (Bei'an) New Energy Co., Ltd.	649
Shanghai Electric Nantong Guohai Water Treatment Co., Ltd.	35
Shanghai Electric Matechstone (Yancheng) Engineering Co., Ltd.	1,154
Net cash received from disposal of subsidiaries	195,679
Considerations for disposal of subsidiaries for the year ended 31 December 2022:	
Including: Suzhou Thvow Technology Co., Ltd.	564,275
Shanghai Electric (Bei'an) New Energy Co., Ltd.	238,043
Shanghai Electric Nantong Guohai Water Treatment Co., Ltd.	13,106
Shanghai Electric Matechstone (Yancheng) Engineering Co., Ltd.	11,932
	827,356

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(74) Major monetary items denominated in foreign currency

	31 December 2022		
	Foreign currency balances	Exchange rate	RMB balances
Cash at bank and on hand -			
USD	555,315	6.9646	3,867,550
EUR	50,860	7.4229	377,532
MYR	544	1.5772	857
JPY	1,090,070	0.0524	57,074
VND	24,400,599	0.0003	7,198
HKD	74,851	0.8933	66,862
GBP	24,851	8.3941	208,605
IDR	34,299,639	0.0004	15,332
BDT	16,746	0.0676	1,132
ETB	1,212	0.1307	158
RSD	1,464,605	0.0634	92,885
INR	696,739	0.0842	58,665
Accounts receivable -			
USD	268,510	6.9646	1,870,065
JPY	52,150	0.0524	2,730
HKD	16,107	0.8933	14,388
EUR	383	7.4229	2,840
GBP	59,200	8.3941	496,933
MYR	494	1.5772	779
Other receivables -			
USD	21,616	6.9646	150,545
JPY	3,477	0.0524	182
HKD	197	0.8933	176
GBP	21,963	8.3941	184,357
Accounts payable -			
USD	3,563	6.9646	24,816
MYR	95,008	1.5772	149,847
EUR	165	7.4229	1,226
JPY	343,058	0.0524	17,962
RSD	1,431,891	0.0634	90,811

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(74) Major monetary items denominated in foreign currency (Cont'd)

	31 December 2022		
	Foreign currency balances	Exchange rate	RMB balances
Other payables -			
MYR	15,075	1.5772	23,777
USD	104	6.9646	723
JPY	378,437	0.0524	19,814
HKD	80	0.8933	71
EUR	5,276	7.4229	39,161
Short-term borrowings -			
EUR	173,497	7.4229	1,287,850
USD	129,000	6.9646	898,433
HKD	525,018	0.8933	468,983
Current portion of long-term borrowings -			
EUR	13,536	7.4229	100,480
USD	104,587	6.9646	728,405
Long-term borrowings -			
USD	281,876	6.9646	1,963,156
EUR	346,737	7.4229	2,573,796
Contract liabilities -			
USD	29,289	6.9646	203,984
MYR	202	1.5772	318
RSD	422,205	0.0634	26,776

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

(75) Share-based payment

(a) Equity-settled share-based payment

(i) General information

In accordance with the Proposal on A-share Restricted Shares Incentive Plan of Shanghai Electric Group Co., Ltd. (Draft) and Summary, the Proposal on Assessment Measures for the Implementation of A-share Restricted Shares Incentive Plan of Shanghai Electric Group Co., Ltd. and the Proposal on Submittal to Shareholders' General Meeting for Authorising the Board of Directors to Handle Matters Related to A-share Restricted Shares Incentive Plan approved by the 13th meeting of the 5th Session of the Board of Directors of the Company on 6 May 2019, the 1st interim shareholders' meeting in 2019, the 1st A-share shareholders' meeting in 2019 and the 1st H-share shareholders' meeting in 2019, the date of 6 May 2019 was determined as the grant date and a total of 133,578 thousand restricted shares were granted to 2,194 incentive recipients by the Company which were approved by the State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government and confirmed with no objection and recorded by China Securities Regulatory Commission. Such restricted shares were granted at RMB3.03 per share. After the completion of the subscription of such incentive plan, due to the issuance of new shares, the Company's share capital and capital surplus increased by RMB133,578 thousand and RMB271,163 thousand respectively, treasury stocks increased by RMB404,741 thousand and repurchase obligation under equity incentive plan was RMB404,741 thousand. The lock-up period of the incentive plan to grant restricted shares is 24 months, 36 months and 48 months from the registration date of the shares granted. The restricted shares granted under such plan shall not be transferred, used for guarantee or debt repayment during the lock-up period.

On 29 June 2020, pursuant to the resolutions at 2019 annual shareholders' meeting, the 1st A-share shareholders' meeting in 2020 and the 1st H-share shareholders' meeting in 2020, the Company repurchased and cancelled the restricted A shares that had been granted to 95 incentive recipients (who were no longer qualified as participants in the incentive plan) but not yet unlocked on 18 September 2020. The total number of restricted shares repurchased and cancelled was 7,416 thousand. After completion of the repurchase and cancellation, the number of remaining restricted shares under the incentive plan of all participants totalled 126,162 thousand.

On 17 January 2022, the Proposal on Termination of the Restricted A Shares Under the Incentive Plan and Repurchase and Cancellation of Granted but Locked-up Restricted Shares, was reviewed and approved at the 1st interim shareholders' meeting in 2022, 1st A-share shareholders' meeting in 2022 and the 1st H-share shareholders' meeting in 2022. The Company repurchased and cancelled a total of 126,162 thousand restricted shares that have been granted to 2,099 incentive recipients but not yet unlocked on 17 March 2022.

In 2022, expenses related to third-tranche share-based payments for termination of the restricted shares under the incentive plan, amounting to RMB32,276 thousand, were recognised, and capital surplus increased accordingly.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONT'D)

Share-based payment (Cont'd)

(a) Equity-settled share-based payment (Cont'd)

(ii) Statement of changes in restricted shares for the year

	For the year ended 31 December 2022	For the year ended 31 December 2021
Number of outstanding restricted shares at the beginning of the year	84,108,000	126,162,000
Number of restricted shares issued in the current year	-	-
Number of restricted shares exercised in the current year	-	-
Number of restricted shares failed in meeting requirements in the current year	(84,108,000)	(42,054,000)
Number of outstanding restricted shares at the end of the year	-	84,108,000

(iii) Effect of share-based payment on financial position and financial performance

	For the year ended 31 December 2022	For the year ended 31 December 2021
Accumulated amount in capital surplus for equity-settled share-based payment (Note 4(51))	184,585	152,309
Total expenses recognised by equity-settled share-based payment in the current year	32,276	(5,506)

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

5 CHANGES IN THE SCOPE OF CONSOLIDATION

(1) Addition of subsidiaries

(a) In 2022, subsidiaries newly incorporated and thus included in the consolidation scope were as follows:

Subsidiaries	Major business location	Place of registration	Nature of business	Shareholding (%)		Registered capital (Unit: RMB)
				Direct	Indirect	
Nantong Zhichu New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Research and test development industry	-	100.00	RMB17,550,000
Guazhou Huichu New Energy Co., Ltd.	Gansu Province	Gansu Province	Technology promotion and application service industry	-	100.00	RMB1,000,000
Guazhou Ruichu New Energy Co., Ltd.	Gansu Province	Gansu Province	Technology promotion and application service industry	-	100.00	RMB1,000,000
Shanghai Electric Yueda (Jiangsu) Energy Storage Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Manufacturing of electrical machinery and equipment	-	51.00	RMB50,000,000
Jiuquan Zhichu New Energy Co., Ltd.	Gansu Province	Gansu Province	Production and supply of electric power and heat	-	100.00	RMB1,000,000
Shanghai Qingqi Shidai Technology Co., Ltd.	Shanghai	Shanghai	Technical service industry	-	100.00	RMB200,000,000
Shencheng Electric Company LTD	Israel	Israel	Production and supply of electric power, heat, fuel gas and water	-	100.00	USD1,300,000
Shanghai Electric New Energy Development Co., Ltd.	Shanghai	Shanghai	Production and supply of electric power and heat	66.67	33.33	RMB3,000,000,000
Shanghai Electric (Changchun) New Energy Development Co., Ltd.	Jilin Province	Jilin Province	Production and supply of electric power and heat	-	100.00	RMB1,000,000
Shanghai Electric (Gongzhuling) New Energy Development Co., Ltd.	Jilin Province	Jilin Province	Production and supply of electric power and heat	-	100.00	RMB1,000,000
Zhejiang Yinghe Technology Co., Ltd.	Zhejiang Province	Zhejiang Province	Manufacturing industry	-	100.00	RMB20,000,000
Yinghe Technology GmbH	Germany	Germany	Manufacturing industry	-	100.00	EUR350,000
Shanghai Electric Wind Power Group Binhai Wind Power Equipment Co., Ltd.	Jiangsu Province	Jiangsu Province	Production and supply of electric power and heat	-	100.00	RMB50,000,000
Shanghai Electric Wind Power Group Shandong Equipment Manufacturing Co., Ltd.	Shandong Province	Shandong Province	Manufacturing of electrical machinery and equipment	-	100.00	RMB51,720,000
Shanghai Electric Wind Power (Zhangye) Blade Technology Co., Ltd.	Gansu Province	Gansu Province	Manufacturing industry	-	100.00	RMB66,000,000
Shanghai Electric Wind Power Blade Technology (Taonan) Co., Ltd.	Jilin Province	Jilin Province	Manufacturing of electrical machinery and equipment	-	100.00	RMB60,000,000
Zhangye Lilong New Energy Development Co., Ltd.	Gansu Province	Gansu Province	Production and supply of electric power and heat	-	100.00	RMB650,000,000

5 CHANGES IN THE SCOPE OF CONSOLIDATION (CONT'D)

(1) Addition of subsidiaries (Cont'd)

(a) In 2022, subsidiaries newly incorporated and thus included in the consolidation scope were as follows:

Subsidiaries	Major business location	Place of registration	Nature of business	Shareholding (%)		Registered capital (Unit: RMB)
				Direct	Indirect	
Shanghai Electric Wind Power Equipment (Jilin) Co., Ltd.	Jilin Province	Jilin Province	Manufacturing of electrical machinery and equipment	-	100.00	RMB15,000,000
Shanghai Electric Wind Power Blade Technology (Shantou) Co., Ltd.	Guangdong Province	Guangdong Province	Manufacturing industry	-	100.00	RMB100,000,000
Shanghai Electric Wind Power Group (Zhangye) Equipment Manufacturing Co., Ltd.	Gansu Province	Gansu Province	Manufacturing industry	-	100.00	RMB6,000,000
Shanghai Electric Wind Power (Hainan) Co., Ltd.	Hainan Province	Hainan Province	Manufacturing industry	-	100.00	RMB25,000,000
Zhiyi (Zhejiang Zhoushan) Wind Power Equipment Intelligent Manufacturing Co., Ltd.	Zhejiang Province	Zhejiang Province	Manufacturing industry	-	90.00	RMB100,000,000
Jinchang Jinkai New Energy Co., Ltd.	Gansu Province	Gansu Province	Production and supply of electric power and heat	-	100.00	RMB160,000,000
Jinchang Yongneng New Energy Co., Ltd.	Gansu Province	Gansu Province	Production and supply of electric power and heat	-	100.00	RMB160,000,000
Shanghai Electric Private Equity Fund Management Co., Ltd.	Shanghai	Shanghai	Capital market service	-	100.00	RMB10,000,000
Shanghai Prime Nedschroef Precision Machine Co., Ltd.	Shanghai	Shanghai	Manufacturing of general equipment	-	52.00	RMB80,000,000
Shanghai Prime Fasteners Co., Ltd.	Shanghai	Shanghai	Wholesale	-	100.00	RMB50,000,000
Shanghai Electric Wind Power Equipment Manufacturing (Taonan) Co., Ltd.	Jilin Province	Jilin Province	Production and supply of electric power, heat, fuel gas and water	-	100.00	RMB15,000,000
Shanghai Electric Digital Smart Energy (Zaozhuang) Co., Ltd.	Shandong Province	Shandong Province	Production and supply of electric power and heat	-	100.00	RMB30,000,000
Shanghai Electric Digital Smart Energy (Shantou) Co., Ltd.	Guangdong Province	Guangdong Province	Research and test development industry	-	100.00	RMB5,000,000
Shanghai Electric Digital Smart Energy (Jiaxing) Co., Ltd.	Zhejiang Province	Zhejiang Province	Production and supply of electric power and heat	-	100.00	RMB5,000,000

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

5 CHANGES IN THE SCOPE OF CONSOLIDATION (CONT'D)

(1) Addition of subsidiaries (Cont'd)

(b) In 2022, subsidiaries newly acquired and thus included in the consolidation scope were as follows:

Subsidiaries	Major business location	Place of registration	Nature of business	Shareholding (%)		Registered capital (Unit: RMB)
				Direct	Indirect	
Suzhou Moli Automation and Control Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Manufacturing of electrical machinery and equipment	-	51.00	USD2,524,390
Rongche Intelligent Technology (Shanghai) Co., Ltd.	Shanghai	Shanghai	Professional technical service industry	-	51.00	RMB5,000,000
Rongche Hydraulic System (Shanghai) Co., Ltd.	Shanghai	Shanghai	Professional technical service industry	-	51.00	RMB1,000,000

(2) Disposal of subsidiaries

(a) Information on disposal of subsidiaries in the current year is summarised as follows:

Subsidiaries	Proceeds from disposal	Disposal proportion	Method of disposal	Timing of losing control	Basis for judgement of timing of losing control	Difference between proceeds from disposal and corresponding shares of net assets in the consolidated financial statements	Amount transferred
							from other comprehensive income related to initial equity investment to investment income or loss
Dongguan KOOZ Rolling Equipment Co., Ltd.	-	100%	Cancellation	28 September 2022	Completion of industrial and commercial cancellation registration	-	-
Shanghai Yiyong Mechanical & Electrical Engineering Co., Ltd.	-	100%	Cancellation	20 December 2022	Completion of industrial and commercial cancellation registration	-	-
Suzhou Thvow Technology Co., Ltd.(Note 8(5)(h))	564,275	15.24%	Equity transfer	30 November 2022	Completion of equity delivery	(87,423)	-
Shanghai Electric (Bei'an) New Energy Co., Ltd.	238,043	100%	Equity transfer	2 December 2022	Completion of equity delivery	23,058	-
Shanghai Electric Nantong Guohai Water Treatment Co., Ltd.	13,106	100%	Equity transfer	9 June 2022	Completion of equity delivery	5,360	-
Shanghai Electric Matechstone (Yancheng) Engineering Co., Ltd.	11,932	100%	Equity transfer	28 May 2022	Completion of equity delivery	2,960	-

6 INTERESTS IN OTHER ENTITIES

(1) Interests in significant subsidiaries

(a) Constitution of the Group

Subsidiaries	Major business location	Legal person	Place of registration	Nature of business	Information on share capital and bonds issued	Shareholding (%)		Method of acquisition
						Direct	Indirect	
SMEI (Note 2(32)(a))	Shanghai	Listed	Shanghai	Manufacturing industry	Share capital 1,022,739	48.81	-	Equity contribution
Shanghai Boiler Works Co., Ltd.	Shanghai	Corporate-owned	Shanghai	Manufacturing industry	-	100	-	Equity contribution
Shanghai Electric Group Shanghai Electric Machinery Co., Ltd.	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	61	-	Equity contribution
Broetje-Automation GmbH	Germany	Other limited liability	Germany	Manufacturing industry	-	-	100	Equity contribution
Shanghai Nanhua-Lanling Electrical Co., Ltd. (Note 2)	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	-	50	Equity contribution
Shanghai Machine Tool Works Co., Ltd.	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	100	-	Equity contribution
Shanghai Mitsubishi Elevator Co., Ltd. (Note 2)	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	-	52	Equity contribution
Shanghai Electric Power Generation Equipment Co., Ltd.	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	-	54.64	Incorporation or investment
Shanghai Electric Wind Power Group Co., Ltd.	Shanghai	Listed	Shanghai	Manufacturing industry	Share capital 1,333,333	60	-	Incorporation or investment
Shanghai Turbine Company, Ltd.	Shanghai	Corporate-owned	Shanghai	Manufacturing industry	-	100	-	Incorporation or investment
Shanghai Electric Nuclear Power Equipment Co., Ltd.	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	57.80	-	Incorporation or investment
Shanghai Electric Transmission & Distribution Group Co., Ltd. (Note 2(32)(a))	Shanghai	Other limited liability	Shanghai	Manufacturing industry	-	50	-	Incorporation or investment

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(1) Interests in significant subsidiaries (Cont'd)

(a) Constitution of the Group (Cont'd)

Subsidiaries	Major business location	Place of registration	Legal person	Nature of business	Information on share capital and bonds issued	Shareholding (%)		Registered capital (Unit: RMB)
						Direct	Indirect	
Shanghai Electrical Apparatus Import & Export Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Service industry	-	100	-	Incorporation or investment
Shanghai Electric Hong Kong Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Financial industry	-	100	-	Incorporation or investment
Shanghai Electric Gas Turbine Co., Ltd.	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	60	-	Incorporation or investment
Shanghai Electric SHMP Pulverising & Special Equipment Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Manufacturing industry	-	100	-	Incorporation or investment
Shanghai Electric Wind Power Yunnan Co., Ltd.	Yunnan	Yunnan	Corporate-owned	Manufacturing industry	-	-	100	Incorporation or investment
Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd.	Shanghai	Shanghai	Other limited liability	Service industry	-	51.12	-	Incorporation or investment
Shanghai Najie Complete Sets of Electric Co., Ltd. (Note 2)	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	-	85	Incorporation or investment
Shanghai Renmin Electrical Apparatus Works	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	-	68	Business combination involving enterprises under common control
Shanghai Electric Power Transmission & Distribution Engineering Co., Ltd.	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	-	100	Business combination involving enterprises under common control
Shanghai Blower Works Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Manufacturing industry	-	100	-	Incorporation or investment
Shanghai Electric Group Finance Co., Ltd.	Shanghai	Shanghai	Other limited liability	Financial industry	-	74.63	13.79	Business combination involving enterprises under common control
Shanghai Panxin Enterprise Management Consulting Partnership (Limited Partnership) (Note 1)	Shanghai	Shanghai	Limited Partnership	Service industry	-	-	20.02	Incorporation or investment
Shanghai Jingteng Enterprise Management Consulting Partnership (Limited Partnership) (Note 1)	Shanghai	Shanghai	Limited Partnership	Service industry	-	-	20.03	Incorporation or investment
Shanghai Jixin Enterprise Management Consulting Partnership (Limited Partnership) (Note 1)	Shanghai	Shanghai	Limited Partnership	Service industry	-	-	20.03	Incorporation or investment

Note 1: The Group holds 67% of the voting rights of Shanghai Panxin Enterprise Management Consulting Partnership (Limited Partnership), Shanghai Jingteng Enterprise Management Consulting Partnership (Limited Partnership) and Shanghai Jixin Enterprise Management Consulting Partnership (Limited Partnership). It enjoys two votes among the three votes of the Investment Decision Committee, which can lead the major operation and investment decisions of the partnership, so it is accounted for as a subsidiary.

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(1) Interests in significant subsidiaries (Cont'd)

(a) Constitution of the Group (Cont'd)

Subsidiaries	Major business location	Place of registration	Legal person	Nature of business	Information on share capital and bonds issued	Shareholding (%)		Method of acquisition
						Direct	Indirect	
Thales SEC Transportation System Limited Company	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	50.10	-	Business combination involving enterprises under common control
Shanghai Electric Group Asset Management Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Real estate industry	-	100	-	Business combination involving enterprises under common control
Shanghai Prime Mingyu Machinery Technology Co., Ltd.	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	95.56	-	Incorporation or investment
Shanghai Electric Power Generation Environment Protection Engineering Co., Ltd.	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	95	-	Business combination involving enterprises under common control
Shanghai Electric Industrial Co., Ltd.	Shanghai	Shanghai	Other limited liability	Service industry	-	51.82	-	Incorporation or investment
Shanghai No.1 Machine Tool Works Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Manufacturing industry	-	100	-	Business combination involving enterprises under common control
Shanghai Electric Leasing Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Service industry	-	100	-	Business combination involving enterprises under common control
Shanghai Denso Fuel Injection Co., Ltd.	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	61	-	Business combination involving enterprises under common control
Shanghai Feihang Electric Wire & Cable Co., Ltd. (Note 2)	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	-	60	Business combination involving enterprises not under common control
Shanghai Huapu Cable Co., Ltd. (Note 2)	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	-	80	Business combination involving enterprises not under common control
Communication Company (Note 3)	Shanghai	Shanghai	Other limited liability	Manufacturing industry	-	40	-	Incorporation or investment
Shanghai Electric Investment Co., Ltd.	Shanghai	Shanghai	Corporate-owned	Financial industry	-	100	-	Incorporation or investment
Shenzhen Yinghe Technology Co., Ltd. (Note 2)(32)(a))	Guangdong	Guangdong	Listed	Manufacturing industry	Share capital 649,537	28.39	-	Business combination involving enterprises not under common control

Note 2: According to the articles of association of Shanghai Nanhua-Lanling Electrical Co., Ltd., Shanghai Mitsubishi Elevator Co., Ltd., Shanghai Najie Complete Sets of Electric Co., Ltd., Shanghai Feihang Electric Wire & Cable Co., Ltd., and Shanghai Huapu Cable Co., Ltd., the Group holds the majority of seats in the Board of Directors of the above companies, and can lead their major financial and operation decisions. Therefore, the Group has substantial control over these companies and includes them in the scope of consolidation as subsidiaries.

Note 3: According to the articles of association of Communication Company, the Group can lead their major financial and operation decisions. Therefore, the Group has substantial control over the company and includes it in the scope of consolidation as a subsidiary.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(1) Interests in significant subsidiaries (Cont'd)

(b) Minority interests in significant subsidiaries

(i)

Subsidiaries	Shareholding of minority shareholders	Profit or loss attributable to minority shareholders for the year ended 31 December 2022	Dividends paid to minority shareholders at the end of 2022	Minority interests as at 31 December 2022
SMEI	51.19%	1,054,861	381,187	9,261,764
Shanghai Electric Wind Power Group Co., Ltd.	40.00%	(134,696)	61,333	2,869,985
Shenzhen Yinghe Technology Co., Ltd.	71.61%	379,345	56,313	4,539,470

(ii) The major financial information of the significant non-fully-owned subsidiaries of the Group is listed below:

	31 December 2022				31 December 2021			
	Current assets	Non-current assets	Total assets	Total liabilities	Current assets	Non-current assets	Total assets	Total liabilities
SMEI	30,917,919	6,588,728	37,506,647	21,922,277	30,519,873	6,691,752	37,211,625	22,575,842
Shanghai Electric Wind Power Group Co., Ltd.	18,337,836	11,870,150	30,207,986	23,057,967	20,572,531	10,120,068	30,692,599	23,068,487
Shenzhen Yinghe Technology Co., Ltd.	13,302,929	3,069,578	16,372,507	10,580,365	9,895,547	2,858,548	12,754,095	7,201,742

	For the year ended 31 December 2022				For the year ended 31 December 2021			
	Revenue	Net profit/(loss)	Total comprehensive income	Cash flows from operating activities	Revenue	Net profit	Total comprehensive income	Cash flows from operating activities
SMEI	23,569,529	1,533,919	1,533,919	693,788	24,716,739	1,172,598	1,172,827	720,405
Shanghai Electric Wind Power Group Co., Ltd.	12,075,140	(338,096)	(340,752)	(717,557)	23,972,183	507,016	506,066	336,113
Shenzhen Yinghe Technology Co., Ltd.	9,019,822	511,213	511,267	328,827	5,201,619	300,486	300,486	450,695

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(2) Interests in joint ventures and associates

(a) Basic information of significant joint ventures and associates

	Major business location	Place of registration	Nature of business	Shareholding (%)	
				Direct	Indirect
Joint ventures -					
Shanghai Fanuc Intelligent Machines Co., Ltd.	Shanghai	Shanghai	Manufacturing of communication equipment	-	49
Associates -					
Shanghai Mitsubishi Electric Shangling Air Conditioner Electric Co., Ltd.	Shanghai	Shanghai	Manufacturing of electrical machinery and equipment	-	48
Shanghai Schneider Power Distribution Electrical Apparatus Co., Ltd.	Shanghai	Shanghai	Manufacturing of communication equipment	-	20
Shanghai Siemens Switchgear Co., Ltd.	Shanghai	Shanghai	Manufacturing of electrical machinery and equipment	-	45

The above-mentioned equity investments are accounted for using the equity method.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(2) Interests in joint ventures and associates (Cont'd)

(b) Summarised financial information for significant joint ventures

	31 December 2022
	Shanghai Fanuc Intelligent Machines Co., Ltd.
Current assets	1,471,659
Non-current assets	11,568
Total assets	1,483,227
Current liabilities	593,972
Non-current liabilities	-
Total liabilities	593,972
Minority interests	-
Attributable to shareholders of the parent company	889,255
Share of net assets based on shareholding (i)	435,735
Adjustments - Goodwill	-
Carrying amount of investments in joint ventures	435,735
Revenue	2,180,982
Net profit	314,002
Other comprehensive income	-
Total comprehensive income	314,002
Dividends received from joint ventures by the Group for the current year	100,748

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(2) Interests in joint ventures and associates (Cont'd)

(c) Summarised financial information for significant associates

	31 December 2022
Shanghai Mitsubishi Electric Shangling Air Conditioner Electric Co., Ltd.	
Current assets	1,923,836
Non-current assets	295,787
Total assets	<u>2,219,623</u>
Current liabilities	712,421
Non-current liabilities	17,763
Total liabilities	<u>730,184</u>
Minority interests	-
Attributable to shareholders of the parent company	<u>1,489,439</u>
Share of net assets based on shareholding (i)	708,973
Adjustments - Goodwill	(23,940)
Carrying amount of investments in associates	685,033
Revenue	3,101,545
Net profit	50,236
Other comprehensive income	-
Total comprehensive income	50,236
Dividends received from associates by the Group for the current year	12,445

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(2) Interests in joint ventures and associates (Cont'd)

(c) Summarised financial information for significant associates (Cont'd)

	31 December 2022
	Shanghai Schneider Power Distribution Electrical Apparatus Co., Ltd.
Current assets	850,785
Non-current assets	137,943
Total assets	988,728
Current liabilities	599,189
Non-current liabilities	-
Total liabilities	599,189
Minority interests	-
Attributable to shareholders of the parent company	389,539
Share of net assets based on shareholding (i)	77,908
Adjustments - Goodwill	-
Carrying amount of investments in associates	77,908
Revenue	2,770,917
Net profit	536,356
Other comprehensive income	-
Total comprehensive income	536,356
Dividends received from associates by the Group for the current year	113,953

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(2) Interests in joint ventures and associates (Cont'd)

(c) Summarised financial information for significant associates (Cont'd)

	31 December 2022
	Shanghai Siemens Switchgear Co., Ltd.
Current assets	674,144
Non-current assets	169,531
Total assets	<u>843,675</u>
Current liabilities	399,218
Non-current liabilities	37,313
Total liabilities	<u>436,531</u>
Minority interests	-
Attributable to shareholders of the parent company	<u>407,144</u>
Share of net assets based on shareholding (i)	183,215
Adjustments - Goodwill	-
Carrying amount of investments in associates	183,215
Revenue	1,309,060
Net profit	212,856
Other comprehensive income	-
Total comprehensive income	212,856
Dividends received from associates by the Group for the current year	101,814

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

6 INTERESTS IN OTHER ENTITIES (CONT'D)

(2) Interests in joint ventures and associates (Cont'd)

(c) Summarised financial information for significant associates (Cont'd)

- (i) The Group calculates share of net assets in proportion of the shareholding based on the amount attributable to the parent company of associates in their consolidated financial statements, which has taken into account the impacts of both the fair value of the identifiable assets and liabilities of the associates upon acquisition of investments in associates and the unification of accounting policies adopted by the associates to those adopted by the Group.
- (ii) Other adjustments include the goodwill herein and unrecognised excess loss.

(d) There was no excess loss incurred in significant joint ventures or associates in the current year.

7 SEGMENT INFORMATION

Operating segment

The Group's businesses are organised and managed separately based on business nature and the products and services provided. Each operating segment of the Group is a business group, which, distinctive from other operating segments, has its own risks in products and services and gains its own rewards.

Information of each operating segment is summarised as follows:

- (1) the energy equipment segment: coal-fired power generation and corollary equipment, gas-fired power generation equipment, wind power equipment, nuclear power equipment, energy storage equipment, high-end vessels for chemical industry as well as power grid and industrial intelligent power supply system solutions;
- (2) the industrial equipment segment: elevators, large and medium-sized electric motors, intelligent manufacturing equipment, industrial basic parts and construction industrialisation equipment;
- (3) the integration service segment: energy, environmental protection and automation engineering and services, covering traditional and new energy, comprehensive use of solid wastes, sewage treatment, flue gas treatment, rail transit, etc.; industrial internet services; financial services, covering finance leases and insurance brokerage; international trade services; property management services; etc.

Management monitors the results of the business units separately for the purpose of making decisions on resource allocation and performance assessment. Segment performance is evaluated based on reported segment profit. Segment profit is an indicator of adjusted total profit, which is consistent with the Group's total profit but excludes interest income, financial expenses, dividend income, gains on changes in fair value of financial instruments and expenses of headquarters.

Financial assets held for trading, derivatives, dividends receivable, interest receivable, long-term equity investments, debt investments, other debt investments, investment in other equity instruments, other non-current financial assets, deferred tax assets and other undistributed assets of headquarters are not included in segment assets, which are under the unified management of the Group.

Financial liabilities held for trading, derivatives, dividends payable, interest payable, borrowings, income tax expenses payable, deferred tax liabilities and other undistributed liabilities of headquarters are not included in segment liabilities, which are under the unified management of the Group.

Inter-segment transfer prices are measured by reference to the prices of transactions with third parties.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

7 SEGMENT INFORMATION (CONT'D)

(a) Segment information as at and for the year ended 31 December 2022 is as follows:

	Energy equipment	Industrial equipment	Integration service	Others	Unallocated	Elimination	Total
Revenue							
Including: Revenue from external customers	53,638,857	38,996,009	24,969,319	18,585	348	-	117,623,118
Inter-segment revenue	<u>2,454,522</u>	<u>1,537,037</u>	<u>1,738,270</u>	<u>110,777</u>	<u>75,290</u>	<u>(5,915,896)</u>	<u>-</u>
	56,093,379	40,533,046	26,707,589	129,362	75,638	(5,915,896)	117,623,118
Operating cost	45,971,002	34,216,208	24,473,918	85,819	650	(6,162,778)	98,584,819
Credit impairment losses	1,621,249	396,509	1,054,248	(415)	(54,010)	(924,116)	2,093,465
Asset impairment losses	982,414	(1,301)	2,705,322	-	-	(1,541,518)	2,144,917
Depreciation and amortisation	1,235,268	477,594	1,222,508	23,869	278,057	-	3,237,296
Financial expenses	-	-	-	-	1,301,049	-	1,301,049
Investment income from associates and joint ventures	-	-	-	-	858,533	-	858,533
Operating profit/(loss)	<u>593,597</u>	<u>1,196,098</u>	<u>(1,146,785)</u>	<u>(172,847)</u>	<u>(1,052,575)</u>	<u>(1,441,946)</u>	<u>(2,024,458)</u>
Non-operating income and expenses							49,160
Total loss							<u>(1,975,298)</u>
Assets and liabilities							
Total assets	<u>96,921,901</u>	<u>73,162,858</u>	<u>171,575,801</u>	<u>723,438</u>	<u>46,938,962</u>	<u>(101,302,108)</u>	<u>288,020,852</u>
Total liabilities	<u>85,584,309</u>	<u>44,574,783</u>	<u>102,558,459</u>	<u>242,439</u>	<u>61,462,045</u>	<u>(100,595,350)</u>	<u>193,826,685</u>
Non-cash expenses other than depreciation and amortisation	<u>1,715,235</u>	<u>188,748</u>	<u>1,956,639</u>	<u>2,218</u>	<u>24,026</u>	<u>-</u>	<u>3,886,866</u>
Increase in non-current assets	<u>3,082,202</u>	<u>644,982</u>	<u>3,515,307</u>	<u>7,735</u>	<u>266,513</u>	<u>-</u>	<u>7,516,739</u>

7 SEGMENT INFORMATION (CONT'D)

(b) Segment information as at and for the year ended 31 December 2021 is as follows:

	Energy equipment	Industrial equipment	Integration service	Others	Unallocated	Inter- segment elimination	Total
Revenue							
Including: Revenue from external customers	55,311,112	39,327,765	35,528,449	74,395	19,529	-	130,261,250
Inter-segment revenue	<u>3,438,767</u>	<u>2,913,470</u>	<u>3,270,931</u>	<u>131,914</u>	<u>156,632</u>	<u>(9,911,714)</u>	<u>-</u>
	58,749,879	42,241,235	38,799,380	206,309	176,161	(9,911,714)	130,261,250
Operating cost	48,256,496	35,328,595	36,460,078	75,271	-	(9,443,455)	110,676,985
Credit impairment losses	559,097	8,013,608	2,447,363	165	8,383,872	(8,417,143)	10,986,962
Asset impairment losses	1,209,677	2,629,268	1,012,169	-	64,478	(390,260)	4,525,332
Depreciation and amortisation	994,385	545,492	817,389	29,213	238,938	-	2,625,417
Financial expenses	-	-	-	-	1,127,410	-	1,127,410
Share of profit of associates and joint ventures	-	-	-	-	22,785	-	22,785
Operating profit/(loss)	<u>467,282</u>	<u>(8,104,168)</u>	<u>(1,640,877)</u>	<u>(142,826)</u>	<u>(9,084,641)</u>	<u>7,666,766</u>	<u>(10,838,464)</u>
Non-operating income and expenses							548,825
Total loss							<u>(10,289,639)</u>
Assets and liabilities							
Total assets	<u>120,744,980</u>	<u>62,575,322</u>	<u>156,567,563</u>	<u>714,825</u>	<u>64,255,704</u>	<u>(104,056,204)</u>	<u>300,802,190</u>
Total liabilities	<u>81,790,164</u>	<u>41,666,402</u>	<u>113,038,321</u>	<u>294,435</u>	<u>66,919,942</u>	<u>(101,051,427)</u>	<u>202,657,837</u>
Non-cash expenses other than depreciation and amortisation	<u>1,941,170</u>	<u>87,339</u>	<u>3,889,594</u>	<u>46,894</u>	<u>180,496</u>	<u>-</u>	<u>6,145,493</u>
Increase in non-current assets	<u>1,554,869</u>	<u>950,395</u>	<u>2,183,885</u>	<u>164,023</u>	<u>42,829</u>	<u>-</u>	<u>4,896,001</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

7 SEGMENT INFORMATION (CONT'D)

(c) Revenue from external customers

	For the year ended 31 December 2022	For the year ended 31 December 2021
Mainland of China	99,204,461	106,460,880
Other countries and geographical areas	18,418,657	23,800,370
	<u>117,623,118</u>	<u>130,261,250</u>

Revenue from external customers is attributed to the region where corresponding customers come from.

(d) Total non-current assets

	31 December 2022	31 December 2021
Mainland of China	59,728,501	60,547,694
Other countries and geographical areas	7,064,563	8,955,539
	<u>66,793,064</u>	<u>69,503,233</u>

Non-current assets, excluding financial assets and deferred tax assets, are attributed to the region where the assets are located in.

In 2022 and 2021, there was no single customer of the Group whose revenue exceeded 10% of the Group's revenue.

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS

(1) Information of the parent company

(a) General information of the parent company

	Place of registration	Nature of business
Electric Holdings	Shanghai	Contracting, manufacturing, sales and service

The parent company and ultimate holding company of the Company is Electric Holdings.

(b) Registered capital and changes in registered capital of the parent company

	31 December 2021	Increase in the current year	Decrease in the current year	31 December 2022
Electric Holdings	9,930,366	919,000	-	10,849,366

(c) The percentages of shareholding and voting rights in the Company held by the parent company

	31 December 2022		31 December 2021	
	Shareholding (%)	Voting rights (%)	Shareholding (%)	Voting rights (%)
Electric Holdings	49.78%	49.78%	54.38%	54.38%

(2) Information of subsidiaries

The general information and other related information of subsidiaries are set out in Note 6.

(3) Information of joint ventures and associates

The general information and other related information of joint ventures and associates are set out in Note 6.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(4) Information of other related parties

	Relationship with the Group
Nanchang Highly Electrical Appliances Co., Ltd.	Controlled by the parent company
Shanghai Gongxin Investment Management Co., Ltd.	Controlled by the parent company
Shanghai Refrigeration Machine Works Co., Ltd.	Controlled by the parent company
Shanghai Beiji Building Materials Market Management Co., Ltd.	Controlled by the parent company
Shanghai Shuang'ai Property Management Co., Ltd.	Controlled by the parent company
Shanghai Kangda Medical Equipment Group Co., Ltd.	Controlled by the parent company
Shanghai Enamelware & Stainless Steel Products United Corporation	Controlled by the parent company
Shanghai Mechanical and Electrical Building Management Co., Ltd.	Controlled by the parent company
Shanghai Nuclear Power Technology Equipment Co., Ltd.	Controlled by the parent company
Shanghai Highly (Group) Co., Ltd.	Controlled by the parent company
Shanghai Highly New Energy Technology Co., Ltd.	Controlled by the parent company
Shanghai Highly Special Cooling Equipment Co., Ltd.	Controlled by the parent company
Shanghai Highly Electrical Appliances Co., Ltd.	Controlled by the parent company
Shanghai Hydraulics & Pneumatics Co., Ltd.	Controlled by the parent company
Shanghai Electric (Group) Corporation Education Centre	Controlled by the parent company
Shanghai Electric (Group) Changjiang Company	Controlled by the parent company
Shanghai Electric Enterprise Development Co., Ltd.	Controlled by the parent company
Shanghai Electric International Economic & Trading Co., Ltd.	Controlled by the parent company
Shanghai Electric Intelligent Rehabilitation Medical Technology Co., Ltd.	Controlled by the parent company
Shanghai Electric Machine Tool & Engineering Co., Ltd.	Controlled by the parent company
Shanghai Electric Eurasia Industrial Development Co., Ltd.	Controlled by the parent company
Shanghai Electric Property Co., Ltd.	Controlled by the parent company
Shanghai Electric Bearing Co., Ltd.	Controlled by the parent company

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(4) Information of other related parties (Cont'd)

	Relationship with the Group
Shanghai Electric Light Industry Asset Management Co., Ltd.	Controlled by the parent company
Shanghai Electric Valve Co., Ltd.	Controlled by the parent company
Shanghai Electric Group Hong Kong Co., Ltd.	Controlled by the parent company
Shanghai No.3 Machine Tool Works	Controlled by the parent company
Shanghai Lianhe Wood Industry Co., Ltd.	Controlled by the parent company
Shanghai Automation Instrumentation Co., Ltd.	Controlled by the parent company
Shanghai Marine Crankshaft Co., Ltd.	Controlled by the parent company
Shanghai Yingshi Property Co., Ltd.	Controlled by the parent company
Shanghai Hero Industrial Co., Ltd.	Controlled by the parent company
Shanghai Crane & Conveyor Works Co., Ltd.	Controlled by the parent company
Shanghai Lianhe Instrumentation Co., Ltd.	Controlled by the parent company
Shanghai Heavy Machinery Plant Co., Ltd.	Controlled by the parent company
Shanghai Jintian Business Co., Ltd.	Controlled by the parent company
Shanghai Feiren Xiechang Sewing Machinery Co., Ltd.	Controlled by the parent company
China Sinogy (Shanghai) New Energy Technology Co., Ltd.	Controlled by the parent company
China National Machinery Power Engineering Co., Ltd.	Controlled by the parent company
Suzhou Thvow Technology Co., Ltd.	Controlled by the parent company
Nanchang Highly Electrical Appliances Co., Ltd.	Controlled by the parent company
Thar Coal Field No. 1 Area Power Generation Co., Ltd.	Controlled by the parent company
Tianjin Pipe Co., Ltd.	Controlled by the parent company
Pacific Mechatronic (Group) Co., Ltd.	Controlled by the parent company
Anhui Highly Auto Parts Co., Ltd.	Controlled by the parent company
Zhanghuaji (Suzhou) Heavy Equipment Co., Ltd.	Controlled by the parent company

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(4) Information of other related parties (Cont'd)

	Relationship with the Group
Zhangjiagang Jiangnan Forging Co., Ltd.	Controlled by the parent company
Hangzhou Fusheng Electrical Appliance Co., Ltd.	Controlled by the parent company
Yumen Xinneng CSP No.1 Electric Power Co., Ltd.	Controlled by the parent company
Mianyang Highly Electrical Appliances Co., Ltd.	Controlled by the parent company
Sino Sindh Resources (Pvt.) Ltd.	Other related enterprises
Shanghai 800 Show Co. Ltd.	Other related enterprises
Shanghai Dalong Machinery Plant Co., Ltd.	Other related enterprises
Shanghai Target Investment Management Co., Ltd.	Other related enterprises
Shanghai Jianshe Luqiao Machinery Co., Ltd.	Other related enterprises
Shanghai Micro Electronics Equipment (Group) Co., Ltd.	Other related enterprises
Shanghai Paibo Zhidian Enterprise Management Co., Ltd.	Other related enterprises
Shanghai Electric Insulating Materials Co., Ltd.	Other related enterprises
Shanghai Nabtesco Business Management Co., Ltd.	Other related enterprises
Shanghai Rail Traffic Equipment Co., Ltd.	Other related enterprises
Shanghai Xuanyi New Energy Development Co., Ltd.	Other related enterprises
China City State Grid (Beijing) Comprehensive Energy Corporation	Other related enterprises
Tianjin Pipe and Steel Trading Co., Ltd.	Other related enterprises
Ansaldo Energia S.p.A.	Other related enterprises
Siemens AG	Other related enterprises
Siemens Transformer (Jinan) Co., Ltd.	Other related enterprises
Nabtesco Corporation	Other related enterprises
Wuhu Highly Property Management Co., Ltd.	Other related enterprises
Siemens (China) Co., Ltd. Shanghai Branch	Other related enterprises
Siemens Gamesa Renewable Energy (Shanghai) Co., Ltd.	Other related enterprises

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(5) Related party transactions

The pricing on transactions between the Group and related parties is based on market prices of similar products or businesses.

(a) Purchase and sales of goods, and rendering and receipt of services

Purchase of goods and receipt of services:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	159	-
Companies controlled by the parent company	228,531	95,931
Associates	3,511,711	3,203,877
Other related enterprises	561,354	1,512,522
	<u>4,301,755</u>	<u>4,812,330</u>

Sales of goods and rendering of services:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	155,928	93,718
Companies controlled by the parent company	288,701	317,631
Joint ventures	-	3,628
Associates	679,566	4,040,987
Other related enterprises	4,053,655	4,380,418
	<u>5,177,850</u>	<u>8,836,382</u>

Construction income from related parties

	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	-	300
Companies controlled by the parent company	1,566,446	3,265,920
Associates	37,995	12,442
Other related enterprises	1,369,877	654,383
	<u>2,974,318</u>	<u>3,933,045</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(5) Related party transactions (Cont'd)

(b) Leases

The Group as the lessor:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Lease income		
Electric Holdings	16,162	15,392
Companies controlled by the parent company	13,906	7,086
Joint ventures	4,060	-
Associates	13,678	6,195
Other related enterprises	12,123	15,864
	59,929	44,537

Right-of-use assets leased in the current year with the Group as the lessee:

	Type of the leased asset	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	Fixed assets	-	20,005
Companies controlled by the parent company	Fixed assets	13,348	3,524
		13,348	23,529

(c) Loans from related parties to the Group:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Companies controlled by the parent company	-	318,803

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(5) Related party transactions (Cont'd)

(d) Loans from the Group to related parties and interest accrued:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Joint ventures	255,852	153,220

(e) Loans repaid by the Group to related parties:

	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	450,000	467,000
Companies controlled by the parent company	77,896	330,727
	<u>527,896</u>	<u>797,727</u>

(f) Borrowing guarantees provided by the Group to related parties

(i)

	31 December 2022		31 December 2021	
	Cap amount	Actual amount	Cap amount	Actual amount
China National Machinery Power Engineering Co., Ltd.	1,256,000	1,159,600	-	-
Yumen Xinneng CSP No.1 Electric Power Co., Ltd.	100,000	75,000	-	-
Suzhou Thvow Technology Co., Ltd.	910,000	649,400	-	-
Nabtesco (China) Precision Machine Co., Ltd.	20,734	20,734	51,150	21,944
Chongqing Shenhua Thin Film Co., Ltd.	-	-	300,000	241,165
Tianjin Qingyuan Water Treatment Technology Co., Ltd.	253,000	202,852	253,000	201,325

(ii) A subsidiary of the Group and Electric Holdings jointly established Shanghai Electric Investment (Dubai) Co., Ltd. to participate in the power station project. After the project is launched, Electric Holdings provides guarantees for the financing of the project company. The Group provides counter-guarantees to Electric Holdings according to the indirect shareholding ratio of 20% of the project company. The counter-guarantee is expected to not exceed USD166,800,000 (equivalent to RMB1,160,000,000). As at 31 December 2022, the counter-guarantee was in Stage 1.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(5) Related party transactions (Cont'd)

(g) Borrowing guarantees provided by related parties to the Group

Communication Company, a subsidiary of the Group, entered into the Contract for Syndicated Loans of RMB One Billion Two Hundred and One Million (“Host Contract”) with Shanghai Pudong Development Bank Co., Ltd. Fengxian Sub-branch (“Guarantee Agency”), Postal Savings Bank of China Co., Ltd. Shanghai Putuo Sub-branch, Bank of Communications Co., Ltd. Shanghai Branch, Bank of Ningbo Co., Ltd. Shanghai Branch, Bank of Jiangsu Co., Ltd. Shanghai Fengxian Sub-branch, China CITIC Bank Corporation Limited Shanghai Branch and Bank of Hangzhou Co., Ltd. Shanghai Branch (collectively the “Syndicate” or “Lenders”). As the guarantor, the Group's parent company Electric Holdings concluded the Guarantee Contract for Syndicated Loans of RMB One Billion Two Hundred and One Million (“Guarantee Contract”) with the Syndicate and Communication Company, in which Electric Holdings has affirmed that where Communication Company fails to fulfil debt obligations as per the Host Contract, the Guarantee Agency (on behalf of all Lenders) has the right to request all or any of guarantors under the Guarantee Contract to assume full guarantee liabilities within the scope of the contract, regardless of whether each Lender is entitled to other warranty for the debts in relation to the Host Contract (including but not limited to the form of guarantee, mortgage and pledge). However, the Guarantee Agency has no right to force other warrantors or guarantors to bear warranty liabilities. The guarantee period ends three years after the expiry of the debt obligations.

(h) Transfer of assets

On 21 June 2022, the Board of Directors of the Company reviewed and approved the Proposal on the Transfer of 15.24% Shares in Suzhou Thvow Technology Co., Ltd. from Shanghai Electric Group Co., Ltd. to Shanghai Electric Holdings Group Co., Ltd. and on the Related Party Transactions. The Board agreed that the Company would transfer its 132,458,814 shares in Thvow Technology to Electric Holdings through private agreement. The equity interest transfer was settled on 2 December 2022, with rights and obligations transferred.

(i) Remuneration of key management (in HKD'000)

	For the year ended 31 December 2022	For the year ended 31 December 2021
Directors	4,749	4,156
Supervisors	2,050	2,468
Senior management	11,039	9,993
	<u>17,838</u>	<u>16,617</u>

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(6) Balances with related parties

		31 December 2022		31 December 2021	
		Book balance	Provision for bad debts	Book balance	Provision for bad debts
Accounts receivable	Electric Holdings	43,039	401	1,119	13
	Companies controlled by the parent company	4,347,188	204,927	1,516,517	96,960
	Joint ventures	630	-	70,791	1,692
	Associates	322,532	30,151	1,076,303	262,594
	Other related enterprises	1,028,003	12,543	893,165	5,848
		<u>5,741,392</u>	<u>248,022</u>	<u>3,557,895</u>	<u>367,107</u>
Notes receivable	Companies controlled by the parent company	3,631	-	5,163	-
	Other related enterprises	1,600	-	3,147	-
		<u>5,231</u>	<u>-</u>	<u>8,310</u>	<u>-</u>
Other receivables	Electric Holdings	-	-	74,094	-
	Companies controlled by the parent company	650	-	6,135	100
	Joint ventures	3900	-	-	-
	Associates	1,288,404	468,520	1,206,502	246,963
	Other related enterprises	532,230	-	589,327	-
		<u>1,860,284</u>	<u>468,520</u>	<u>1,876,058</u>	<u>247,063</u>
Contract assets	Companies controlled by the parent company	60,878	4,546	-	-
	Associates	408,455	5,271	1,345,715	18,947
	Other related enterprises	358,090	11,803	2,404	34
		<u>827,423</u>	<u>21,620</u>	<u>1,348,119</u>	<u>18,981</u>
Other non-current assets - Contract assets	Companies controlled by the parent company	7,600	233	-	-
	Other related enterprises	13,374	485	13,113	433
		<u>20,974</u>	<u>718</u>	<u>13,113</u>	<u>433</u>
Long-term receivables	Joint ventures	1,672,704	604,795	1,314,038	259,580

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(6) Balances with related parties (Cont'd)

As at 31 December 2022 and 31 December 2021, the aforesaid balances of long-term receivables represented borrowing to related parties, which were in Stage 2.

		31 December 2022	31 December 2021
Prepayments	Companies controlled by the parent company	95,184	26,350
	Associates	345,070	351,745
	Other related enterprises	304,048	164,853
		<u>744,302</u>	<u>542,948</u>
Dividends receivable	Associates	88,615	49,260
	Other related enterprises	-	37,450
		<u>88,615</u>	<u>86,710</u>
The above prepayments and dividends receivable have not been provided for bad debts.			
Current portion of non-current assets	Joint ventures	-	85,418
Accounts payable	Companies controlled by the parent company	219,643	88,863
	Joint ventures	251	296
	Associates	413,944	245,296
	Other related enterprises	283,817	391,404
		<u>917,655</u>	<u>725,859</u>
Notes payable	Companies controlled by the parent company	2,247	13,061
	Associates	360,438	189,209
	Other related parties	46,952	-
		<u>409,637</u>	<u>202,270</u>

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(6) Balances with related parties (Cont'd)

		31 December 2022	31 December 2021
Advances from customers	Electric Holdings	16,685	-
	Companies controlled by the parent company	4,335	-
	Associates	2,894	-
	Other related enterprises	5,398	4,889
		<u>29,312</u>	<u>4,889</u>
Contract liabilities	Electric Holdings	174,327	32,194
	Companies controlled by the parent company	980,539	35,218
	Associates	4,231	142,804
	Other related enterprises	5,332	83,590
		<u>1,164,429</u>	<u>293,806</u>
Other payables	Companies controlled by the parent company	7,758	6,407
	Joint ventures	1,696	-
	Associates	30	13,659
	Other related enterprises	307,600	391,480
		<u>317,084</u>	<u>411,546</u>
Dividends payable	Other related enterprises	<u>124,523</u>	<u>108,171</u>
Current portion of long-term payables	Electric Holdings	30,000	450,000
	Companies controlled by the parent company	432,505	510,401
	Associates	36,503	29,420
		<u>499,008</u>	<u>989,821</u>
Long-term payables	Electric Holdings	<u>71,600</u>	<u>101,600</u>
Lease liabilities	Electric Holdings	18,321	20,266
	Companies controlled by the parent company	26,522	14,317
		<u>44,843</u>	<u>34,583</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(7) Deposit and loan services provided by Finance Company to related parties

Deposits from customers

	31 December 2022	31 December 2021
Electric Holdings	3,222,045	1,895,567
Companies controlled by the parent company	2,653,021	3,100,313
Associates	4,958	15,665
Other related enterprises	34,797	29,367
	<u>5,914,821</u>	<u>5,040,912</u>

Interest costs

	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	29,312	45,026
Companies controlled by the parent company	45,405	45,199
Associates	49	175
Other related enterprises	399	461
	<u>75,165</u>	<u>90,861</u>

Loans

	31 December 2022		31 December 2021	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Electric Holdings	1,487,500	8,717	6,500,000	212,284
Companies controlled by the parent company	5,341,330	479,602	894,000	206,873
Associates	20,000	2,796	15,000	2,157
Other related enterprises	19,997	2,796	20,000	2,876
	<u>6,868,827</u>	<u>493,911</u>	<u>7,429,000</u>	<u>424,190</u>

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(7) Deposit and loan services provided by Finance Company to related parties (Cont'd)

Discounting

	31 December 2022	31 December 2021
Companies controlled by the parent company	259,636	5,550
Associates	1,859	13,255
	<u>261,495</u>	<u>18,805</u>

Interest income from loans and discount of notes

	For the year ended 31 December 2022	For the year ended 31 December 2021
Electric Holdings	87,632	166,307
Companies controlled by the parent company	49,621	41,076
Associates	1,109	3,133
Other related enterprises	558	775
	<u>138,920</u>	<u>211,291</u>

Bank acceptance notes issued for related parties

	31 December 2022	31 December 2021
Companies controlled by the parent company	-	455,386

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(8) Directors' interests

(a) Remuneration of directors and CEO

The remuneration of each director, supervisor and CEO in 2022 is as follows (in HKD'000):

Name	Title	Fees	Salaries and benefits	Pension plan	Bonus	Other benefits	Compensation for other services provided to the Group	Total
Ms. Leng Weiqing	Chairman and CEO	-	975	-	-	-	-	975
Mr. Gan Pin	Vice chairman	-	815	-	-	-	-	815
Mr. Liu Ping	Director and President	-	1,033	-	-	-	-	1,033
Mr. Zhu Zhaokai	Executive director	-	1,086	-	-	-	-	1,086
Ms. Yao Minfang	Non-executive director	-	-	-	-	-	-	-
Ms. Li An	Non-executive director	-	-	-	-	-	-	-
Mr. Xi Juntong	Independent director	280	-	-	-	-	-	280
Mr. Xu Jianxin	Independent director	280	-	-	-	-	-	280
Mr. Liu Yunhong	Independent director	280	-	-	-	-	-	280
Mr. Cai Xiaoqing	Chairman of the Board of Supervisors	-	1,042	-	-	-	-	1,042
Mr. Han Quanzhi	Supervisor	-	-	-	-	-	-	-
Mr. Yuan Shengzhou	Staff supervisor	-	1,008	-	-	-	-	1,008
Mr. Dong Jianhua	Vice president	-	1,360	-	-	-	-	1,360
Mr. Chen Ganjin	Vice president	-	1,274	-	-	-	-	1,274
Mr. Gu Zhiqiang	Vice president	-	1,268	-	-	-	-	1,268
Mr. Jin Xiaolong	Vice president	-	1,281	-	-	-	-	1,281
Ms. Yanghong	Vice president	-	1,274	-	-	-	-	1,274
Mr. Zhou Zhiyan	Secretary of the Board of Directors and Chief financial officer	-	1,119	-	-	-	-	1,119
Ms. Tong Liping	Chief legal officer	-	1,343	-	-	-	-	1,343
Ms. Fu Min	Chief auditor	-	849	-	-	-	-	849
Mr. Zhang Mingjie	Chief Operating Officer	-	1,271	-	-	-	-	1,271
		840	16,998	-	-	-	-	17,838

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(8) Directors' interests (Cont'd)

(a) Remuneration of directors and CEO (Cont'd)

The remuneration of each director, supervisor and CEO in 2021 is as follows (in HKD'000):

Name	Title	Fees	Salaries and benefits	Pension plan	Bonus	Other benefits	Compensation for other services provided to the Group	Total
Ms. Leng Weiqing	Chairman and CEO	-	315	-	-	-	-	315
Mr. Gan Pin	Vice chairman	-	494	-	-	-	-	494
Mr. Liu Ping	Director and President	-	275	-	-	-	-	275
Mr. Zhu Zhaokai	Executive director	-	725	-	-	-	-	725
Ms. Yao Minfang	Non-executive director	-	-	-	-	-	-	-
Ms. Li An	Non-executive director	-	-	-	-	-	-	-
Mr. Xi Juntong	Independent director	275	-	-	-	-	-	275
Mr. Xu Jianxin	Independent director	275	-	-	-	-	-	275
Mr. Liu Yunhong	Independent director	275	-	-	-	-	-	275
Mr. Cai Xiaoqing	Chairman of the Board of Supervisors	-	481	-	-	-	-	481
Mr. Han Quanzhi	Supervisor	-	-	-	-	-	-	-
Mr. Yuan Shengzhou	Staff supervisor	-	921	-	-	-	-	921
Mr. Dong Jianhua	Vice president	-	1,079	-	-	-	-	1,079
Mr. Chen Ganjin	Vice president	-	959	-	-	-	-	959
Mr. Gu Zhiqiang	Vice president	-	1,079	-	-	-	-	1,079
Mr. Jin Xiaolong	Vice president	-	959	-	-	-	-	959
Ms. Yang Hong	Vice president	-	959	-	-	-	-	959
Mr. Zhou Zhiyan	Chief financial officer and Secretary of the Board of Directors (Started his tenure from 2022)	-	-	-	-	-	-	-
Ms. Tong Liping	Chief legal officer	-	1,636	-	-	-	-	1,636
Mr. Zhang Mingjie	Chief investment officer	-	1,388	-	-	-	-	1,388
Mr. Zheng Jianhua	Chairman and CEO (resigned)	-	481	-	-	-	-	481
Mr. Huang Ou	Director and President (resigned)	-	799	-	-	-	-	799
Mr. Zhu Bin	Director (resigned)	-	242	-	-	-	-	242
Mr. Zhou Guoxiong	Chairman of the Board of Supervisors (resigned)	-	-	-	-	-	-	-
Mr. Hua Xingsheng	Vice chairman of the Board of Supervisors (resigned)	-	-	-	-	-	-	-
Ms. Zhang Yan	Staff supervisor (resigned)	-	1,066	-	-	-	-	1,066
Mr. Hu Kang	Chief financial officer (resigned)	-	959	-	-	-	-	959
Ms. Fu Rong	Secretary of the Board of Directors (resigned)	-	975	-	-	-	-	975
		825	15,792	-	-	-	-	16,617

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(8) Directors' interests (Cont'd)

(a) Remuneration of directors and CEO (Cont'd)

(i)

	Provide director services for the Company or its subsidiaries		Provide other services for the Company or its subsidiaries		Total	
	For the year ended 31 December 2022	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2021
Directors' remuneration	4,749	4,156	-	-	4,749	4,156

(ii) In 2022, no director waived any remuneration (2021: Nil).

(b) Director's retirement benefits

In 2022, the Group provided no retirement benefits arising from provision of director services (2021: Nil), and no retirement benefits arising from provision of other services (2021: Nil).

(c) Consideration paid to third parties in return for director services

In 2022, the Company made no payments to the company where a director of the Company had previously served (2021: Nil).

(d) Loans, quasi-loans and other transactions provided to directors, legal persons controlled by directors, and associated persons of directors

(e) In 2022, the Group did not provide loans and quasi-loans to directors, legal persons controlled by directors and associated persons of directors (2021: Nil), or did not provide guarantees for loans from directors, legal persons controlled by directors and associated persons of directors (2021: Nil).

(f) Substantial interests of directors in transactions, arrangements or contracts

In 2022, the Company did not sign with other parties any important transactions, arrangements or contracts related to the Group's business within which the directors of the Company directly or indirectly have substantial interests.

8 RELATED PARTIES AND RELATED PARTY TRANSACTIONS (CONT'D)

(9) The five individuals whose remunerations are the highest

The five individuals whose remunerations were the highest in the Group for 2022 included 0 director (2021: no director) whose remunerations were reflected in Note 8(8). The remunerations payable to the remaining 5 (2021: 5) individuals during the year were as follows (in HKD'000):

	For the year ended 31 December 2022	For the year ended 31 December 2021
Salaries	10,793	11,215
Housing subsidies	-	-
Bonus	-	-
Other benefits	-	-
Pension plan	189	258
Entry bonus	-	-
Severance compensation	-	-
Others	-	-
	10,982	11,473

	Number of employees	
	For the year ended 31 December 2022	For the year ended 31 December 2021
Range of remuneration:		
HKD1,500,001 - HKD2,000,000	4	2
HKD2,000,001 - HKD2,500,000	-	1
HKD2,500,001 - HKD3,000,000	-	1
HKD3,000,001 - HKD3,500,000	1	1
HKD3,500,001 - HKD4,000,000	-	-
HKD4,000,001 - HKD4,500,000	-	-
HKD4,500,001 - HKD5,000,000	-	-

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

9 CONTINGENCIES

In June 2008, Shanghai Electric signed the Equipment Supply and Service Contract with an Indian buyer to provide major equipment and related services to a coal-fired power station project in Sasan, India, with a total contract amount of USD1,311 million, and a guarantee letter from its related parties was provided for the payment obligations under the contract.

In December 2019, due to long-term default in the payment of equipment expenses and other related expenses by the buyer, the Company submitted an arbitration application to the Singapore International Arbitration Centre (SIAC), requiring the guarantor to pay the Company at least USD135 million of equipment expenses and other related payables as prescribed in the guarantee letter, and in December 2020, the Company submitted an application to the local High Court for property preservation of the guarantor. In December 2022, the Company received an arbitration notice from SIAC in respect of this arbitration, which ruled as follows: the guarantor shall pay the Company an aggregate amount of USD146 million, including outstanding payments for work performed, pre-ruling interest thereon and other legal expenses; the relevant arbitration costs shall be borne by the guarantor; and the guarantor shall pay the Company post-ruling interest on the amount of the aforementioned ruling up to the date of payment. As at the issue date of these financial statements, the Company has not received the above amounts.

On 23 February 2021, the Company received a notice from SIAC for the acceptance of the arbitration application, and the buyer and its related parties requested the Company to compensate their losses of approximately USD416 million, mainly including the losses of USD132 million in power plant operation, losses of USD221 million in electricity revenue and other related expenses. In June 2021, the Company received a letter of withdrawal from SIAC, in which the applicant confirmed the withdrawal of the arbitration case.

In August 2021, the Company received a copy of the indictment filed by the lawyer of the operator of the coal-fired power station project, in which the operator sued the general contractor and the buyer of the project (related parties of the operator) and the Company, seeking joint liabilities from all defendants for losses of approximately RMB2,133 million, mainly including losses in power plant operation, losses in electricity revenue, interest and other expenses.

In July 2022, the High Court of Bombay in India dismissed the petition on the grounds that the plaintiff did not satisfy the conditions of the lawsuit and failed to amend the petition within the prescribed time.

In December 2021, the Company received a notice from SIAC for the acceptance of the arbitration application, where the buyer of the above-mentioned project asserted quality issues with the equipment supplied by the Company on the project, claiming for losses of approximately USD389 million from Shanghai Electric, mainly including losses in power plant operation, losses in electricity revenue, penalty for shipment delay and other expenses. To date, no arbitral tribunal has been convened for this arbitration.

To date, the above arbitration cases have not yet been heard. In light of the written comment from external lawyers, management believed that it was unlikely that SIAC would uphold the claims against the Company and thus no provisions were made for the lawsuits.

9 CONTINGENCIES (CONT'D)

Except for the above lawsuits, as at 31 December 2022, the Group's contingent liabilities arising from other pending lawsuits and arbitration cases amounted to RMB832,710 thousand. Since management believes that the opponent's claim is less likely to be supported, no provision is made for estimated liabilities for the sued case (31 December 2021: RMB818,556 thousand).

As at 31 December 2022, the upper limit of loan guarantees to be provided by the Group for related parties was RMB2,539,734 thousand while the balance of loan guarantees already provided by the Group was RMB2,107,586 thousand (31 December 2021: RMB464,434 thousand) (Note 8(5)(f)), and provided counter-guarantees to Electric Holdings in an amount not expected to exceed USD166.8 million (equivalent to RMB1.16 billion) (Note 8(5)(g)). In 2022, there were no bank acceptances notes issued for related parties (31 December 2021: RMB455,386 thousand) (Note 8(7)). The Group recognised the above-mentioned related provision of RMB225,545 thousand (Note 4(42)(b)).

As at 31 December 2022, there were no significant contingent liabilities related to the equity of joint ventures and associates.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

10 COMMITMENTS

(1) Capital commitments

	31 December 2022	31 December 2021
Contracted	1,788,918	2,542,351
Authorised but not contracted	2,110	71,783
	<u>1,791,028</u>	<u>2,614,134</u>

(2) As the lessor under operating lease

According to the lease contracts signed with the lessee, the minimum leases receipts under irrevocable leases are as follows:

	31 December 2022	31 December 2021
Within 1 year (inclusive)	52,568	69,302
1 to 2 years (inclusive)	46,200	47,877
2 to 3 years (inclusive)	43,520	39,356
Over 3 years	206,975	166,286
	<u>349,263</u>	<u>322,821</u>

(3) Investment commitments

	31 December 2022	31 December 2021
Contracted but not fulfilled	<u>534,126</u>	<u>493,878</u>

11 EVENTS AFTER THE BALANCE SHEET DATE

- (1) On 7 February 2023, Electric Holdings completed the pledge release procedures for 684,521,063 unrestricted tradable shares of the Company under the “Shanghai Electric (Group) Corporation - Shanghai Electric (Group) Corporation 2020 Non-Public Exchangeable Corporate Bond (Phase I) Pledge Account” at China Securities Depository and Clearing Corporation Limited.
- (2) On 14 March 2023, the Board of Directors of the Company deliberated and approved the Resolution on the Transfer of 100% Equity Interest in Shanghai Xinji Machine Tool Co., Ltd. held by Shanghai Electric Group Co., Ltd. to Shanghai Electric Holdings Group Co., Ltd, agreeing to the non-public transfer of 100% equity interest of Shanghai Xinji Machine Tool Co., Ltd., a subsidiary of the Group, to Electric Holdings.
- (3) On March 29 2023, the board of directors of the company reviewed and approved the proposed acquisition of Shanghai Electric Industrial Co., Ltd., a holding subsidiary of the company held by ICBC Financial Assets Investment Co., Ltd., Bank of Communications Financial Assets Investment Co., Ltd. 48.18% of the equity, 39.42% of the equity of Shanghai Electric Group Motor Factory Co., Ltd., 48.88% of the equity of Shanghai Electromechanical Design Institute Co., Ltd., and 42.20% of the equity of Shanghai Electric Nuclear Power Equipment Co., Ltd. The total equity transfer price is 10.004 billion yuan.

12 AS THE LESSOR UNDER FINANCE LEASE

As at 31 December 2022, unrealised financing income amounted to RMB825,214 thousand (31 December 2021: RMB1,048,650 thousand), which was amortised by using the effective interest method over the leasing period. According to the lease contracts signed with the lessee, the minimum leases receipts under irrevocable leases are as follows:

	31 December 2022	31 December 2021
Within 1 year (inclusive)	1,671,539	1,758,505
1 to 2 years (inclusive)	633,102	961,497
2 to 3 years (inclusive)	542,170	761,132
Over 3 years	1,505,902	1,994,032
	<u>4,352,713</u>	<u>5,475,166</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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13 FINANCIAL INSTRUMENTS AND RISKS

The Group's activities expose it to a variety of financial risks: market risk (primarily including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

(1) Market risk

(a) Foreign exchange risk

The Group's operational activities carried out in Mainland of China are denominated in RMB, while the overseas activities are denominated in foreign currencies, including USD and EUR, thus the overseas transactions are exposed to foreign exchange risk. In addition, the Group is exposed to foreign exchange risk arising from the recognised assets and liabilities, and future transactions denominated in foreign currencies, primarily with respect to US dollars. The Group's finance department at its headquarters is responsible for monitoring the amount of assets and liabilities, and transactions denominated in foreign currencies to minimise the foreign exchange risk. Therefore, the Group may consider entering into forward exchange contracts or currency swap contracts to mitigate the foreign exchange risk.

The financial assets and financial liabilities denominated in foreign currencies, which are held by the subsidiaries of the Group, whose recording currencies are RMB, are expressed in RMB as at 31 December 2022 and 31 December 2021 as follows:

	31 December 2022				
	USD	JPY	EUR	HKD	Total
Financial assets denominated in foreign currency -					
Cash at bank and on hand	3,867,550	57,074	377,532	66,862	4,369,018
Accounts receivable	1,870,065	2,730	2,840	14,388	1,890,023
Other receivables	150,545	182	1	176	150,904
	<u>5,888,160</u>	<u>59,986</u>	<u>380,373</u>	<u>81,426</u>	<u>6,409,945</u>
Financial liabilities denominated in foreign currency -					
Accounts payable	24,816	17,962	1,226	-	44,004
Other payables	723	19,814	39,161	71	59,769
Short-term borrowings	898,433	-	1,287,850	468,983	2,655,266
Long-term borrowings	1,963,156	-	2,573,796	-	4,536,952
Current portion of long-term borrowings	728,405	-	100,480	-	828,885
	<u>3,615,533</u>	<u>37,776</u>	<u>4,002,513</u>	<u>469,054</u>	<u>8,124,876</u>

13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(1) Market risk (Cont'd)

(a) Foreign exchange risk (Cont'd)

	31 December 2021				
	USD	JPY	EUR	HKD	Total
Financial assets denominated in foreign currency -					
Cash at bank and on hand	2,693,846	37,742	122,225	58,852	2,912,665
Accounts receivable	4,479,789	-	318,743	-	4,798,532
Other receivables	350,931	192	53,082	526	404,731
	<u>7,524,566</u>	<u>37,934</u>	<u>494,050</u>	<u>59,378</u>	<u>8,115,928</u>
Financial liabilities denominated in foreign currency -					
Accounts payable	3,345,588	12,444	73,929	-	3,431,961
Other payables	951	1	38,671	47	39,670
Short-term borrowings	992,061	-	2,870,978	448,454	4,311,493
Long-term borrowings	1,546,116	-	1,046,654	-	2,592,770
Current portion of long-term borrowings	445,249	-	123,714	-	568,963
	<u>6,329,965</u>	<u>12,445</u>	<u>4,153,946</u>	<u>448,501</u>	<u>10,944,857</u>

As at 31 December 2022, for the above financial assets and financial liabilities denominated in foreign currencies, if the RMB had strengthened/weakened by 10% against the currency, while all other variables had been held constant and with consideration to the fair value changes in the forward exchange contracts bought by the Company, the Group's net profit would have decreased/increased as follows:

	Strengthened	Weakened
USD	227,263	(227,263)
JPY	2,221	(2,221)
EUR	(362,214)	362,214
HKD	(38,763)	38,763

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

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13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(1) Market risk (Cont'd)

(b) Interest rate risk

The Group's interest rate risk mainly arises from long-term interest-bearing borrowings including long-term borrowings and bonds payable. Financial liabilities issued at floating rates expose the Group to cash flow interest rate risk. Financial liabilities issued at fixed rates expose the Group to fair value interest rate risk. The Group determines the relative proportions of its fixed rate and floating rate contracts depending on the prevailing market conditions. As at 31 December 2022, the Group's interest-bearing borrowings with floating rates mainly represented floating rate borrowing contracts denominated in RMB, USD and EUR, with the amounts of RMB12,326,323 thousand (31 December 2021: RMB19,293,121 thousand) (Note 4(43)).

The Group's finance department at its headquarters continuously monitors the interest rate position of the Group. Increases in interest rates will increase the cost of new borrowing and the interest costs with respect to the Group's outstanding floating rate borrowings, and therefore could have a material adverse effect on the Group's financial performance. Management makes adjustments timely with reference to the latest market conditions and may enter into interest rate swap agreements to mitigate its exposure to interest rate risk. For the year ended 31 December 2022 and the year ended 31 December 2021, the Group did not enter into any significant interest rate swap agreements.

As at 31 December 2022, if interest rates on the floating rate borrowings had risen/fallen by 50 basis points while all other variables had been held constant, the Group's net profit would have decreased/increased by approximately RMB113,097 thousand (31 December 2021: approximately RMB146,255 thousand).

(c) Other price risk

The Group's other price risk arises mainly from various investments in equity instruments which are exposed to the risk of price changes on equity instruments.

As at 31 December 2022, if the price of investments in equity instruments had risen/fallen by 5% while all other variables had been held constant, the Group's net profit would have been approximately RMB93,671 thousand (31 December 2021: approximately RMB103,497 thousand) higher/lower. There was no (31 December 2021: Nil) impact on other comprehensive income.

13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(2) Credit risk

The Group's credit risk mainly arises from cash at bank and on hand, notes receivable, accounts receivable, receivables financing, other receivables, contract assets, debt investments, other debt investments, financial guarantee contracts, and investments in debt instruments and derivative financial assets at fair value through profit or loss that are not included in the impairment assessment scope. As at the balance sheet date, the carrying amount of the Group's financial assets represented the maximum credit exposure of the Group; and the maximum credit exposure off the balance sheet was the maximum amount of RMB6,049,349 thousand that need to be paid for fulfilment of guarantee obligations/commitments (Note 13(3)).

The Group expects that there is no significant credit risk associated with cash at bank and bank acceptance notes since they are mainly deposited at and accepted by state-owned banks and other medium or large size listed banks. The Group does not expect that there will be any significant losses from non-performance by these counterparties.

The Group has policies to limit the credit exposure on notes receivable, accounts receivable, other receivables and contract assets. The Group assesses the credit quality of and sets credit limits on its customers by taking into account their financial position, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, or shorten or cancel credit periods, to ensure the overall credit risk of the Group is limited to a controllable extent. For trade acceptance notes receivable, accounts receivable and contract assets with significantly different credit risk characteristics, the Group evaluated the distribution of expected cash flows under multiple scenarios based on historical credit loss experience, operating model, current situations and forecasts of future conditions of contract counterparties under different situations, taking into account the professional legal advice from external lawyers and the asset preservation related to the litigation, and made corresponding provision for ECL according to ECL rate and the related probability weight under different scenarios.

As at 31 December 2022, the Group had trade acceptance notes, accounts receivable and contract assets totalling RMB2,108,726 thousand, RMB2,653,574 thousand and RMB322,696 thousand respectively due from various subsidiaries within certain third party groups. Based on the historical recoverability, operating model, current condition and forecasts of the future conditions of such subsidiaries in different situations within these third party groups, the Group evaluated the distribution of expected cash flows under multiple scenarios, and made corresponding provision for ECL according to ECL rate and the related probability weight under different scenarios. As at 31 December 2022, the provision for impairment amounted to RMB2,629,438 thousand.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(2) Credit risk (Cont'd)

The Group only deals with recognised and reputable third parties on the lease business of Lease Company. According to the Group's policy, credit review is required for all customers that trade by using credit methods. The Group continuously monitors the balance of long-term lease payments receivable, to prevent the Group from exposure to significant risk of bad debts.

The loan business provided by Finance Company is dealt with the subsidiaries of Electric Holdings. The Group has established a credit quality evaluation system, setting credit limit and determining required pledge value and guarantee level based on borrower's risk level. Risk assessment includes borrower investigation, risk classification, evaluation and setting of credit limit, loan review and post-lending monitoring. The Group conducts risk assessment regularly, to ensure that the Group timely monitors potential risks and adopts proper precautions.

As at 31 December 2022, the fair value of significant collateral held by the Group as a result of the debtor's mortgage was RMB3,623,400 thousand and the risk exposure on the debt was RMB5,563,780 thousand.

As at 31 December 2022, other receivables of the Group from an associate amounted to RMB1,015,622 thousand. As for the above other receivables, the related enterprises of the associate are committed to assuming joint guarantee liabilities for outstanding amounts under guarantee.

13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(3) Liquidity risk

Cash flow forecasting is performed by each subsidiary of the Group and aggregated by the Group's finance department in its headquarters. The Group's finance department at its headquarters monitors rolling forecasts of the Group's short-term and long-term liquidity requirements to ensure it has sufficient cash and securities that are readily convertible to cash to meet operational needs, while maintaining sufficient headroom on its undrawn committed borrowing facilities from major financial institutions so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities to meet the short-term and long-term liquidity requirements.

The financial liabilities of the Group at the balance sheet date are analysed by their maturity dates below at their undiscounted contractual cash flows:

	31 December 2022				Total
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	
Short-term borrowings	8,882,068	-	-	-	8,882,068
Financial liabilities held for trading and derivative financial liabilities	42,467	-	-	-	42,467
Notes payable	16,069,558	-	-	-	16,069,558
Accounts payable	57,396,886	-	-	-	57,396,886
Deposits from customers, banks and other financial institutions	6,258,862	-	-	-	6,258,862
Current portion of long-term borrowings	5,642,280	-	-	-	5,642,280
Long-term borrowings	755,706	4,830,228	12,062,189	8,395,299	26,043,422
Bonds payable (including the current portion)	2,623,621	23,850	757,645	-	3,405,116
Long-term payables (including the current portion)	764,983	312,930	55,960	193,964	1,327,837
Lease liabilities	793,997	466,595	238,112	190,244	1,688,948
Other financial liabilities	6,280,898	-	-	-	6,280,898
	<u>105,511,326</u>	<u>5,633,603</u>	<u>13,113,906</u>	<u>8,779,507</u>	<u>133,038,342</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(3) Liquidity risk (Cont'd)

The financial liabilities of the Group at the balance sheet date are analysed by their maturity dates below at their undiscounted contractual cash flows (Cont'd):

	31 December 2021				Total
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	
Short-term borrowings	11,957,092	-	-	-	11,957,092
Financial liabilities held for trading and derivative financial liabilities	38,194	-	-	-	38,194
Notes payable	16,578,854	-	-	-	16,578,854
Accounts payable	61,303,577	-	-	-	61,303,577
Deposits from customers	5,354,684	-	-	-	5,354,684
Current portion of long-term borrowings	6,828,214	-	-	-	6,828,214
Long-term borrowings	809,700	9,737,108	9,023,909	8,099,181	27,669,898
Bonds payable	103,750	2,599,771	-	-	2,703,521
Long-term payables (including the current portion)	1,619,484	438,600	134,953	199,587	2,392,624
Lease liabilities	130,368	120,344	259,468	214,053	724,233
Other financial liabilities	6,132,925	-	-	-	6,132,925
	<u>110,856,842</u>	<u>12,895,823</u>	<u>9,418,330</u>	<u>8,512,821</u>	<u>141,683,816</u>

(i) As at the balance sheet date, the Group's financial guarantees and non-financial guarantee letters provided to external parties are analysed below based on the maximum amounts and the earliest periods in which the guarantees could be called:

	31 December 2022				Total
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	
Financial guarantees	<u>3,701,429</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3,701,429</u>

	31 December 2021				Total
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	
Financial guarantees	1,667,617	-	-	-	1,667,617
Acceptance notes	455,386	-	-	-	455,386
	<u>2,123,003</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,123,003</u>

13 FINANCIAL INSTRUMENTS AND RISKS (CONT'D)

(3) Liquidity risk (Cont'd)

(ii) As at the balance sheet date, the cash flow of lease contracts signed but not yet executed by the Group is listed as follows according to the maturity date:

	31 December 2022				Total
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	
Future contractual cash flows not included in lease liabilities	-	-	-	-	-

	31 December 2021				Total
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	
Future contractual cash flows not included in lease liabilities	3,299	2,381	2,977	-	8,657

(iii) The analysis of repayment period of bank borrowings and other borrowings is as follows:

	31 December 2022		31 December 2021	
	Bank borrowings	Other borrowings	Bank borrowings	Other borrowings
Within 1 year	15,101,201	11,353,717	18,095,041	9,742,512
1 to 2 years	4,836,612	490,758	10,860,009	2,750,115
2 to 5 years	12,081,340	995,813	9,130,270	331,068
Over 5 years	8,548,616	190,438	8,365,789	214,053
	<u>40,567,769</u>	<u>13,030,726</u>	<u>46,451,109</u>	<u>13,037,748</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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(All amounts in RMB'000 Yuan unless otherwise stated)

14 FAIR VALUE ESTIMATES

The level in which fair value measurement is categorised is determined by the level of the fair value hierarchy of the lowest level input that is significant to the entire fair value measurement:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Unobservable inputs for the asset or liability.

(1) Assets measured at fair value on a recurring basis

As at 31 December 2022, the assets measured at fair value on a recurring basis by the above three levels are analysed below:

	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading -				
Investments in funds held for trading	5,921,775	-	-	5,921,775
Investments in equity instruments held for trading	152,688	-	-	152,688
Investments in bonds held for trading	1,011,394	-	-	1,011,394
Wealth management products	-	231,175	-	231,175
Non-hedging derivative financial instruments	-	340,406	-	340,406
Derivative financial assets -	-	55,890	-	55,890
Receivables financing -				
Notes receivable measured at fair value through other comprehensive income	-	-	2,056,202	2,056,202
Accounts receivable measured at fair value through other comprehensive income	-	-	49,387	49,387
Other current assets -				
Interbank deposits	-	15,486,059	-	15,486,059
Other non-current financial assets	781,091	-	6,487,372	7,268,463
Total assets	7,866,948	16,113,530	8,592,961	32,573,439

14 FAIR VALUE ESTIMATES (CONT'D)

(1) Assets measured at fair value on a recurring basis (Cont'd)

As at 31 December 2022, the liabilities measured at fair value on a recurring basis by the above three levels are analysed below:

	Level 1	Level 2	Level 3	Total
Financial liabilities				
Derivative financial liabilities	-	10,450	-	10,450
Financial liabilities held for trading	-	32,017	-	32,017
	-	42,467	-	42,467

As at 31 December 2021, the assets measured at fair value on a recurring basis by the above three levels are analysed below:

	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading -				
Investments in funds held for trading	5,754,200	-	-	5,754,200
Investments in equity instruments held for trading	423,721	-	-	423,721
Investments in bonds held for trading	681,833	-	-	681,833
Wealth management products	-	430,793	-	430,793
Non-hedging derivative financial instruments	-	312,550	-	312,550
Derivative financial assets -	-	44,101	-	44,101
Receivables financing -				
Notes receivable measured at fair value through other comprehensive income	-	-	1,091,644	1,091,644
Accounts receivable measured at fair value through other comprehensive income	-	-	53,849	53,849
Other current assets -				
Interbank deposits	-	7,570,419	-	7,570,419
Other non-current financial assets	535,365	-	6,431,232	6,966,597
Other debt investments	-	81,874	-	81,874
Total assets	7,395,119	8,439,737	7,576,725	23,411,581

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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14 FAIR VALUE ESTIMATES (CONT'D)

(1) Assets measured at fair value on a recurring basis (Cont'd)

As at 31 December 2021, the liabilities measured at fair value on a recurring basis by the above three levels are analysed below:

	Level 1	Level 2	Level 3	Total
Financial liabilities				
Derivative financial liabilities	-	9,625	-	9,625
Financial liabilities held for trading	-	28,569	-	28,569
	-	38,194	-	38,194

The Group takes the date on which events causing the transfers between the levels take place as the timing specific for recognising the transfers. There is no transfer between Level 1 and Level 2 for the current year.

The fair value of financial instruments traded in an active market is determined at the quoted market price; and the fair value of those not traded in an active market is determined by the Group using valuation techniques. For the financial assets at fair value through profit or loss which are recognised at initial recognition, the valuation models used mainly comprise Monte Carlo simulation model, and the inputs of the valuation technique mainly include stock expected yield and stock expected volatility; the fair value of debt investments and wealth management products are basically obtained from third parties' quoted prices of the same or comparable assets, and the valuation models used mainly comprise discounted cash flow model and market comparable corporate model.

The changes in Level 3 assets and liabilities are analysed below:

	31 December 2021		Transfer into Level 3	Transfer out of Level 3	Total gains or losses for the current period		31 December 2022	Changes in unrealised gains or losses included in profit or loss for the current year with respect to assets still held as at 31 December 2022 - Gains or losses on changes in fair value
	Purchases	Decrease			Gains or losses recognised in profit or loss (a)	Gains or losses recognised in other comprehensive income		
Financial assets - Other non-current financial assets	6,431,232	379,754	-	-	(323,614)	-	6,487,372	-
Financing receivables	1,145,493	4,970,191	(3,998,366)	-	-	(11,729)	2,105,589	-
	7,576,725	5,349,945	(3,998,366)	-	(323,614)	(11,729)	8,592,961	-

(a) Gains or losses recognised in profit or loss are included in the income statement under the items of gains on changes in fair value.

14 FAIR VALUE ESTIMATES (CONT'D)

(1) Assets measured at fair value on a recurring basis (Cont'd)

Information about the Level 3 fair value measurement is as follows:

	Valuation technique	Fair value as at 31 December 2022	Name	Inputs		
				Scope/Weighted average	Relationship with fair value	Observable/Unobservable
Other non-current financial assets at fair value through profit or loss						
-	Recent financing price method	1,201,106	Investment cost	1,201,106	Positive correlation	Unobservable
	Market multiple method	2,283,749	Price to book ratio (P/B)	0.9-3.6	Positive correlation	Unobservable
			Price earnings ratio (PE)	19.1-33.7	Positive correlation	Unobservable
			Price sales ratio (PS)	2.9-7.4	Positive correlation	Unobservable
			Others/Scale risk discount	17.7%-30%	Negative correlation	Unobservable
			Liquidity discount	25%-31%	Negative correlation	Unobservable
	Asset-based approach	2,518,018	Discount due to lack of control	12%-15%	Negative correlation	Unobservable
Notes receivable measured at fair value through other comprehensive income -	Income Approach	2,056,202	Discount rates	1.34%	Negative correlation	Unobservable
Accounts receivable measured at fair value through other comprehensive income -	Income Approach	<u>49,387</u>	Discount rates	4.79%-6%	Negative correlation	Unobservable
		<u>8,108,462</u>				

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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14 FAIR VALUE ESTIMATES (CONT'D)

(1) Assets measured at fair value on a recurring basis (Cont'd)

Information about the Level 2 fair value measurement is as follows:

	Fair value as at 31 December 2022	Valuation technique	Observable inputs	
			Name	Scope/Weighted average
Derivative financial assets -				
Forward foreign exchange contracts	6,209	Income approach	Forward exchange rate of USD against RMB	Range: 6.7297 - 7.0753 Weighted average: 6.9024

	Fair value as at 31 December 2021	Valuation technique	Observable inputs	
			Name	Scope/Weighted average
Derivative financial assets -				
Forward foreign exchange contracts	6,322	Income approach	Forward exchange rate of USD against RMB	Range: 6.6726- 7.1847 Weighted average: 6.9006
Other debt investments -				
Local government bonds and treasury bonds	81,874	Market method	Valuation of the Stock Exchange	
	<u>88,196</u>			

14 FAIR VALUE ESTIMATES (CONT'D)

(2) Assets and liabilities not measured at fair value but for which the fair value is disclosed

The Group's financial assets and liabilities measured at amortised cost mainly include notes receivable, accounts receivable, other receivables, debt investments, long-term receivables, lease assets, short-term borrowings, payables, long-term borrowings, bonds payable, lease liabilities and long-term payables.

Except for financial assets and liabilities listed below, the carrying amount of other financial assets and liabilities not measured at fair value is a reasonable approximation of their fair value.

	31 December 2022		31 December 2021	
	Financial liabilities -	Fair value	Carrying amount	Fair value
Financial liabilities -				
Long-term borrowings	21,647,690	20,862,148	23,845,417	24,361,698
Bonds payable	748,697	748,310	2,490,445	2,472,522
	<u>22,396,387</u>	<u>21,610,458</u>	<u>26,335,862</u>	<u>26,834,220</u>

The fair value of long-term borrowings is the present value of the contractually determined stream of future cash flows discounted at the rate of interest applied at that time by the market to instruments of comparable credit status and providing substantially the same cash flows on the same terms, and categorised within Level 2 of the fair value hierarchy.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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15 CAPITAL MANAGEMENT

The Group's capital management policies aim to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, refund capital to shareholders, issue new shares or sell assets to reduce debts.

The Group's total capital is calculated as 'shareholders' equity' as shown in the consolidated balance sheet. The Group is not subject to external mandatory capital requirements, and monitors capital on the basis of gearing ratio.

As at 31 December 2022 and 31 December 2021, the Group's gearing ratio is as follows:

	31 December 2022	31 December 2021
Interest-bearing bank borrowings and other borrowings	35,791,159	42,195,848
Bonds	3,265,305	2,490,445
Lease liabilities	1,433,621	1,503,787
Deposits from customers	6,076,565	5,198,722
Net liabilities	46,566,650	51,388,802
Total equity	94,194,167	98,144,353
Total equity and net liabilities	140,760,817	149,533,155
Gearing ratio	33.08%	34.37%

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS

(1) Notes receivable

	31 December 2022	31 December 2021
Trade acceptance notes	20,421	31,239
Bank acceptance notes	379,621	252,058
Less: Provision for bad debts	(713)	(1,250)
	399,329	282,047

(a) As at 31 December 2022, the Company had no pledged notes receivable.

(b) As at 31 December 2022, the Group's notes receivable endorsed or discounted but unmatured are as follows:

	Derecognised	Not derecognised
Bank acceptance notes	167,368	34,702
Trade acceptance notes	-	-
	167,368	34,702

(2) Accounts receivable

	31 December 2022	31 December 2021
Accounts receivable	13,827,940	12,283,858
Less: Provision for bad debts	(3,634,058)	(3,692,043)
	10,193,882	8,591,815

	31 December 2022		31 December 2021	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Individual provision (c)(iii)	2,785,043	(2,055,318)	2,702,797	(2,329,119)
Sovereign credit portfolio (b)	690,314	(478,967)	1,140,600	(961,470)
Ageing grouping of accounts receivable (c)(iv)	10,352,583	(1,099,773)	8,440,461	(401,454)
	13,827,940	(3,634,058)	12,283,858	(3,692,043)

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(2) Accounts receivable (Cont'd)

(a) The analysis of ageing of accounts receivable

(i) The overdue ageing of accounts receivable is analysed as follows:

	31 December 2022	31 December 2021
Not overdue	5,368,878	4,255,317
Overdue within 1 year	3,020,458	2,680,438
Overdue 1 to 2 years	1,884,419	1,514,111
Overdue 2 to 3 years	949,134	1,073,954
Overdue 3 to 4 years	557,751	803,498
Overdue 4 to 5 years	238,917	500,035
Overdue over 5 years	1,808,383	1,456,505
	<u>13,827,940</u>	<u>12,283,858</u>

(ii) The ageing of accounts receivable is analysed based on invoice date as follows:

	31 December 2022	31 December 2021
Within 1 year	4,507,892	4,745,167
1 to 2 years	3,100,550	3,018,747
2 to 3 years	2,676,259	1,052,157
3 to 4 years	868,884	1,061,251
4 to 5 years	746,610	871,527
Over 5 years	1,927,745	1,535,009
	<u>13,827,940</u>	<u>12,283,858</u>

(b) As at 31 December 2022, accounts receivable with a book value of RMB690,314 thousand, provision for bad debts of RMB478,967 thousand, net book value of RMB211,347 thousand (31 December 2021: book value of RMB1,140,600 thousand, provision for bad debts of RMB961,470 thousand, net book value of RMB179,130 thousand) were accounts receivable with sovereign credit risk.

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(2) Accounts receivable (Cont'd)

(c) Provision for bad debts

(i) Movements in provision for bad debts of accounts receivable are as follows:

31 December 2021	3,692,043
Reversal in the current year	<u>(57,985)</u>
31 December 2022	<u>3,634,058</u>

(ii) For the year ended 31 December 2022, the amount of bad debt allowance reversed in was RMB57,985 thousand.

(iii) As at 31 December 2022, accounts receivable with provision for bad debts made on the individual basis are analysed as follows:

	Book balance	Lifetime ECL rates	Provision for bad debts	Reason
Accounts receivable 1	881,600	74.14%	653,619	Part of it will not be recovered
Accounts receivable 2	834,346	99.80%	832,664	Part of it will not be recovered
Others	<u>1,069,097</u>	53.23%	<u>569,035</u>	Part of it will not be recovered
	<u>2,785,043</u>		<u>2,055,318</u>	

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(2) Accounts receivable (Cont'd)

(c) Provision for bad debts

(iv) As at 31 December 2022, except for the accounts receivable with sovereign credit risk mentioned in (b), accounts receivable with provision for bad debts made on the grouping basis are analysed as follows:

	31 December 2022		
	Book balance	Provision for bad debts	
	Amount	Lifetime ECL rates	Amount
Not overdue	5,368,878	0.1%-2%	62,421
Overdue within 1 year	3,000,752	3%-10%	248,146
Overdue 1 to 2 years	875,737	7%-22%	173,893
Overdue 2 to 3 years	511,987	8%-35%	153,257
Overdue 3 to 4 years	196,066	15%-68%	98,944
Overdue 4 to 5 years	100,532	20%-90%	76,847
Overdue over 5 years	298,631	81%-100%	286,265
	<u>10,352,583</u>		<u>1,099,773</u>

(v) As at 31 December 2021, except for the accounts receivable with sovereign credit risk mentioned in (b), accounts receivable with provision for bad debts made on the grouping basis are analysed as follows:

	31 December 2021		
	Book balance	Provision for bad debts	
	Amount	Lifetime ECL rates	Amount
Not overdue	4,255,317	0.1%-1%	29,767
Overdue within 1 year	2,517,476	3%-10%	94,520
Overdue 1 to 2 years	929,143	7%-22%	77,003
Overdue 2 to 3 years	225,617	8%-21%	18,265
Overdue 3 to 4 years	165,114	15%-65%	25,747
Overdue 4 to 5 years	220,778	20%-90%	46,692
Overdue over 5 years	127,016	81%-100%	109,460
	<u>8,440,461</u>		<u>401,454</u>

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(2) Accounts receivable (Cont'd)

(d) Accounts receivable derecognised due to transfer of financial assets are analysed as follows:

For the year ended 31 December 2022, the Company had no accounts receivable that were derecognised after the Company had applied a non-recourse factoring (2021: Nil).

(3) Other receivables

	31 December 2022	31 December 2021
Receivables from the Group's subsidiaries	9,982,082	11,447,941
Receivables from third parties	2,278,775	1,393,650
Receivables from associates	1,015,622	1,015,622
Receivables from Electric Holdings and its subsidiaries	2,625	2,625
Dividends receivable	826,453	754,038
	<u>14,105,557</u>	<u>14,613,876</u>
Less: Provision for bad debts	<u>(8,548,525)</u>	<u>(8,241,253)</u>
	<u>5,557,032</u>	<u>6,372,623</u>

(a) As at 31 December 2022 receivables from Electric Holdings and its subsidiaries and dividends receivable of the Company were in Stage 1.

(b) As at 31 December 2022, other receivables with provision for bad debts made on the individual basis are analysed as follows:

	Book balance	Lifetime ECL rates	Provision for bad debts	Reason
Other receivables 1	7,841,183	100%	7,841,183	Unrecoverable by estimation
Other receivables 2	1,015,622	26%	260,521	After considering the credit situation of the debtor and the relevant credit enhancement, it is expected that part of it will not be recovered
Other receivables 3	793,781	34%	271,494	After considering the credit situation of the debtor and the relevant credit enhancement, it is expected that part of it will not be recovered
Other receivables 4	274,168	25%	68,542	After considering the credit situation of the debtor, it is expected that part of it will not be recovered
Others	<u>83,357</u>	100%	<u>83,357</u>	Unrecoverable by estimation
	<u>10,008,111</u>		<u>8,525,097</u>	

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(3) Other receivables (Cont'd)

(c) Provision for losses and changes in book balance statement

As at 31 December 2022, other receivables with provision for bad debts made on the grouping basis are analysed as follows:

	31 December 2022			31 December 2021		
	Book balance	Provision for bad debts		Book balance	Provision for bad debts	
	Amount	Amount	Provision ratio	Amount	Amount	Provision ratio
Stage 1 - 12 months ECL						
Receivables within 1 year from third parties	746,382	199	0%-1%	802,897	784	0%-1%
Stage 2 - Lifetime ECL						
Receivables within 1 year from associates	-	-	-	-	-	-
Stage 3 - Lifetime ECL						
1 to 2 years	44,842	1,397	0%-4%	411,749	134	0%-2%
2 to 3 years	260,978	28	0%-2%	17,612	-	0%-2%
Over 3 years	134,255	21,804	0%-20%	161,392	21,405	0%-20%
	440,075	23,229		590,753	21,539	

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(3) Other receivables (Cont'd)

(d) Movements in provision for bad debts of other receivables:

	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total
Balance at 31 December 2021	784	-	8,240,469	8,241,253
Net increase in the current year	(585)	-	307,857	307,272
Balance at 31 December 2022	199	-	8,548,326	8,548,525

(e) As at 31 December 2022, other receivables from top five debtors in respect of outstanding balance are analysed as follows:

	Nature	Balance	Ageing	% of the total balance of other receivables	Provision for bad debts
Other receivables 1	Receivables from the Group's subsidiaries	7,841,183	3 to 4 years	56%	7,841,183
Other receivables 2	Related-party loans	1,015,622	2 to 3 years	7%	260,521
Other receivables 3	Purchase deposits	793,781	Within 1 year	6%	271,493
Other receivables 4	Purchase deposits	274,169	Within 1 year	2%	68,542
Other receivables 5	Export tax rebates	118,123	Within 1 year	1%	-
		10,042,878			8,441,739

(4) Long-term equity investments

	31 December 2022	31 December 2021
Subsidiaries (a)	46,190,874	46,807,497
Joint ventures (b)	552,543	454,207
Associates (c)	2,266,196	2,152,197
	49,009,613	49,413,901
Less: Provision for impairment of long-term equity investments	(933,823)	(216,801)
	48,075,790	49,197,100

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(4) Long-term equity investments (Cont'd)

(a) Subsidiaries

	Movements in the current year						Others	31 December 2022	Shareholding (%)	Provision for impairment	Cash dividends declared in the current year
	31 December 2021	New additions	Increase in investments	Decrease in investments	Provision for impairment	Other decreases					
Shanghai Electric Wind Power Group Co., Ltd.	4,725,799	-	-	-	-	-	2,704	4,728,503	60%	-	91,080
Shanghai Electric Hong Kong Co., Ltd.	4,455,493	-	-	-	-	-	190	4,455,683	100%	-	-
Shenzhen Yinghe Technology Co., Ltd.	4,107,488	-	-	-	(314,692)	-	-	3,792,796	28%	(314,692)	18,477
Shanghai Electric Leasing Co., Ltd.	3,091,379	-	-	-	-	-	-	3,091,379	100%	-	-
Shanghai Electric Investment Co., Ltd.	2,889,047	-	-	-	-	-	-	2,889,047	100%	-	-
Shanghai Electric Group Asset Management Co., Ltd.	2,221,529	-	-	-	-	-	682	2,222,211	100%	-	-
Shanghai Electric Nuclear Power Equipment Co., Ltd.	2,096,479	-	-	-	-	-	952	2,097,431	58%	-	(110,000)
Shanghai Prime Mingyu Machinery Technology Co., Ltd.	2,690,416	-	-	-	-	-	-	2,690,416	96%	-	-
Shanghai Mechanical & Electrical Industry Co., Ltd.	1,671,054	-	-	-	-	-	-	1,671,054	49%	-	142,411
Shanghai Electric Industrial Co., Ltd.	1,356,038	-	-	-	-	-	379	1,356,417	52%	-	193,599
Shanghai Electric Group Finance Co., Ltd.	1,331,019	-	-	-	-	-	895	1,331,914	75%	-	164,175
Shanghai Institute of Mechanical & Electric Engineering Co., Ltd.	1,105,281	-	-	-	-	-	-	1,105,281	51%	-	-
Shanghai Boiler Works Co., Ltd.	1,087,602	-	-	-	-	-	1,403	1,089,005	100%	-	-
Shanghai Electric Science and Technology Venture Capital Co., Ltd.	1,024,087	-	13,600	-	-	-	18	1,037,705	100%	-	-
Shanghai Electric Transmission & Distribution Group Co., Ltd.	1,016,843	-	-	-	-	-	1,027	1,017,870	50%	-	-
Shanghai Electric (Nantong) Technology Innovation Centre Co., Ltd.	826,000	-	-	-	-	-	-	826,000	100%	-	-
Shanghai Electric Group Shanghai Electric Machinery Co., Ltd.	754,231	-	-	-	-	-	-	754,231	100%	-	-
Shanghai Turbine Company, Ltd.	728,140	-	44,567	-	-	-	-	772,707	100%	-	-
Suzhou Thvow Technology Co., Ltd.	664,943	-	-	(664,943)	-	-	-	-	15%	-	-

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(4) Long-term equity investments (Cont'd)

(a) Subsidiaries (Cont'd)

	Movements in the current year						Others	31 December 2022	Shareholding (%)	Provision for impairment	Cash dividends declared in the current year
	31 December 2021	New additions	Increase in investments	Decrease in investments	Provision for impairment	Other decreases					
Shanghai No.1 Machine Tool Works Ltd.	621,528	-	-	-	-	-	503	622,031	100%	-	-
Shanghai Electric (Qidong) Water Development Co., Ltd.	516,046	-	-	-	-	-	-	516,046	98%	-	-
Shanghai Denso Fuel Injection Co., Ltd.	454,960	-	-	-	-	-	-	454,960	61%	-	270,189
Shanghai Electric SHMP Casting & Forging Co., Ltd.	451,697	-	-	-	-	-	361	452,058	100%	-	-
Shanghai Xinji Machine Tool Co., Ltd.	428,730	-	-	-	-	-	-	428,730	100%	-	-
Shanghai Electric Lingang Heavy Machinery Equipment Co., Ltd.	409,535	-	-	-	-	-	290	409,825	100%	-	-
Shanghai Electric Environmental Thermal Power (Nantong) Co., Ltd.	364,663	-	-	-	-	-	-	364,663	100%	-	-
Shanghai Electric Gas Turbine Co., Ltd.	360,000	-	-	-	(360,000)	-	-	-	60%	(360,000)	-
Shanghai Jinshajiang Asset Management Co., Ltd.	356,995	-	-	-	-	-	-	356,995	54%	-	-
Shanghai Power Station Auxiliary Machinery Factory Co., Ltd.	356,979	-	-	-	-	-	101	357,080	100%	-	-
Shanghai Electric (Huaibei) Water Development Co., Ltd.	324,000	-	-	-	-	-	-	324,000	90%	-	-
Shanghai Electric (Anhui) Investment Co., Ltd.	300,000	-	-	-	-	-	-	300,000	100%	-	-
Shanghai Electric Guoxuan New Energy Technology Co., Ltd.	237,000	-	-	-	-	-	-	237,000	47%	-	-
Zhangjiagang Twentsche Cable Co., Ltd.	234,144	-	-	-	-	-	-	234,144	95%	-	18,002
Shanghai Machine Tool Works Co., Ltd.	209,390	-	-	-	-	-	457	209,847	100%	-	-
Shanghai Electric (Xinjiang) New Energy Investment Co., Ltd.	202,000	-	-	-	-	-	-	202,000	100%	-	-
Shanghai Electric Group Automation Engineering Co., Ltd.	200,000	-	-	-	-	-	-	200,000	100%	-	-

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(4) Long-term equity investments (Cont'd)

(a) Subsidiaries (Cont'd)

	Movements in the current year						Others	31 December 2022	Shareholding (%)	Provision for impairment	Cash dividends declared in the current year
	31 December 2021	New additions	Increase in investments	Decrease in investments	Provision for impairment	Other decreases					
Thales SEC Transportation System Limited Company	193,348	-	-	-	-	-	170	193,518	50%	-	35,995
Shanghai Electric Group (Dandong) Environmental Protection Technology Co., Ltd.	155,130	-	-	-	-	-	-	155,130	88%	-	-
Shanghai Electric Group Digital Technology Co., Ltd.	153,629	-	7,500	-	-	-	410	161,539	100%	-	-
Shanghai Electric SHMP Pulverising & Special Equipment Co., Ltd.	151,749	-	-	-	-	-	371	152,120	100%	-	-
Shanghai Machinery Manufacturing Technology Research Institute Co., Ltd.	136,175	-	-	-	-	-	-	136,175	100%	-	-
Shanghai Electric Group (Huaiyuan) Water Treatment Co., Ltd.	127,399	-	-	-	-	-	-	127,399	89%	-	-
Shanghai Electric-SPX Engineering & Technologies Co., Ltd.	126,621	-	-	-	-	-	95	126,716	55%	(14,775)	-
Shanghai Electric Group (Ma'anshan) Water Treatment Co., Ltd.	108,900	-	-	-	-	-	-	108,900	90%	-	-
Shanghai Electric Automation Design and Research Institute Co., Ltd.	102,947	-	-	-	-	-	246	103,193	100%	-	-
Shanghai Electric Nuclear Power Group Co., Ltd.	93,280	-	30,000	-	-	-	-	123,280	100%	-	-
Shanghai Electric (Rudong) Water Development Co., Ltd.	91,456	-	-	-	-	-	-	91,456	90%	-	-
Shanghai Electric (Rudong) Water Environment Treatment Co., Ltd.	79,676	-	-	-	-	-	-	79,676	95%	-	-
Shanghai Electric Group (Fengcheng) Environmental Protection Energy Co., Ltd.	62,902	-	-	-	-	-	-	62,902	70%	-	-
Shanghai Electric (India) Co., Ltd.	62,285	-	-	-	-	-	-	62,285	100%	-	-
Shanghai Electric Group Enterprise Service Co., Ltd.	58,145	-	-	-	-	-	-	58,145	80%	-	-
Shanghai Centrifugal Machinery Research Institute Co., Ltd.	56,258	-	-	-	-	-	-	56,258	100%	(14,629)	13,831
Shanghai Electric Group Intelligent Transportation Technology Co., Ltd.	53,235	-	-	-	-	-	-	53,235	52%	-	-

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(4) Long-term equity investments (Cont'd)

(a) Subsidiaries (Cont'd)

	Movements in the current year							31 December 2022	Shareholding (%)	Provision for impairment	Cash dividends declared in the current year
	31 December 2021	New additions	Increase in investments	Decrease in investments	Provision for impairment	Other decreases	Others				
Shanghai Electric New Era Co., Ltd.	50,000	-	-	-	-	-	-	50,000	100%	-	-
Shanghai Electric Group (Suning) Environmental Protection Technology Co., Ltd.	50,000	-	62,968	-	-	-	-	112,968	100%	-	-
Shanghai Guangye Optical Cable Co., Ltd.	44,649	-	-	-	(31,881)	-	-	12,768	55%	(31,881)	-
Shanghai Electric Group Battery Technology Co., Ltd.	44,000	-	-	-	-	-	-	44,000	55%	-	-
Shanghai Mutual Inductor Factory Co., Ltd.	43,479	-	-	-	-	-	-	43,479	100%	(29,667)	-
Shanghai Electric (Anhui) Energy Storage Technology Co., Ltd.	30,000	-	-	-	-	-	-	30,000	60%	-	-
Shanghai Capital Numerical Control Co., Ltd.	26,279	-	-	-	-	-	-	26,279	100%	-	-
Shanghai Electric Fuji Electric Technology Co., Ltd.	25,969	-	-	-	-	-	77	26,046	51%	-	-
Shanghai Electric Distributed Energy Technology Co., Ltd.	25,250	-	-	-	-	-	-	25,250	70%	-	-
Shanghai Electric Group Medical Technology Development Co., Ltd.	25,000	-	-	-	-	-	-	25,000	100%	-	-
Qingdao Huachen Weiye Power Technology Engineering Co., Ltd.	23,000	-	-	-	-	-	-	23,000	46%	-	-
Sida Machine Tool Manufacturing Co., Ltd.	22,600	-	-	-	-	-	-	22,600	100%	(27,692)	-
Shanghai Shendiantong Rail Transit Technology Co., Ltd.	15,300	-	-	-	-	-	-	15,300	51%	-	-
Shanghai Electric Liangyuan Photothermal Engineering Co., Ltd.	10,449	-	-	-	(10,449)	-	-	-	50%	(10,449)	-
Shanghai Electric Group Europa Co., Ltd.	9,899	-	-	-	-	-	-	9,899	100%	-	-
Shanghai Electric Panama Co., Ltd.	4,434	-	-	-	-	-	-	4,434	100%	-	-
Shanghai Electric Communication Technology Co., Ltd.	-	-	-	-	-	-	-	-	40%	(20,000)	-
Others	456,718	80,030	6,754	(9,200)	-	-	(199,230)	335,072	—	(110,038)	-
	46,590,696	80,030	165,389	(674,143)	(717,022)	-	(187,899)	45,257,051	—	(933,823)	837,759

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(4) Long-term equity investments (Cont'd)

(b) Joint ventures

	Movements in the current year											31 December 2022	Provision for impairment
	31 December 2021	Increase in investments	Decrease in investments	Share of net profit/ (loss) under equity method	Share of other comprehensive income	Subsidiary combined from business combination involving enterprises not under common control	New associate combined from enterprises not under common control	Share of other changes in equity	Cash dividends or profits declared	Provision for impairment	Others		
Shanghai Fanuc Intelligent Machines Co., Ltd.	382,807	-	-	153,676	-	-	-	-	(100,748)	-	-	435,735	-
Jinzhai Zhichu New Energy Technology Co., Ltd.	71,400	-	-	(47)	-	-	-	-	-	-	-	71,353	-
Shanghai Shendian Green Power Technology Development Co., Ltd.	-	45,000	-	455	-	-	-	-	-	-	-	45,455	-
	<u>454,207</u>	<u>45,000</u>	<u>-</u>	<u>154,084</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(100,748)</u>	<u>-</u>	<u>-</u>	<u>552,543</u>	<u>-</u>

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(4) Long-term equity investments (Cont'd)

(c) Associates

	Movements in the current year											31 December 2022	Provision for impairment	
	31 December 2021	Increase in investments	Decrease in investments	Share of net profit/(loss) under equity method	Share of other comprehensive income	Subsidiary combined from business combination involving enterprises not under common control	New associate combined from enterprises not under common control	Associates transferred to other non-current financial assets	Share of other changes in equity	Cash dividends or profits declared	Provision for impairment			Others
Shanghai Rail Traffic Equipment Development Co., Ltd.	571,814	-	-	22,432	-	-	-	-	-	(13,206)	-	-	581,040	-
Zhejiang Zhuji Lianchuang Yongjun Equity Investment Partnership (Limited Partnership)	194,125	-	-	(1,593)	-	-	-	-	-	-	-	-	192,532	-
Shanghai Siemens Switchgear Co., Ltd.	189,174	-	-	95,855	-	-	-	-	-	(101,814)	-	-	183,215	-
Legend Electric (Shenyang) Co., Ltd.	142,408	-	-	46,445	-	-	-	-	-	(54,600)	-	-	134,253	-
KSB Shanghai Pumps Co., Ltd.	132,487	-	-	13,618	-	-	-	-	-	(17,600)	-	-	128,505	-
Shanghai Schneider Power Distribution Electrical Apparatus Co., Ltd.	86,955	-	-	104,906	-	-	-	-	-	(113,953)	-	-	77,908	-
Shanghai Schneider Industrial Control Co., Ltd.	83,844	-	-	59,152	-	-	-	-	-	(72,906)	-	-	70,090	-
Shanghai ABB Transformers Co., Ltd.	82,975	-	-	20,216	-	-	-	-	-	(33,792)	-	-	69,399	-
SEC Alstom (Shanghai Baoshan) Transformers Co., Ltd.	76,450	-	-	376	-	-	-	-	-	-	-	-	76,826	-
Shanghai Cooper Power Capacitor Co., Ltd.	48,738	-	-	6,782	-	-	-	-	-	-	-	-	55,520	-
Shanghai Ansaldo Gas Turbine Co., Ltd.	33,694	-	-	5,832	-	-	-	-	-	-	-	-	39,526	-
Shanghai Electric Fuji Electric Technology (Wuxi) Co., Ltd.	31,190	-	-	1,465	-	-	-	-	-	-	-	-	32,655	-
Others	478,343	9,200	-	97,912	-	-	-	-	-	(160,728)	-	200,000	624,727	-
	<u>2,152,197</u>	<u>9,200</u>	<u>-</u>	<u>473,398</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(568,599)</u>	<u>-</u>	<u>200,000</u>	<u>2,266,196</u>	<u>-</u>

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(5) Capital surplus

	31 December 2021	Increase in the current year	Decrease in the current year	31 December 2022
Share premium (Note 4(51))	16,853,555	-	-	16,853,555
Effect of convertible bond on equity	3,381,592	-	-	3,381,592
Capital contribution by shareholders due to equity incentive	256,109	-	(256,109)	-
Amount recorded in owners' equity arising from share-based payment arrangements (Note 4(51))	152,309	32,276	-	184,585
Others	173,104	-	-	173,104
	<u>20,816,669</u>	<u>32,276</u>	<u>(256,109)</u>	<u>20,592,836</u>

	31 December 2020	Increase in the current year	Decrease in the current year	31 December 2021
Share premium (Note 4(51))	16,853,555	-	-	16,853,555
Effect of convertible bond on equity	1,214,919	2,166,673	-	3,381,592
Capital contribution by shareholders due to equity incentive	256,109	-	-	256,109
Amount recorded in owners' equity arising from share-based payment arrangements (Note 4(51))	157,815	(5,506)	-	152,309
Others	173,104	-	-	173,104
	<u>18,655,502</u>	<u>2,161,167</u>	<u>-</u>	<u>20,816,669</u>

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(6) Other comprehensive income

	Other comprehensive income in the balance sheet			Other comprehensive income in the income statement				
	31 December 2021	Increase in the current year	Reclassification of other comprehensive income	31 December 2022	Amount incurred before income tax	Less: Transfer-out of previous other comprehensive income in the current year	Less: Income tax expenses	Other comprehensive income after income tax
Other comprehensive income items which will be reclassified to profit or loss								
Provision for credit impairment of other debt investments and receivables financing (Note)	-	-	-	-	-	-	-	-
Share of other comprehensive income items which will be reclassified to profit or loss under equity method	(30,627)	-	-	(30,627)	-	-	-	-
	<u>(30,627)</u>	<u>-</u>	<u>-</u>	<u>(30,627)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

	Other comprehensive income in the balance sheet			Other comprehensive income in the income statement				
	31 December 2020	Increase in the current year	Reclassification of other comprehensive income	31 December 2021	Amount incurred before income tax	Less: Transfer-out of previous other comprehensive income in the current year	Less: Income tax expenses	Other comprehensive income after income tax
Other comprehensive income items which will be reclassified to profit or loss								
Provision for credit impairment of other debt investments and receivables financing (Note)	280,607	-	(280,607)	-	-	-	-	-
Share of other comprehensive income items which will be reclassified to profit or loss under equity method	(30,627)	-	-	(30,627)	-	-	-	-
	<u>249,980</u>	<u>-</u>	<u>(280,607)</u>	<u>(30,627)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

Note: In 2021, as a result of changes in business model for accounts receivable, the Company reclassified related receivables financing to accounts receivable and transferred out the accumulated gains or losses previously included in other comprehensive income, with a corresponding adjustment made to the carrying amount of accounts receivable.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(7) Surplus reserve

	31 December 2021	Increase in the current year	Decrease in the current year	31 December 2022
Statutory surplus reserve	2,639,825	-	-	2,639,825

	31 December 2020	Increase in the current year	Decrease in the current year	31 December 2021
Statutory surplus reserve	2,639,825	-	-	2,639,825

(8) Retained earnings

	For the year ended 31 December 2022	For the year ended 31 December 2021
Retained earnings at the beginning of the year	1,905,104	12,794,008
Add: Net loss in the current year	(3,131,640)	(9,761,529)
Dividends payable to the Company's ordinary shareholders	-	(1,127,375)
Retained earnings at the end of the year	(1,226,536)	1,905,104

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(9) Revenue and operating cost

	For the year ended 31 December 2022	For the year ended 31 December 2021
Revenue from main operations	20,993,013	17,947,614
Revenue from other operations	249,978	344,376
	<u>21,242,991</u>	<u>18,291,990</u>
Operating cost from main operations	21,322,330	19,459,590
Operating cost from other operations	104,071	279,704
	<u>21,426,401</u>	<u>19,739,294</u>

Revenue from main operations refers to sales income from energy equipment, integration services, etc. Operating cost refers to cost of products related to main operations.

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(9) Revenue and operating cost (Cont'd)

	For the year ended 31 December 2022								
	Sale of goods			Projects					
	China	Other Asian countries/ geographical areas	Other regions	China	Other Asian countries/ geographical areas	Other regions	Labour services	Others	Total
Revenue Including:	14,617,372	86,621	1,049	1,629,675	4,272,623	380,055	5,618	-	20,993,013
Recognised at a time point	14,617,372	86,621	1,049	-	-	-	5,618	-	14,710,660
Recognised within a certain period	-	-	-	1,629,675	4,272,623	380,055	-	-	6,282,353
Revenue from other operations	-	-	-	-	-	-	-	249,978	249,978
	<u>14,617,372</u>	<u>86,621</u>	<u>1,049</u>	<u>1,629,675</u>	<u>4,272,623</u>	<u>380,055</u>	<u>5,618</u>	<u>249,978</u>	<u>21,242,991</u>

	For the year ended 31 December 2022								
	Sale of goods			Projects					
	China	Other Asian countries/ geographical areas	Other regions	China	Other Asian countries/ geographical areas	Other regions	Labour services	Others	Total
Revenue Including:	8,679,312	18,598	1,226	4,705,057	3,902,137	569,228	72,056	-	17,947,614
Recognised at a time point	8,679,312	18,598	1,226	-	-	-	58,226	-	8,757,362
Recognised within a certain period	-	-	-	4,705,057	3,902,137	569,228	13,830	-	9,190,252
Revenue from other operations	-	-	-	-	-	-	-	344,376	344,376
	<u>8,679,312</u>	<u>18,598</u>	<u>1,226</u>	<u>4,705,057</u>	<u>3,902,137</u>	<u>569,228</u>	<u>72,056</u>	<u>344,376</u>	<u>18,291,990</u>

- (i) As at 31 December 2022, the Company's income corresponding to the performance obligations that have been signed but not yet fulfilled or not yet completed was RMB11,576,106 thousand, of which RMB4,042,626 thousand was expected to be recognised in 2022 and RMB7,533,480 thousand was expected to be recognised in 2023 and beyond.
- (ii) For the year ended 31 December 2022, the Company had no extra award due to the completion of services in advance.

16 NOTES TO THE COMPANY'S FINANCIAL STATEMENTS (CONT'D)

(10) Investment income

	For the year ended 31 December 2022	For the year ended 31 December 2021
Income from long-term equity investments accounted for using the cost method	837,759	2,295,452
Income from long-term equity investments accounted for using the equity method	627,482	(610,422)
Interest income of entrusted loans	256,304	367,703
Investment income obtained during the holding of other non-current financial assets	-	68,651
Investment (losses)/income from disposal of subsidiaries	(101,359)	1,502,073
Investment losses from disposal of associates	-	(12,434)
Investment income from disposal of other non-current financial assets	-	15,555
	1,620,186	3,626,578

SUPPLEMENTARY INFORMATION TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2022

(All amounts in RMB'000 Yuan unless otherwise stated)

1 Statement of non-recurring profit or loss

	For the year ended 31 December 2022	For the year ended 31 December 2021
Profit or loss from disposal of non-current assets	560,440	183,064
Government grants recognised in profit or loss for the current period	1,012,719	929,196
Profit or loss from debt restructuring	359	341
Recombination expenses, such as staff resettlement expenditure and integration charges	-	-
Gains or losses arising from changes in fair value of financial assets or liabilities at fair value through profit or loss, and investment income from disposal of financial assets or liabilities at fair value through profit or loss, debt investments, other debt investments and other non-current financial assets besides those relevant to the effective hedging business related to the Company's normal operations and investment business of Finance Company	(58,326)	872,034
Reversal of provision for impairment of receivables tested for impairment on the individual basis	325,592	32,913
Reversal of provision for impairment of contract assets tested for impairment on the individual basis	38,311	5,318
Investment income from disposal of subsidiaries	(56,045)	935,262
Non-operating income and expenses other than aforesaid items	48,801	548,485
	<u>1,871,851</u>	<u>3,506,613</u>
Effect of income tax	(391,624)	(875,970)
Effect of minority interests (net of tax)	(336,959)	(729,043)
	<u>1,143,268</u>	<u>1,901,600</u>

Basis for preparation of statement of non-recurring profit or loss

Pursuant to the Explanatory Announcement for Information Disclosure of Companies Offering Securities to the Public No. 1 - Non-recurring Profit or Loss (2008) issued by China Securities Regulatory Commission, non-recurring profit or loss refers to profit or loss arising from transactions and events those are not directly related to the Company's normal course of business, also from transactions and events those even are related to the Company's normal course of business, but will interfere with the right judgement of users of the financial statements on the Company's operation performance and profitability due to their special nature and occasional occurrence.

2 Reconciliation of statement prepared under HKFRS and CAS

On 15 April 2020, with the approval of the Company's extraordinary general meeting, the Group will use the consolidated financial statements prepared in accordance with China's accounting standards for business enterprises as information disclosure in the stock exchange of Hong Kong since 2019. Therefore, the Group does not need to prepare the difference adjustment statement of domestic and foreign financial statements in the current period.

3 Return on equity and earnings per share

	Weighted average return on equity (%)		Earnings per share (RMB Yuan)			
			Basic earnings per share		Diluted earnings per share	
	For the year ended 31 December 2022	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2021
Net profit attributable to ordinary shareholders of the Company	-6.31	-15.69	-0.23	-0.64	-0.23	-0.64
Net profit attributable to ordinary shareholders of the Company after deducting non-recurring profit or loss	-8.33	-18.64	-0.30	-0.76	-0.30	-0.76