



華電國際電力股份有限公司

HUADIAN POWER INTERNATIONAL CORPORATION LIMITED \*

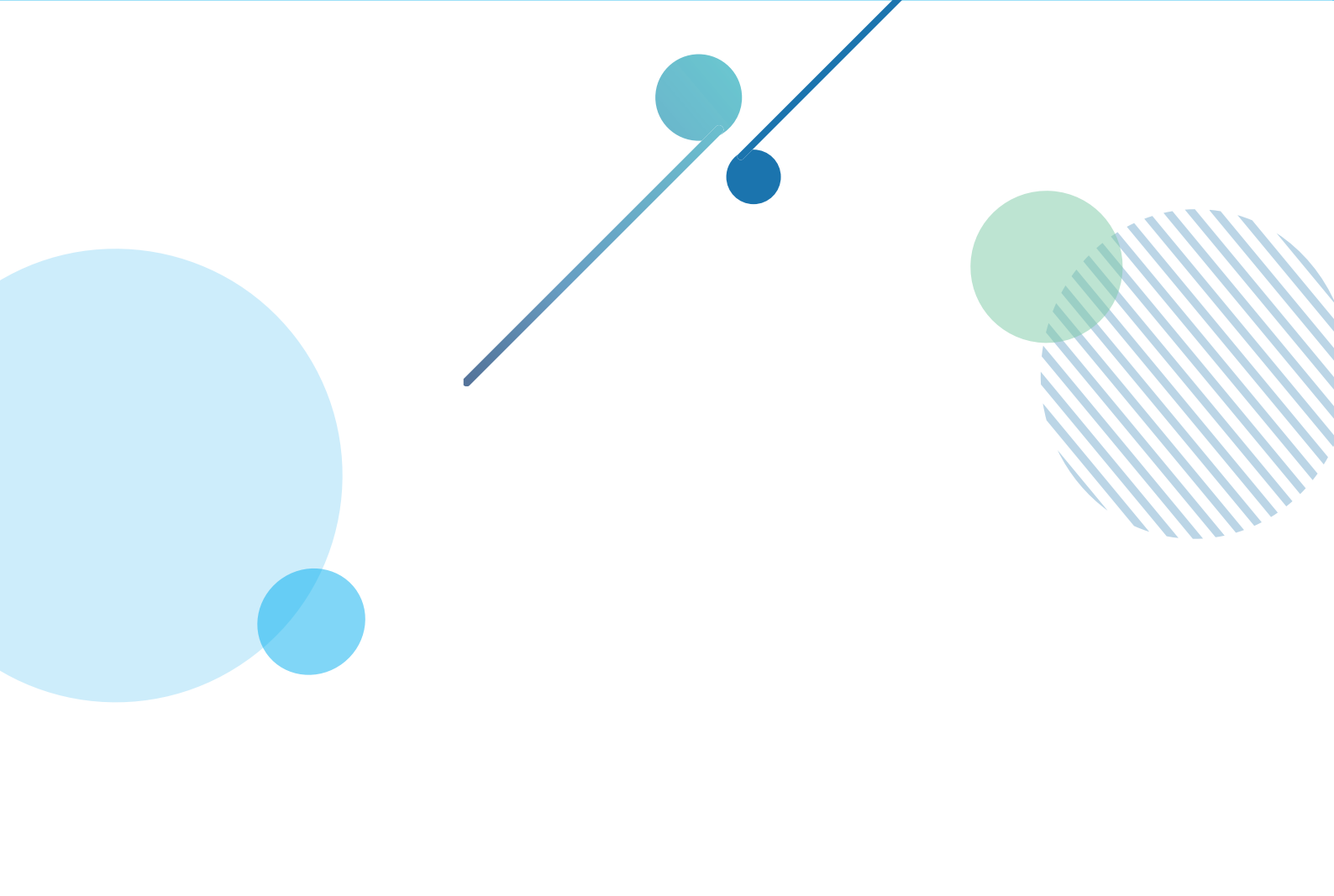
Stock Code: 1071



# ANNUAL REPORT 2022

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## COMPANY PROFILE

Huadian Power International Corporation Limited (the “**Company**”) and its subsidiaries (together the “**Group**”) are one of the largest comprehensive energy companies in the People’s Republic of China (the “**PRC**”), primarily engaged in the construction and operation of power plants, including large-scale efficient coal- or gas-fired generating units and various renewable energy power generating projects. The Group’s power generating assets in operation are located in 12 provinces, autonomous regions and municipalities across the PRC at the prime location, mainly in the electricity and heat load centres or regions with abundant coal resources. As of the date of this report, the Group had a total of 44 controlled power generation enterprises which have commenced operations involving a total of approximately 54,754.24 MW controlled installed capacity, primarily including approximately 43,700 MW attributable to coal-fired generating units, approximately 8,589.05 MW attributable to gas-fired generating units and approximately 2,459 MW attributable to hydropower generating units.

The Company was incorporated in Jinan, Shandong Province, the PRC on 28 June 1994. On 30 June 1999, the Company issued approximately 1,431 million H shares in its initial public offering, and such H shares are listed on The Stock Exchange of Hong Kong Limited (the “**Hong Kong Stock Exchange**”). On 3 February 2005, the Company successfully issued 765 million A shares in the PRC, and such A shares are listed on the Shanghai Stock Exchange (“**SSE**”). Subsequently, on 1 December 2009, 3 July 2012 and 18 July 2014, the Company issued 750 million, 600 million and 1,150 million A shares, respectively, each through a non-public issuance, and all such A shares are listed on the SSE. On 30 July 2014, the Company issued approximately 286 million H shares by way of placing, and such H shares are listed on the Hong Kong Stock Exchange. On 8 September 2015, the Company issued approximately 1,056 million A shares by way of non-public issuance, and such A shares are listed on the SSE. On 28 September 2021, the Company issued approximately 6.8816 million A shares and 14,701,590 convertible corporate bonds by way of non-public issuance, and such A shares and convertible corporate bonds are listed on the SSE. As of 31 March 2023, the Company has 8,176,475,953 A shares and 1,717,233,600 H shares, accounting for approximately 82.64% and 17.36%, respectively, of the current total share capital of the Company. As of 31 December 2022, the total number of regular employees of the Group amounted to 24,755.

Details of the Group’s major operational power generating assets as of the date of this report are as follows:

### (1) Details of controlled coal- and gas-fired generating units are as follows:

Category	Name of power plant/company	Installed capacity (MW)	Equity interest held by the Company	Generating units
	1 Zouxian Plant	2,575	100%	1 x 635 MW + 1 x 600 MW + 4 x 335 MW
	2 Shiliquan Plant	2,120	100%	2 x 660 MW + 2 x 330 MW + 1 x 140 MW
	3 Laicheng Plant	1,200	100%	4 x 300 MW
	4 Fengjie Plant	1,200	100%	2 x 600 MW
	5 Huadian Zouxian Power Generation Company Limited (“ <b>Zouxian Company</b> ”)	2,000	69%	2 x 1,000 MW
	6 Huadian Laizhou Power Generation Company Limited (“ <b>Laizhou Company</b> ”)	4,000	75%	4 x 1,000 MW
	7 Huadian Weifang Power Generation Company Limited (“ <b>Weifang Company</b> ”)	2,000	64.29%	2 x 670 MW + 2 x 330 MW
Coal-fired	8 Huadian Qingdao Power Generation Company Limited (“ <b>Qingdao Company</b> ”)	1,220	55%	1 x 320 MW + 3 x 300 MW
	9 Huadian Zibo Thermal Power Company Limited (“ <b>Zibo Company</b> ”)	950	100%	2 x 330 MW + 2 x 145 MW
	10 Huadian Zhangqiu Power Generation Company Limited (“ <b>Zhangqiu Company</b> ”)	925	87.5%	1 x 335 MW + 1 x 300 MW + 2 x 145 MW
	11 Huadian Tengzhou Xinyuan Thermal Power Company Limited (“ <b>Tengzhou Company</b> ”)	930	93.26%	2 x 315 MW + 2 x 150 MW
	12 Huadian Longkou Power Generation Co., Ltd. (“ <b>Longkou Company</b> ”)	880	100%	4 x 220 MW
	13 Sichuan Guang’an Power Generation Company Limited (“ <b>Guang’an Company</b> ”)	2,400	80%	2 x 600 MW + 4 x 300 MW
	14 Huadian Xinxiang Power Generation Company Limited (“ <b>Xinxiang Company</b> ”)	1,320	98.72%	2 x 660 MW
	15 Huadian Luohe Power Generation Company Limited (“ <b>Luohe Company</b> ”)	660	75%	2 x 330 MW
	16 Huadian Qudong Power Generation Company Limited (“ <b>Qudong Company</b> ”)	660	90%	2 x 330 MW



## COMPANY PROFILE (CONTINUED)

Category	Name of power plant/company	Installed capacity (MW)	Equity interest held by the Company	Generating units
Coal-fired	17 Shuozhou Thermal Power Branch Company of Huadian Power International Corporation Limited ("Shuozhou Thermal Power Branch Company")	701.2	100%	2 x 350 MW + 1.2 MW <sup>Note 2</sup>
	18 Anhui Huadian Suzhou Power Generation Company Limited ("Suzhou Company")	1,260	98.27%	2 x 630 MW
	19 Anhui Huadian Wuhu Power Generation Company Limited ("Wuhu Company")	2,320	65%	1 x 1,000 MW + 2 x 660 MW
	20 Anhui Huadian Lu'an Power Generation Company Limited ("Lu'an Company")	1,320	95%	2 x 660 MW
	21 Hebei Huadian Shijiazhuang Yuhua Thermal Power Company Limited ("Yuhua Company")	600	100%	2 x 300 MW
	22 Hebei Huadian Shijiazhuang Luhua Thermal Power Company Limited ("Luhua Company")	661	90%	2 x 330 MW + 1 MW <sup>Note 2</sup>
	23 Guangdong Huadian Pingshi Power Generation Company Limited ("Pingshi Power Generation Company")	600	100%	2 x 300 MW
	24 Guangdong Huadian Shaoguan Thermal Power Company Limited ("Shaoguan Thermal Power Company")	700	100%	2 x 350 MW
	25 Huadian Hubei Power Generation Company Limited ("Hubei Company") <sup>Note 1</sup>	6,855.6	82.56%	2 x 680 MW + 2 x 660 MW + 2 x 640 MW + 6 x 330 MW + 1 x 300 MW + 2 x 185 MW + 2 x 122.8 MW
	26 Hunan Huadian Changsha Power Generation Company Limited ("Changsha Company")	1,200	70%	2 x 600 MW
	27 Hunan Huadian Changde Power Generation Company Limited ("Changde Company")	1,320	48.98%	2 x 660 MW
	28 Hunan Huadian Pingjiang Power Generation Company Limited ("Pingjiang Company")	1,000	100%	1 x 1,000 MW
29 Tianjin Development Area Branch Company of Huadian Power International Corporation Limited ("Tianjin Development Area Branch Company")	340	100%	2 x 170 MW	
Gas-fired	30 Guangdong Huadian Shenzhen Energy Company Limited ("Shenzhen Company")	365	100%	1 x 120 MW + 2 x 82 MW + 1 x 81 MW
	31 Hangzhou Huadian Banshan Power Generation Company Limited ("Hangzhou Banshan Company")	2,415	64%	3 x 415 MW + 3 x 390 MW
	32 Hangzhou Huadian Xiasha Thermal Power Company Limited ("Xiasha Company")	246	56%	1 x 88 MW + 2 x 79 MW
	33 Hangzhou Huadian Jiangdong Thermal Power Company Limited ("Jiangdong Company")	960.5	70%	2 x 480.25 MW
	34 Huadian Zhejiang Longyou Thermal Power Company Limited ("Longyou Company")	405	100%	1 x 130.3 MW + 2 x 127.6 MW + 1 x 19.5 MW
	35 Hebei Huadian Shijiazhuang Thermal Power Company Limited ("Shijiazhuang Thermal Power Company")	1,310.2	82%	2 x 453.6 MW + 2 x 200 MW <sup>Note 3</sup> + 3 MW <sup>Note 2</sup>
	36 Shijiazhuang Huadian Heat Corporation Limited ("Shijiazhuang Heat Corporation")	12.55	100%	2 x 4.275 MW + 2 x 2 MW
	37 Huadian Foshan Energy Company Limited ("Foshan Energy Company")	329	90%	4 x 59 MW + 47.5 MW + 45.5 MW
	38 Tianjin Huadian Fuyuan Thermal Power Company Limited ("Fuyuan Thermal Power Company")	400.49	100%	2 x 200 MW + 0.49 MW <sup>Note 2</sup>
	39 Tianjin Huadian Nanjiang Thermal Power Company Limited ("Nanjiang Thermal Power Company")	930	65%	2 x 315 MW + 1 x 300 MW
	40 Guangdong Huadian Qingyuan Energy Company Limited ("Qingyuan Company")	1,003.2	100%	2 x 501.6 MW

## COMPANY PROFILE (CONTINUED)

Note 1: Details of the installed generating units of Hubei Company are as follows:

Category	Name of power plant/company	Installed capacity (MW)	Shareholding percentage of Hubei Company	Generating units
Coal-fired	Huadian Hubei Power Generation Company Limited Huangshi Thermal Power Plant ("Huangshi Thermal Power Plant")	330	100%	1 x 330 MW
	Hubei Xisaishan Power Generation Company Limited ("Xisaishan Company")	660	50%	2 x 330 MW
	Hubei Huadian Xisaishan Power Generation Company Limited ("Huadian Xisaishan Company")	1,360	50%	2 x 680 MW
	Hubei Huadian Xiangyang Power Generation Company Limited ("Xiangyang Company")	2,570	60.1%	2 x 640 MW + 3 x 330 MW + 1 x 300 MW
	Hubei Huadian Jiangling Power Generation Company Limited ("Jiangling Company")	1,320	100%	2 x 660 MW
Gas-fired	Huadian Hubei Power Generation Company Limited Wuchang Thermal Power Branch Company ("Wuchang Thermal Power")	370	100%	2 x 185 MW
	Hubei Huadian Xiangyang Gas Turbine Thermal Power Company Limited ("Xiangyang Thermal Power")	245.6	51%	2 x 122.8 MW

Note 2: The 1.2 MW photovoltaic generating units of Shuozhou Thermal Power Branch Company, the 1 MW photovoltaic generating units of Luhua Company, the 3 MW photovoltaic generating units of Shijiazhuang Thermal Power Company and the 0.49 MW photovoltaic generating units of Fuyuan Thermal Power Company are for own use.

Note 3: Generating units of Shijiazhuang Thermal Power Company include two 200 MW coal-fired generating units.

## (2) Details of controlled renewable energy generating units are as follows:

Category	Name of power plant/company	Installed capacity (MW)	Equity interest held by the Company	Generating units
Hydropower	1 Sichuan Huadian Luding Hydropower Company Limited ("Luding Hydropower Company")	920	100%	4 x 230 MW
	2 Sichuan Huadian Za-gunao Hydroelectric Development Company Limited ("Za-gunao Hydroelectric Company")	591	64%	3 x 65 MW + 3 x 56 MW + 3 x 46 MW + 3 x 30 MW
	3 Sichuan Huadian Power Investment Company Limited ("Sichuan Investment Company") <sup>Note 1</sup>	883	100%	3 x 70 MW + 3 x 62 MW + 3 x 56 MW + 3 x 46 MW + 3 x 38 MW + 3 x 11 MW + 4 x 8.5 MW
	4 Hebei Huadian Complex Pumping-storage Hydropower Company Limited ("Hebei Hydropower Company")	65.5	100%	1 x 16 MW + 2 x 15 MW + 1 x 11 MW + 2 x 3.2 MW + 1 x 1.6 MW + 0.5 MW <sup>Note 2</sup>

## COMPANY PROFILE (CONTINUED)

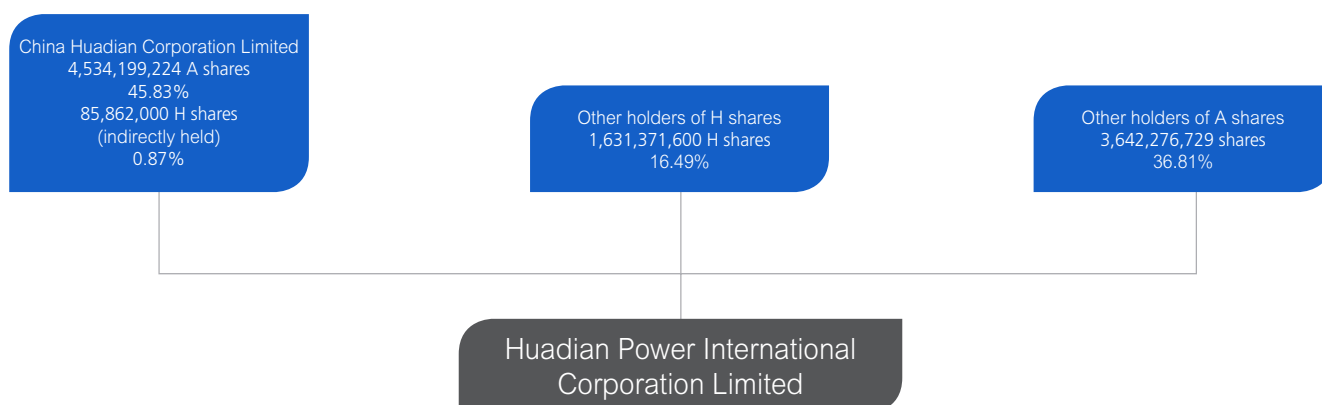
Note 1: Details of the installed generating units of Sichuan Investment Company are as follows:

Category	Name of power plant/company	Installed capacity (MW)	Shareholding percentage of Sichuan Investment Company	Generating units
Hydropower	Lixian Xinghe Power Company Limited ("Lixian Company")	67	100%	3 x 11 MW + 4 x 8.5 MW
	Sichuan Liangshan Shuiluohe Hydropower Development Company Limited ("Shuiluohe Company")	816	57%	3 x 70 MW + 3 x 62 MW + 3 x 56 MW + 3 x 46 MW + 3 x 38 MW

Note 2: Generating units of Hebei Hydropower Company include 0.5 MW photovoltaic generating units for own use, and 1.6 MW hydropower generating units for own use.

## SHAREHOLDING STRUCTURE

The shareholding structure of the Company as of 31 March 2023 is as follows:



# CHAIRMAN'S STATEMENT

Dai Jun  
Chairman



## Dear Shareholders,

In 2022, the Group earnestly implemented the decisions and arrangements made by the Board of Directors (the "Board"), actively responded to the impact of the complex and severe macroeconomic situation and the flare-ups of the pandemic in China, adhered to the general tone of making progress while maintaining stability, made efforts in the fight against the pandemic, properly carried out work to ensure the supply, stabilize the growth, facilitate the reform, increase efficiency, promote innovation, standardization and development, thus constantly making new achievements and taking its business to a new level.

In terms of results of operations, in 2022, the turnover of the Group was approximately RMB105,960 million; the loss for the year attributable to equity holders of the Company was approximately RMB31 million; the basic loss per share was approximately RMB0.094. The power generation was 220.93 million MWh, representing a year-on-year increase of approximately 0.54% as compared with the same period of the previous year, on a comparable basis; the heat generation amounted to 167 million GJ, representing an increase of approximately 16.08% as compared with the same period of the previous year, on a comparable basis. The total coal consumption for power supply was 287.11g/kWh, representing a year-on-year decrease of 0.44g/kWh. As at the end of the year, the liabilities to assets ratio was 67.80%, remaining at the excellent level among listed companies in the same industry.

In terms of project development, in 2022, the Group actively responded to the adverse impact of the pandemic and the severe business situation. The Group forged ahead despite difficulties and made efforts to fully promote high-quality development, realize the recovery of growth in benefits, and achieve a good start of high-quality development during the "14th Five-Year Plan" period. The power supply projects that have been put into operation in the year amounted to approximately 1,401.69 MW, primarily including 1,340 MW coal-fired generating units, 56 MW hydropower generating units and 5.69 MW photovoltaic generating units for own use. As of the date of this report, the Group's controlled installed capacity was approximately 54,754.24 MW. The Group made steady progress in thermal power development, seized the opportunity for the development of coal-fired generating units, steadily expanded high-quality gas-fired power projects, vigorously developed the resources of pumped storage projects, strengthened research into new technologies for energy storage, actively followed up relevant energy storage industry policies, and actively promoted floor heating projects. On the basis of steady improvement in the scale strength, the Group realized the continuous expansion of its development path and the adjustment and transformation of the industrial structure.

In terms of production safety, in 2022, the Group persisted in fulfilling its social responsibilities and made efforts to properly carry out safety, environmental protection and energy supply guarantee work in important events including the Beijing Winter Olympics. The Group strengthened communication and actively provided services, and strongly supported the capital needs of grass-roots organizations. The Group coordinated resource allocation, strengthened the analysis and judgment of the coal market, increased the number of annual long-term cooperation contracts, optimized the coal purchase structure,



# CHAIRMAN'S STATEMENT (CONTINUED)



and strengthened seasonal reserves to control the purchase costs. The Group implemented the national production safety requirements, steadily carried out the identification and management of potential safety hazards, and actively promoted the “three technical transformations” of coal-fired generating units, thus stably maintaining safety and environmental protection as a whole. The Group implemented the requirements of the Party Central Committee and the State Council on COVID-19 prevention and control, complied with the national “ten new measures” for pandemic prevention, actively overcame difficulties to find pandemic prevention resources, and made efforts to meet the needs of employees.

In terms of environmental protection, the Group strictly fulfilled the environmental protection responsibility, earnestly performed the environmental protection responsibility for compliant discharge, and strengthened the operation and maintenance of environmental protection facilities and the monitoring of environmental protection indicators, so as to ensure the compliant discharge of pollutants. The Group prepared a report to disclose environmental information on coal-fired and gas-fired enterprises according to laws. The Group strengthened the monitoring of major energy consumption indicators and the implementation of consumption reduction measures and continuously optimized the energy efficiency level of power generating units, which remained at the leading level in the industry.

In terms of shareholders’ returns, the Group implemented a continuous, stable and active profit distribution policy under the principle of focusing on reasonable investment returns for shareholders, in consideration of the overall interests of all shareholders, the long-term interests and reasonable capital needs of the Company. On 28 May 2021, the Shareholders’ Return Plan for the Years 2020-2022 was considered and approved at the third extraordinary general meeting of the Company in 2021. From 2020 to 2022, in principle, the profit to be distributed in cash by the Company will not be less than 50% of the distributable profits for the year as indicated in the consolidated statements, and the dividend per share will not be less than RMB0.2. The Board of the Company proposes a final cash dividend of RMB0.2 per share (tax inclusive) for the financial year ended 31 December 2022.

The year 2022 was a year of making progress while maintaining stability, and scoring remarkable achievements. The Group won the “Enterprise of the Year Award” in the 17th People’s Corporate Social Responsibility Award for the first time, the “Model Enterprise in Terms of Construction of Credit System in the Power Industry in 2022” by China Electricity Council for the first time, the “Best Practice of Board Office of Listed Company in 2022” by China Association for Public Companies for the first time, the “Best Listed Company” for the fourth year in a row, and the rating of A in information disclosure on the Shanghai Stock Exchange for the eighth year in a row. Our outstanding achievements depend on the active efforts and hard work of all employees, the constant trust and support of shareholders, and continuous care and help from all walks of life. I would like to express my heartfelt thanks to them!

In 2023, the Group will adhere to the tone of making progress while maintaining stability, implement the new development philosophy, and construct a new development paradigm, with high-quality development as the primary task. The Group will make rapid and excellent progress while maintaining stability, fully accomplish the annual goals and tasks, and strive to build a strong and large first-class listed energy company.



# BUSINESS REVIEW AND OUTLOOK



Chen Bin  
General Manager

## BUSINESS REVIEW

### (1) Power Generation

As of the date of this report, the Group's total controlled installed capacity amounted to 54,754.24 MW. Power generation by the Group in 2022 amounted to 220.93 million MWh. As compared with that calculated on the same basis, it increased by approximately 0.54% compared with the same period of the previous year. The volume of on-grid power sold amounted to 207.05 million MWh. As compared with that calculated on the same basis, it increased by approximately 0.32% compared with the same period of the previous year. The annual utilization hours of the Group's generating units were 4,117 hours, among which the utilization hours of coal-fired generating units were 4,508 hours, the utilization hours of natural gas-fired generating units were 2,220 hours, and the utilization hours of hydropower generating units were 3,984 hours. The coal consumption for power supply was 287.11g/KWh in aggregate.

### (2) Turnover

In 2022, the Group's turnover amounted to approximately RMB105,960 million, representing an increase of approximately 4.74% over 2021 (restated); of which revenue generated from sale of electricity amounted to approximately RMB95,496 million, representing an increase of approximately 16.39% over 2021 (restated); revenue generated from sale of heat amounted to approximately RMB8,971 million, representing an increase of approximately 19.53% over 2021 (restated); revenue generated from sale of coal amounted to approximately RMB1,494 million.

### (3) Loss

In 2022, the Group's operating loss amounted to approximately RMB4,184 million, representing a decrease of approximately 71.03% over 2021 (restated), mainly due to the combined impact of the Group's full implementation of the national energy supply assurance policy, the implementation of multiple measures to deepen quality and efficiency improvement, the gradual implementation of the policy of rising on-grid price of coal-fired generation units and the year-on-year increase in earnings from equity investments. For the year ended 31 December 2022, the loss for the year attributable to equity holders of the Company amounted to approximately RMB31 million, the loss for the year attributable to equity shareholders of the Company amounted to approximately RMB932 million, and the basic loss per share was approximately RMB0.094.

## BUSINESS REVIEW AND OUTLOOK (CONTINUED)

### (4) The Capacity of Newly-added Generating Units

From 1 January 2022 to the date of this report, the details of the Group's newly-added generating units are as follows:

Projects	Category	Capacity (MW)
Pingjiang Company	Coal-fired	1,000
Tianjin Development Area Branch Company	Coal-fired	340
Shuiluohe Company	Hydropower	56
Shijiazhuang Thermal Power Company <sup>Note</sup>	Photovoltaic	3
Shuozhou Thermal Power Branch Company <sup>Note</sup>	Photovoltaic	1.2
Luhua Company <sup>Note</sup>	Photovoltaic	1
Fuyuan Thermal Power Company <sup>Note</sup>	Photovoltaic	0.49
<b>Total</b>		<b>1,401.69</b>

Note: The new 3 MW photovoltaic generating units of Shijiazhuang Thermal Power Company, the new 1.2 MW photovoltaic generating units of Shuozhou Thermal Power Branch Company, the new 1 MW photovoltaic generating units of Luhua Company and the new 0.49 MW photovoltaic generating units of Fuyuan Thermal Power Company are for own use.

### (5) Generating Units Approved and under Construction

As at the date of this report, the Group's major generating units approved and under construction are as follows:

Company name	Planned new installed capacity
Guangdong Huadian Huizhou Energy Company Limited ("Huizhou Company")	Two 535 MW gas-fired generating units
Qingdao Company	Two 505.54 MW gas-fired generating units
Shantou Huadian Power Generation Company Limited ("Shantou Company")	Two 660 MW coal-fired generating units
Longkou Company	Two 1,000 MW coal-fired generating units
Pingjiang Company	Two 660 MW coal-fired generating units
Tianjin Development Area Branch Company	One 1,000 MW coal-fired generating unit
Zhejiang Huadian Wuxi River Hybrid Pumped Storage Power Generation Company Limited ("Wuxi River Company")	One 170 MW coal-fired generating unit
	298 MW pumped storage generating unit
<b>Total</b>	<b>8,189.08 MW</b>

## BUSINESS OUTLOOK

### (1) Competitive Landscape in the Industry and Development Trend

The Central Economic Work Conference points out that China's economy is highly resilient, potential and vigorous, and that with the continuous manifestation of effects of various policies, China's economy is expected to pick up in 2023. From the perspective of the long period of building a modern socialist country in an all-round way, the implementation of the strategy of expanding domestic demand, acceleration of the construction of a manufacturing power, and comprehensive promotion of the revitalization of rural areas will drive the rigid growth in the demand for electricity. Meanwhile, from the perspective of terminal energy use, the demand for the replacement of coal, oil and gas with electricity is increasing. The National Energy Administration predicts that the average annual growth rate of electricity generation in the "14th Five-Year Plan" period will be 4.3-5.2%, which will provide a predictable market opportunity for the long-term development of power enterprises.

## BUSINESS REVIEW AND OUTLOOK (CONTINUED)

According to the analysis and forecast of the national power supply and demand in 2023 by China Electricity Council, in terms of power demand, under normal weather conditions, it is expected that the electricity consumption of the entire society in China will be 9.15 trillion kWh in 2023, representing an increase of about 6% as compared with 2022. Macroeconomic growth, foreign trade export situation and extreme weather give rise to uncertainties about the demand for electricity consumption. In terms of power supply, it is expected that the new installed generating capacity in China will reach about 250 million KW in 2023, of which the new installed generating capacity of non-fossil energy will be 180 million KW, and the total installed generating capacity in China will reach about 2.81 billion KW by the end of 2023. Uncertainties about precipitation, wind and solar resources, fuel supply, etc., and the increase in the risks and hazards in equipment arising out of insufficient investment in technical renovation and maintenance as a result of the continuous loss incurred by coal-fired power enterprises increase the uncertainties about power generation and supply.

In terms of actual national conditions, resource endowments and the energy transformation process of China, coal-fired power remains to be an important support for ensuring national energy security, supply chain security, steady growth, promotion of development, and civil heating before 2030. China vigorously promotes the joint operation of coal-fired power, and the joint operation of coal-fired power and renewable energy, and carries out the “three technical transformations” and professional integration. Meanwhile, China published a series of relief policies, including financial preference, electricity price adjustment, special bonds of energy supply assurance, and the approved increase in the high-quality coal production capacity, quantity assurance, price control and capacity expansion. These policies will help ease the operating pressure on coal-fired power enterprises and improve their operating performance.

### (2) Development Strategy of the Group

Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Group has fully implemented the spirit of the 20th National Congress of the Communist Party of China and the deployment of the Central Economic Work Conference, adhered to the general tone of making progress while maintaining stability, fully, accurately and comprehensively implemented the new development philosophy, and served the building of a new development paradigm, and has taken high-quality development as the primary task, and focused on improving the quality of the Company. The Group has properly carried out work including energy supply assurance, transformation, development, quality improvement, efficiency enhancement, reform, innovation, and compliance management. The Group has endeavored to make rapid and excellent progress while maintaining stability and has made efforts to build a strong and large first-class listed energy company.

### (3) Operation Plan of the Group in 2023

Without significant changes in external conditions, the Group is expected to generate about 220 billion kWh in 2023, and the utilization hours of power generating units are expected to remain largely stable. According to the actual progress of each project, in 2023, the Group plans to invest approximately RMB13 billion, which will be used for the construction of power source projects, environmental protection and energy-saving technology transformation projects, and other projects.

In 2023, the Group will focus on the following four aspects:

The Group will highlight the element control and steadily improve its profitability. The Group will enhance business analysis and judgment, and strengthen economic operation tracking and monitoring to ensure the achievement of the annual business objectives. The Group will strengthen the responsibility of improving quality and efficiency, take the governance of loss-making enterprises as the top priority in quality and efficiency improvement, comprehensively enhance budget management and process control, and spare no efforts to tap the potential and increase efficiency. The Group will strengthen the analysis of coal purchase strategies, coordinate the thermal coal ordering work for the year, and strive to improve the ability to ensure the supply, control prices and resist risks. The Group will expand market benefits, conduct in-depth research into macroeconomic policies, market-oriented reform situations and regional electricity price trends, and ensure that its electricity share matches the installed capacity and that the transaction prices are not lower than the average level for the same type. The Group will further promote the substantive operation of the electricity sales companies, consolidate the achievement of the increase in the coal-fired electricity price, strive to secure support under the gas-fired electricity price policy, and participate in spot market transactions in a scientific manner. The Group will strengthen capital assurance, coordinate internal and external sources of funds, and improve the efficiency in the use of funds. The Group will make full use of fiscal, taxation and financial policies, intensify efforts to secure support under energy policies, continue to properly issue perpetual bonds and special bonds of energy supply assurance, and reduce financing costs.

The Group will give prominence to the strategic orientation and accelerate the transformation and development. The Group will persist in green, low-carbon and sustainable development, and promote the implementation of its “14th Five-Year” development plan and carbon peaking action plan. The Group will speed up the adjustment of the power source structure, seize the policy opportunities, actively develop high-efficiency coal-fired power that meets various conditions, continue to strengthen the expansion of the resources of pumped-storage hydropower projects, actively promote the development of hydropower plants in river basins, develop gas-fired power projects in regions with good consumption market, strong affordability, policy support and income guarantee in a steady and orderly manner, according to local conditions, actively explore and develop new business forms and models including new energy storage, geothermal energy and smart energy, and continuously develop new sources of growth for the high-quality development of the Company.



## BUSINESS REVIEW AND OUTLOOK (CONTINUED)

The Group will highlight compliance with laws and regulations to ensure the standardized operation of the Company. The Group will persist in taking compliance with laws and regulations as the bottom line and red line for production, operation and development, strengthen the study of various new rules and requirements of the CSRC and the stock exchanges, and further standardize the operational procedures of the “general meeting, the Board and the Supervisory Committee”, thus continuously improving the quality and efficiency of the Company’s regulated operation. The Group will strengthen information disclosure management and improve the quality of information disclosure. The Group will strengthen the management, audit, dynamic tracking and supervision of connected transactions. The Group will earnestly perform the responsibility of the first person responsible for the construction of the rule of law, and steadily and properly carry out work for the construction of the rule of law.

The Group will highlight safety and environmental protection, and steadily consolidate a solid foundation for high-quality development. The Group will carry out in-depth investigations into and management of potential production safety hazards, flood prevention and “production safety month” activities, and strengthen production safety publicity and education to consolidate the foundation for production safety. The Group will closely follow up national environmental protection policies, continue to strengthen the environmental protection supervision, and focus on strengthening the in-depth optimization of water consumption, and transformation of water pollution prevention and control, to ensure compliance with environmental requirements. The Group will actively participate in the supervision of the process of “simultaneous conducting of three tasks” for the environmental protection of new projects, and properly carry out the environmental protection acceptance inspection and water and soil conservation acceptance inspection upon completion to ensure that new projects are in compliance with regulations and laws. The Group will pay close attention to relevant national policies and regulations, and continuously strengthen carbon emission management. The Group will promote energy conservation and consumption reduction in depth, tap the potential for energy efficiency improvement in units, carry out energy conservation and consumption reduction actions in depth, continuously reduce the coal consumption of power supply, and improve the operation stability and economy of units.

### (4) Possible Risks and Measures

At present, the foundation for economic recovery in China remains weak, with three large pressures, namely demand contraction, supply shocks and weaker expectation. Due to the “three pressures”, the Company’s business situation remains extremely severe and complicated, and the possible risks mainly include:

Firstly, electricity market risks. In order to achieve the strategic goals of “carbon peaking and carbon neutrality”, China promotes the construction of a new power system with new energy as the mainstay. At present, the proportion of the installed thermal power generation capacity of the Group is relatively high, and the problem of unbalanced and uncoordinated power source structure and asset allocation still exists.

The Group will actively participate in and serve the construction of a new power market based on the actual national conditions of China such as energy resource endowment, and economic and social development. In advancing the transformation and upgrading of coal-fired power generating units, the Group will give overall consideration to the energy-saving transformation of coal-fired power, heat supply transformation and flexibility transformation. The Group will play a greater role in peak load, frequency, voltage regulation and standby of the power system, so as to meet the basic need and ensure the supply. With the objective of effectively improving the competitiveness in the capital market, the Group will preferentially develop new industries and technologies including pumped-storage hydropower, geothermal energy and smart energy, innovate and develop new business forms and models including comprehensive energy, virtual power plants and new energy storage, and actively develop high-efficiency coal-fired power and high-quality gas-fired power that meet various conditions, so as to promote effective qualitative improvement and reasonable quantitative growth in assets of the Group.

Secondarily, fuel market risks. In China, coal production is highly concentrated, and coal-fired power enterprises have a weak ability to bargain and control prices. At present, the tight supply of coal in the market remains and continuously high prices of coal and natural gas further increase the production costs of thermal power enterprises, resulting in increased losses for some enterprises.

The Group will focus on cost control and a return to profit, increase the number of long-term coal contracts and the contract fulfillment rate, scientifically grasp the coal inventory and purchase opportunities, and spare no efforts to control and reduce fuel costs. The Group will give full play to its financing function as a listed company, further expand the low-cost financing channels, and obtain low-cost funds with “sufficient quantity and favorable price” in a continuous and stable manner.

Thirdly, environmental protection risks. As the Group has coal-fired power generating units under construction, the total carbon emissions will continue to increase in the short term. The characteristics of the thermal power industry affect the ESG rating of the Company, giving rise to certain risks to the Group’s reputation in the capital market.

The Group will be firmly devoted to tackling difficulties in pollution prevention and control, promote in-depth optimization of water consumption, transformation of water pollution prevention and control, in-depth treatment of fugitive emissions and clean transportation of coal in an orderly manner, and continuously strengthen the management of carbon emissions. The Group will further popularize the ESG philosophy among its subsidiaries, improve the construction of an ESG governance system, and enhance the brand image of practicing green and sustainable development and actively fulfilling social responsibilities.

Fourthly, risks of development of new business forms. There are uncertainties about new business forms and models including new energy storage and new power distribution networks in terms of policy implementation and investment income.

The Group will further strengthen policy research, and preferentially promote the implementation. The Group will make full use of financial, market, technological and other means to strengthen business model research and practice, according to the characteristics of emerging businesses. The Group will develop and promote the conducting of “Three New Businesses.”

# DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

## Biographies of Directors, Supervisors and Senior Management

As at the date of this report, the biographies of the directors of the Company (the “**Director(s)**”), the supervisors of the Company (the “**Supervisor(s)**”) and senior management of the Company are as follows:

### Directors



**Dai Jun (戴軍)** Chinese nationality, born in November 1964, a professorate senior engineer. He graduated from Xinjiang Institute of Technology majoring in power system automation with a bachelor’s degree in engineering and North China Electric Power University majoring in management engineering with a bachelor’s degree in management. He currently serves as the Chairman of the Company and the deputy chief economist of China Huadian Corporation Limited (中國華電集團有限公司). Mr. Dai has successively worked at Xinjiang Manas Power Plant (新疆瑪納斯電廠), Xinjiang Hongyanchi Second Power Generation Co., Ltd. (新疆紅雁池第二發電有限責任公司), China Huadian Corporation Xinjiang Branch (中國華電集團新疆公司), Huadian Xinjiang Power Generation Company Limited (華電新疆發電有限公司), China Huadian Corporation Jiangsu Branch (中國華電集團公司江蘇分公司), China Huadian Corporation Anhui Branch (中國華電集團公司安徽公司) and Huadian Jiangsu Energy Company Limited (華電江蘇能源有限公司). Mr. Dai has over thirty years of working experience in power operation, enterprise management, etc.



**Ni Shoumin (倪守民)** Chinese nationality, born in October 1962. He graduated from Zhongnan University of Economics and Law, with a master’s degree in Executive Master of Business Administration (EMBA). He currently serves as the vice Chairman of the Company, a director of Taihe Assets Management Co., Ltd. and a director of Shandong Nuclear Power Company Ltd.. Mr. Ni has successively worked at the General Office of Shandong Provincial Government, Hong Kong Hualu Group Co., Ltd., Shandong Hualu Group Company Limited, Hualu Holdings Group Company Limited and Shandong Development Investment Holding Group Co., Ltd.. Mr. Ni has over thirty years of working experience in macroeconomics, corporate management, etc.



**Peng Xingyu (彭興宇)** Chinese nationality, born in November 1962. He is a Chinese certified public accountant and a senior accountant. He graduated from Wuhan University with a master’s degree in Economics. He is currently the Director of the Company. Mr. Peng has successively worked at Huazhong Electric Power Management Bureau, China Huazhong Electric Power Corporation, Hubei Electric Power Company and China Huadian Corporation Limited. Mr. Peng has over thirty years of working experience in auditing, finance, assets of electric power companies, etc.



**Luo Xiaoqian (羅小黔)** Chinese nationality, born in December 1962, a senior engineer. He graduated from Xi’an Jiaotong University with a doctoral degree in management. He is currently a Director of the Company and was formerly the General Manager of the Company. Mr. Luo has successively worked at Guizhou Wujiangdu Power Plant, Guizhou Wujiang Hydropower Development Co., Ltd., China Huadian Corporation Guizhou Branch, Huadian Power International Corporation Limited, Huadian Sichuan Power Company Limited and China Huadian Corporation Limited. Mr. Luo has over thirty years of working experience in power design, infrastructure, production, operation management, etc.



**Zhang Zhiqiang (張志強)** Chinese nationality, born in August 1963, a senior engineer. He graduated from Xi’an University of Technology with a master’s degree in engineering. He is currently a Director of the Company, a director of Huadian Jinshajiang Upstream Hydropower Development Company Limited and a director of China Huadian Finance Corporation Limited. Mr. Zhang has successively worked at Wujiangdu Power Plant, Guizhou Wujiang Hydroelectric Development Company Limited, Guizhou Qianyuan Power Co., Ltd. and Huadian Yunnan Power Generation Co., Ltd. (Yunnan Branch of China Huadian Corporation Limited). Mr. Zhang has over thirty years of working experience in power enterprise management, strategic management, etc.

## DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)



**Li Pengyun (李鵬雲)** Chinese nationality, born in October 1962, a professor level senior accountant. He graduated from the Graduate School of the Party School of the Central Committee of the Chinese Communist Party with a postgraduate degree. He is currently a Director of the Company and a director of Huadian Coal Industry Group Company Limited. Mr. Li has successively worked at Gansu Baiyin Power Supply Bureau, Electric Power Industry Bureau of Gansu Province, Northwest Electric Power Corporation, State Power Corporation of China and China Huadian Corporation Limited. Mr. Li has over thirty years of working experience in financial management, power system reform, policy research, corporate management, legal construction, etc.



**Wang Xiaobo (王曉渤)** Chinese nationality, born in March 1968, an economist. He graduated from Shandong University with a bachelor's degree in economics. He currently acts as a Director of the Company, the head of the Capital Operation Department of Shandong Development Investment Holding Group Co., Ltd. (山東發展投資控股集團有限公司), a director of Shandong Huapeng Glass Co., Ltd. (山東華鵬玻璃股份有限公司). Mr. Wang has successively worked at Weihai Huancui District Foreign Economic and Trade Commission, Shandong Foreign Investment Service Company, US Pacific Peak Investment Co., Ltd., British CAMCO International Carbon Asset Information Consulting (Beijing) Co., Ltd. and Hualu Holdings Group Company Limited. Mr. Wang has thirty years of working experience in capital operation, corporate management, etc.



**Li Guoming (李國明)** Chinese nationality, born in March 1969, a senior accountant. He graduated from Hebei University of Economics and Business with a bachelor's degree in accounting, and currently is a Director and the chief financial officer of the Company, a director of China Huadian Finance Corporation Limited, Huadian Hubei Power Generation Company Limited, Otog Front Banner Changcheng Mine Company Limited, Inner Mongolia Fucheng Mining Company Limited, Otog Front Banner Changcheng No.3 Mining Company Limited, and Otog Front Banner Changcheng No.5 Mining Company Limited. Mr. Li has successively worked at Xibaipo Power Plant (西柏坡發電總廠), Hebei Electric Power Corporation (河北省電力公司), China Huadian Corporation Limited (中國華電集團有限公司) and China Huadian Engineering Corporation (中國華電科工集團有限公司). Mr. Li has over thirty years of working experience in financial management, risk management, power operation, etc.



**Feng Zhenping (豐鎮平)** Chinese nationality, born in November 1956, holds a doctoral degree in engineering from Xi'an Jiaotong University. He is currently an independent non-executive Director of the Company, a second-tier professor of Xi'an Jiaotong University and the head of Shaanxi Impeller Machinery and Power Equipment Engineering Laboratory. Mr. Feng was a visiting scholar at the Aerospace System Research Institute of the University of Stuttgart in Germany and a DAAD visiting professor at the Aero Propulsion Laboratory of the Technical University of Berlin in Germany. He served in Xi'an Jiaotong University including the head of the Impeller Machinery Research Institute (葉輪機械研究所) of the School of Energy and Power Engineering, the assistant dean of the School of Energy and Power Engineering, the head of the International Cooperation and Exchange Office, the dean of the School of Energy and Power Engineering, and the head of the National Experimental Teaching Demonstration Center in Energy and Power Engineering.



**Li Xingchun (李興春)** Chinese nationality, born in April 1966, obtained a bachelor's degree in nuclear science from Fudan University, a doctoral degree in financial engineering from the School of Engineering & Management of Nanjing University. He currently acts as an independent non-executive Director of the Company, manager and executive director of Wanzhen Investment Management (Beijing) Co., Ltd. (萬稹投資管理(北京)有限公司), chairman and general manager of Leadbank Technology Co., Ltd. (利得科技有限公司), deputy chairman and executive director of Shandong Chenming Paper Holdings Limited, deputy chairman of Shanghai New Huangpu Industrial Group Co., Ltd. (上海新黃浦實業集團股份有限公司), manager of Leadbank Capital Management Co., Ltd. (利得資本管理有限公司), general manager and executive director of Leadbank Asset Management Co., Ltd. (利得資產管理有限公司), general manager and executive director of Leadbank Information Services Co., Ltd. (利得信息服務有限公司), chairman of Shanghai Leadbank Fund Sales Co., Ltd. (上海利得基金銷售有限公司), chairman and general manager of Shanghai Leadbank Shanjin Asset Management Co., Ltd. (上海利得山金資產管理有限公司), executive director of Shanghai Leadbank Financial Services Group Co., Ltd. (上海利得金融服務集團有限公司), chairman and general manager of Kunpeng Asset Management Co., Ltd. (昆朋資產管理股份有限公司), chairman of Kunpeng (Shandong) Asset Management Co., Ltd. (昆朋(山東)資產管理有限公司), director of Western Leadbank Fund Management Co., Ltd. (西部利得基金管理有限公司), and visiting professor of Shanghai Finance University. Mr. Li has successively worked at Jiangxi Xinyu Food Union Corporation (江西新餘食品聯合總公司), Jiangxi Xinyu Material Bureau (江西新餘物資局), Ctrip.com (攜程旅行網), Fuyou Securities Co., Ltd. (富友證券有限責任公司), Western Development Holdings Co., Ltd. (西部發展控股有限公司), etc. Mr. Li has over thirty years of working experience in industry, securities, trust, etc.



## DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)



**Li Menggang (李孟剛)** Chinese nationality, born in April 1967, a professor of economics and doctoral supervisor. He currently acts as an independent non-executive Director of the Company. Mr. Li graduated from Beijing Jiaotong University majoring in industrial economics, with a doctorate degree in 2006. Mr. Li currently serves as the dean of the National Academy of Economic Security, Beijing Jiaotong University. Research interests: industrial economics, industrial security and national economic security. He concurrently serves as the deputy chairman of China Human Resource Development Association, deputy chairman of Guanghua Engineering Science and Technology Award Foundation (光華工程科技獎勵基金會) and independent director of China Merchants Bank Co., Ltd. (stock code: 600036).



**Wang Yuesheng (王躍生)** Chinese nationality, born in July 1960, a professor and doctoral supervisor. He currently acts as an independent non-executive Director of the Company. Since he graduated from School of Economics of Peking University in 1985, Mr. Wang has been teaching in Peking University. Mr. Wang currently serves as the head of the Department of International Economics and Trade of Peking University, the director of the EU Economic and Strategic Research Center jointly established by Peking University and Bank of China. He also serves as an executive director at China Association of World Economic Research, and China Association of International Economic Relations, member of the Expert Committee of China Council for the Promotion of International Trade. Research interests: New system economics and economic transition issues, economy in transitional countries; enterprise theory, enterprise system and corporate governance; and contemporary international economy and multinational corporations. His research has mainly covered international comparison of economic transition, enterprise theory, international enterprise system and the contemporary international economy in recent years.

### Supervisors



**Chen Wei (陳煒)** Chinese nationality, born in April 1975, a doctor of law. She currently serves as the Chairman of the Supervisory Committee of the Company, the assistant to the general manager, the general counsel and the head of the audit and law department of Shandong Development Investment Holding Group Co., Ltd. and the chairman of Shandong Green Development Investment Group Co., Ltd.. Ms. Chen has worked for the tax authorities in Shandong Province. Ms. Chen has twenty-two years of working experience in taxation, auditing, law, corporate management, etc.



**Ma Jing'an (馬敬安)** Chinese nationality, born in March 1966, a senior administrative engineer. He graduated from Dalian University of Technology with a master's degree in engineering. He is currently a Supervisor and the secretary of the discipline committee of the Company, chairman of the supervisory committee of Huadian Group Beijing Fuel Logistics Co., Ltd.. Mr. Ma started his career in 1986 and has successively worked at Fangzi Power Plant, Weifang Power Plant, Huadian Power International Corporation Limited and Shanxi Maohua Energy Investment Company Limited. Mr. Ma has over thirty years of working experience in power enterprise management, coal enterprise operation and construction, and party construction of enterprises.



**Zhang Peng (張鵬)** Chinese nationality, born in December 1970, a chief senior economist. He achieved a bachelor's degree in management from Shanxi University of Finance and Economics. Mr. Zhang is currently an employee Supervisor and deputy chief economist of the Company, and a director of Huadian Qingdao Power Generation Company Limited. Mr. Zhang started his career in 1991 and has successively worked at Zouxian Plant of Huadian International and Huadian Power International Corporation Limited. Mr. Zhang has thirty years of working experience in power production and operation, human resource management, etc.



## DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

### Senior Management



**Chen Bin (陳斌)** Chinese nationality, born in September 1973, graduated from the Hunan University. He holds a doctoral degree in economics. He currently serves as the General Manager of the Company. Mr. Chen has successively worked at China Electric Power News, State Power Corporation, China Guodian Corporation and Guodian Finance Corporation Ltd.. He had served as a supervisor, the General legal Counsel and a deputy General Manager of the Company. Mr. Chen has twenty-six years of working experience in power business management, law, capital operation, etc.



**Peng Guoquan (彭國泉)** Chinese nationality, born in October 1966, a senior engineer with a master's degree in engineering, graduated from Huazhong University of Science and Technology, majoring in Thermal Energy and Power. Mr. Peng is currently a deputy General Manager of the Company, the chairman of Anhui Wenhui New Products Promotion Company Limited, the chairman of Anhui Hualin International Energy Company Limited, a director of Huadian Coal Industry Group Company Limited and a director of Huadian Hubei Power Generation Company Limited. Mr. Peng has successively worked at Qingshan Thermal Power Plant, Wuchang Thermal Plant and Anhui Huadian Wuhu Power Generation Company Limited. Mr. Peng has over thirty years of working experience in power production and management, etc.



**Qin Jiehai (秦介海)** Chinese nationality, born in February 1968, a senior engineer. He graduated from the Department of Power Engineering in Harbin Institute of Technology majoring in thermal power engineering with a master's degree in engineering, and obtained a master of business administration degree from Texas Tech University. Mr. Qin is currently a deputy General Manager, the Secretary to the Board and the General Counsel of the Company. Mr. Qin has successively worked at Shandong Electric Power Engineering Consulting Institute, Huadian Power International Corporation Limited and Huadian Fuxin Energy Development Company Limited. Mr. Qin has thirty years of working experience in strategic investment, power engineering, corporate management, etc.



**Wu Yuejie (武日傑)** Chinese nationality, born in July 1971, a senior administrative engineer, graduated from North China Institute of Technology majoring in financial management. Mr. Wu is currently a deputy General Manager of the Company, a director of Huadian Property Company Limited, Huadian Group Beijing Fuel Logistics Company Limited and Huadian Jinshajiang Upstream Hydropower Development Company Limited, and a deputy chairman of CNNP CHD Hebei Nuclear Power Company Limited. Mr. Wu has successively worked at Shandong Weifang Power Plant (山東濰坊發電廠), Anhui Suzhou Power Generation Company Limited (安徽宿州發電有限公司), Luohe Power Plant Preparatory Office (漯河電廠籌建處) and China Huadian Corporation Limited. Mr. Wu has twenty-nine years of working experience in power generation and operation, development of power supply projects, human resources management, etc.

### Changes in the Biographies of Directors, Supervisors and Senior Management

As at the date of this report, Mr. Ni Shoumin ceased to serve as the deputy secretary of the party committee and a director of Shandong Development Investment Holding Group Co., Ltd.. Mr. Peng Xingyu ceased to serve as the chief auditor of China Huadian Corporation Limited. Mr. Luo Xiaoqian ceased to serve as the general manager of the Company.

As at the date of this report, Ms. Chen Wei ceased to serve as the Chief Risk Officer of Shandong Development Investment Holding Group Co., Ltd., and currently serves as an assistant to the general manager and the general counsel of Shandong Development Investment Holding Group Co., Ltd.. Mr. Ma Jing'an serves as the Chairman of the Supervisory Committee of Huadian Beijing Fuel Logistics Co, Ltd.

As at the date of this report, Mr. Chen Bin ceased to serve as the deputy general manager and the general counsel of the Company, and currently serves as the general manager of the Company. Mr. Peng Guoquan serves as a director of Huadian Hubei Power Generation Company Limited. Mr. Qin Jiehai serves as the Secretary to the Board of Directors and the general counsel of the Company. Mr. Wu Yuejie serves as a director of Huadian Jinshajiang Upstream Hydropower Development Company Limited and the vice chairman of CNNP CHD Hebei Nuclear Power Co., Ltd.

# MANAGEMENT DISCUSSION AND ANALYSIS

## (1) Macroeconomic Conditions and Electricity Demand

According to the data released by the National Bureau of Statistics, after preliminary calculations, the Gross Domestic Product (GDP) of the year in 2022 amounted to RMB121,020.7 billion, representing an increase of 3.0% over the same period of last year. According to the data released by the National Energy Administration, power consumption of the entire society totalled 8,637.2 billion KWh in 2022, representing a year-on-year increase of 3.6%. With regard to different industries, the consumption by the primary industry accounted for 114.6 billion KWh, representing a year-on-year increase of 10.4%; the consumption by the secondary industry accounted for 5,700.1 billion KWh, representing a year-on-year increase of 1.2%; and the consumption by the tertiary industry accounted for 1,485.9 billion KWh, representing a year-on-year increase of 4.4%; and the consumption by urban and rural residents accounted for 1,336.6 billion KWh, representing a year-on-year increase of 13.8%.

## (2) Turnover

In 2022, the turnover of the Group was approximately RMB105,960 million, representing an increase of approximately 4.74% over 2021 (restated), mainly due to the rising on-grid price of coal-fired generation units.

## (3) Major Operating Expenses

In 2022, the operating expenses of the Group amounted to approximately RMB110,144 million, representing a decrease of approximately 4.73% over 2021 (restated). The particulars are as follows:

Fuel costs of the Group amounted to approximately RMB82,866 million in 2022, representing an increase of approximately 10.95% over 2021 (restated), mainly due to the rising coal and natural gas prices.

Costs of coal sold of the Group amounted to approximately RMB1,228 million in 2022, representing a decrease of approximately 89.18% over 2021, mainly due to the decrease in coal trading volume.

Depreciation and amortisation expenses of the Group amounted to approximately RMB10,037 million in 2022, representing a decrease of approximately 12.76% over 2021 (restated), mainly due to the combined impact of the deconsolidation of wind and photovoltaic power assets in the year after the integration of new energy assets in the previous year and the operation of new generating units.

In 2022, the repairs, maintenance and inspection expenses of the Group were approximately RMB3,892 million, representing an increase of approximately 2.81% over 2021 (restated), mainly due to the combined impact of the increase in energy conservation inputs, the rise in raw material prices and the operation of new generating units.

In 2022, the staff cost of the Group was approximately RMB7,154 million, representing an increase of approximately 2.80% over 2021, mainly due to the combined impact of the increase in employee compensation linked to operating results and the operation of new generating units.

In 2022, the administration expenses of the Group were approximately RMB2,696 million, representing a decrease of approximately 44.15% over 2021 (restated), mainly due to the impairment provision for the assets held for sale in the previous year.

## (4) Investment Income

Investment income of the Group amounted to approximately RMB9 million in 2022, as compared to approximately RMB6,565 million in 2021 (restated). The change was mainly due to the one-off revenue from integration of new energy assets in the previous year and others.

## (5) Other Net Income

Other net income of the Group amounted to approximately RMB773 million in 2022, representing a decrease of approximately 43.12% over 2021, mainly due to decrease in sales revenue from by-products of power generation such as coal ash.

## (6) Finance Costs

Finance costs of the Group amounted to approximately RMB4,131 million in 2022, representing a decrease of approximately 5.09% over 2021, mainly due to the Group's greater efforts in capital operation and financing innovation and the lower financing cost.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## (7) Share of Results of Associates and Joint Ventures

Share of results of associates and joint ventures of the Group amounted to approximately RMB4,797 million in 2022, representing an increase of approximately 92.84% over 2021 (restated), mainly due to the increase in income from the invested new energy and coal enterprises.

## (8) Income Tax

Income tax credit of the Group amounted to approximately RMB615 million in 2022, as compared to approximately RMB1,775 million in 2021. The change was mainly due to the improvement in the Group's operating results.

## (9) Pledge and Mortgage of Assets

As at 31 December 2022, the Company's subsidiaries have pledged their income stream in respect of the sale of electricity and heat to secure loans amounting to approximately RMB11,105 million.

As at 31 December 2022, some of the Company's subsidiaries have mortgaged their generating units and relevant equipment to secure loans amounting to approximately RMB2,482 million.

## (10) Indebtedness

As at 31 December 2022, the total borrowings of the Group amounted to approximately RMB97,388 million, of which borrowings denominated in Euro amounted to approximately EUR6.29 million. The liabilities to assets ratio (representing the total liabilities divided by total assets of the Group as at 31 December 2022) was approximately 67.80%. Borrowings of the Group were mainly of floating interest rates. Short-term borrowings and long-term borrowings due within one year amounted to approximately RMB37,648 million, and long-term borrowings due after one year amounted to approximately RMB59,740 million. The closing balance of the medium-term notes (including the portion due within one year) and debt financing instruments issued through non-public offering to target subscribers (including the portion due within one year) of the Group amounted to approximately RMB27,476 million. The closing balance of lease liabilities of the Group amounted to approximately RMB280 million.

## (11) Contingent Liabilities

As of 31 December 2022, the Group did not have material contingent liability.

## (12) Provisions

Provisions represent the Group's best estimate of its liabilities and remedial work costs arising from mine disposal and environmental restoration based on industry practices and historical experience. As at 31 December 2022, the balance of the Group's provisions amounted to approximately RMB60 million.

## (13) Cash Flow Analysis

In 2022, the net cash inflow from operating activities of the Group amounted to approximately RMB5,419 million, and the net cash outflow from operating activities amounted to approximately RMB10,772 million in 2021 (restated), mainly due to the increase in on-grid price of coal-fired generation units. The net cash outflow used in investing activities amounted to approximately RMB8,509 million, and the net cash outflow used in investing activities amounted to approximately RMB13,740 million in 2021 (restated), mainly due to the integration of new energy assets in the previous year. The net cash inflow from financing activities amounted to approximately RMB3,052 million, and the net cash inflow from financing activities amounted to approximately RMB23,958 million in 2021, mainly due to the repayment of loans and bonds.

## (14) Exchange Rate Fluctuation Risk and Related Hedging

The Group mainly engages in business that sources income in China, and has a relatively small amount of foreign currency borrowings. Therefore, the exchange rate fluctuation risk is relatively low. Based on the above consideration, the Group did not adopt relevant hedging measures.



# DIRECTORS' REPORT



The Board is pleased to present the annual report together with the audited consolidated financial statements of the Group for the year ended 31 December 2022 (the “Year”).

## PRINCIPAL ACTIVITIES

The Group is principally engaged in the generation of electricity and heat, sales of coal and other relevant businesses in the PRC. All electricity generated is supplied to the grid companies where the plants are located. In 2022, the Group had strictly complied with relevant laws and regulations and industrial rules that impose significant influence on the operation of the Group. The chief operating decision makers review the Group’s revenue and profit as a whole, which is determined in accordance with the Group’s accounting policies, for resources allocation and performance assessment. Therefore, the Group has only one operating and reportable segment and no further segment information is presented in this financial information. The profit of the Group for the year ended 31 December 2022 and the Group’s and the Company’s financial positions as at that date prepared in accordance with IFRSs are set out on pages 48 to 138 of the annual report.

## PROFIT DISTRIBUTION

Pursuant to a resolution passed at the thirty-third meeting of the ninth session of the Board, the Board proposes to declare a final cash dividend of RMB0.20 per share (tax inclusive, based on the total share capital of 9,869,858,215 shares) for the financial year ended 31 December 2022, totaling approximately RMB1,973,971.64 thousand (tax inclusive). If the total share capital of the Company changes due to the conversion of the convertible corporate bonds to shares before the record date, the total cash dividends to be paid will be adjusted accordingly based on the total amount of RMB1,973,971.64 thousand (tax inclusive). The dividend distribution proposal is subject to approval by the shareholders at the upcoming 2022 annual general meeting (such date has not been determined but will be published by the Company in due course). The circular of the 2022 annual general meeting of the Company, containing details of the period of the closure and procedures of the register of members, will be published and despatched to shareholders of the Company in due course.

If the above proposal for profit distribution is considered and approved at the upcoming 2022 annual general meeting, the Company expects to distribute such cash dividends on or before 25 August 2023.

As of the date of this report, the Company is not aware of any arrangement under which a Shareholder has waived or agreed to waive any dividends.

## SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES

Particulars of the Company’s subsidiaries, associates and joint ventures as at 31 December 2022 are set out in notes 45 and 22 respectively to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

## BANK LOANS AND OTHER LOANS

Details of bank loans and other loans of the Group and the Company as at 31 December 2022 are set out in note 31 to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

## INTEREST CAPITALISED

Details relating to the interest capitalised by the Group during the year 2022 are set out in note 10 to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.



## DIRECTORS' REPORT (CONTINUED)

### PROPERTY, PLANT AND EQUIPMENT

Details relating to movements in property, plant and equipment of the Group and those of the Company during the year 2022 are set out in note 17 to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

### DISTRIBUTABLE RESERVES

Details relating to movements in reserves of the Group and the Company for the year ended 31 December 2022 are set out in the consolidated statement of changes in equity in the consolidated financial statements and note 50 to the consolidated financial statements prepared in accordance with IFRSs included in this annual report, respectively.

### DONATIONS

During the year of 2022, the Group made donations for charitable purpose in an aggregate amount of approximately RMB7,219,230 (2021: approximately RMB3,397,560).

### TAX REDUCTION AND EXEMPTION

The Company was not aware of any tax reduction and exemption granted to any shareholder by virtue of the securities held in the Company.

### ENVIRONMENTAL PROTECTION POLICIES AND PERFORMANCE

The Group carries out its social responsibility seriously and puts more emphasis on environmental protection work. In particular, the Group strictly implements the requirements of environmental protection and monitored environmental index, in order to standardize the management of operation and maintenance of environmental facilities, and improve the operation rate and efficiency of environmental protection facilities. By adhering to the principles of safety and reliability, mature technology and cost-effectiveness, the Company continues to optimise and refine technical improvement, makes active arrangement and implementation, so as to ensure the environmental protection and improvement goes as planned and reaches the expected target. Leveraging on the energy efficiency and environmental protection feature of the equipment, the Company has built the red-line awareness of environmental protection and achieved the key indicators for reduction of total emission of pollutants to ensure that the emission meets the requirement and strive to reduce the emission level.

In 2022, the Group continuously strengthened its management and control over the technological improvement of environmental protection, improved the monitoring platform construction of environmental protection and strengthened the real-time online monitoring of environmental protection.

As of the date of this report, all of the 98 coal-fired generating units of the Group met the ultra-low emission requirement.

### RELATIONSHIP WITH EMPLOYEES

The Group adheres to the concept of "identify talents through performance, select talents through competition and award talents through remuneration", continuously improves the rules and systems relating to human resources management, safeguards the interests of employees and constantly strengthens the training of talents so as to promote the common sustainable development of employees and enterprises. Meanwhile, the Group also strives to create a vibrant and comfortable working environment for employees so as to work together for the future, build a first-class team, and develop a first-class power generation enterprise.

### RETIREMENT PLANS

The Group is required to contribute to the retirement plans operated by the State at 16% of its staffs' salaries, subject to a maximum specified by national or local regulations. After reaching retirement age and handling retirement procedures, a member subscribed to the plan is entitled to receive pension from the State.

In addition, the Group's staff has participated in an enterprise annuity plan managed by the annuity council of China Huadian to supplement the above-mentioned plan. According to the plan, employees are required to pay a certain amount as their personal savings for pension insurance based on their service periods in the Company and its subsidiaries, while the Company and its subsidiaries pay four times as much as the amount of employee contributions. The employees will receive the total contribution of the plan when retiring. The Group's total contribution to these plans amounted to approximately RMB430 million during the year of 2022.

### EMPLOYEES' MEDICAL INSURANCE

During 2022, there was no change in employees' medical insurance policies of the Group as compared with that of 2021. The Group anticipates that implementation of the above medical insurance will not have any significant impact on the business operation and financial position of the Group. Apart from the above contributions, the Group is not required to pay any other medical expenses for its staff.

### PRE-EMPTIVE RIGHTS

Under the Articles of Association and the laws of the PRC, there was no rule relating to pre-emptive right in the Company which requires the Company to offer or issue new shares to its existing shareholders in proportion to their respective shareholdings in the Company.

## DIRECTORS' REPORT (CONTINUED)

### SHARE CAPITAL

Details of the share capital of the Company for the year 2022 and as at 31 December 2022 are set out in the Company's statement of changes in equity in the financial statements prepared in accordance with IFRSs and note 38(b) to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

### MAJOR CUSTOMERS AND SUPPLIERS

The Group is committed to maintaining long-term close business cooperation with customers and suppliers, realizing friendly communication and win-win collaboration and establishing bidding and bargaining mechanism to adapt to market changes. For the financial year of 2022, details regarding the percentages of the Group's total sales and purchases attributable to its major customers and major suppliers, respectively, are as follows:

	Approximate Percentage in the Group's Total	
	Sales	Purchases
The largest customer	33.47%	/
The five largest customers combined	66.41%	/
The largest supplier	/	7.00%
The five largest suppliers combined	/	18.29%

The suppliers of the Group are mainly coal supply enterprises. The distribution of the subordinate power generation enterprises of the Group is relatively scattered. Therefore, the distribution of the suppliers is also scattered. The total purchase volume of the Group from the five largest suppliers did not exceed 30%.

None of the Directors, their close associates or substantial shareholders of the Company (each of which to the knowledge of the Directors owns 5% or more of the Company's share capital) had any interest in the five largest suppliers and customers of the Group at any time during the year.

### SHAREHOLDINGS OF SUBSTANTIAL SHAREHOLDERS

So far as the Directors of the Company are aware, each of the following persons, not being a Director, Supervisor, chief executive or member of the senior management of the Company, had an interest or short position as at 31 December 2022 in the Company's shares or underlying shares (as the case may be) which was disclosed to the Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance (the "SFO"), or was otherwise interested in 5% or more of any class of issued share capital of the Company as at 31 December 2022, or was a substantial shareholder (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 as at 31 December 2022.

Name of shareholder	Class of shares	Number of shares held	Approximate percentage of the total number of shares of the Company in issue	Approximate percentage of the total number of A shares of the Company in issue	Approximate percentage of the total number of H shares of the Company in issue	Capacity
China Huadian	A shares	4,534,199,224 (L)	45.94%	55.62%	–	Beneficial owner Interests in a controlled corporation
	H shares	85,862,000 (L) <sup>Note</sup>	0.87%	–	5.00%	
Shandong Development Investment Holding Group Co., Ltd.	A shares	686,805,546 (L)	6.96%	8.42%	–	Beneficial owner

(L) = long position  
(S) = short position  
(P) = lending pool

Note: So far as the Directors of the Company are aware or are given to understand, these 85,862,000 H shares were held directly by a wholly-owned subsidiary of China Huadian, namely, China Huadian Hong Kong Company Limited, through CCASS in the name of HKSCC Nominees Limited.

## DIRECTORS' REPORT (CONTINUED)

Save as disclosed above and so far as the Directors are aware, as at 31 December 2022, no other person (other than the Directors, Supervisors, chief executive or members of senior management of the Company) had any interest or short position in the Company's shares or underlying shares (as the case may be) which would fall to be disclosed to the Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO and as recorded in the register required to be kept under Section 336 of the SFO, or was otherwise a substantial shareholder (as defined in the Hong Kong Listing Rules) of the Company.

### SUFFICIENCY OF PUBLIC FLOAT

Based on data that is publicly available to the Company and to the knowledge of the Directors as at the latest practicable date prior to the issue of this annual report, the Directors believe that the Company has maintained the relevant applicable minimum percentage of listed securities as prescribed by Rule 8.08 of the Hong Kong Listing Rules.

### DIRECTORS, SUPERVISORS, CHIEF EXECUTIVE AND SENIOR MANAGEMENT

The following table sets forth certain information concerning the Directors, Supervisors and senior management of the Company for the financial year ended 31 December 2022 and as of the date of this report. All Directors and Supervisors of the Company are currently serving a term of three years, renewable upon re-election and re-appointment every three years. The consecutive term of office of independent non-executive Directors however shall not exceed six years.

Name	Position in the Company	Changes
Ding Huande Dai Jun	Former Chairman, Former Executive Director Chairman, Executive Director	Resigned on 24 August 2022 Elected as an executive Director at the extraordinary general meeting of the Company held on 24 August 2022 and elected as the Chairman at the twenty-ninth meeting of the ninth session of the Board held on 26 August 2022
Ni Shoumin	Vice Chairman, Non-executive Director	Re-elected as a non-executive Director at the annual general meeting of the Company held on 30 June 2020 and re-elected as the vice Chairman at the first meeting of the ninth session of the Board held on 30 June 2020
Peng Xingyu	Non-executive Director	Elected as a non-executive Director at the annual general meeting of the Company held on 30 June 2020
Luo Xiaoqian Zhang Zhiqiang Li Pengyun Wang Xiaobo Feng Rong	Executive Director, Former General Manager Non-executive Director Non-executive Director Non-executive Director Former Executive Director, Former Chief Financial Officer	Resigned as a General Manager on 30 December 2022 Elected at the extraordinary general meeting of the Company held on 27 January 2021 Elected at the extraordinary general meeting of the Company held on 27 January 2021 Re-elected at the annual general meeting of the Company held on 30 June 2020 Resigned on 15 June 2020
Li Guoming	Executive Director, Chief Financial Officer	Elected as the chief financial officer at the twenty-seventh meeting of the ninth session of the Board held on 15 June 2022 and elected as an executive Director at the extraordinary general meeting of the Company held on 24 August 2022
Feng Zhenping Li Xingchun Li Menggang Wang Yuesheng Chen Wei	Independent Non-executive Director Independent Non-executive Director Independent Non-executive Director Independent Non-executive Director Chairman of the Supervisory Committee	Elected at the annual general meeting of the Company held on 30 June 2020 Elected at the annual general meeting of the Company held on 30 June 2020 Elected at the annual general meeting of the Company held on 30 June 2021 Elected at the annual general meeting of the Company held on 30 June 2021 Re-elected as a Supervisor at the annual general meeting of the Company held on 30 June 2020 and re-elected as the Chairman of the Supervisory Committee at the first meeting of the ninth session of the Supervisory Committee held on 30 June 2020
Ma Jing'an Zhang Peng Peng Guoquan Chen Bin	Supervisor Employee Supervisor Deputy General Manager General Manager, Former Deputy General Manager, Former General Legal Counsel	Elected as a supervisor at the annual general meeting the Company held on 30 June 2020 Elected through employee election on 30 June 2020 Re-appointed at the first meeting of the ninth session of the Board held on 30 June 2020 Re-appointed at the first meeting of the ninth session of the Board held on 30 June 2020 and resigned as General Legal Counsel on 31 May 2022 Resigned as Deputy General Manager on 2 March 2023, and appointed as General Manager at thirty-second meeting of the ninth session of the Board held on 2 March 2023
Song Jingshang Qin Jiehai	Former Chief Engineer Deputy General Manager, Secretary to the Board, General Legal Counsel, Company Secretary	Resigned on 27 June 2022 Appointed as the deputy general manager at the twenty-fourth meeting of the ninth session of the Board held on 25 March 2022 and appointed as Secretary to the Board, General Legal Counsel and Company Secretary on 31 May 2022
Wu Yuejie Zhang Gelin	Deputy General Manager Former Company Secretary	Appointed at the eighth meeting of the ninth session of the Board held on 27 January 2021 Resigned as Company Secretary on 31 May 2022

## DIRECTORS' REPORT (CONTINUED)

The Directors' and Supervisors' remunerations for the year ended 31 December 2022 are set out in note 12 to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

The biographical details of the incumbent Directors, Supervisors and members of senior management of the Company, including the particulars required under paragraph 12 of Appendix 16 to the Hong Kong Listing Rules (if applicable or appropriate), are set out on pages 12 to 15 in this annual report.

Each of the independent non-executive Directors has issued a confirmation in respect of the factors set out in Rule 3.13 of the Hong Kong Listing Rules concerning his independence pursuant to Rule 3.15 of the Hong Kong Listing Rules. The Company considers all of the independent non-executive Directors are independent.

## SECURITIES INTERESTS OF DIRECTORS, SUPERVISORS, CHIEF EXECUTIVE OR MEMBERS OF SENIOR MANAGEMENT

As at 31 December 2022, none of the Directors, Supervisors, chief executive or members of senior management of the Company and their respective associates had any interest or short position in the shares, underlying shares and/or debentures (as the case may be) of the Company and/or any of its associated corporations (within the meaning of Part XV of the SFO) which was required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the provisions of Divisions 7 and 8 of Part XV of the SFO (including interest or short position which any such Director, Supervisor, chief executive or member of senior management of the Company was taken or deemed to have under such provisions of the SFO), or was required to be recorded in the register required to be kept by the Company pursuant to Section 352 of the SFO, or which was otherwise required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") adopted by the Company (which for this purpose shall be deemed to apply to the Supervisors of the Company to the same extent as it applies to the Directors).

In 2022, the Company has adopted a code of conduct regarding transactions of the Directors and Supervisors in the Company's securities on terms identical to those of the Model Code. Having made specific enquiries of all Directors and Supervisors, the Company understands that all Directors and Supervisors have complied with the required standards set out in the Model Code.

## DIRECTORS' AND SUPERVISORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

No transaction, arrangement or contract of significance or proposed transaction, arrangement or contract of significance, to which the Company or any of its subsidiaries and holding company was a party and in which a Director or Supervisor or their related entities (as defined in Article 486 of Hong Kong Companies Ordinance) had a material interest, whether directly or indirectly, subsisted at the end of the financial year or at any time during the financial year. None of the Company or its subsidiaries had provided any loan or quasi-loan to any Director or other members of senior management of the Company.

## DIRECTORS' INTERESTS IN THE BUSINESS THAT COMPETES WITH THE COMPANY

None of our Directors has any interest in any business that competes or is likely to compete, either directly or indirectly, with the Company.

## PERMITTED INDEMNITY PROVISIONS

In 2022, the Company has purchased liability insurance for its Directors, Supervisors and members of senior management to provide appropriate guarantee to the Directors, Supervisors and members of senior management of the Company.

## SERVICE CONTRACTS OF THE DIRECTORS AND SUPERVISORS

The Company has entered service contracts with its all Directors and Supervisors. No Director or Supervisor 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).

## MATERIAL CONTRACTS WITH CONTROLLING SHAREHOLDER

Save as disclosed in this annual report, none of the Company or any of its subsidiaries had entered into any material contract with the controlling shareholder or any of its subsidiaries, nor has any enter into any material contract as to the provision of services by the controlling shareholder or any of its subsidiaries to the Company or any of its subsidiaries at any time during the year.

## MANAGEMENT CONTRACT

In 2022, there was no management or administration contract in respect of all or substantial part of the Company's business.



# DIRECTORS' REPORT (CONTINUED)

## SIGNIFICANT EVENTS

### 1. Resignation of General Manager

On 30 December 2022, due to the age consideration, Mr. Luo Xiaoqian tendered his resignation as an executive director of the ninth session of the Board of Directors, a member of the Nomination Committee and the general manager of the Company. The resignation of Mr. Luo Xiaoqian as a director and a member of the Nomination Committee of the Company will take effect upon the election of new directors at the general meeting of the Company. The resignation of Mr. Luo Xiaoqian as the general manager of the Company will take effect on the date of delivering the resignation to the Board of Directors of the Company.

For details, please see the announcement of the Company dated 30 December 2022.

### 2. Appointment of Deputy General Manager

On 25 March 2022, Mr. Qin Jiehai was appointed as the deputy general manager of the Company at the 24th meeting of the ninth session of the Board of the Company.

For details, please see the announcement of the Company dated 25 March 2022.

### 3. Change of Company Secretary, Authorized Representative and General Counsel, and Appointment of Representative of Securities Affairs

On 31 May 2022, Mr. Qin Jiehai was appointed as the joint company secretary, the secretary to the Board, the authorized representative of the Company under Rule 3.05 of the Hong Kong Listing Rules and the general counsel of the Company at the 26th meeting of the ninth session of the Board of the Company.

On 31 May 2022, Ms. Ng Ka Man was appointed as the joint company secretary of the Company at the 26th meeting of the ninth session of the Board of the Company.

On 31 May 2022, due to personal work adjustment, Mr. Zhang Gelin ceased to serve as the company secretary of the Company, and the authorized representative of the Company under Rule 3.05 of the Hong Kong Listing Rules of the Hong Kong Stock Exchange.

On 31 May 2022, due to personal work adjustment, Mr. Chen Bin ceased to serve as the general counsel of the Company.

On 31 May 2022, Mr. Hu Shufeng was appointed as the representative of securities affairs of the Company at the 26th meeting of the ninth session of the Board of the Company.

For details, please see the announcement of the Company dated 31 May 2022.

### 4. Change of Director and Chief Financial Officer

On 15 June 2022, Mr. Feng Rong tendered his resignation as an executive director, a member of the Strategic Committee and the chief financial officer of the Company due to personal work adjustment. The resignation of Mr. Feng Rong will take effect on the date of delivering the registration to the Board.

On 15 June 2022, Mr. Li Guoming was appointed as the chief financial officer of the Company at the 27th meeting of the ninth session of the Board of the Company.

For details, please see the announcement of the Company dated 15 June 2022.

### 5. Convening of Extraordinary General Meeting and Changing of Directors

The Company convened the 2022 first extraordinary general meeting (the "EGM") on 24 August 2022. Mr. Dai Jun and Mr. Li Guoming were appointed as executive directors of the ninth session of the Board of the Company at the EGM, with a term of office commencing from the conclusion of the EGM and ending on the expiry of the term of the ninth session of the Board.

On 28 July 2022, Mr. Ding Huande resigned as the chairman of the Board, the executive director and the chairman of the Strategic Committee of the ninth session of the Board of the Company due to reaching the retirement age with effect from 24 August 2022. Mr. Ding Huande has confirmed that he has no disagreement with the Board and there is no matter in relation to his resignation that needs to be brought to the attention of the shareholders of the Company.

On 26 August 2022, at the 29th meeting of the ninth session of the Board of the Company, Mr. Dai Jun has been appointed as the chairman of the Board and the chairman of the Strategic Committee of the Company; Mr. Li Guoming has been appointed as a member of the Strategic Committee of the Company.

For details, please see the announcements of the Company dated 28 July 2022, 24 August 2022 and 26 August 2022 and the notice of the EGM dated 28 July 2022.

## DIRECTORS' REPORT (CONTINUED)

### 6. Real Estate Investment Trust Funds (the "REITs") for Infrastructure Assets

On 31 May 2022, the 26th meeting of the ninth session of the Board of the Company considered and approved the Resolution in relation to the Commencement of Infrastructure REITs Application Work (《關於開展基礎設施REITs申報工作的議案》), at which the Company agreed to commence the infrastructure REITs application work. It aims to respond to the call of national policies, establish a capital circulation system, and achieve a full-cycle capital circulation operating model of "Investment, Financing, Management, and Withdrawal (投融管退)".

The Company intended to select the natural gas heat and power co-generation projects (天然氣熱電聯產項目) owned by certain subsidiaries in Zhejiang Province (the "Project Companies") as the pooled assets. As of 31 December 2021, the total assets of the Project Companies were approximately RMB2,805 million, the total liabilities were approximately RMB1,690 million, the total operating income in 2021 were approximately RMB1,756 million, and the total profits were approximately RMB135 million (Audited).

If the Company proceeds with the transaction, the proposed transaction may constitute a spin-off by the Company pursuant to Practice Note 15 ("PN15") of the Hong Kong Listing Rules. The Company will apply for approvals for the Proposed Transaction from relevant regulatory authorities in due course, including but not limited to making application to The Stock Exchange of Hong Kong Limited with respect of the transaction for approvals of the spin-off, pursuant to PN15.

The Company will cooperate with relevant professional institutions to continuously improve and form formal application materials in accordance with the relevant rules and requirements of regulatory institutions, submit applications to relevant regulatory institutions, and promote the registration, issuance and listing of the publicly traded fund. The final plan for the establishment of infrastructure REITs will be determined based on the approval of relevant regulatory institutions. Currently, related work is in progress.

For details, please see the announcement of the Company dated 31 May 2022.

### 7. Convertible Bonds Entering the Conversion Period

On 28 September 2021, the Company submitted the relevant registration materials to China Securities Depository and Clearing Corporation Limited, Shanghai Branch, in respect of the new shares and new convertible corporate bonds. The number of new shares issued through private placement was 6,881,562 and the number of convertible corporate bonds issued through private placement was 14,701,590. The Securities Registration Certificate was issued by China Securities Depository and Clearing Corporation Limited, Shanghai Branch.

Pursuant to the Report on Asset Acquisition Through Issuance of Shares and Convertible Corporate Bonds by Huadian Power International Corporation Limited, the "Huadian Dingzhan (華電定轉)" convertible corporate bonds issued by the Company were convertible into shares of the Company from 28 September 2022. The conversion period is from 28 September 2022 to 27 September 2024. As of 31 December 2022, a total of RMB Nil of "Huadian Dingzhan" was converted into shares of the Company, and the cumulative number of shares converted was Nil.

For details, please see the announcements of the Company dated 30 September 2021 and 22 September 2022.

## SUBSEQUENT EVENTS

### 1. Appointment of General Manager

On 2 March 2023, at the 32nd meeting of the ninth session of the Board, Mr. Chen Bin was appointed as the general manager of the Company, with the term of office commencing at the end of the 32nd meeting of the ninth session of the Board of the Company held on 2 March 2023 and ending on the expiry date of the term of office for the ninth session of the Board of the Company.

For details, please see the announcement of the Company dated 2 March 2023.

### 2. Proposed Change of Auditors

As at 29 March 2023, the Board of Directors resolved to propose the appointment of ShineWing Certified Public Accountants (Special General Partnership) as the domestic auditor (internal control auditor) and SHINEWING (HK) CPA Limited as the overseas auditor of the Company for 2023 to replace Baker Tilly China Certified Public Accountants (Special General Partnership) and Baker Tilly Hong Kong Limited respectively (the "Proposed Change of Auditors").

The proposed change of auditors is subject to the approval by the Shareholders at the upcoming 2022 annual general meeting. The respective term of service of ShineWing Certified Public Accountants (Special General Partnership) and SHINEWING (HK) CPA Limited is proposed to commence from the date of the approval of Shareholders at the 2022 annual general meeting up to the date of next annual general meeting of the Company.

For details, see the announcement of the Company dated 29 March 2023.

### 3. Results of the Conversion of Convertible Bonds and Changes in Shares

As at 31 March 2023, a total of RMB98,029,000 "Huadian Dingzhan (華電定轉)" was converted into the shares of the Company in the first quarter of 2023, and the number of converted shares was 23,851,338, accounting for 0.24% of the total issued shares of the Company immediately prior to the conversion. The amount of unconverted "Huadian Dingzhan" was RMB1,372,130,000, accounting for 93.33% of the total issued "Huadian Dingzhan".

# DIRECTORS' REPORT (CONTINUED)

## CONNECTED TRANSACTIONS

Pursuant to requirements of the Hong Kong Listing Rules, the connected transactions conducted by the Group for the year ended 31 December 2022 are as follows:

### CONTINUING CONNECTED TRANSACTIONS

#### 1. Commercial Factoring Services Framework Agreement with Huadian Commercial Factoring (Tianjin) Co., Ltd. ("Huadian Factoring")

On 26 October 2021, the Company and Huadian Factoring signed and renewed the Commercial Factoring Services Framework Agreement, pursuant to which, Huadian Factoring shall provide factoring business services to the Company and its subsidiaries. The term of the renewed Commercial Factoring Services Framework Agreement is from 1 January 2022 to 31 December 2024. The annual cap for commercial factoring business for the period from 1 January 2022 to 31 December 2024 in the transactions contemplated under the Commercial Factoring Services Framework Agreement shall not exceed RMB7,500 million. The 5th extraordinary general meeting for 2021 held on 14 December 2021 considered the Commercial Factoring Services Framework Agreement between the Company and Huadian Factoring, and the resolution was approved and became effective at the extraordinary general meeting.

China Huadian is a controlling shareholder of the Company. Huadian Factoring is a wholly-owned subsidiary of China Huadian and therefore is a connected person of the Company. Therefore, the execution of the Commercial Factoring Services Framework Agreement and the transactions contemplated thereunder constitute continuing connected transactions of the Company. As one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Hong Kong Listing Rules) of the transactions contemplated under the Commercial Factoring Services Framework Agreement exceed 5%, the Commercial Factoring Services Framework Agreement and the transactions contemplated thereunder are subject to the reporting, announcement, annual review and independent shareholders' approval requirements under Chapter 14A of the Hong Kong Listing Rules.

In addition, as one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Hong Kong Listing Rules) of the transactions contemplated under the Commercial Factoring Services Framework Agreement exceed 5% but are less than 25%, the Commercial Factoring Services Framework Agreement and the transactions contemplated thereunder constitute discloseable transaction pursuant to Chapter 14 of the Hong Kong Listing Rules, and are subject to the reporting and announcement requirements, but are exempt from the shareholders' approval requirement under Chapter 14 of the Hong Kong Listing Rules.

In 2022, the scale of the factoring business between the Group and Huadian Factoring was RMB3,877 million, which did not exceed the annual cap specified in the agreement and met the relevant provisions of the agreement.

For details, please see the announcements of the Company dated 26 October 2021 and 14 December 2021 and circular dated 24 November 2021.

#### 2. Financial Services Framework Agreement with China Huadian Finance Corporation Limited ("Huadian Finance")

On 26 October 2021, the Company and Huadian Finance signed and renewed the Financial Services Framework Agreement, pursuant to which, Huadian Finance shall provide deposit services, loan services, settlement services and other financial services to the Group. The term of the renewed Financial Services Framework Agreement is from 1 January 2022 to 31 December 2024. The daily balance of the deposits for the period from 1 January 2022 to 31 December 2024 in the transactions contemplated under the Financial Services Framework Agreement shall not exceed RMB9,000 million or the daily financing balance from Huadian Finance to the Group. The 5th extraordinary general meeting for 2021 held on 14 December 2021 considered the Financial Services Framework Agreement between the Company and Huadian Finance, and the resolution was approved and became effective at the extraordinary general meeting.

Huadian Finance is an associate of China Huadian, which is a controlling shareholder of the Company, and therefore a connected person of the Company under the Hong Kong Listing Rules.

With regard to deposit services under the Financial Services Framework Agreement, as one or more of the applicable percentage ratios in relation to the maximum daily balance of the deposits of the deposit services under the Financial Services Framework Agreement, i.e. RMB9,000 million, exceed 5% but are less than 25%, the transaction involving the provision of deposit services to the Group by Huadian Finance constitutes a discloseable transaction and non-exempt continuing connected transaction of the Company and is subject to the reporting and announcement requirements under Chapter 14 and the reporting, announcement and independent shareholders' approval requirements under Chapter 14A of the Hong Kong Listing Rules. The independent shareholders have approved the transaction and relevant annual caps.

With regard to settlement services and other financial services under the Financial Services Framework Agreement, since the amount of the settlement services and other financial services under the Financial Services Framework Agreement will continue to be very small, they fall within the de minimis threshold as stipulated under Rule 14A.76(1) of the Hong Kong Listing Rules, thus such transactions are fully exempt continuing connected transactions under the Hong Kong Listing Rules. The Company will monitor the transaction amounts of such financial services and will comply with relevant requirements under the Hong Kong Listing Rules as and when required.

In respect of the provision of loan services under the Financial Services Framework Agreement, since the fees charged by Huadian Finance for the services provided to the Group are not higher than those charged by other commercial banks and financial institutions in the PRC for the same services, the transactions involving the

## DIRECTORS' REPORT (CONTINUED)

provision of financial assistance by Huadian Finance to the Group are on normal commercial terms or better to the Group, and no security over the Group's assets is granted in respect of the financial assistance. Such loans are fully exempted continuing connected transactions under Rule 14A.90 of the Hong Kong Listing Rules.

In 2022, the maximum daily balance of the deposits placed by the Group with Huadian Finance was RMB8,990 million, which did not exceed RMB9,000 million or the daily loan balance from Huadian Finance to the Group.

For details, please see the announcements of the Company dated 26 October 2021 and 14 December 2021 and circular dated 24 November 2021.

### 3. Fuel, Equipment and Services Purchase (Supply) Framework Agreement with China Huadian

On 11 September 2020, the Company and China Huadian entered into the Fuel, Equipment and Services Purchase (Supply) Framework Agreement, to specify the purchase of fuel by the Group from China Huadian, the provision of engineering equipment, systems, products, engineering and construction contracting projects, environmental protection system renovation projects, supplies procurement services and miscellaneous and relevant services by China Huadian to the Group, and the sale of fuel and the provision of relevant services to China Huadian by the Group. The term of the Fuel, Equipment and Services Purchase (Supply) Framework Agreement commenced on 1 January 2021 and will expire on 31 December 2023. Pursuant to the Fuel, Equipment and Services Purchase (Supply) Framework Agreement, the annual cap for the purchase of fuel by the Group from China Huadian is RMB8,000 million, the annual cap for the provision of engineering equipment, systems, products, engineering and construction contracting projects, environmental protection system renovation projects, supplies procurement services and miscellaneous and relevant services by China Huadian is RMB8,000 million and the annual cap for the sale of fuel and the provision of relevant services to China Huadian by the Group is RMB13,000 million.

On 26 October 2021, the Company and China Huadian signed the Supplementary Agreement to the Fuel, Equipment and Services Purchase (Supply) Framework Agreement. Under the Supplementary Agreement, the annual cap for the continuing connected transactions involving the purchase of fuel for the period from 2021 to 2023 is changed from RMB8,000 million to RMB14,000 million, and other terms remain unchanged. The 5th extraordinary general meeting for 2021 held on 14 December 2021 considered the Supplementary Agreement to the Fuel, Equipment and Services Purchase (Supply) Framework Agreement between the Company and China Huadian, and the resolution was approved and became effective at the extraordinary general meeting.

China Huadian is the controlling shareholder of the Company and therefore is a connected person of the Company. Therefore, the transactions contemplated under the existing Fuel, Equipment and Services Purchase (Supply) Framework Agreement constitute continuing connected transactions of the Company. As the highest applicable percentage ratios for the revised annual caps for the purchase of fuel contemplated under the existing Fuel, Equipment and Services Purchase (Supply) Framework Agreement exceed 5%, the revisions to the annual caps are subject to the reporting, announcement and independent shareholders' approval requirements under Chapter 14A of the Hong Kong Listing Rules.

In 2022, the actual amount of purchase of fuel by the Group from China Huadian was approximately RMB10,191 million; the actual amount of provision of engineering equipment, products, and relevant services by China Huadian (including the cost of environmental protection and technological transformation) was approximately RMB3,284 million, and the actual amount of the sale of fuel and the provision of relevant services to China Huadian by the Group was approximately RMB1,559 million, neither of which exceeded the annual cap for the transactions.

For details, please see the announcements of the Company dated 11 September 2020, 28 October 2020, 26 October 2021 and 14 December 2021 and the circular dated 9 October 2020 and 24 November 2021.

### 4. Lease Agreement with Beijing Huabin

On 7 December 2020, the Company entered into the Lease Agreement with Beijing Huabin in respect of the lease of certain properties of Huadian Tower by the Company, pursuant to which, during the three years from 1 January 2021 to 31 December 2023, the Group leased certain properties of Huadian Tower from Beijing Huabin, and the annual rental is approximately RMB42.64 million.

Beijing Huabin is a subsidiary of China Huadian, the controlling shareholder of the Company. As such, according to the Hong Kong Listing Rules, Beijing Huabin is an associate of China Huadian and thus a connected person of the Company. The connected transactions under the Lease Agreement constituted continuing connected transactions of the Company under the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the annual rentals of the continuing connected transactions under the Lease Agreement exceeds 0.1% but is lower than 5%, such transactions shall be subject to the reporting, announcement and annual review requirements under Chapter 14A of the Hong Kong Listing Rules but are exempt from the independent shareholders' approval requirement. Considering the long-term relationship between the Group and Beijing Huabin, the Company considers that it is beneficial to continue to enter into the Lease Agreement with Beijing Huabin as such transactions have provided the Group a good working environment and will continue to facilitate the operation and growth of the Group's businesses.

The annual rental paid by the Group to Beijing Huabin during 2022 amounted to approximately RMB40.609 million.

For details, please see the announcement of the Company dated 7 December 2020.



## DIRECTORS' REPORT (CONTINUED)

### 5. Finance Lease Framework Agreement with Huadian Financial Leasing Company Limited ("Huadian Financial Leasing")

On 8 May 2020, the Company entered into the Finance Lease Framework Agreement with Huadian Financial Leasing with a term of three years from 1 July 2020 to 30 June 2023, pursuant to which, Huadian Financial Leasing agreed to provide the Group with finance lease services, including direct lease and sale and leaseback services. The maximum financing balance obtained by the Group from Huadian Financial Leasing for the three financial years ending 30 June 2023 will be capped at RMB6.0 billion. The annual caps for each of the direct lease and the sale and leaseback services are RMB1,500 million and RMB500 million, respectively.

Huadian Financial Leasing is a subsidiary of China Huadian, the controlling shareholder of the Company, and thus a connected person of the Company under the Hong Kong Listing Rules. The connected transactions under the Finance Lease Framework Agreement will be carried out on a continuing or recurring basis in the ordinary and usual course of business of the Group and accordingly constitute continuing connected transactions of the Company under the Hong Kong Listing Rules. As one or more of the percentage ratios in respect of the transactions under the Finance Lease Framework Agreement exceeds 0.1% but is less than 5%, the transactions are subject to the reporting and announcement requirements but are exempt from the independent shareholders' approval requirement under Chapter 14A of the Hong Kong Listing Rules. However, such transactions are subject to the approval by the independent shareholders at the general meeting of the Company pursuant to the Rules Governing the Listing of Stocks on Shanghai Stock Exchange (the "**Shanghai Listing Rules**"). The transactions have been approved by the independent shareholders.

In 2022, the maximum financing balance obtained by the Group from Huadian Financial Leasing was RMB956 million, of which the amounts of the direct lease services and the sale and leaseback services were RMB310 million and RMB350 million respectively for the period from 1 July 2021 to 30 June 2022, and the amounts of the direct lease services and the sale and leaseback services were RMB267 million and RMB150 million respectively for the period from 1 July 2022 to 31 December 2022, neither of which exceeded the caps as agreed in the agreements and satisfied the relevant provisions in the agreements..

For details, please see the announcements of the Company dated 8 May 2020 and 30 June 2020, and the circular dated 15 May 2020.

### 6. Coal Purchase Framework Agreement with Shaanxi Coal Selling and Transportation (Group) Corporation ("Shaanxi Coal Transportation")

On 7 December 2020, the Company entered into a 3-year Coal Purchase Framework Agreement with Shaanxi Coal Transportation, pursuant to which, the annual cap for the Company's coal purchase from Shaanxi Coal Transportation is RMB3,500 million for the period from 1 January 2021 to 31 December 2023.

Shaanxi Coal Transportation is a subsidiary of Shaanxi Coal and Chemical Group Industry Group Co., Ltd. ("**Shaanxi Coal and Chemical Group**") (which is a substantial shareholder of a subsidiary of the Company) and thus a connected person of the Company at the subsidiary level under the Hong Kong Listing Rules. The connected transactions under the Coal Purchase Framework Agreement will be carried out on a continuing or recurring basis in the ordinary and usual course of business of the Group and accordingly constitute continuing connected transactions of the Company under the Hong Kong Listing Rules. As the Board has approved the transactions under the Coal Purchase Framework Agreement and the independent non-executive Directors have confirmed that the terms of such transactions are fair and reasonable, on normal commercial terms and in the interests of the Company and its shareholders as a whole, pursuant to Rule 14A.101 of the Hong Kong Listing Rules, the transactions contemplated thereunder are subject to the reporting and announcement requirements but are exempt from the independent shareholders' approval requirement under Chapter 14A of the Hong Kong Listing Rules.

In 2022, the actual amount of purchase of coal by the Group from Shaanxi Coal Transportation was approximately RMB772 million, which did not exceed the annual cap specified in the agreement and met the relevant provisions of the agreement.

For details, please see the announcement of the Company dated 7 December 2020.

### 7. Coal Purchase Framework Agreement with Yankuang Energy Group Company Limited ("Yankuang Energy")

#### A. Renewal of the Coal Purchase Framework Agreement

On 28 October 2022, the Company renewed the Coal Purchase Framework Agreement with Yankuang Energy for the period from 1 January 2023 to 31 December 2025, pursuant to which, the maximum amount of purchase of coal by the Group from Yankuang Energy each year was RMB8,000 million. The thirty-first meeting of the ninth session of the Board of Directors for 2022 held on 28 October 2022 considered the Coal Purchase Framework Agreement between Huadian Power International Corporation Limited and Yankuang Energy Group Company Limited renewed by the Company and Yankuang Energy. The resolution was considered, approved and came into effect at the Board meeting.

## DIRECTORS' REPORT (CONTINUED)

As Yankuang Energy was a major shareholder of a non-wholly-owned subsidiary of the Company, it was a connected person of the Company at the subsidiary level pursuant to the Hong Kong Listing Rules. As the directors approved the transactions under the proposed Coal Purchase Framework Agreement, and the independent non-executive Directors confirmed that the terms of the transactions were fair and reasonable, on normal commercial terms, and in the interests of the Company and its shareholders as a whole, pursuant to Rule 14A.101 of the Hong Kong Listing Rules, the transactions contemplated under the agreement were exempt from the circular and independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

In view of the long-term relationship between the Group and Yankuang Energy, the Company believes that it is beneficial to renew the proposed Coal Purchase Framework Agreement, as the transactions promote the growth of the Group's main business, provide a good working environment for the Group, and will continue to promote the business operation and growth of the Group.

For details, please see the announcement of the Company dated 28 October 2022.

### B. Continuing Connected Transactions in 2022

On 1 November 2019, the Company and Yankuang Energy renewed the Coal Purchase Framework Agreement, with a term of three years from 1 January 2020 to 31 December 2022, and an annual purchase cap of up to RMB8,000 million.

In 2022, the actual amount of purchase of coal by the Group from Yankuang Energy was approximately RMB3,145 million, which did not exceed the annual cap specified in the agreement and met the relevant provisions of the agreement.

For details, please see the announcement of the Company dated 1 November 2019.

The Company has engaged external auditors to report on the Group's aforesaid continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditors' Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditors have submitted an unqualified letter containing their conclusions in respect of the continuing connected transactions set out above to the Board in accordance with Rule 14A.56 of the Hong Kong Listing Rules. A copy of the Auditors' Letter has been provided by the Company to the Hong Kong Stock Exchange.

The auditors of the Company confirmed that these continuing connected transactions:

- (1) had been approved by the Board of the Company and/or on general meetings;
- (2) were carried out on the price policies of the Company, if the transactions are related to the provision of goods or services by the Company;
- (3) were carried out under relevant agreements of these transactions; and
- (4) did not exceed the caps as disclosed in previous announcements.

The Company's independent non-executive Directors have reviewed the continuing connected transactions set out above and confirmed that:

- (1) these transactions were entered into in the ordinary and usual course of the business of the Group;
- (2) these transactions were under normal commercial terms or more favourable terms; and
- (3) these transactions were conducted under agreed terms of relevant transactions which are fair and reasonable and in the interests of the Group and its shareholders as a whole.

In respect of the Company's material related party transactions set out in note 39 to the consolidated financial statements prepared in accordance with IFRSs, to the extent that they constitute connected transactions and/or continuing connected transactions of the Company under the Hong Kong listing Rules that apply to it, the Company confirms that it has complied with the relevant requirements under the Hong Kong Listing Rules (if applicable).

Save as disclosed above, the material related party transactions of Company set out in note 39 to the consolidated financial statements prepared in accordance with IFRSs do not constitute connected transactions of the Company under the Hong Kong Listing Rules.

## ISSUE OF DEBENTURES

In 2022, in order to meet its operational needs, the Group has successfully issued four tranches of medium-term notes at a par value of RMB5.5 billion and the interest rates ranging from 2.70% to 3.39% per annum; the Group has successfully issued two tranches of corporate bonds at a par value of RMB4 billion and the interest rate ranging from 2.58% to 2.92% per annum. For details, please see note 31(f) to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

## DIRECTORS' REPORT (CONTINUED)

### ISSUE OF EQUITY FINANCING INSTRUMENTS

In 2022, in order to meet its operational needs, the Company has successfully issued four tranches of perpetual capital securities at a total par value of RMB7.5 billion. For details, please see note 38(e) to the consolidated financial statements prepared in accordance with IFRSs included in this annual report.

### PURCHASE, SALE OR REDEMPTION OF LISTED SECURITIES

During the financial year of 2022, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of its issued securities ("securities" having the meaning as ascribed thereto under paragraph 1 of Appendix 16 to the Hong Kong Listing Rules).

### FINANCIAL SUMMARIES

Summaries of the results and the assets and liabilities of the Group for each of the five financial years ended 31 December 2022 prepared in accordance with IFRSs are set out on page 139. The Company is not aware of any matter taking place in the year ended 31 December 2022 that would be required to be disclosed under Rules 13.13 to 13.19 of the Hong Kong Listing Rules.

### BUSINESS REVIEW AND OUTLOOK

Description of the fair review of the Group's business, potential risks and countermeasures of the Group, material factors related to the performance and finance of the Group and the future development of the Group's business are set out in the sections headed "Business Review and Outlook" and "Management Discussion and Analysis" of this report.

### MATERIAL LITIGATION

As of 31 December 2022, some members of the Group were a party to certain litigations arising from the Group's ordinary course of business or acquisition of assets. The management of the Group believes that any possible legal liability which incurred or may incur from the aforesaid cases will have no material adverse effect on the financial position and operating results of the Group.

### DESIGNATED DEPOSITS AND OVERDUE TIME DEPOSITS

As at 31 December 2022, the Group's deposits placed with financial institutions or other parties did not include any designated or entrusted deposits, or any material overdue time deposits which could not be collected by the Group upon maturity.

### AUDIT COMMITTEE

The Company's Audit Committee has reviewed the annual results of the Group for 2022 and the financial statements prepared under IFRSs for the financial year ended 31 December 2022.

### AUDITORS

At the annual general meeting held on 30 June 2021, the Company changed the domestic auditor from BDO China Shu Lun Pan Certified Public Accountants LLP (Special General Partnership) to Baker Tilly China Certified Public Accountants (Special General Partnership) and changed the international auditor from BDO Limited to Baker Tilly Hong Kong Limited. The respective term of service of Baker Tilly China Certified Public Accountants (Special General Partnership) and Baker Tilly Hong Kong Limited commences from the approval date of the 2020 annual general meeting up to the date of 2021 annual general meeting of the Company.

At the annual general meeting on 29 June 2022, the Company re-appointed Baker Tilly China Certified Public Accountants (Special General Partnership) and Baker Tilly Hong Kong Limited, with a term of office from the date of approval by the 2021 annual general meeting to the date of conclusion of the 2022 annual general meeting, respectively. Apart from these, there have been no other changes of auditors in the past three years.

By Order of the Board  
**Dai Jun**  
Chairman

# CORPORATE GOVERNANCE REPORT

The Company has always attached great importance to the corporate governance and continuously promoted management innovation. In strict compliance with the Company Law of the People's Republic of China (the "Company Law"), the Securities Law of the People's Republic of China, the Shanghai Listing Rules, the Hong Kong Listing Rules and relevant provisions promulgated by domestic and overseas securities regulatory institutions, the Company has improved its corporate governance structure, enhanced the level of its governance and endeavoured to achieve a harmonious development between the Company's growth and the interest of its shareholders.

The codes on corporate governance of the Company include, but not limited to, the following documents:

1. Articles of Association;
2. Rules of Procedures for General Meetings of Shareholders, Rules of Procedures for the Board of Directors and Rules of Procedures for the Supervisory Committee of the Company (as a part of the current Articles of Association);
3. Terms of Reference of the Audit Committee, the Remuneration and Appraisal Committee, the Nomination Committee, and the Strategic Committee of the Board of the Company;
4. Working Requirements for Independent Directors;
5. Working Requirements for Secretary to the Board;
6. Working Rules for General Manager;
7. Code on the Company's Investment Projects;
8. the Company's Management Methods on Raised Proceeds;
9. the Company's Management Methods on External Guarantees;
10. the Company's Management Rules on Information Disclosure;
11. Management Rules on Investor Relations and Implementation Procedures;
12. Code on Trading in Securities of the Company by Directors (Supervisors) of the Company;
13. Code on Trading in Securities of the Company by Employees of the Company;
14. Management Methods for Affairs of the Board of Directors;
15. Working Rules on Annual Report for the Audit Committee of the Board;
16. Working Rules on Annual Report for Independent Directors;
17. Management Methods on Connected Transactions; and
18. Insider Registration and Management Methods.

The Board is committed to the principles of corporate governance in order to achieve a prudent management and enhancement of shareholders' value. Transparency, accountability and independence are enshrined under these principles.

The Board has reviewed the relevant requirements prescribed under the corporate governance codes adopted by the Company and its actual practices, and has taken the view that the corporate governance of the Company in 2022 has met the requirements under the code provisions in the Corporate Governance Code (the "**CG Code**") as contained in Appendix 14 to the Hong Kong Listing Rules and there was no deviation from such provisions. In certain aspects, the corporate governance codes adopted by the Company are more stringent than the code provisions set out in the CG Code, the particulars of which are as follows:

- The Company has formulated the Code on Trading in Securities of Huadian Power International Corporation Limited\* by Directors (Supervisors) and the Code on Trading in Securities of Huadian Power International Corporation Limited\* by Employees, which are on terms no less exacting than those set out in the Model Code set out in Appendix 10 to the Hong Kong Listing Rules.
- In addition to the Audit Committee, the Remuneration and Appraisal Committee and the Nomination Committee, the Company has established the Strategic Committee and stipulated the Terms of Reference of the Strategic Committee.
- In the financial year of 2022, a total of nine Board meetings were held by the Company.
- The Audit Committee comprises five members, including two non-executive Directors and three independent non-executive Directors.



## CORPORATE GOVERNANCE REPORT (CONTINUED)

### THE BOARD OF DIRECTORS

As an efficient leader of the Company, the Board is responsible for the leadership and supervision of the Company.

Directors as a whole are responsible for advancing activities of the Company through commanding and monitoring. We are of the opinion that all Directors can act on an objective basis and make decisions in the interest of the Company.

As at 31 December 2022, members of the Board are set out below:

Name	Position in the Company
Dai Jun	Chairman, Executive Director
Ni Shoumin	Vice Chairman, Non-executive Director
Peng Xingyu	Non-executive Director
Luo Xiaoqian	Executive Director
Zhang Zhiqiang	Non-executive Director
Li Pengyun	Non-executive Director
Wang Xiaobo	Non-executive Director
Li Guoming	Executive Director
Feng Zhenping	Independent Non-executive Director
Li Xingchun	Independent Non-executive Director
Li Menggang	Independent Non-executive Director
Wang Yuesheng	Independent Non-executive Director

The biographical information of the Directors are detailed in the section headed "Directors, Supervisors and Senior Management" in this annual report. No Directors have any personal relationships (including material/relevant relationships in terms of finance, business, family or otherwise) with any other Directors or chief executive of the Company. Directors (including non-executive Directors) of each session serve a term of three years, renewable upon re-election and reappointment. The term of office for independent non-executive Directors is renewable with a limit of six years. A Director who is elected to fill a temporary vacancy shall be elected by the shareholders at the first general meeting following his/her election, and his/her term of office shall be terminated upon re-election of Directors. A Director who is elected for the first time shall report to the Board his/her position as director or other roles in other companies or entities upon his/her election, and such reporting of relevant interests is updated annually. In the event that the Board considers that a conflict of interest exists for a Director or any of his/her associates when considering any resolution, such Director shall report such interest and abstain from voting.

The independent non-executive Directors have submitted written confirmation of their independence as required by Rule 3.13 of the Hong Kong Listing Rules. The independent non-executive Directors of the Company have extensive expertise and experience. Among the nine non-executive Directors, four of them (representing no less than one-third of all Directors) are independent non-executive Directors. Among them, Director Li Menggang is an accounting professional, who plays an important role of check and balance and safeguards the interests of the shareholders and the Company as a whole. The Board is of the opinion that all independent non-executive Directors are able to deliver effective independent judgments under the independence guidelines set out in Rule 3.13 of the Hong Kong Listing Rules, and are independent in accordance with such guidelines.

To ensure compliance with the Board procedures and all applicable rules, each Director has access to advice and services of the Secretary to the Board. Directors are encouraged to enroll in comprehensive professional development courses and seminars relating to the Hong Kong Listing Rules, the Companies Ordinance/laws and corporate governance practices so that they can continuously update and further improve their relevant knowledge and skills. From time to time, the Directors are provided with written training materials to develop and refresh their professional skills.

The Directors of the Company received the following trainings with an emphasis related to the roles, functions and duties of a director of a listed company during the year ended 31 December 2022:

Name	Trainings <sup>(Note 1)</sup>
Ding Huande <sup>(Note 2)</sup>	A
Dai Jun	A, B
Ni Shoumin	A
Peng Xingyu	A
Luo Xiaoqian	A
Zhang Zhiqiang	A
Li Pengyun	A
Wang Xiaobo	A, B
Feng Rong <sup>(Note 2)</sup>	A
Li Guoming	A, B
Feng Zhenping	A, B
Li Xingchun	A, B
Li Menggang	A, B
Wang Yuesheng	A, B

## CORPORATE GOVERNANCE REPORT (CONTINUED)

### Note 1:

A: Read relevant listing rules, the general business or responsibilities of the directors and other relevant training materials and updates  
 B: Attend seminars and/or lectures

### Note 2:

Mr. Ding Huande ceased to be the Director of the Company with effect from 24 August 2022. Mr. Feng Rong ceased to be the Director of the Company with effect from 15 June 2022.

The current Company Secretary has taken no less than 15 hours of relevant professional training for the year ended 31 December 2022.

## CHAIRMAN AND GENERAL MANAGER

To improve independence, accountability and responsibility, the positions of the Chairman and General Manager of the Company are assumed by different individuals. During the reporting period, the position of Chairman was served by Mr. Ding Huande (ceased to serve as the Chairman since 24 August 2022) and Mr. Dai Jun (served as the Chairman since 26 August 2022) respectively, the position of General Manager was served by Mr. Luo Xiaoqian (ceased to serve as the General Manager since 30 December 2022). As the legal representative of the Company, the Chairman presides over the Board, aiming to ensure that the Board acts in the best interest of the Company, operates effectively, duly fulfils its responsibilities and engages in discussion of important and appropriate matters, and to ensure Directors' access to accurate, timely and clear data. The Chairman appoints the Secretary to the Board to arrange for agenda of every Board meeting and consider any matter proposed by other Directors to be included in the agenda, thus ensuring that all Directors are properly briefed regarding matters discussed at the Board meeting and have the access to adequate and reliable data in due time. The Chairman should at least annually hold meetings with the independent non-executive Directors without the presence of other Directors.

The General Manager heads the management to take charge of daily operation of the Company. With the cooperation from other executive Directors and management team of each business department, the General Manager manages the business of the Company, including implementation of policies adopted by the Board and reporting to the Board in respect of the overall operation of the Company.

## THE MANAGEMENT

The Board and the management work separately and cooperate with each other in accordance with relevant requirements of the Company Law, the Articles of Association and the Working Rules for General Manager of the Company. The duties and responsibilities of the management include, but are not limited to, the following matters:

- (1) to preside over the production, operation and management of the Company, and to implement resolutions of the Board;
- (2) to formulate development plans, annual production and operation plans, annual financial budget and final account scheme, profit (after tax) distribution plan and loss recovery plan of the Company;
- (3) to implement the Company's annual business plans and investment schemes;
- (4) to formulate the scheme of the Company's internal management structure;
- (5) to formulate the Company's basic management system;
- (6) to formulate the Company's detailed regulations;
- (7) to determine remuneration, welfare, bonus and penalties of employees of the Company and to determine appointment or dismissal of them;
- (8) to handle significant business on behalf of the Company; and
- (9) to exercise other powers within the authorisation of Articles of Association and the Board.

## BOARD MEETINGS

The Board shall convene at least four meetings annually, approximately one in each quarter. The Chairman of the Board should convene the Board meetings, ensure the Board's effective discharge of its duties, schedule agenda of Board meetings and consider matters proposed by other Directors to be included in the agenda. The Board has arrangements in place to ensure that all Directors are given an opportunity to include matters in the agenda for regular Board meetings. 14 days' notice shall be given prior to the commencement of a regular meeting.

## CORPORATE GOVERNANCE REPORT (CONTINUED)

The Chairman of the Board shall convene an extraordinary meeting of the Board within 10 days in any of the following cases:

- (1) when proposed by the shareholders representing more than 10% voting rights;
- (2) when deemed as necessary by the Chairman of the Board;
- (3) when proposed jointly by more than one-third of the Directors;
- (4) when proposed jointly by more than one-half of the independent Directors;
- (5) when proposed by the Supervisory Committee; and
- (6) when proposed by the General Manager.

Notice of Board meetings and extraordinary Board meetings should be served on all Directors, either by facsimile, express mail, registered air mail, by hand or email.

If the time and venue for a regular meeting have been previously determined by the Board, no notice is necessary. Otherwise, the Chairman of the Board or relevant proposer shall inform the Secretary to the Board of the proposal and agenda of the meeting in writing, and the Secretary to the Board shall then dispatch a notice containing time, venue and agenda of the Board meeting to the Directors 10 days prior to the date of the meeting. However, each Director may waive his/her right for being served with the notice of the Board meeting prior or subsequent to the dispatch of the notice. The Secretary to the Board should also send a copy of the above-mentioned notice of the Board meeting to the Chairman of the Supervisory Committee prior to the meeting.

Each Director has one vote. The Board's resolutions shall be passed by a simple or two-thirds majority of the Directors in accordance with the provisions of relevant laws, regulations and the Articles of Association of the Company. A Director shall attend Board meetings in person. Regular or extraordinary Board meetings can be held by way of teleconference meeting or by virtue of similar telecommunication device. So long as the participating Directors can hear and communicate effectively with each other, all participating Directors are deemed as if they had participated in the meeting in person.

A Director shall appoint, in writing, another Director to attend the meeting on his/her behalf in case of unavailability of attendance. The scope of authorisation shall be specified in the authorisation letter. The Director attending the meeting on behalf of the entrusting Director shall only exercise the rights within the authorisation letter. Should a Director neither attend a Board meeting nor appoint another Director to attend on his/her behalf, such Director shall be deemed to have waived his/her voting rights at such meeting.

Independent non-executive Directors served on the Audit Committee, the Remuneration and Appraisal Committee, the Nomination Committee and the Strategic Committee according to the Articles of Association of the Company, and accounted for the majority and served as the convener of the Audit Committee, the Remuneration and Appraisal Committee and the Nomination Committee. The opinions of independent non-executive Directors had substantial influence in the decision-making of the Board of the Company, and their participation helped the Board exercise judgments, make objective decisions and take actions and was in line with the interests of the Company and its Shareholders as a whole. Independent non-executive Directors provided independent and objective suggestions and opinions as to material related party transactions and other matters of the Company according to the Working Requirements for Independent Directors and in consideration of the overall interests of all Shareholders, and maintained the independence as independent non-executive Directors. The Board believes that independent non-executive Directors were well aware of their functions and have actively performed their duties.

The Secretary to the Board shall prepare detailed minutes for the matters put to the Board meeting for consideration and resolutions passed, including any reserved or dissenting opinion expressed by the Directors. Within a reasonable period of time following the conclusion of the Board meeting, the Secretary to the Board shall dispatch to all Directors the draft and final minutes of Board meetings at which reserved or dissenting opinions are expressed by the Directors for comments and for records, respectively.

There has been a procedure agreed by the Board to enable Directors, upon reasonable request, to seek independent professional advice in appropriate circumstances, at the expense of the Company. The Board resolves to provide separate independent professional advice to Directors.

The Board accepts the proposal passed by written resolution instead of convening a Board meeting and such draft proposal shall be dispatched to each Director, either by hand, mail, telex, facsimile or email. Unless otherwise stipulated by applicable laws, regulations and/or relevant listing rules, a resolution shall come into effect without a Board meeting being convened when the number of Directors signing and consenting to the written resolution meets the quorum for the resolution as required by the laws, administrative regulations and the Articles of Association in connection therewith, and the signed resolution is returned to the Secretary to the Board by the aforesaid means.

Any written resolution not being executed by Directors in accordance with legal procedures, even opined by each Director by different means, shall not come into legal force as a resolution of the Board. Minutes of meetings of the Board and its committees shall be kept by the Secretary to the Board, and upon any Director's request to review, the Secretary to the Board shall produce to such Director the requested minutes within a reasonable period of time.

If a substantial shareholder or a Director has a conflict of interest in a matter to be considered by the Board which the Board has determined to be material, the matter should be dealt with by a physical Board meeting rather than a written resolution. Independent non-executive Directors who, and whose close associates, have no material interest in the transaction should be present at that Board meeting.

## CORPORATE GOVERNANCE REPORT (CONTINUED)

To ensure sound corporate governance, the Board has established the following committees: Audit Committee, Remuneration and Appraisal Committee, Nomination Committee and Strategic Committee, and specified their respective terms of reference in accordance with principles stipulated by laws, regulations and the CG Code. Relevant administrative departments set up by those special committees in the Company are responsible for the preparation of meeting documents while those special committees report to the Board.

The Board reports to the general meeting, and is also responsible for the completeness of financial data as well as the effectiveness of internal control system and risk management procedures of the Company. Besides, the Board shall bear the responsibility for the preparation of corporate financial statements, while the General Manager assumes duties of attaining business goals and attending to daily operations of the Company. Through regular reviews of functions of the General Manager and his/her authorised powers, the Board ensures the rationality of such arrangement. The Board also regularly reviews performances in relation to budget and business goals of operating departments, and retained various powers, including:

- (1) to convene general meetings and report its work to the general meetings;
- (2) to implement the resolutions passed at general meetings;
- (3) to decide the Company's business plans and investment schemes;
- (4) to formulate the Company's annual budget scheme and final account plan;
- (5) to formulate the Company's profit distribution plan and loss recovery plan;
- (6) to formulate proposals for increasing or reducing the Company's registered capital and the issue of corporate debentures;
- (7) to draw up plans for repurchase of the Company's shares or proposal for merger, division or dissolution of the Company;
- (8) within the authorisation of the general meeting, to determine external investment, acquisition and disposal of assets, pledge of assets, trusted finance, connected transactions of the Company; and to determine other guarantee matters not subject to approval of the general meeting as stipulated by law, administrative regulations and the Article of Association;
- (9) to determine the establishment of the Company's internal management structure;
- (10) to appoint or dismiss the Company's General Manager and the Secretary to the Board, and pursuant to the General Manager's nominations, to appoint or dismiss senior management including the Deputy General Managers and financial officers of the Company and determine their remuneration, bonus and penalties;
- (11) to formulate the Company's basic management system;
- (12) to formulate proposed amendments to the Articles of Association;
- (13) to manage the information disclosure of the Company;
- (14) to propose at general meetings for the appointment or change of auditors providing audit services to the Company;
- (15) to hear the work report and inspect the work of the Company's General Manager; and
- (16) to exercise any other powers specified in relevant laws, administrative regulations or the Articles of Association and conferred by the shareholders at general meetings.

Except for the Board's resolutions in respect of the matters specified in the abovementioned items (6), (7), (12) and external guarantees which shall be passed by two-thirds majority of the Directors, the Board's resolutions in respect of any other aforesaid matters may be passed by a simple majority. The Board mainly performed the following duties in respect of corporate governance in the reporting period:

- (1) to develop and review the Company's policies and practices on corporate governance;
- (2) to review and monitor the training and continuous professional development of Directors and senior management of the Company;
- (3) to develop, review and monitor the code of conduct and compliance manual applicable to employees and Directors of the Company;
- (4) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements; and



## CORPORATE GOVERNANCE REPORT (CONTINUED)

- (5) to review the Company's compliance with CG Code and disclosure in the Corporate Governance Report in the annual report.

Nine Board meetings were held by the Company in the financial year from 1 January 2022 to 31 December 2022, the attendance of each Director at which is set out as follows:

Name	Position in the Company	Number of meetings actually attended (excluding by proxy)/ number of meetings to attend
Ding Huande	Former Chairman, Former Executive Director	6/6
Dai Jun	Chairman, Executive Director	3/3
Ni Shoumin	Vice Chairman, Non-executive Director	9/9
Peng Xingyu	Non-executive Director	9/9
Luo Xiaoqian	Executive Director	9/9
Zhang Zhiqiang	Non-executive Director	9/9
Li Pengyun	Non-executive Director	9/9
Wang Xiaobo	Non-executive Director	9/9
Feng Rong	Former Executive Director	4/4
Li Guoming	Executive Director	3/3
Feng Zhenping	Independent Non-executive Director	9/9
Li Xingchun	Independent Non-executive Director	9/9
Li Menggang	Independent Non-executive Director	9/9
Wang Yuesheng	Independent Non-executive Director	9/9

One annual general meeting and one extraordinary general meetings were held by the Company in the financial year from 1 January 2022 to 31 December 2022, the attendance of each Director at which is set out as follows:

Name	Position in the Company	Number of meetings actually attended/number of meetings to attend
Ding Huande	Former Chairman, Former Executive Director	2/2
Dai Jun	Chairman, Executive Director	0/0
Ni Shoumin	Vice Chairman, Non-executive Director	2/2
Peng Xingyu	Non-executive Director	1/2
Luo Xiaoqian	Executive Director	2/2
Zhang Zhiqiang	Non-executive Director	2/2
Li Pengyun	Non-executive Director	2/2
Wang Xiaobo	Non-executive Director	2/2
Feng Rong	Former Executive Director	0/0
Li Guoming	Executive Director	0/0
Feng Zhenping	Independent Non-executive Director	2/2
Li Xingchun	Independent Non-executive Director	2/2
Li Menggang	Independent Non-executive Director	1/2
Wang Yuesheng	Independent Non-executive Director	2/2

Note: Mr. Li Pengyun, non-executive Director was unable to be present at the annual general meeting of the Company held on 29 June 2022 due to personal work commitment. Mr. Li Menggang, independent non-executive Director was unable to be present at the extraordinary general meeting of the Company held on 24 August 2022 due to personal work commitment.

## DIRECTORS' RESPONSIBILITIES IN RESPECT OF FINANCIAL STATEMENTS

The Directors confirm that they are responsible for the preparation of the financial statements of the Group. Mr. Ding Shengmin was in charge of the accounting department. With the assistance of the accounting department, the Directors ensure that the financial statements of the Company are prepared in compliance with relevant laws, regulations and applicable accounting policies. The Directors also confirm that the financial statements of the Company will be published in due course. Directors are not aware of any material uncertainties relating to events or conditions which may cast significant doubt upon the Company's ability to continue as going concern.

The reporting responsibility statement made by the Company's auditor in respect of the financial statements of the Company is set out in the Independent Auditor's Report of this annual report.

## CORPORATE GOVERNANCE REPORT (CONTINUED)

### SECURITIES TRANSACTIONS BY DIRECTORS AND SUPERVISORS

The Company has adopted the “Model Code” as the code of conduct regarding securities transactions by its Directors and Supervisors. Meanwhile, it formulated the “Code on Trading of the Company’s Securities by Directors (Supervisors) of Huadian Power International Corporation Limited” which requires the Directors and Supervisors to sign, as early as the commencement of their term of office, a statement on share transaction undertaking that any share transaction by Directors or Supervisors and their associates will be reported to the Board or the Supervisory Committee. No securities transaction should be conducted by the Directors or Supervisors and/or their relevant persons and entities prior to a written consent being given with a specific date certifying compliance of the proposed transaction with the Hong Kong Listing Rules and Shanghai Listing Rules and the requirements regarding transactions of securities of listed companies by Directors and Supervisors as stipulated in the abovementioned codes.

After specific inquiries with all Directors and Supervisors, the Directors and Supervisors of the Company have complied with the relevant codes on securities transactions by Directors and Supervisors set out in the “Model Code” and the “Code on Trading of the Company’s Securities by Directors (Supervisors) of Huadian Power International Corporation Limited” during the year ended 31 December 2022.

### AUDIT COMMITTEE

In accordance with the Hong Kong Listing Rules, the Board set up the Audit Committee in August 1999. It comprises five members, including three independent non-executive Directors and two non-executive Directors. One of the five members is an independent non-executive director who is an accounting professional. In addition to carrying out duties in accordance with the Hong Kong Listing Rules and requirements stipulated in the “A Guide for Effective Operation of an Audit Committee” issued by Hong Kong Institute of Certified Public Accountants and the “Principle on Governance of Listed Companies” issued by the China Securities Regulatory Commission, the Audit Committee of the Board comprising such five members also formulated the “Working Rules for the Audit Committee of the Board of Directors of Huadian Power International Corporation Limited” by setting out the scope of their powers and functions in details.

The primary terms of reference of the Audit Committee include:

- (1) to make recommendations to the Board on the appointment, reappointment or replacement of the external auditor;
- (2) to review and monitor the external auditor’s independence and objectivity as well as the effectiveness of the audit process;
- (3) to formulate and implement policies on engaging an external auditor to supply non-audit services;
- (4) to act as the key representative body for the communication between the Company and the external auditor;
- (5) to examine, monitor and supervise integrity of the Company’s financial statements, annual reports and interim reports, and to review the major opinions on financial reporting in such statements and reports; and
- (6) to examine and continuously monitor the efficient operation of internal control and risk management system of the Company, hear the report regarding internal control and risk management mechanism as well as the system establishment of the enterprise, and offer opinion and suggestion accordingly.

The terms of reference of the Audit Committee are published on the webpage of the Company at <http://www.hdpi.com.cn/>. During the reporting period, the Audit Committee of the Company is chaired by independent non-executive Director Mr. Li Menggang, and is comprised of members including non-executive Directors Mr. Li Pengyun and Mr. Wang Xiaobo, independent non-executive Directors Mr. Wang Yuesheng and Mr. Li Xingchun. They are responsible for the communication between the Company’s internal and external auditors, supervision and examination while giving advice to the Board on audit, risk management, internal control and corporate governance. In particular, Mr. Li Menggang is an accounting professional.

The Audit Committee held three meetings respectively on 28 April, 24 August and 28 October 2022 with the average attendance rate of 100%. All of the Directors of the committee attended all of the meetings in person instead of by proxy.

During the reporting period, the Audit Committee considered and approved the resolution on the changes to accounting policies, the resolution on continuing connected transactions of the Company, the report on risk continuation assessment of connected transactions with China Huadian Finance Corporation Limited, the interim work report of the Audit Committee, the resolution on continuing connected transactions of purchasing coal from Yankuang Energy Group Company Limited and the report on amendments to the list of related parties.

The Audit Committee considered and approved internal control evaluation reports of the Company and the proposals on connected transactions and continuing connected transactions, examined relevant information in the annual and interim financial reports of the Company, considered and approved the proposal on appointment of domestic and foreign auditors, carefully reviewed the Directors’ Report, the Auditor’s Report and Internal Control Audit Report. In respect of corporate governance, the Audit Committee has developed and reviewed the Company’s policies and practices on corporate governance and make recommendations to the Board; reviewed and monitored the Company’s policies and practices on compliance with legal and regulatory requirements; developed, reviewed and monitored the code of conduct and compliance manual applicable to the Company’s employees and Directors; and reviewed the Company’s compliance with the CG Code and disclosure in the Corporate Governance Report.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

## RISK MANAGEMENT AND INTERNAL CONTROL

### Main Features of the Risk Management and Internal Control Systems

The Board is responsible for the ongoing supervision on the Company's risk management and internal control systems. The Board has developed the Group's risk management and internal control systems and confirmed and reviewed that the Board bears the overall responsibility for the effectiveness of the Group's risk management and internal control systems to safeguard the interest of the shareholders and the assets of the Group. It reviews the effectiveness of the systems at least annually to ensure the adequacy of resources, staff qualifications and experience on accounting, internal audit, financial reporting functions and those relating to the Company's Environmental, Social and Governance performance and reporting, and training programs received by staffs and budget of the Group.

The Company has established its special department to regularly review the adequacy and effectiveness of the Group's risk management and internal control systems, and the Audit Committee will review the work report and suggestions made by the independent internal audit department on the effectiveness of the key internal control system.

The Company's risk management and internal control systems are designed to manage rather than eliminate risks, and can only provide reasonable but not absolute assurance against material misstatement or loss. We have employed a bottom-up approach to identify, assess and mitigate risk to the largest extent at all business unit levels and across functional areas of the Group.

### Process Used to Identify, Evaluate and Manage Major Risks

The Company's risk management and internal control systems are mainly responsible for tracking and recording identified major risks, assessing and evaluating major risks and developing and updating counter-measures, as well as continuing to test risk management and internal control procedures to ensure their effectiveness.

The Company has put in place appropriate policies and monitoring procedures to ensure that no asset will be used or disposed without authorisation of the Company. The Company maintains reliable financial and accounting records in accordance with the relevant accounting standards and regulatory reporting regulations, and properly identifies and manages major risks which may affect the Company's performance, and reasonably ensures that the level of risk is within the acceptable scope of the Company.

### Process Used to Review the Effectiveness of the Risk Management and Internal Control Systems and to Resolve Material Internal Control Defects

During the risk evaluation process, each business department and major subsidiaries which face risks are the first responsible persons to identify the major risks that have reached target. It should assess the residual risks and report to the management, the Audit Committee and the Board of the Company after considering the counter-measures against major risks.

The internal control department of the Company carries out its work based on risks and defects. The internal control department of the Company formulates the annual internal control evaluation work plan covering the Company's operation, business and finance and major procedures of its affiliated entities, and reports the evaluation findings to the management and the Board of the Company. The internal control department of the Company urges relevant entities to rectify the internal control defects identified in the process and reports the progress of rectification to the Audit Committee and the management on a regular basis.

The internal control department of the Company reports the adequacy and effectiveness of its monitoring to the management, the Audit Committee and the Board of the Company.

The management of the Company, with assistance of the office, the finance department, the internal control department and other departments, is responsible for the design, implementation, supervision and evaluation of the risk management and internal control systems of the Company operate effectively, and reports the effectiveness of risk management and internal control to the Audit Committee and the Board.

The Company has adopted various policies and procedures to evaluate and enhance the effectiveness of the risk management and internal control systems, including requiring the management to conduct assessment on a regular basis and control the risks at a level which is acceptable to the Company to ensure that the risk management and internal control systems of the Company operate effectively, which the Company believes will enhance the corporate governance in the future and improve the risk management and internal control capacities of the Company.

The Company has integrated risk management and internal control into its daily operations. The functional departments and affiliated entities of the Company continuously conduct risk assessment, formulate risk management strategies and risk counter-measures, assess residual risks and report risk events and counter-measures implemented to the relevant business management departments of the Company on a timely basis. The relevant business departments of the Company summarise the possibility and effect of risk events, analyse the effectiveness of its risk management and internal control strategies and counter-measures, and report to the management and the Board of the Company on a regular basis.



## CORPORATE GOVERNANCE REPORT (CONTINUED)

### Procedures and Internal Control for the Handling and Dissemination of Inside Information

The Board has already established a policy on the procedures and internal control for the handling and dissemination of inside information. The policy stipulated the duty and responsibility of publishing inside information, restriction on sharing non-public information, handling of rumours, unintentional selective disclosure, exemption and waiver to the disclosure of inside information, and also compliance and reporting procedures. Every senior management of the Company must take all reasonable measures to prevent the breach of the disclosure requirement in relation to the Company. They must promptly bring any possible leakage or divulgence of inside information to the attention of the management, who will notify the Board accordingly and take appropriate actions promptly. For any material violation of this policy, the Board will decide, or designate appropriate persons to decide the course of actions for rectifying the problem and avoiding reoccurrence.

In 2022, the effectiveness assessment on risk management and internal control of the Company and its subsidiaries was conducted using the "Internal Control and Risk Management – A Basic Framework" issued by Hong Kong Institute of Certified Public Accountants as guidance, and in accordance with requirements of the "Standard Regulations on Corporate Internal Control" jointly issued by five PRC ministries and commissions including the Ministry of Finance of the PRC, specifically covering various material aspects including operational control, finance control, compliance control and risk management. Based on the assessment results, the Audit Committee of the Board prepared the draft 2022 assessment report on internal control which was approved on the thirty-third meeting of the ninth session of the Board. The 2022 assessment report on internal control of the Board concluded that no material and important internal control defect was found from the assessment, and therefore confirmed that the Company has fully complied with provisions of risk management and internal control set out in the CG Code in 2022, and confirmed that the existing risk management and internal control systems of the Company was in line with the relevant PRC laws and requirements of securities regulators, and it could effectively perform the role of controlling and preventing in areas of major enterprise risks, serious management fraud and important procedures. The Board and the Audit Committee considered that the Company has adequate resources, qualification and experience of employees in accounting and financial reporting, and that the relevant employees have received adequate trainings, and the Company has adequate budget. The Company handled and disseminated the inside information according to the information disclosure management system and the stipulated procedures to ensure that inside information remains confidential until the disclosure of such information is appropriately approved, and the dissemination of such information is efficiently and consistently made after obtaining the appropriate approval.

In 2022, the Company has performed its duties in accordance with the latest requirements of Hong Kong Listing Rules on risk management and internal control of listed companies. The Board considers that the risk management and internal control systems of the Group in 2022 was effective and adequate.

### REMUNERATION AND APPRAISAL COMMITTEE

The Company has set up a Remuneration and Appraisal Committee. The Remuneration and Appraisal Committee is a specialised committee of the Board established under the resolution of the general meeting of the Company. It is responsible for studying the performance appraisal standards for the Directors and the senior management of the Company, performing appraisal and giving its advice. It is also responsible for research and review of the remuneration policy and scheme for the Directors and the senior management of the Company. The Remuneration and Appraisal Committee is accountable to the Board. It has reviewed the current remuneration policy and proposed to the Board to improve the remuneration policy and system. After each meeting, the Committee will report to the Board. None of the Directors shall participate in the determination of his/her own remuneration.

The primary terms of reference of the Remuneration and Appraisal Committee of the Board include:

- (1) to make recommendations to the Board on the remuneration's policy and developing procedure for Directors and senior management;
- (2) to formulate the remuneration management measures and remuneration packages for each Director (including non-executive Directors), employee representative Supervisor and senior management, and to propose suggestions to the Board;
- (3) to review and approve the management's remuneration proposals with reference to the corporate goals and objectives resolved by the Board;
- (4) to review and approve compensation payable to executive Directors and senior management for any loss or termination of office or appointment;
- (5) to supervise the execution of the Company's remuneration system; and
- (6) to review duty performance by Directors and senior management and carry out performance appraisal of them.

The terms of reference of the Remuneration and Appraisal Committee are published on the Company's webpage: <http://www.hdpi.com.cn/>. During the reporting period, the Remuneration and Appraisal Committee was chaired by independent non-executive Director Mr. Wang Yuesheng, and is comprised of members including non-executive Director Mr. Zhang Zhiqiang and Mr. Wang Xiaobo, independent non-executive Directors Mr. Li Xingchun and Mr. Li Menggang.

## CORPORATE GOVERNANCE REPORT (CONTINUED)

The Remuneration and Appraisal Committee held three meetings on 23 March 2022. All Directors who were members of the Committee were present at all of the meetings in person instead of by proxy. During the reporting period, the Remuneration and Appraisal Committee considered and approved the plans for review and payment of annual salaries of the general manager and other senior management members for 2021, the resolution on confirmation of the remuneration package of Directors and Supervisors for 2021 and submission to the general meeting for consideration, the resolution on the Work Plan on Tenure System and Contract-based Management of Management Members of Huadian Power International Corporation Limited, and considered the work report of the Remuneration and Appraisal Committee for 2021.

The Remuneration and Appraisal Committee reviewed and monitored the training and continuous professional development of Directors and senior management of the Company during the reporting period. The remuneration of the executive Directors, the General Manager and other senior management members of the Company were determined based on their calibre, education level and commitment to work with reference to the Company's results and profit, industry comparables and market conditions.

### ANNUAL SALARY SCHEME FOR THE DIRECTORS IN 2022

In order to provide the necessary safeguard for the accomplishment of the strategic development targets for the year 2022 and to ensure completion of the annual missions of the Board, the Company linked the annual salary scheme for the Directors with the annual operating performance of the Company with reference to the Company's actual circumstances.

### ALLOWANCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

In 2022, the Company paid each of the independent non-executive Directors, namely, Mr. Feng Zhenping, Mr. Li Xingchun, Mr. Li Menggang and Mr. Wang Yuesheng, an independent Director's allowance of RMB140,000.

### ANNUAL SALARY SCHEME FOR THE GENERAL MANAGER IN 2022

In order to provide the necessary safeguard for the accomplishment of the strategic development targets for the year 2022 and to ensure completion of the annual plans of the Company, the Company linked the annual salary scheme for the General Manager of the Company with the annual operating performance of the Company with reference to the Company's actual circumstances.

Based on the Company's development strategies, external environmental changes, annual performance results, salary level of employees and other factors, and with reference to the salary level of the listed peers and the Company's actual circumstances, the Remuneration and Appraisal Committee determined the annual salary plan for the Directors and General Manager of the Company in 2022 in line with principles such as integration of incentives and constraints, priority to efficiency while giving considerations to impartiality, and combination of material and ideological incentives, subject to the approval of the general meeting or Board before implementation of such plan.

### MOTIVATION AND APPRAISAL METHODS FOR OTHER SENIOR MANAGEMENT IN 2022

In order to secure the accomplishment of the strategic development targets in 2022 and to ensure completion of the annual missions of the Board, the Remuneration and Appraisal Committee formulated the motivation and assessment methods for other senior management members (including the Deputy General Managers, Chief Financial Officer and Secretary to the Board) of the Company in 2022 with reference to the Company's actual circumstances, and the annual salary scheme for the General Manager of the Company, and in line with the performance based and integration of incentives and constraints principles. The motivation and appraisal methods are carried out by the Remuneration and Appraisal Committee upon approval of the Board.

### EMPLOYEE REMUNERATION POLICY FOR THE GROUP

As of 31 December 2022, the total number of the Group's official staff amounted to 24,755. Consistently complying with State regulations, the Group determines the salary of the employees at various levels based on its economic benefits, and adheres to the concept of "identify talents through performance, select talents through competition and award talents through remuneration", thus establishing the objective, impartial, scientific and effective remuneration distribution mechanism and performance appraisal mechanism for its employees.

## CORPORATE GOVERNANCE REPORT (CONTINUED)

### Remuneration (allowance) of Directors, Supervisors and senior management of the Company in 2022

Name	Position in the Company	Remuneration (allowance) (RMB'000)
Ding Huande	Former Chairman, Former Executive Director	19.95
Dai Jun	Chairman, Executive Director	–
Ni Shoumin	Vice Chairman, Non-executive Director	–
Peng Xingyu	Non-executive Director	–
Luo Xiaoqian	Executive Director, Former General Manager	92.64
Zhang Zhiqiang	Non-executive Director	–
Li Pengyun	Non-executive Director	–
Wang Xiaobo	Non-executive Director	–
Feng Rong	Former Executive Director, Former Chief Financial Officer	40.74
Li Guoming	Executive Director, Chief Financial Officer	40.63
Feng Zhenping	Independent Non-executive Director	14
Li Xingchun	Independent Non-executive Director	14
Li Menggang	Independent Non-executive Director	14
Wang Yuesheng	Independent Non-executive Director	14
Chen Wei	Chairman of the Supervisory Committee	–
Ma Jing'an	Supervisor	81.51
Zhang Peng	Employee Supervisor	75.07
Chen Bin <sup>Note 2</sup>	Deputy General Manager, Former General Legal Counsel	83.31
Peng Guoquan	Deputy General Manager	83.31
Song Jingshang	Former Chief Engineer	39.78
Qin Jiehai	Deputy General Manager, Secretary to the Board, General Legal Counsel, Company Secretary	68.26
Wu Yuejie	Deputy General Manager	80.65

Note 1: Above remuneration (allowance) are all before individual income tax.

Note 2: As Chen Bin was appointed as the General Manager of the Company on 2 March 2023, the remuneration he received in 2022 was for the position of Deputy General Manager. Please refer to the Subsequent Events in this report for details.

## NOMINATION COMMITTEE

On 28 March 2012, the Company set up a Nomination Committee, which is a body specifically set up by the Board according to the resolution of the general meeting, and mainly responsible for making recommendations to the Board on the procedures, standards and qualifications of electing and appointing Directors and senior management of the Company.

In 2022, the Nomination Committee strictly implemented the nomination policy of the Company. The standards relating to the selection and recommendation of Director candidates include the Director's appropriate professional knowledge and background, personal ethics, as well as their time commitment. In order to achieve sustainable and balanced development, the Company will take into account many aspects concerning the diversity of members of the Board, including but not limited to gender, age, cultural and educational background, race, professional expertise, skills, knowledge and terms of service, when determining the composition of the Board.

If the term of office of the Board expires or the Board proposes to add new Directors or to fill vacancies of the Board, the Nomination Committee of the Board shall recommend to the Board the candidates. Upon being considered and approved by the Board, relevant proposals will be submitted at the general meeting of the Company for approval. Other Director candidates other than the independent non-executive Director shall be nominated by the Board, the Supervisory Committee, shareholders individually or collectively holding over 3% of the total voting shares of the Company, and elected at the general meeting of the Company. The candidates for the independent non-executive Director shall be nominated by the Board, the Supervisory Committee of the Company, shareholders individually or collectively holding over 1% of the total voting shares of the Company, and elected at the general meeting of the Company.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The primary terms of reference of the Nomination Committee include:

- (1) to regularly review the structure, size and composition of the Board;
- (2) to consider the criteria and procedures for the selection of Directors and senior management and the appointment plan, and to provide recommendations on it;
- (3) to verify the personal information of all the candidates for election or re-election of the Company's Directors and senior management of the Company, and submit the verification result to the Board or the general meeting of the Company for reference;
- (4) in case of resignation or removal of a Director, to present the Board the reasons for such resignation or removal and other matters that need to be specified to shareholders of the Company; in case of resignation or removal of a senior management member, to present the Board the reasons for such resignation or removal;
- (5) to assess the independence of the independent non-executive Director; and
- (6) to formulate and review the standards for establishing the special committees under the Board and provide proposed amendments to the Board when appropriate.

During the reporting period, the Nomination Committee of the Company is chaired by independent non-executive Director Mr. Feng Zhenping, and is comprised of members including executive Director Mr. Luo Xiaoqian, non-executive Director Mr. Wang Xiaobo, independent non-executive Directors Mr. Li Xingchun and Mr. Wang Yuesheng.

The Nomination Committee held four meetings on 23 March, 31 May, 15 June and 28 July 2022 respectively. All Director members of the committee attended the meetings in person instead of by proxy. During the reporting period, the Nomination Committee considered and approved the resolution on the appointment of the deputy general manager of the Company, the resolution on the appointment of the secretary to the Board, the company secretary and the general counsel of the Company, the resolution on the appointment of the representative of securities affairs of the Company, the resolution on the appointment of the chief financial officer, and the resolution on the nomination of the Company's Director candidates and submission to the general meeting for consideration, and considered the work report of the Nomination Committee for 2021.

## Diversity

### Diversity of Directors

Based on the Company's existing business model and specific needs, the current composition of the Board satisfies the Board Diversity Policy in 2022. According to the goal of the Board diversity policy, it is expected that the Board will have one or more female members before the 2023 annual general meeting, provided that (i) the Director candidates meet the requirements on the ability and experience of a Director, as confirmed by the performance of comprehensive investigation and audit procedures under reasonable standards; and (ii) in considering the appointments, there shall be assurance that the Director candidates will earnestly perform their responsibilities and act according to the principle of safeguarding the best interests of the Company and its shareholders as a whole.

In order to provide more potential female candidates for the Board of Directors, the Company will internally identify and train capable, experienced and competent female employees, and invest more resources in training, so as to form an effective channel for promoting potential Director successors with gender diversity. In evaluating the best composition of the Board of Directors, the Nomination Committee will consider the Board diversity from many aspects, including but not limited to gender, age, culture, educational background, race, professional experience, skills, knowledge and service term.

### Diversity of Employees

		<b>Data for 2022</b> <i>(person)</i>
Total number of regular employees		24,755
By gender	Male	19,226
	Female	5,529

As at 31 December 2022, the male and female regular employees of the Group accounted for 78% and 22% respectively. The Group implemented the principle of fair employment and adopted the merit-based recruitment method, without discrimination. The Group attached importance to the principles of fairness, justice and openness in recruiting and promoting suitable employees, and never discriminated against employees on the grounds of gender.

The Board implemented and reviewed the Diversity Policy annually in accordance with the Hong Kong Listing Rules to ensure its effectiveness from time to time.



## CORPORATE GOVERNANCE REPORT (CONTINUED)

### DIVIDEND DISTRIBUTION POLICY

The Company implements active profit distribution measures, gives priority to cash dividends and pays attention to the reasonable investment returns to the investors. The Company shall distribute cash dividends provided that the Company has no significant cash outlay required for its operation and development in the foreseeable future, that the net profit for the year is positive, that the accumulated and undistributed profit at the end of the year is positive, that the cash flow generated from operating activities is positive and that the Company's normal operation will not be affected. In the profit distribution, the cash dividends shall account for at least 40%.

On 28 May 2021, the Shareholders' Return Plan (2020-2022) was considered and approved at the 2021 third extraordinary general meeting by adhering to the principals of getting a reasonable return on investment for shareholders while maintaining the overall interest of all shareholders, the long-term prospect of the Company and reasonable capital needs, so as to implement a sustainable, stable and proactive profit distribution policy. In particular in 2020-2022, the profit distributed in cash by the Company in principle will not be less than 50% of the distributable profits achieved in the year as indicated in the consolidated statements, and the dividend per share will not be less than RMB0.2.

### AUDITORS

During the year ended 31 December 2022, the Company paid an aggregate of RMB8.20 million of audit service fees to its auditors, Baker Tilly China Certified Public Accountants (Special General Partnership) and Baker Tilly Hong Kong Limited, including fees for audit of internal control provided by Baker Tilly China Certified Public Accountants (Special General Partnership) to the Company. The audit service fees were considered by the Audit Committee and the Board and were approved at the annual general meeting of the Company.

### SHAREHOLDERS' RIGHTS

Shareholders individually or jointly holding 10% or more of the Company's shares may request the convening of an extraordinary general meeting by signing one or more counterpart requisition(s) in writing stating the meeting agenda and requiring the Board to convene the meeting. The Board shall give a reply in writing, as to whether or not it agrees to convene the meeting within 10 days after receiving the aforementioned requisition.

Shareholders individually or jointly holding 3% or more of the Company's shares shall have the right to submit proposals at a general meeting of the Company. Shareholders individually or jointly holding 3% or more of the Company's shares may submit extraordinary proposals to the convener in writing 10 days prior to the general meeting. The convener shall issue a supplemental notice of the general meeting and announce the contents of such extraordinary proposals within 2 days after receipt thereof.

### INVESTOR RELATIONS

The Company undertakes that it shall make impartial disclosure and full and transparent reporting. The ultimate duty of the Chairman is to ensure effective communication with the investors and the Board's understanding of the opinions of substantial shareholders. In this regard, the Chairman shall meet with the shareholders. The Secretary to the Board is responsible for the day-to-day contacts between the Board and substantial shareholders.

The previous annual general meeting of the Company was held in Beijing on 29 June 2022, at which the Chairman of the Board attended the meeting and answered questions. At the annual general meeting, each matter was put forward in form of a separate proposal and voted by way of poll.

The senior management of the Company shall preside over presentations and attend the meetings with institutional investors and financial analysts for intercommunication in respect of the Company's results and business prospects, which is a regular function of investor relations. Investors and the public may access the Company's website which also sets out the detailed information on the Company's businesses.

## CORPORATE GOVERNANCE REPORT (CONTINUED)

For any enquiry addressed to the Board, investors can contact the Board through shareholder hotlines (83567905) or by email (hdpi@hdpi.com.cn) or by fax (8610-83567963), and shareholders may raise questions at annual or extraordinary general meetings of the Company. The Company maintained smooth channels of communication with investors by reception of shareholders, roadshow and reverse roadshow activities, online communication via telephone and Internet, etc., to answer inquiries from investors in a timely and accurate manner. During the reporting period, the Company assessed and reviewed various communication channels and believed that the above policy was effectively implemented in 2022.

During the Reporting Period, there was no change in the Articles of Association of the Company, and Shareholders may make relevant inquiries on the websites of the Company and the Stock Exchange.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE POLICIES AND PERFORMANCE

The Company complied with the “comply or explain” provisions set out in the Environmental, Social and Governance Reporting Guide and other relevant laws and regulations in 2022. The information relating to the environmental, social and governance policies and performance of the Company in 2022 is set out in the Environmental, Social and Governance Report of the Company.

By order of the Board  
**Huadian Power International Corporation Limited**  
**Dai Jun**  
*Chairman*

Beijing, the PRC  
29 March 2023

As at the date of this report, the Board comprises:

*Dai Jun (Chairman, Executive Director), Ni Shoumin (Vice Chairman, Non-executive Director), Peng Xingyu (Non-executive Director), Luo Xiaoqian (Executive Director), Zhang Zhiqiang (Non-executive Director), Li Pengyun (Non-executive Director), Wang Xiaobo (Non-executive Director), Li Guoming (Executive Director), Feng Zhenping (Independent Non-executive Director), Li Xingchun (Independent Non-executive Director), Li Menggang (Independent Non-executive Director) and Wang Yuesheng (Independent Non-executive Director).*

# CORPORATE INFORMATION

## CORPORATE INFORMATION

<b>Legal address</b>	14800 Jingshi Road Jinan, Shandong Province The People's Republic of China
<b>Authorised representatives</b>	Dai Jun Qin Jiehai
<b>Joint Company Secretaries</b>	Qin Jiehai Ng Ka Man
<b>Hong Kong share registrar and transfer office</b>	Hong Kong Registrars Limited 17th Floor Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong
<b>Auditors</b>	Baker Tilly Hong Kong Limited Registered Public Interest Entity Auditors 2nd Floor, 625 King's Road, North Point, Hong Kong  Baker Tilly China Certified Public Accountants (Special General Partnership) Building 12, Foreign Cultural and Creative Garden, No. 19 Chegongzhuang West Road, Haidian District, Beijing The People's Republic of China
<b>Legal advisers to the Company as to Hong Kong law</b>	Fangda Partners 26/F, One Exchange Square, 8 Connaught Place Central, Hong Kong PRC
<b>as to PRC law</b>	King & Wood Mallesons 18th Floor, East Tower, World Financial Center, 1 Dongsanhuan Zhonglu, Chaoyang District, Beijing The People's Republic of China

## COMPANY PUBLICATIONS

The Company's 2022 annual report was published in April 2023. Copies of the annual report are available for inspection at:

<b>PRC</b>	Huadian Power International Corporation Limited No. 2 Xuanwumennei Street, Xicheng District, Beijing Tel: (8610) 8356-7888 Fax: (8610) 8356-7963
<b>Hong Kong</b>	Toppan Merrill Limited 8th Floor, Gloucester Tower, The Landmark, 15 Queen's Road Central, Central, Hong Kong Tel: (852)2973-8600 Fax: (852)2877-9978

# INDEPENDENT AUDITOR'S REPORT



TO THE SHAREHOLDERS OF  
**HUADIAN POWER INTERNATIONAL CORPORATION LIMITED**  
*(Incorporated in the People's Republic of China with limited liability)*

## OPINION

We have audited the consolidated financial statements of Huadian Power International Corporation Limited (the "**Company**") and its subsidiaries (together the "**Group**") set out on pages 48 to 138, which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("**IFRSs**") issued by the International Accounting Standards Board ("**IASB**") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

## BASIS FOR OPINION

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

## KEY AUDIT MATTERS

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

### Accounting for the Group's interests in associates

Key audit matter	How our audit addressed the key audit matter
<p>As set out in note 22 to the consolidated financial statements, the Group's associates are principally engaged in generation and sale of electricity; production and sale of coal; property development and provision of corporate financial service.</p> <p>The Group's share of results of associates for the year ended 31 December 2022 and the Group's interests in associates at that date are considered material in the context of the Group's consolidated financial statements.</p> <p>We identified the accounting for the Group's interests in associates as a key audit matter due to the significance of these interests to the Group's consolidated financial statements as a whole.</p>	<p>Our procedures in relation to the accounting for the Group's interests in associates included:</p> <ul style="list-style-type: none"> <li>• Obtaining an understanding, evaluating the design, and testing the operating effectiveness of controls over the Group's investing activities;</li> <li>• Evaluating the competence, capability and objectivity of the component auditors of material associates (the "component auditors");</li> <li>• Sending detailed group audit instructions to the component auditors in relation to full scope audit on those material associates;</li> <li>• Discussing with component auditors about their assessment of risks and identification of areas of audit focus and evaluating the appropriateness of their planned work procedures;</li> <li>• Reviewing component auditors documentation of identified areas of audit focus and discussing with the component auditors on their audit findings and conclusions; and</li> <li>• Obtaining an understanding of other associates by reviewing their financial statements and discussing with the Group's management about the financial performance and critical judgements for adjustments to conform to the Group's accounting policies.</li> </ul>



## INDEPENDENT AUDITOR'S REPORT (CONTINUED)

### KEY AUDIT MATTERS (Continued)

#### Impairment review of goodwill and property, plant and equipment with impairment indicators

Key audit matter	How our audit addressed the key audit matter
<p>Management performed an impairment review on goodwill and property, plant and equipment with impairment indicators, which are allocated to the cash generating units ("CGUs") of power generation, after taking into account the Group's future operating plans for power generation and the outlook for the industry.</p> <p>The recoverable amount of the relevant assets or the CGUs has been determined based on value in use calculation through discounting the estimated future cash flows generated from the relevant assets or the CGUs to the present value. In estimating the recoverable amounts, management is required to consider all relevant factors with reasonable and supportable assumptions to make significant accounting estimations.</p> <p>We identified the impairment review of goodwill and property, plant and equipment with impairment indicators as a key audit matter due to significant accounting estimations involved in estimating the recoverable amounts of the relevant assets or CGUs arising thereof.</p>	<p>Our procedures in relation to impairment review of the goodwill and property, plant and equipment with impairment indicators included:</p> <ul style="list-style-type: none"> <li>• Obtaining an understanding, evaluating the design, and testing the operating effectiveness of controls over the management's key process of the Group's impairment review;</li> <li>• Evaluating the appropriateness of the management's identification of impairment indicators, if any, with reference to the internal and external sources of information;</li> <li>• Assessing the appropriateness of the methodology adopted by management in its preparation of the discounted cash flow forecasts, whether these were prepared in a manner consistent with the requirement of with prevailing accounting standards and how the external valuer's work was relied on by management;</li> <li>• Evaluating the competence, capability and objectivity of the external valuers engaged by the management;</li> <li>• Comparing the key assumptions used in the discounted cash flow forecasts, including the future sales volumes and selling prices, future fuel prices and discount rate applied, with the historical performance of each CGU, management's approved budgets and forecasts and industry and other externally available information;</li> <li>• Performing sensitivity analysis of the key assumptions described by assessing the changes to the recoverable amounts of the CGUs resulting from change in these assumptions; and</li> <li>• Verifying the mathematical accuracy of the calculation in the impairment review.</li> </ul>

### OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

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

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

### RESPONSIBILITIES OF THE DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

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

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion solely to you, as a body, in accordance with our agreed terms of our engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSA's will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSA's, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with 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, actions taken to eliminate threats or safeguards applied.

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

The engagement director on the audit resulting in this independent auditor's report is Gao Yajun.

**Baker Tilly Hong Kong Limited**  
Certified Public Accountants

Hong Kong, 29 March 2023  
**Gao Yajun**  
Practising certificate number P06391

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000 (Restated)
<b>Turnover</b>	5	<b>105,960,339</b>	101,168,876
<b>Operating expenses</b>			
Fuel costs		<b>(82,865,965)</b>	(74,689,441)
Costs of coal sold		<b>(1,227,745)</b>	(11,352,083)
Depreciation and amortisation		<b>(10,037,498)</b>	(11,505,464)
Repairs, maintenance and inspection		<b>(3,892,007)</b>	(3,785,640)
Personnel costs	6	<b>(7,153,546)</b>	(6,958,393)
Administration expenses		<b>(2,696,380)</b>	(4,827,531)
Taxes and surcharges	7	<b>(871,948)</b>	(976,501)
Other operating expenses	11(b)	<b>(1,399,244)</b>	(1,515,306)
		<b>(110,144,333)</b>	(115,610,359)
<b>Operating loss</b>		<b>(4,183,994)</b>	(14,441,483)
Investment income	8	<b>8,673</b>	6,565,017
Other revenue	9	<b>1,104,893</b>	1,370,714
Other net income	9	<b>773,360</b>	1,359,670
Interest income from bank deposits		<b>84,376</b>	136,259
Fair value gain/(loss) on financial assets at fair value through profit or loss		<b>10,322</b>	(37,228)
Finance costs	10	<b>(4,131,194)</b>	(4,352,826)
Share of results of associates and joint ventures		<b>4,796,637</b>	2,487,413
<b>Loss before taxation</b>	11(a)	<b>(1,536,927)</b>	(6,912,464)
Income tax credit	14	<b>614,821</b>	1,774,724
<b>Loss for the year</b>		<b>(922,106)</b>	(5,137,740)
<b>Other comprehensive income:</b>			
<i>Items that may be subsequently reclassified to profit or loss:</i>			
Share of other comprehensive income of investees accounted for under the equity method (with nil tax effect)		<b>34,746</b>	38,391
<i>Items that will not be reclassified to profit or loss:</i>			
Share of other comprehensive (expense)/income (non-recycling) of investees accounted for under the equity method (with nil tax effect)		<b>(7,365)</b>	41,412
<b>Other comprehensive income for the year (net of tax)</b>	15	<b>27,381</b>	79,803
<b>Total comprehensive expense for the year</b>		<b>(894,725)</b>	(5,057,937)
<b>Loss for the year attributable to:</b>			
Equity holders of the Company		<b>(30,791)</b>	(3,255,963)
Non-controlling interests		<b>(891,315)</b>	(1,881,777)
		<b>(922,106)</b>	(5,137,740)
<b>Total comprehensive expense for the year attributable to:</b>			
Equity holders of the Company		<b>(3,755)</b>	(3,176,363)
Non-controlling interests		<b>(890,970)</b>	(1,881,574)
		<b>(894,725)</b>	(5,057,937)
<b>Basic and diluted loss per share</b>	16	<b>RMB(0.094)</b>	RMB(0.434)

The accompanying notes form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000 (Restated)
<b>Non-current assets</b>			
Property, plant and equipment	17	128,171,003	125,638,139
Right-of-use assets	18(a)	5,979,607	6,497,402
Construction in progress	19	14,842,864	15,804,052
Investment properties		71,405	61,828
Intangible assets	20	1,939,859	1,900,627
Goodwill	21	1,032,483	1,199,701
Interests in associates and joint ventures	22	41,482,010	37,387,135
Financial assets at fair value through profit or loss	23	370,055	330,064
Other non-current assets	24	823,936	1,762,095
Deferred tax assets	35(b)	2,858,796	2,289,323
		<b>197,572,018</b>	192,870,366
<b>Current assets</b>			
Inventories	26	3,937,380	6,130,892
Trade debtors and bills receivable	27	12,389,467	9,265,280
Deposits, other receivables and prepayments	28	6,521,277	7,554,257
Tax recoverable	35(a)	99,832	552,862
Restricted deposits	29	374,824	145,463
Cash and cash equivalents	30	5,907,615	5,945,067
		<b>29,230,395</b>	29,593,821
<b>Current liabilities</b>			
Bank loans	31(a)	28,838,057	29,968,493
Loans from shareholders	31(b)	1,358,019	617,054
State loans	31(c)	1,781	1,733
Other loans	31(d)	7,450,216	5,491,491
Short-term debentures payable	31(e)	–	2,023,880
Long-term debentures payable – current portion	31(f)	2,442,132	5,861,218
Amount due to the parent company		11,245	27,599
Lease liabilities	18(b)	218,402	240,830
Trade creditors and bills payable	33	16,606,208	14,793,426
Other payables and contract liabilities	34	6,088,796	6,431,258
Tax payable	35(a)	76,954	205,952
		<b>63,091,810</b>	65,662,934
<b>Net current liabilities</b>		<b>(33,861,415)</b>	(36,069,113)
<b>Total assets less current liabilities</b>		<b>163,710,603</b>	156,801,253



## CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000 (Restated)
<b>Non-current liabilities</b>			
Bank loans	31(a)	49,551,462	45,353,610
Loans from shareholders	31(b)	4,395,860	5,579,400
State loans	31(c)	44,880	45,384
Other loans	31(d)	5,747,581	5,703,716
Long-term debentures payable	31(f)	23,572,927	16,078,002
Convertible bonds – liability component	32	1,461,245	1,433,637
Lease liabilities	18(b)	61,492	327,557
Provisions	37	59,733	64,242
Deferred government grants		1,422,925	1,266,742
Deferred income	36	2,871,409	2,896,818
Deferred tax liabilities	35(b)	1,482,251	1,690,353
Retirement benefit obligations		9,929	15,078
		<b>90,681,694</b>	80,454,539
<b>Net assets</b>			
		<b>73,028,909</b>	76,346,714
<b>Capital and reserves</b>			
Share capital	38(b)	9,869,858	9,869,858
Perpetual capital securities	38(e)	23,506,213	22,473,349
Reserves	38(c)	28,054,481	31,451,229
<b>Equity attributable to equity holders of the Company</b>			
		<b>61,430,552</b>	63,794,436
<b>Non-controlling interests</b>			
		<b>11,598,357</b>	12,552,278
<b>Total equity</b>			
		<b>73,028,909</b>	76,346,714

The consolidated financial statements on pages 48 to 138 were approved and authorised for issue by the board of directors on 29 March 2023 and are signed on its behalf by:

**Dai Jun**  
Director

**Li Guoming**  
Director

The accompanying notes form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2022 (Expressed in Renminbi)

	Attributable to equity holders of the Company											
	Share capital RMB'000 (note 38(b))	Capital reserve RMB'000 (note 38(c)(i))	Statutory surplus reserve RMB'000 (note 38(c)(ii))	Discretionary surplus reserve RMB'000	Revaluation reserve RMB'000 (note 38(c)(iii))	Fair value reserve RMB'000 (note 38(c)(iv))	Retained profits RMB'000	Convertible bonds reserve RMB'000 (note 38(c)(v))	Perpetual capital securities RMB'000 (note 38(e))	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
<b>Balance at 1 January 2021</b>	9,862,977	15,365,069	3,977,820	68,089	44,726	(13,610)	19,195,115	-	24,645,175	73,145,361	21,247,748	94,393,109
Loss for the year (Restated)	-	-	-	-	-	-	(4,279,224)	-	1,023,261	(3,255,963)	(1,881,777)	(5,137,740)
Other comprehensive income for the year (note 15)	-	-	-	-	-	79,600	-	-	-	79,600	203	79,803
<b>Total comprehensive expense for the year (Restated)</b>	-	-	-	-	-	79,600	(4,279,224)	-	1,023,261	(3,176,363)	(1,881,574)	(5,057,937)
Issue of shares	6,881	22,914	-	-	-	-	-	-	-	29,795	-	29,795
Issue of convertible bonds	-	-	-	-	-	-	-	41,250	-	41,250	-	41,250
Acquisition of non-controlling interests	-	(338,008)	-	-	-	-	-	-	-	(338,008)	(3,308,431)	(3,646,439)
Capital injection from non-controlling interests	-	-	-	-	-	-	-	-	-	-	705,696	705,696
Issue of perpetual capital securities	-	-	-	-	-	-	-	-	4,496,319	4,496,319	-	4,496,319
Redemption of perpetual capital securities	-	(19,976)	-	-	-	-	-	-	(6,630,024)	(6,650,000)	-	(6,650,000)
Dividends recognised as distribution (note 38(a))	-	-	-	-	-	-	(2,465,744)	-	-	(2,465,744)	-	(2,465,744)
Dividends declared to non-controlling interests	-	-	-	-	-	-	-	-	-	-	(1,381,129)	(1,381,129)
Distributions payable to holders of perpetual capital securities (note 38(e))	-	-	-	-	-	-	-	-	(1,061,382)	(1,061,382)	-	(1,061,382)
Appropriation of general reserve	-	-	504,620	-	-	-	(504,620)	-	-	-	-	-
Appropriation of specific reserve	-	-	61,105	-	-	-	(61,105)	-	-	-	-	-
Utilisation of specific reserve	-	-	(48,821)	-	-	-	48,821	-	-	-	-	-
Acquisition of subsidiaries	-	-	-	-	-	-	-	-	-	-	1,851,585	1,851,585
Loss of control of subsidiaries	-	(76,792)	(173,885)	-	-	-	-	-	-	(250,677)	(4,687,569)	(4,938,246)
Share of reserve of associates	-	23,885	-	-	-	-	-	-	-	23,885	-	23,885
Others	-	-	-	-	-	-	-	-	-	-	5,952	5,952
<b>Balance at 31 December 2021 (Restated)</b>	9,869,858	14,977,092	4,320,839	68,089	44,726	65,990	11,933,243	41,250	22,473,349	63,794,436	12,552,278	76,346,714

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

	Attributable to equity holders of the Company											
	Share capital RMB'000 (note 38(b))	Capital reserve RMB'000 (note 38(c)(i))	Statutory surplus reserve RMB'000 (note 38(c)(ii))	Discretionary surplus reserve RMB'000	Revaluation reserve RMB'000 (note 38(c)(iii))	Fair value reserve RMB'000 (note 38(c)(iv))	Retained profits RMB'000	Convertible bonds reserve RMB'000 (note 38(c)(v))	Perpetual capital securities RMB'000 (note 38(e))	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
<b>Balance at 1 January 2022 (Restated)</b>	9,869,858	14,977,092	4,320,839	68,089	44,726	65,990	11,933,243	41,250	22,473,349	63,794,436	12,552,278	76,346,714
Loss for the year	-	-	-	-	-	-	(931,666)	-	900,875	(30,791)	(891,315)	(922,106)
Other comprehensive income for the year (note 15)	-	-	-	-	-	27,036	-	-	-	27,036	345	27,381
Total comprehensive expense for the year	-	-	-	-	-	27,036	(931,666)	-	900,875	(3,755)	(890,970)	(894,725)
Capital injection from non-controlling interests	-	-	-	-	-	-	-	-	-	-	13,860	13,860
Issue of perpetual capital securities	-	-	-	-	-	-	-	-	7,494,189	7,494,189	-	7,494,189
Redemption of perpetual capital securities	-	(45,497)	-	-	-	-	-	-	(6,454,503)	(6,500,000)	-	(6,500,000)
Dividends recognised as distribution (note 38(a))	-	-	-	-	-	-	(2,467,465)	-	-	(2,467,465)	-	(2,467,465)
Dividends declared to non-controlling interests	-	-	-	-	-	-	-	-	-	-	(76,811)	(76,811)
Distributions payable to holders of perpetual capital securities (note 38(e))	-	-	-	-	-	-	-	-	(907,697)	(907,697)	-	(907,697)
Appropriation of general reserve	-	-	330,915	-	-	-	(330,915)	-	-	-	-	-
Appropriation of specific reserve	-	-	156,634	-	-	-	(156,634)	-	-	-	-	-
Utilisation of specific reserve	-	-	(89,755)	-	-	-	89,755	-	-	-	-	-
Share of reserve of associates	-	20,844	-	-	-	-	-	-	-	20,844	-	20,844
<b>Balance at 31 December 2022</b>	<b>9,869,858</b>	<b>14,952,439</b>	<b>4,718,633</b>	<b>68,089</b>	<b>44,726</b>	<b>93,026</b>	<b>8,136,318</b>	<b>41,250</b>	<b>23,506,213</b>	<b>61,430,552</b>	<b>11,598,357</b>	<b>73,028,909</b>

The accompanying notes form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000 (Restated)
<b>Cash flows from operating activities</b>			
Cash received from customers and others		126,904,886	119,015,346
Cash paid to suppliers, employees and others		(117,411,666)	(124,286,464)
<b>Cash generated from/(used in) operations</b>		<b>9,493,220</b>	<b>(5,271,118)</b>
Interest paid		(4,235,320)	(4,168,760)
PRC enterprise income tax refunded/(paid)	35(a)	161,278	(1,331,681)
<b>Net cash generated from/(used in) operating activities</b>		<b>5,419,178</b>	<b>(10,771,559)</b>
<b>Cash flows from investing activities</b>			
Payment of purchase of property, plant and equipment, construction in progress, investment properties, land use rights and intangible assets		(10,423,076)	(12,824,517)
Proceeds from disposal of property, plant and equipment, land use rights and intangible assets		996,125	622,010
Net cash outflows for the acquisition of subsidiaries	47	-	(3,198,712)
Net cash inflow from loss of control of subsidiaries	48	-	10,583,718
Proceeds from disposal of associates	22(d)	-	2,759,101
Payment of investments in associates		(83,603)	(7,806,938)
Payment for acquiring additional equity interest in subsidiaries		-	(4,620,663)
Payment of purchase of financial assets at fair value through profit or loss		(42,609)	(82,365)
Proceeds from disposal of financial assets at fair value through profit or loss		13,071	4,169
Interest received		90,305	106,488
Withdrawal of restricted deposits		73,924	102,490
Placement of restricted deposits		(303,285)	(62,754)
Dividends received		1,089,940	609,447
Other investing activities		80,215	68,742
<b>Net cash used in investing activities</b>		<b>(8,508,993)</b>	<b>(13,739,784)</b>



## CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000 (Restated)
<b>Cash flows from financing activities</b>			
Debtures			
– Net proceeds from debtures		9,500,000	21,600,000
– Repayment of debtures		(7,500,000)	(10,500,571)
Loans			
– Proceeds from loans		87,394,955	82,708,531
– Repayment of loans		(82,907,489)	(60,655,859)
Lease liabilities			
– Repayment of principal portion of the lease liabilities		(304,902)	(1,275,275)
Bills financing			
– Proceeds from bank acceptance bills discounted		3,422,668	596,811
– Repayment of bank acceptance bills		(3,921,017)	(2,133,778)
Capital injection from non-controlling interests		13,860	418,177
Issue of perpetual capital securities		7,500,000	4,500,000
Repayment of perpetual capital securities		(6,500,000)	(6,650,000)
Dividends paid to non-controlling interests		(289,650)	(1,162,658)
Dividends distribution		(2,467,465)	(2,465,744)
Dividends paid to holders of perpetual capital securities		(886,725)	(1,060,780)
Other financing activities		(1,872)	39,152
<b>Net cash generated from financing activities</b>		<b>3,052,363</b>	<b>23,958,006</b>
<b>Net decrease in cash and cash equivalents</b>		<b>(37,452)</b>	<b>(553,337)</b>
<b>Effect of foreign exchange rate on cash and cash equivalents</b>		<b>–</b>	<b>(53)</b>
<b>Cash and cash equivalents at beginning of the year</b>		<b>5,945,067</b>	<b>6,498,457</b>
<b>Cash and cash equivalents at end of the year</b>	30	<b>5,907,615</b>	<b>5,945,067</b>

The accompanying notes form part of these consolidated financial statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022 (Expressed in Renminbi)

## 1 BACKGROUND OF THE COMPANY

Huadian Power International Corporation Limited (the “**Company**”) was established in Shandong province of the People’s Republic of China (the “**PRC**”) on 28 June 1994 as a joint stock limited company and the office address is No. 2 Xuanwumennei Street, Xicheng District, Beijing, the PRC.

The Company and its subsidiaries (together referred to as the “**Group**”) are principally engaged in the generation and sale of electricity, heat and coal. The majority of electricity generated is supplied to the local power grid companies where the power plants are located.

The consolidated financial statements are presented in Renminbi (“**RMB**”), which is the same as the functional currency of the Company.

## 2 SIGNIFICANT ACCOUNTING POLICIES

### (a) Statement of compliance

The consolidated financial statements have been prepared in accordance with all applicable International Financial Reporting Standards (“**IFRSs**”) issued by the International Accounting Standards Board (“**IASB**”). For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and by the Hong Kong Companies Ordinance. A summary of the significant accounting policies adopted by the Group is set out below.

The IASB has issued certain amendments to IFRSs that are first effective or available for early adoption for the current year of the Group. Note 3 provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current year reflected in the consolidated financial statements.

### (b) Basis of preparation of the consolidated financial statements

The consolidated financial statements for the year ended 31 December 2022 comprise the Group and its interests in associates and joint ventures.

At 31 December 2022, the Group had net current liabilities of approximately RMB33,861 million and certain capital commitments (see note 41). The directors of the Company are of the opinion that, taking into account the current operation of the Group; the unutilised banking facilities available to the Group as well as debentures and bonds registered in the PRC interbank debenture market which has not been issued, the Group has sufficient working capital to enable it to meet in full its financial obligations as and when they fall due in the coming twelve months from the end of the reporting period. Therefore, these consolidated financial statements have been prepared on a going concern basis.

The measurement basis used in the preparation of the consolidated financial statements is the historical cost basis except for certain financial instruments, which are measured at fair value (see note 2(l)).

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

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

For financial instruments which are transacted at fair value and a valuation technique that unobservable inputs are to be used to measure fair value in subsequent periods, the valuation technique is calibrated so that at initial recognition the results of the valuation technique equal the transaction price.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

### (b) Basis of preparation of the consolidated financial statements (*Continued*)

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

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

The preparation of the consolidated financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying amounts of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgement made by management in the application of IFRSs that have significant effects on the consolidated financial statements and major sources of estimation uncertainty are discussed in note 4.

### (c) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. Control is achieved when the Group:

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

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

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

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

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

### (c) Subsidiaries and non-controlling interests (*Continued*)

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances and transactions and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity holders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income or expense for the year between non-controlling interests and the equity holders of the Company.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of the Group's relevant components of equity and non-controlling interests within consolidated equity to reflect the change in relative interests, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests. Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognised directly in equity and attributed to equity holders of the Company.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interests, if any, are derecognised. It is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss and calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the equity holders of the Company. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 2(l)) or, when appropriate, the cost on initial recognition of an investment in an associate or a joint venture (see note 2(k)). All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary, i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRSs.



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

### (d) Business combination

A business is an integrated set of activities and assets which includes an input and a substantive process that together significantly contribute to the ability to create outputs. The acquired processes are considered substantive if they are critical to the ability to continue producing outputs, including an organised workforce with the necessary skills, knowledge, or experience to perform the related processes or they significantly contribute to the ability to continue producing outputs and are considered unique or scarce or cannot be replaced without significant cost, effort, or delay in the ability to continue producing outputs.

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

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

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

- deferred tax assets or liabilities and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with IAS 12 *Income Taxes* ("**IAS 12**") and IAS 19 *Employee Benefits* ("**IAS 19**") respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 *Share-based Payment* ("**IFRS 2**") at the acquisition date; and
- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* ("**IFRS 5**") are measured in accordance with that standard.
- lease liabilities are recognised and measured at the present value of the remaining lease payments (as defined in IFRS 16) as if the acquired leases were new leases at the acquisition date, except for leases for which (a) the lease term ends within 12 months of the acquisition date; or (b) the underlying asset is of low value. Right-of-use assets are recognised and measured at the same amount as the relevant lease liabilities, adjusted to reflect favourable or unfavourable terms of the lease when compared with market terms.

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

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (e) Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 2(m)(ii)).

Costs includes expenditures that are directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, including costs of testing whether the related assets is functioning properly and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy (see note 2(w)). Sale proceeds of items that are produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management (such as samples produced when testing whether the asset is functioning properly), and the related costs of producing those items are recognised in the profit or loss. The costs of those items are measured in accordance with the measurement requirements of IAS 2. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodies within the part will flow to the Group and its cost can be measured reliably. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

When proved and probable coal reserves have been determined, costs incurred to develop coal mines are capitalised as part of the cost of the mining structures. When stripping activities can be shown to give rise to future benefits from the mineral property, the Group capitalises the related production stripping costs into property, plant and equipment as mining structure, including production stripping costs for surface mining activities.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

Depreciation is calculated to write off the cost of items of property, plant and equipment, other than mining structures and mining rights, less their estimated residual value, if any, using the straight-line method over their estimated useful lives as follows:

– Buildings	20 – 45 years
– Generators, machinery and equipment	5 – 20 years
– Motor vehicles, furniture, fixtures, equipment and others	5 – 10 years

Mining structures and mining rights are depreciated on a units-of-production method utilising only proved and probable coal reserves in the depletion base.

The Group's mining rights are of sufficient duration (or convey a legal right to renew for sufficient duration) to enable all reserves to be mined in accordance with current production schedules.

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

### (f) Leases

#### As a lessee

All leases are required to be capitalised in the consolidated statement of financial position as right-of-use assets and lease liabilities, but accounting policy choices exist for an entity to choose not to capitalise (i) leases which are short-term leases and/or (ii) leases for which the underlying asset is of low-value. The Group has elected not to recognise right-of-use assets and lease liabilities for low-value assets and leases for which at the commencement date have a lease term less than 12 months. The lease payments associated with those leases have been expensed on straight-line basis over the lease term.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (f) Leases (Continued)

#### As a lessee (Continued)

##### (i) Right-of-use asset

The right-of-use asset should be recognised at cost and would comprise: (i) the amount of the initial measurement of the lease liability (see below for the accounting policy to account for lease liability); (ii) any lease payments made at or before the commencement date, less any lease incentives received; (iii) any initial direct costs incurred by the lessee and (iv) an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories. Under the cost model, the Group measures the right-to-use at cost, less any accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liability.

The recognised right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term as follows:

– Buildings	20 – 45 years
– Generators, machinery and equipment	5 – 20 years
– Land use rights and sea use rights	10 – 70 years
– Motor vehicles, furniture, fixtures, equipment and others	5 – 10 years

##### (ii) Lease liability

The lease liability is recognised at the present value of the lease payments that are not paid at the date of commencement of the lease. The lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the Group's incremental borrowing rate.

The following payments for the right to use the underlying asset during the lease term that are not paid at the commencement date of the lease are considered to be lease payments:

- (i) fixed payments less any lease incentives receivable;
- (ii) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at commencement date;
- (iii) amounts expected to be payable by the lessee under residual value guarantees;
- (iv) the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- (v) payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

Variable lease payments that do not depend on an index or a rate are not included in the measurement of lease liabilities and right-of-use assets, and are recognised as expense in the period in which the event or condition that triggers the payment occurs.

Subsequent to the commencement date, the Group measures the lease liability by:

- (i) increasing the carrying amount to reflect interest on the lease liability;
- (ii) reducing the carrying amount to reflect the lease payments made; and
- (iii) remeasuring the carrying amount to reflect any reassessment or lease modification, or to reflect revised in-substance fixed lease payments.

##### (iii) Sale and leaseback transaction

#### The Group acts as a seller-lessee

The Group applies the requirements of IFRS 15 *Revenue from Contracts with Customers* ("IFRS 15") to assess whether sale and leaseback transaction constitutes a sale by the Group as a seller-lessee. For a transfer that does not satisfy the requirements as a sale, the Group accounts for the transfer proceeds as borrowings within the scope of IFRS 9 *Financial Instruments* ("IFRS 9").

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

### (g) Construction in progress

Construction in progress is stated at cost, which comprises construction expenditure, including interest costs and foreign exchange differences on related borrowed funds to the extent that they are regarded as an adjustment to interest costs during the construction period, and the cost of related equipment, less impairment losses (see note 2(m)(ii)).

The costs are transferred to property, plant and equipment and depreciation will be provided at the appropriate rates specified in note 2(e) above when the relevant assets are completed and ready for their intended use.

### (h) Investment property

Investment property is property held either to earn rentals or for capital appreciation or for both, but not held for sale in the ordinary course of business, use in the production or supply of goods or services or for administrative purposes. Investment property is measured at cost on initial recognition and subsequently at cost less accumulated depreciation and impairment losses (note 2(m)(ii)).

Depreciation is recognised so as to write off the cost of investment properties after taking into account of their estimated residual value, using the straight-line method over their estimated useful lives of 20 to 45 years. An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. Any gain or loss arising on derecognition of the investment property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss.

### (i) Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business (see note 2(d)) less accumulated impairment losses (see note 2(m)(ii)), if any.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or groups of cash-generating units) that is expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than operating segment.

A cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment annually, or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro-rata basis based on the carrying amount of each asset in the unit (or group of cash-generating units).

On disposal of the relevant cash-generating unit or any cash-generating unit within the group of cash-generating units, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal.

### (j) Intangible assets (other than goodwill)

When the Group has a right to charge for usage of the concession infrastructure as consideration for providing construction services in a service concession arrangement, it recognises an intangible asset at fair value upon initial recognition. Subsequent to initial recognition, the intangible asset is carried at cost less accumulated amortisation and impairment losses (see note 2(m)(ii)).

Other intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 2(m)(ii)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (j) Intangible assets (other than goodwill) (Continued)

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the asset's estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

–	Concession assets	the shorter of remaining concession period or 25 years
–	Development right of hydropower	45 years
–	Others	5 – 10 years

Both the period and method of amortisation are reviewed annually.

Intangible assets are not amortised while their useful lives are assessed to be indefinite. Any conclusion that the useful life of an intangible asset is indefinite is reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite is accounted for prospectively from the date of change and in accordance with the policy for amortisation of intangible assets with finite lives as set out above.

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

### (k) Interests in associates and joint ventures

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

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

The results and assets and liabilities of associates and joint ventures are incorporated in the consolidated financial statements using the equity method of accounting. The financial statements of associates and joint ventures used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Appropriate adjustments have been made to conform the associate's and the joint venture's accounting policies to those of the Group. Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. Changes in net assets of the associate/joint venture other than profit or loss and other comprehensive income are not accounted for unless such changes resulted in changes in ownership interest held by the Group. When the Group's share of losses of an associate or joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

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

When there is an objective evidence indicating that the net investments in associates or joint ventures may be impaired, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised in profit or loss forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (k) Interests in associates and joint ventures (Continued)

Upon disposal or partial disposal of the Group's interest in an associate or a joint venture in which the Group loses significant influence or joint control and discontinues the use of equity method, any retained interest that is within the scope of IFRS 9 is measured at fair value on that date. The difference between the carrying amount of the associate or joint venture at the date, and the proceeds from disposing of such interest (or partial interest) in the associate or joint venture and the fair value of the retained interest is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognised in other comprehensive income in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in other comprehensive income by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) when the Group loses significant influence or joint control over the investee.

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

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

### (l) Other investments in securities

The Group's policies for investments in securities, other than investments in subsidiaries, associates and joint ventures, are as follows:

Investments in securities are recognised/derecognised on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss ("FVPL"), for which transaction costs are recognised directly in profit or loss.

#### Investments other than equity securities

Non-equity securities held by the Group are classified into one of the following measurement categories:

- amortised cost, if the investment is held within a business model with the objective of collecting the contractual cash flows; and the contractual terms of the non-equity securities give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding. A gain or loss on an investment that is subsequently measured at amortised cost is recognised in profit or loss when the investment is derecognised or impaired. Interest income from these investments is included in investment income using the effective interest method.

The Group assesses on a forward looking basis the expected credit losses associated with its non-equity securities carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk (see note 2(m)(i)).

- fair value through other comprehensive income ("FVOCI") – recycling, if the objective of the business model is to hold the investments to collect the contractual cash flows and to sell financial assets; and the contractual terms of the non-equity securities give rise on specified date to cash flows that are solely payments of principal and interest on the principal outstanding. Changes in fair value are recognised in other comprehensive income, except for the recognition in profit or loss of expected credit losses, interest income (calculated using the effective interest method) and foreign exchange gains or losses. When the investment is derecognised, the amount accumulated in other comprehensive income is recycled from equity to profit or loss.
- FVPL, if the investments does not meet the criteria for being measured at amortised cost or FVOCI (recycling). Changes in the fair value of the investment (including interest) are recognised in profit or loss.

#### Equity securities

An investment in equity securities is classified as FVPL unless the equity investment is not held for trading purposes and on initial recognition of the investment, the Group makes an irrevocable election to designate the investment at FVOCI (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Dividends from an investment in equity securities classified as at FVPL are recognised in profit or loss as other income in accordance with the policy set out in note 2(t)(iv).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

#### (m) Impairment of assets

##### (i) Impairment of financial assets

The Group recognises loss allowances for expected credit loss (the “ECL”) on trade debtors and bills receivable related to sales of electricity, heat and coal measured at amortised cost, other receivables, restricted deposits, cash and cash equivalents and other financial assets measured at amortised cost and debt instruments measured at FVOCI. The ECLs are measured on either of the following bases:

- (1) 12-month ECLs: these are the ECLs that result from possible default events within the 12 months after the reporting date; and
- (2) lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial instrument.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive. The shortfall is then discounted at an approximation to the assets’ original effective interest rate.

For trade debtors and bills receivable related to sale of electricity, heat and coal measured at amortised cost, the Group applies the simplified approach to providing for ECLs prescribed by IFRS 9, which requires the use of the lifetime expected losses provision for all debtors. The Group performs impairment assessment based on the Group’s historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

For restricted deposits and cash and cash equivalents placed in high credit-rated financial institutions are considered to be low credit risk. Thus, the impairment provision recognised during the year was limited to 12-month ECLs.

For all other instruments, the Group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial asset since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information analysis, based on the Group’s historical experience and informed credit assessment and including forward-looking information.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group considers a financial asset to be credit-impaired when:

- (1) the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- (2) the financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criteria is more appropriate.

Interest income on credit-impaired financial assets is calculated based on the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset. For non-credit-impaired financial assets interest income is calculated based on the gross carrying amount.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (m) Impairment of assets (Continued)

#### (ii) Impairment of other assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

- property, plant and equipment;
- right-of-use assets;
- construction in progress;
- investment properties;
- intangible assets;
- goodwill;
- investments in subsidiaries, associates and joint ventures in the Company's statement of financial position; and
- other non-current assets (other than financial assets).

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill and intangible assets that have indefinite useful lives, the recoverable amount is estimated annually whether or not there is any indication of impairment.

#### – Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

#### – Recognition of impairment losses

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying amount of an asset will not be reduced below its individual fair value less costs of disposal, if measurable, or value in use, if determinable.

#### – Reversals of impairment losses

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

#### (n) Inventories

Inventories, comprising coal, stalk, fuel oil, gas, materials, components and spare parts for consumption, are carried at the lower of cost and net realisable values.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, cost of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realisable values is the estimated selling price in the ordinary course of business less the estimated costs of completion, the estimated conversion costs during power generation, and the estimated costs necessary to make the sale.

When inventories are used or sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

#### (o) Trade debtors and bills receivable, deposits and other receivables (“Trade and other receivables”)

Trade and other receivables that do not contain a significant financing component are initially measured at their transaction price. Trade and other receivables that contain a significant financing component are initially measured at fair value plus transaction costs.

If the Group holds the trade and other receivables with the objective to collect the contractual cash flows, they are subsequently stated at amortised cost using the effective interest method, less allowance for credit loss (see note 2(m)(i)).

For certain bills receivable that are managed with a business model under which bills receivable are held to collect contractual cash flows or endorsed to suppliers prior to their expiry date, they are initially recognised at fair value and thereafter stated at fair value through other comprehensive income. Subsequent changes in the carrying amounts of bills receivable as a result of interest income calculated using the effective interest method are recognised in profit or loss. All other changes in the carrying amount of these receivables, if any, are recognised in other comprehensive income and accumulated under fair value reserve (recycling).

Interest income is recognised by applying the effective interest rate, except for short-term receivables where the recognition of interest would be immaterial.

#### (p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term and highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition.

Cash and cash equivalents are assessed for ECL in accordance with the accounting policy as stated in note 2(m)(i).

#### (q) Financial liabilities and equity instruments

Debt and equity instruments issued by a group entity are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

##### (i) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Perpetual capital securities is classified as equity if it is non-redeemable, or redeemable only at the Company's option, and any interests are discretionary. Interest on perpetual capital securities classified as equity are recognised as distributions within equity.

##### (ii) Convertible bonds that contain equity component

The component parts of the convertible bonds are classified separately as financial liability and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument. A conversion option that will be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company's own equity instruments is an equity instrument. At the date of issue, the fair value of the liability component (including any embedded non-equity derivatives features) is estimated by measuring the fair value of similar liability that does not have an associated equity component.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (q) Financial liabilities and equity instruments (Continued)

#### (ii) Convertible bonds that contain equity component (Continued)

A conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case, the balance recognised in equity will be transferred to capital reserve. Where the conversion option remains unexercised at the maturity date of the convertible bonds, the balance recognised in equity will be transferred to retained profits. No gain or loss is recognised in profit or loss upon conversion or expiration of the conversion option.

Transaction costs that relate to the issue of the convertible bonds are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are charged directly to equity. Transaction costs relating to the liability component are included in the carrying amount of the liability portion and amortised over the period of the convertible bonds using the effective interest method.

#### (iii) Other financial liabilities

Other financial liabilities including bank loans, loans from shareholders, state loans, other loans, short-term debentures payable, amount due to the parent company, trade creditors and bills payable, other payables and long-term debentures payable, are initially measured at fair value and subsequently measured at amortised cost, using the effective interest method.

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

### (r) Derecognition of financial assets or financial liabilities

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss.

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

### (s) Financial guarantees issued, provisions and contingent liabilities

#### (i) Financial guarantees issued

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. A financial guarantee contract issued by the Group is recognised initially at its fair value less transaction costs that are directly attributable to the issue of the financial guarantee contract.

Subsequent to initial recognition, the Group measures the financial guarantee contract at the higher of: (i) the amount of the loss allowance, being the ECL provision measured in accordance with principles of the accounting policy set out in note 2(m)(i) and (ii) the amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with the principles of IFRS 15.

#### (ii) Provisions and contingent liabilities

Provisions are recognised for liabilities of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (s) Financial guarantees issued, provisions and contingent liabilities (Continued)

#### (ii) Provisions and contingent liabilities (Continued)

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

### (t) Revenue recognition

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

Depending on the terms of the contract and the laws that apply to the contract, control of the goods or service may be transferred over time or at a point in time. Control of the goods or service is transferred over time if the Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates or enhances an asset that the customer controls as the Group performs; or
- does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

If control of the goods or services transfers over time, revenue is recognised over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognised at a point in time when the customer obtains control of the goods or services.

Where the contract contains a financing component which provides a significant financing benefit to the Group, revenue recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method. For contracts where the period between the payment and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in IFRS 15.

#### (i) Electricity Income

For sales of electricity, each unit sold is generally considered a distinct good and the related performance obligation is generally satisfied at a point in time when control of electricity is transferred to the customer. Revenue is thus recognised upon when the power grid companies received each unit of electricity. A standard tariff is charged for each unit of electricity, which is established by the government.

#### (ii) Heat Income

For sales of heat, each unit sold is generally considered a distinct good and the related performance obligation is generally satisfied at a point in time when control of heat is transferred to the customer. Revenue is thus recognised upon the customers received each unit of heat.

#### (iii) Sale of coal

Revenue is recognised when control of the goods has transferred, being when the goods are delivered to and have been accepted by customers.

#### (iv) Other income

##### *Dividend income*

Dividend income from investments is recognised when the shareholder's right to receive payment is established.

##### *Interest income*

Interest income is recognised as it accrues using the effective interest method.

##### *Government grants*

Government grants are recognised in the consolidated statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred government grants in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (*Continued*)

### (t) Revenue recognition (*Continued*)

#### (iv) Other income (*Continued*)

##### *Government grants (Continued)*

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in which they become receivable.

##### *Upfront installation fees*

Upfront installation fee received for connecting the customers' premises to the heat network of the Group is deferred and recognised on a straight-line basis over the expected useful life of the relevant assets installed, which approximates to the expected service terms of the relevant contracts of sale of heat.

### (u) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

Foreign currency translation differences relating to funds borrowed relevant to construction in progress, to the extent that they are regarded as an adjustment to interest costs, are capitalised during the construction period (see note 2(g)). All other exchange differences are dealt with in profit or loss.

### (v) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### (v) Income tax (Continued)

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

- in the case of current tax assets and liabilities, the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or
- in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity; or
  - different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise the assets and settle the liabilities simultaneously.

#### (w) Borrowing costs

Borrowing costs that are directly attributable to the acquisition or construction of an asset which necessarily takes a substantial period of time to get ready for its intended use are capitalised as part of the cost that of asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use are interrupted or complete.

#### (x) Employee benefits

##### (i) Short-term employee benefits and contributions to defined contribution retirement plans

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

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

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date.

##### (ii) Termination benefits

A liability for a termination benefit is recognised at the earlier of when the Group entity can no longer withdraw the offer of the termination benefit and when it recognises any related restructuring costs.

#### (y) Research expenditure

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

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (z) Related parties

#### (a) A person, or a close member of that person's family, is related to the Group if that person:

- (i) has control or joint control over the Group;
- (ii) has significant influence over the Group; or
- (iii) is a member of the key management personnel of the Group or the Group's parent.

#### (b) An entity is related to the Group if any of the following conditions applies:

- (i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
- (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
- (iii) Both entities are joint ventures of the same third party.
- (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- (v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.
- (vi) The entity is controlled or jointly controlled by a person identified in (a).
- (vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).
- (viii) The entity, or any member of a group of which it is part, provides key management personnel services to the Group or to the Group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

### (aa) Segment reporting

The Group's most senior executive management ("**the chief operating decision makers**") review the Group's revenue and profits as a whole for the purposes of allocating resources and assessing the performance (note 5).

### (ab) Dividends

Dividends are recognised as a liability in the period in which they are declared.

### (ac) Contract liabilities

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

## 3 APPLICATION OF AMENDMENTS TO IFRSs

### (a) Amendments to IFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the following amendments to IFRSs issued by the IASB for the first time, which are mandatorily effective for the Group's annual periods beginning on or after 1 January 2022 for the preparation of the Group's consolidated financial statements:

Amendments to IFRS 3	Reference to the Conceptual Framework
Amendments to IAS 16	Property, Plant and Equipment – Proceeds before Intended Use
Amendments to IAS 37	Onerous Contracts – Cost of Fulfilling a Contract
Annual Improvements to IFRSs 2018-2020	Amendments to IFRS 1, IFRS 9, Illustrative Examples accompanying IFRS 16, and IAS 41

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

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 3 APPLICATION OF AMENDMENTS TO IFRSs (*Continued*)

#### (a) Amendments to IFRSs that are mandatorily effective for the current year (*Continued*)

##### Impacts on application of Amendments to IAS 16 “Property, Plant and Equipment – Proceeds before Intended Use”

The Group has applied the amendments for the first time in the current year. The amendments specify that the costs of any item that were produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management (such as samples produced when testing whether the relevant property, plant and equipment is functioning properly) and the proceeds from selling such items should be recognised and measured in the profit or loss in accordance with applicable standards. The cost of the items are measured in accordance with IAS 2.

In accordance with the transitional provisions, the Group has applied the new accounting policy retrospectively to property, plant and equipment (including construction in progress) made available for use on or after the beginning of 1 January 2021. In addition, appropriate adjustments were made to conform the associates’ accounting policies to those of the Group. The details of the impacts are set out below. Comparative figures have been restated.

The effects of the changes in accounting policies on the consolidated statement of profit or loss and other comprehensive income and loss per share, are as follows:

	2022 RMB'000	2021 RMB'000
Increase in turnover	175,299	185,324
(Increase)/decrease in operating expenses		
– Fuel costs	(166,529)	(217,610)
– Depreciation and amortisation	–	883
– Repairs, maintenance and inspection	(1,612)	(6,946)
– Administration expenses	–	(178)
– Other operating expenses	(2,331)	(3,628)
Increase in investment income	–	103,100
Increase in share of results of associates and joint ventures	176,155	17,204
Net decrease in loss and total comprehensive expense for the year	180,982	78,149
Decrease in loss and total comprehensive expense for the year attributable to:		
Equity holders of the Company	180,982	86,019
Non-controlling interests	–	(7,870)
	180,982	78,149
<i>Impact on basic and diluted loss per share</i>		
Basic and diluted loss per share before adjustments	RMB (0.112)	RMB (0.443)
Net adjustments arising from change in accounting policy	RMB 0.018	RMB 0.009
Reported basic and diluted loss per share as restated	RMB(0.094)	RMB (0.434)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 3 APPLICATION OF AMENDMENTS TO IFRSs (Continued)

#### (a) Amendments to IFRSs that are mandatorily effective for the current year (Continued)

##### Impacts on application of Amendments to IAS 16 "Property, Plant and Equipment – Proceeds before Intended Use" (Continued)

The effects of the changes in accounting policies on the consolidated statement of financial position at the end of the immediately preceding financial year, i.e., 31 December 2021 are as follows:

	At 31 December 2021 RMB'000 (As originally stated)	Adjustments RMB'000	At 31 December 2021 RMB'000 (Restated)
Property, plant and equipment	125,676,926	(38,787)	125,638,139
Construction in progress	15,807,420	(3,368)	15,804,052
Interests in associates and joint ventures	37,266,831	120,304	37,387,135
Total non-current assets	192,792,217	78,149	192,870,366
Total assets less current liabilities	156,723,104	78,149	156,801,253
Net assets	76,268,565	78,149	76,346,714
Reserves	31,365,210	86,019	31,451,229
Equity attributable to equity holders of the Company	63,708,417	86,019	63,794,436
Non-controlling interests	12,560,148	(7,870)	12,552,278
Total equity	76,268,565	78,149	76,346,714

There were no effects to the consolidated financial position at 1 January 2021, the beginning of the comparative period, as a result of application of Amendments to IAS 16.

The effects of the changes in accounting policies result on the consolidated statement of cash flows, are as follows:

	2022 RMB'000	2021 RMB'000
<b>Cash flows from operating activities</b>		
Cash received from customers and others	84,526	152,646
Cash paid to suppliers, employees and others	(141,479)	(203,502)
<b>Net decrease in cash generated from operating activities</b>	<b>(56,953)</b>	(50,856)
<b>Cash flows from investing activities</b>		
Payment of purchase of property, plant and equipment, construction in progress, investment properties, land use rights and intangible assets	56,953	50,856
<b>Net decrease in cash used in investing activities</b>	<b>56,953</b>	50,856

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 3 APPLICATION OF AMENDMENTS TO IFRSs (Continued)

#### (b) New or revised IFRSs that have been issued but are not yet effective

The Group has not early applied the following new and amendments to IFRSs that have been issued but are not yet effective:

IFRS 17 (including the June 2020 and December 2021 amendments to IFRS 17)	Insurance Contracts <sup>1</sup>
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture <sup>2</sup>
Amendments to IFRS 16	Lease Liability in a Sale and Leaseback <sup>3</sup>
Amendments to IAS 1	Classification of Liabilities as Current or Non-current <sup>3</sup>
Amendments to IAS 1	Non-current Liabilities with Covenants <sup>3</sup>
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies <sup>1</sup>
Amendments to IAS 8	Definition of Accounting Estimates <sup>1</sup>
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction <sup>1</sup>

<sup>1.</sup> Effective for annual periods beginning on or after 1 January 2023.

<sup>2.</sup> Effective for annual periods beginning on or after a date to be determined.

<sup>3.</sup> Effective for annual periods beginning on or after 1 January 2024.

The directors of the Company anticipate that the application of all new and amendments to IFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

### 4 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

#### *Critical accounting judgement*

The following is the critical judgement, apart from those involving estimations (see below), that the directors of the Company have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the consolidated financial statements.

#### **Going concern basis**

These consolidated financial statements have been prepared on a going concern basis, the validity of which depends upon the availability of funding from various sources to enable the Group to operate as a going concern and meet its liabilities as they fall due. Details are explained in note 2(b).

#### **Key sources of estimation uncertainty**

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

#### (a) Estimated impairment of goodwill

The Group performs impairment assessment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. Recoverable amount is the higher of its value in use and fair value less costs of disposal. The value in use calculation requires the Group to estimate the future cash flows expected to arise from the CGU(s) in which the goodwill is allocated, and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, further impairment loss may arise. As at 31 December 2022, the carrying amount of goodwill is RMB1,032,483,000 (2021: RMB1,199,701,000) (net of accumulated impairment loss of RMB805,868,000 (2021: RMB638,650,000)). Details of the impairment assessment are disclosed in note 21.

#### (b) Estimated impairment of property, plant and equipment

In determining whether an property, plant and equipment is impaired, the Group has to exercise judgement and make estimation, particularly in assessing: (1) whether an event has occurred or any indicators that may affect the asset's recoverable amount; (2) whether the carrying value of an asset can be supported by the net present value of future cash flows which are estimated based upon the Continued use of the asset; and (3) the appropriate key assumptions, including future sales volumes and selling price, future fuel prices and discount rate applied in preparing cash flow projections. Changing the assumptions selected by management to determine the level of impairment, including the discount rate assumptions in the cash flow projections, could materially affect net present value used in the impairment test. Impairment loss amounting to RMB432,890,000 (2021: RMB302,906,000) was recognised in the consolidated financial statements for the year ended 31 December 2022 (Note 11(a)) and details of the impairment assessment are set out in note 17.



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 4 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(Continued)*

### *Key sources of estimation uncertainty (Continued)*

#### (c) Provision of ECLs on trade and other receivables

The provision of ECLs is made based on the assessment of their recoverability and the ageing analysis of the trade and other receivables as well as other quantitative and qualitative information and on management's judgement and assessment of the forward-looking information. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customers' actual default in the future. Information about the ECLs on the Group's trade and other receivables are disclosed in notes 27, 28 and 43(b).

#### (d) Depreciation and amortisation

Property, plant and equipment, right-of-use assets, investment properties and intangible assets are depreciated or amortised over their estimated useful lives, after taking into account the estimated residual value. The Group reviews the estimated useful lives of the assets regularly in order to determine the amount of depreciation and amortisation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and taking into account upgrading and improvement work performed, and anticipated technological changes. If there have been significant changes in the factors used to determine the depreciation or amortisation, the rate of depreciation or amortisation is revised prospectively.

#### (e) Deferred tax assets

As disclosed in note 35(b), a deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the unused tax losses and credits can be utilised. The Group uses all readily available information which includes reasonable and supportable assumptions and projections of sales volume, tariff and relevant operating costs to estimate whether there will be sufficient available future taxable profits to utilise deductible temporary differences. Any significant change in estimates would result in adjustment in the amount of deferred tax assets and income tax in future years.

#### (f) Incremental borrowing rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate ("IBR") to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group "would have to pay", which requires estimation when no observable rates are available or when it needs to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using the benchmark interest rate for RMB loan ("人民幣貸款基準利率") published by The People's Bank of China as the observable inputs.

#### (g) Provision on remediation costs

As disclosed in note 37, the estimation of the liabilities for mine disposal and environmental restoration involves the estimates of the amount and timing of future cash outflows as well as the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liability. The Group considers the factors including the size of mining area, future production development plan and reserve volume to determine the scope, amount and timing of reclamation and mine closure works to be performed. Determination of the effect of these factors involves judgements from the Group and the estimated liabilities may turn out to be different from the actual expenditure to be incurred.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 5 TURNOVER AND SEGMENT INFORMATION

#### (a) Disaggregation of turnover

Turnover represents the sale of electricity, heat and coal. Major components of the Group's turnover are as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i> <i>(Restated)</i>
<b>Revenue from contracts with customers within the scope of IFRS 15</b>		
– Sale of electricity	<b>95,495,823</b>	82,047,326
– Sale of heat	<b>8,970,609</b>	7,504,897
– Sale of coal	<b>1,493,907</b>	11,616,653
	<b>105,960,339</b>	101,168,876

The revenue from sale of electricity, heat and coal is recognised at a point in time.

#### (b) Segment information

The chief operating decision makers review the Group's revenue and profit as a whole, which are determined in accordance with the Group's accounting policies, for resources allocation and performance assessment. Therefore, the Group has only one operating and reportable segment and no further segment information is presented in the consolidated financial statements.

#### Geographical information

The Group's non-current assets are mainly located in the PRC as the Group's major customers are based in the PRC which are the power grid operators in relation to the sale of electricity.

#### Information about major customers

In 2022, the revenue from two (2021: two) regional and provincial power grid operators accounted for 47% (2021: 42%) of external revenue, each of which contributing to over 10% of the total sales of the Group. Revenue from customers of the corresponding years contributing over 10% of the total revenue of the Group is as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Customer A*	<b>35,470,043</b>	30,851,776
Customer B*	<b>14,603,841</b>	11,539,187

\* Revenue from sale of electricity.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 6 PERSONNEL COSTS

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Wages, welfare and other benefits	<b>4,722,700</b>	4,526,316
Retirement benefits (note 40)	<b>1,183,522</b>	1,211,742
Other staff costs	<b>1,247,324</b>	1,220,335
	<b>7,153,546</b>	6,958,393

## 7 TAXES AND SURCHARGES

During the year, taxes and surcharges of the Group with the amount of approximately RMB872 million (2021: RMB977 million) mainly represent city maintenance and construction tax, education surcharge, urban land use tax, real estate tax and other taxes and surcharges.

## 8 INVESTMENT INCOME

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i> <i>(Restated)</i>
Dividend income from financial assets measured at FVPL	<b>3,413</b>	24,176
Dilution gain on investment in an associate (note 22(e))	–	1,793,703
Gain on loss of control of subsidiaries (notes 46 and 48)	–	4,649,443
Gain on disposal of associates (note 22(d))	–	119,154
Interest on loans and receivables	<b>14,878</b>	15,200
Loss on deregistration of a subsidiary	<b>(1,543)</b>	–
Loss on disposal of financial assets measured at FVOCI	<b>(8,075)</b>	(36,659)
	<b>8,673</b>	6,565,017

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 9 OTHER REVENUE AND NET INCOME

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
<b>Other revenue</b>		
Government grants (Note)	<b>757,986</b>	751,233
Revenue from upfront installation fees for heating networks (note 36)	<b>227,492</b>	263,737
Others	<b>119,415</b>	355,744
	<b>1,104,893</b>	1,370,714
<b>Other net income</b>		
Gain on disposal of property, plant and equipment, right-of-use assets and intangible assets	<b>221,101</b>	325,292
Net income from sale of materials	<b>783,121</b>	1,362,118
Others	<b>(230,862)</b>	(327,740)
	<b>773,360</b>	1,359,670

Note: Government grants mainly represent the grants from government for purchase of coal, power generation, heat supply and environmental protection. There is no unfulfilled condition relating to those grants.

### 10 FINANCE COSTS

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Interest on loans and other financial liabilities	<b>4,232,436</b>	4,497,310
Interest on lease liabilities	<b>19,524</b>	38,616
Interest on convertible bonds (note 32)	<b>57,011</b>	14,657
Other finance costs	<b>34,889</b>	117,961
Net foreign exchange loss/(gain)	<b>5,489</b>	(5,702)
Less: interest capitalised	<b>(218,155)</b>	(310,016)
	<b>4,131,194</b>	4,352,826

The borrowing costs have been capitalised at an average rate of 3.61% (2021: 4.08%) per annum for construction in progress.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 11 LOSS BEFORE TAXATION

### (a) Loss before taxation is arrived at after charging:

	2022 RMB'000	2021 RMB'000 (Restated)
Amortisation		
– Intangible assets	111,552	205,379
Depreciation		
– Property, plant and equipment	9,631,805	10,985,433
– Right-of-use assets	292,150	314,102
– Investment properties	1,991	550
Total depreciation and amortisation	10,037,498	11,505,464
Auditor's remuneration		
– Audit services	6,950	6,950
– Non-audit services	1,250	1,250
Cost of inventories recognised	87,985,717	89,827,164
Impairment losses under expected credit loss model, net (included in administration expenses)		
– Trade debtors and bills receivable	41,372	97,631
– Deposits, other receivables and prepayments	3,528	373,446
Write down of inventories, net	1,434	42,298
Impairment losses on non-financial assets (included in administration expenses):		
– Property, plant and equipment	432,890	302,906
– Construction in progress	513,876	361,305
– Goodwill (note 21)	167,218	423,203
Expense relating to short-term leases	54,991	21,451
Research and development costs	–	2,761

### (b) Other operating expenses:

	2022 RMB'000	2021 RMB'000 (Restated)
Heating	629,329	508,334
Power charges	298,015	576,704
Water charges	435,405	389,414
Environmental restoration expenses	7,897	13,782
Other expense relating to short-term leases	28,598	27,072
Total other operating expenses	1,399,244	1,515,306



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 12 DIRECTORS', CHIEF EXECUTIVES' AND SUPERVISORS' EMOLUMENTS

Details of directors', chief executives' and supervisors' emoluments are as follows:

2022	Directors' and supervisors' fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Retirement benefits RMB'000	Bonuses RMB'000	Total RMB'000
<b>Executive directors</b>					
Dai Jun (Note i)	-	-	-	-	-
Luo Xiaoqian*(Note ii)	-	398	69	459	926
Li Guoming (Note iii)	-	173	36	197	406
Ding Huande (Note iv)	-	-	-	200	200
Feng Rong (Note v)	-	172	28	207	407
<b>Non-executive directors</b>					
Ni Shoumin	-	-	-	-	-
Peng Xingyu	-	-	-	-	-
Zhang Zhiqiang	-	-	-	-	-
Li Pengyun	-	-	-	-	-
Wang Xiaobo	-	-	-	-	-
<b>Independent non-executive directors</b>					
Feng Zhenping	140	-	-	-	140
Li Xingchun	140	-	-	-	140
Li Menggang	140	-	-	-	140
Wang Yuesheng	140	-	-	-	140
<b>Supervisors</b>					
Chen Wei	-	-	-	-	-
Ma Jing'an	-	356	55	404	815
Zhang Peng	-	328	55	368	751
	<b>560</b>	<b>1,427</b>	<b>243</b>	<b>1,835</b>	<b>4,065</b>

\* Mr. Luo Xiaoqian, executive director, was also general manager of the Company and his emoluments disclosed above include those for services rendered by him as the chief executive.

Notes:

- (i) Mr. Dai Jun appointed as executive director on 24 August 2022.
- (ii) Mr. Luo Xiaoqian tendered his resignation as executive director, member of the Nomination Committee and the general manager on 30 December 2022 and the resignation application will take effect after the appointment of a new director is approved at the general meeting of the Company.
- (iii) Mr. Li Guoming appointed as executive director and the chief financial officer on 24 August 2022.
- (iv) Mr. Ding Huande resigned as executive director, the chairman of the Board, and the chairman of the Strategic Committee on 24 August 2022.
- (v) Mr. Feng Rong resigned as executive director and the chief financial officer on 15 June 2022.
- (vi) No directors, supervisors, or the chief executive of the Company waived any remuneration in 2022 (2021: Nil) and their emoluments shown above were mainly for their services as directors of the Company.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 12 DIRECTORS', CHIEF EXECUTIVES' AND SUPERVISORS' EMOLUMENTS (Continued)

Details of directors', chief executives' and supervisors' emoluments are as follows: (Continued)

2021	Directors' and supervisors' fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Retirement benefits RMB'000	Bonuses RMB'000	Total RMB'000
<b>Executive directors</b>					
Ding Huande	45	–	–	–	45
Luo Xiaoqian*	–	347	69	437	853
Feng Rong	–	311	65	384	760
<b>Non-executive directors</b>					
Ni Shoumin	–	–	–	–	–
Peng Xingyu	–	–	–	–	–
Zhang Zhiqiang	–	–	–	–	–
Li Pengyun	–	–	–	–	–
Wang Xiaobo	–	–	–	–	–
Gou Wei (Note i)	–	–	–	–	–
Hao Bin (Note ii)	–	–	–	–	–
<b>Independent non-executive directors</b>					
Feng Zhenping	140	–	–	–	140
Li Xingchun	140	–	–	–	140
Li Menggang (Note iii)	70	–	–	–	70
Wang Yuesheng (Note iv)	70	–	–	–	70
Wang Dashu (Note v)	70	–	–	–	70
Zong Wenlong (Note vi)	70	–	–	–	70
<b>Supervisors</b>					
Chen Wei	–	–	–	–	–
Ma Jing'an	–	302	63	371	736
Zhang Peng	–	287	63	349	699
	605	1,247	260	1,541	3,653

\* Mr. Luo Xiaoqian, executive director, was also general manager of the Company and his emoluments disclosed above include those for services rendered by him as the chief executive.

Notes:

- (i) Mr. Gou Wei resigned as non-executive director on 27 January 2021.
- (ii) Mr. Hao Bin resigned as non-executive director on 27 January 2021.
- (iii) Mr. Li Menggang was appointed as independent non-executive director on 30 June 2021.
- (iv) Mr. Wang Yuesheng was appointed as independent non-executive director on 30 June 2021.
- (v) Mr. Wang Dashu resigned as non-executive director on 30 June 2021.
- (vi) Mr. Zong Wenlong resigned as non-executive director on 30 June 2021.
- (vii) No directors, supervisors, or the chief executive of the Company waived any remuneration in 2021 (2020: Nil) and their emoluments shown above were mainly for their services as directors of the Company.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 13 INDIVIDUALS WITH HIGHEST EMOLUMENTS

The five highest paid employees of the Group during the year included two directors (2021: two directors), details of whose remuneration are set out in note 12 above. Details of the remuneration for the year of the remaining three (2021: three) highest paid employees who are neither a director nor chief executive of the Company are as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Salaries and other emoluments	1,057	937
Retirement benefits	176	201
Bonus	1,240	1,157
	<b>2,473</b>	2,295

The number of the highest paid employees who are not the directors of the Company whose remuneration fell within following bands is as follows:

	2022 Number of Individuals	2021 Number of Individuals
Nil – Hong Kong Dollars (“ <b>HK\$</b> ”) 1,000,000	3	3

### 14 INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

(a) Taxation in the consolidated statement of profit or loss and other comprehensive income represents:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
<b>Current tax – PRC Enterprise Income Tax</b> (note 35(a))		
Charge for the year	173,079	416,058
Over-provision in respect of prior years	(10,325)	(11,729)
	<b>162,754</b>	404,329
<b>Deferred tax</b> (note 35(b))		
Origination and reversal of temporary differences and tax losses	(777,575)	(2,179,053)
Income tax credit in the consolidated statement of profit or loss and other comprehensive income	<b>(614,821)</b>	(1,774,724)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 14 INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME (Continued)

#### (b) Reconciliation between income tax and accounting loss at applicable tax rates:

	2022 RMB'000	2021 RMB'000 (Restated)
Loss before taxation	<b>(1,536,927)</b>	(6,912,464)
Notional PRC enterprise income tax at statutory tax rate of 25% (2021: 25%)	<b>(384,232)</b>	(1,728,116)
Tax effect of non-deductible expenses	<b>80,744</b>	91,032
Tax effect of non-taxable income	<b>(14,850)</b>	(1,077,100)
Preferential tax rate on subsidiaries' profit or loss (Note)	<b>(4,616)</b>	(224,970)
Tax effect of share of results of associates and joint ventures	<b>(1,199,159)</b>	(621,853)
Tax effect of tax losses and deductible temporary differences not recognised	<b>949,911</b>	1,806,059
Utilisation of tax losses and deductible temporary differences previously not recognised	<b>(32,294)</b>	(8,047)
Over-provision in respect of prior years	<b>(10,325)</b>	(11,729)
	<b>(614,821)</b>	(1,774,724)

Note:

The charge for PRC Enterprise Income Tax is calculated at the statutory rate of 25% (2021: 25%) on the estimated assessable profit or loss for the year determined in accordance with relevant enterprise income tax rules and regulations, except for certain subsidiaries of the Group, which are taxed at preferential rate of 15% (2021: tax exempted, taxed at preferential rate of 7.5%, 12%, 12.5% or 15%).

### 15 OTHER COMPREHENSIVE INCOME

	2022 RMB'000	2021 RMB'000
Share of other comprehensive income of investees accounted for under the equity method	<b>34,746</b>	38,391
Share of other comprehensive (expense)/income (non-recycling) of investees accounted for under the equity method	<b>(7,365)</b>	41,412
Other comprehensive income, net of income tax	<b>27,381</b>	79,803

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 16 LOSS PER SHARE

#### (a) Basic loss per share

The calculation of basic loss per share is based on the loss attributable to equity holders of the Company for the year and divided by the weighted average number of ordinary shares in issue during the year.

	2022 RMB'000	2021 RMB'000 (Restated)
Loss attributable to equity holders of the Company	(30,791)	(3,255,963)
Less: Profit attributable to holders of perpetual capital securities (note 38(e))	(900,875)	(1,023,261)
Loss attributable to equity shareholders	(931,666)	(4,279,224)
Weighted average number of ordinary shares in issue (Rounded to the nearest thousand)	9,869,858	9,864,768
Basic loss per share (RMB)	(0.094)	(0.434)

#### (b) Diluted loss per share

Diluted loss per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume exercise/conversion of all dilutive potential ordinary shares. During the years ended 31 December 2022 and 2021, the Company has 1 category of dilutive potential ordinary shares which is the convertible bonds (note 32).

The diluted loss per share for the years ended 31 December 2022 and 2021 are the same as the respective basic loss per share because the conversion of convertible bonds will have an anti-dilutive effect.

### 17 PROPERTY, PLANT AND EQUIPMENT

	Buildings RMB'000	Generators, machinery and equipment RMB'000	Mining structures and mining rights RMB'000	Motor vehicles, furniture, fixtures, equipment and others RMB'000	Total RMB'000
<b>Cost</b>					
At 1 January 2021	70,086,505	177,773,140	10,212,352	6,901,729	264,973,726
Additions (Restated)	246,401	1,084,095	–	367,150	1,697,646
Acquisition of subsidiaries (note 47)	1,763,438	4,115,640	–	164,894	6,043,972
Transferred from construction in progress (note 19)	1,241,899	13,567,998	–	512,615	15,322,512
Transfer to investment properties	(32,739)	–	–	–	(32,739)
Disposals/write-offs	(985,941)	(3,029,424)	(2,650,743)	(234,842)	(6,900,950)
Disposal of subsidiaries	(6,195,509)	(47,131,704)	(1,540,036)	(2,954,434)	(57,821,683)
<b>At 31 December 2021 and 1 January 2022 (Restated)</b>	<b>66,124,054</b>	<b>146,379,745</b>	<b>6,021,573</b>	<b>4,757,112</b>	<b>223,282,484</b>
Additions	149,326	302,844	–	136,961	589,131
Transferred from construction in progress (note 19)	4,082,920	7,392,867	–	604,509	12,080,296
Disposals/write-offs	(161,595)	(1,000,880)	–	(177,579)	(1,340,054)
<b>At 31 December 2022</b>	<b>70,194,705</b>	<b>153,074,576</b>	<b>6,021,573</b>	<b>5,321,003</b>	<b>234,611,857</b>



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 17 PROPERTY, PLANT AND EQUIPMENT (Continued)

	Buildings RMB'000	Generators, machinery and equipment RMB'000	Mining structures and mining rights RMB'000	Motor vehicles, furniture, fixtures, equipment and others RMB'000	Total RMB'000
<b>Accumulated depreciation and impairment</b>					
At 1 January 2021	21,407,165	74,379,719	5,083,697	3,799,062	104,669,643
Charge for the year (Restated)	2,385,341	7,809,564	–	790,528	10,985,433
Written back on disposals	(634,842)	(1,432,105)	(29,247)	(166,342)	(2,262,536)
Disposal of subsidiaries	(1,626,503)	(12,572,018)	(158,356)	(1,684,897)	(16,041,774)
Transfer to investment properties	(9,327)	–	–	–	(9,327)
Impairment loss (note (i))	43,700	226,699	–	32,507	302,906
<b>At 31 December 2021 and 1 January 2022 (Restated)</b>	<b>21,565,534</b>	<b>68,411,859</b>	<b>4,896,094</b>	<b>2,770,858</b>	<b>97,644,345</b>
Charge for the year	2,071,938	6,898,033	2,474	659,360	9,631,805
Written back on disposals	(125,769)	(967,477)	–	(174,940)	(1,268,186)
Impairment loss (note (i))	13,651	335,091	–	84,148	432,890
<b>At 31 December 2022</b>	<b>23,525,354</b>	<b>74,677,506</b>	<b>4,898,568</b>	<b>3,339,426</b>	<b>106,440,854</b>
<b>Net book value</b>					
At 31 December 2022	46,669,351	78,397,070	1,123,005	1,981,577	128,171,003
At 31 December 2021 (Restated)	44,558,520	77,967,886	1,125,479	1,986,254	125,638,139

Notes:

(i) Impairment loss

Each power generation plant or coal mining company constitutes a CGU. During the current year, certain property, plant and equipment became idle or obsolete due to government policies on environmental protection, energy conservation and emission reduction. The management assessed the carrying value of the property, plant and equipment relating to power generation plants, after taking into account the Group's future power generation operating plans and the outlook for the industry. In addition, in the assessment of the carrying value of the property, plant and equipment relating to coal mining companies, the management takes into account the changes in the external market, such as the pandemic of Covid-19, the coal production and operation efficiency of the Group. Based on the impairment testing results, the carrying value of property, plant and equipment of the Group were impaired by approximately RMB433 million (2021: RMB303 million), with impairment losses recognised in profit or loss accordingly.

The recoverable amount of the relevant CGUs had been determined based on value in use calculations. These calculations use cash flow projections based on financial forecasts prepared by the management covering a five-year period (2021: five-year period). Cash flows beyond the five-year period are projected using zero growth rates (2021: zero growth rates). The cash flows are discounted using a discount rate from 7.00% to 11.00% (2021: 7.00% to 11.00%). The discount rates used are pre-tax and reflect specific risks relating to the relevant group of assets.

Other assumptions for the value in use calculations include the expected sales price of electricity, demands of electricity in specific regions where the power plants are located and fuel cost. Management determined these key assumptions based on past performance and its expectations on market development. Management believes that any reasonably possible change in any of these assumptions would not cause the aggregate carrying amount to exceed the aggregate recoverable amount of these units.

- (ii) Certain of the Group's interest-bearing bank borrowings were secured by certain of the Group's property, plant and equipment, which had an aggregate net book value of approximately RMB2,456 million as at 31 December 2022 (2021: RMB2,399 million).
- (iii) As at 31 December 2022, the carrying value of property, generators and related machinery of property, plant and equipment held as collateral of the sales and leaseback agreement signed by the Group for financing purposes (note 31(d)) during the year was approximately RMB1,120 million (2021: RMB1,185 million).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 18 LEASE

#### The Group as a lessee

The Group has lease contracts for various items of buildings, generators, machinery and equipment, land use rights and sea use rights that were used in its operations. Leases of buildings, generators, machinery and equipment generally have lease terms between 6 months and 50 years (2021: between 6 months and 45 years), while land use rights and sea use rights generally have lease terms between 10 and 70 years (2021: between 10 and 70 years). Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group.

#### (a) Right-of-use assets

##### (i) The carrying amounts of the Group's right-of-use assets are as follows:

	2022 RMB'000	2021 RMB'000
Buildings	98,498	146,512
Generators, machinery and equipment	488,593	771,831
Land use rights and sea use rights	5,392,516	5,579,059
<b>Total</b>	<b>5,979,607</b>	<b>6,497,402</b>

Additions to the right-of-use assets during the year ended 31 December 2022 were RMB12,249,000 (2021: RMB268,105,000).

##### (ii) Depreciation charge of right-of-use assets is as follows:

	2022 RMB'000	2021 RMB'000
Buildings	59,731	63,791
Generators, machinery and equipment	69,423	103,763
Land use rights and sea use rights	162,996	146,548
<b>Total</b>	<b>292,150</b>	<b>314,102</b>

#### (b) Lease liabilities

Future lease payments are due as follows:

	At 31 December 2022		
	Minimum lease payments RMB'000	Interest RMB'000	Present value RMB'000
Not later than one year	226,260	7,858	218,402
Later than one year and not later than two years	23,538	2,601	20,937
Later than two years and not later than five years	34,099	2,845	31,254
Later than five years	15,053	5,752	9,301
<b>Total</b>	<b>298,950</b>	<b>19,056</b>	<b>279,894</b>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 18 LEASE (Continued)

### (b) Lease liabilities (Continued)

	At 31 December 2021		
	Minimum lease payments <i>RMB'000</i>	Interest <i>RMB'000</i>	Present value <i>RMB'000</i>
Not later than one year	262,894	22,064	240,830
Later than one year and not later than two years	281,153	19,123	262,030
Later than two years and not later than five years	58,127	7,209	50,918
Later than five years	24,165	9,556	14,609
	626,339	57,952	568,387
		<b>2022</b> <i>RMB'000</i>	2021 <i>RMB'000</i>
Analysed into:			
Current portion		<b>218,402</b>	240,830
Non-current portion		<b>61,492</b>	327,557

The weighted average incremental borrowing rates applied to lease liabilities range from 4.20% to 5.39% (2021: 4.66% to 5.39%). The total cash outflow for leases for the year ended 31 December 2022 was RMB408,015,000 (2021: RMB1,449,210,000).

## 19 CONSTRUCTION IN PROGRESS

	<b>2022</b> <i>RMB'000</i>	2021 <i>RMB'000</i> <i>(Restated)</i>
At 1 January	<b>15,804,052</b>	22,361,667
Additions	<b>11,632,984</b>	9,417,779
Acquisition of subsidiaries (note 47)	–	1,379,762
Transferred to property, plant and equipment (note 17)	<b>(12,080,296)</b>	(15,322,512)
Disposal of subsidiaries	–	(1,671,339)
Impairment loss (Note)	<b>(513,876)</b>	(361,305)
At 31 December	<b>14,842,864</b>	15,804,052

Note:

During the current year, it was identified that certain preliminary projects of the Group have no economic value for further development or remote possibility of obtaining relevant approval of the National Development and Reform Commission or its local agencies. As a result, the gross carrying amount of these projects of approximately RMB626 million (2021: RMB361 million) was written down to its recoverable amount of RMB112 million (2021: RMB0) as of 31 December 2022. The recoverable amounts of these assets are based on their fair value less costs of disposal, which is the estimated proceed from sale of the remaining project as scrap. In addition, certain preliminary projects with a gross amount of RMB24 million (2021: RMB320 million) which had previously been fully impaired, were written off in 2022. As of 31 December 2022, the accumulated impairment loss of construction in progress was approximately RMB895 million (2021: RMB405 million).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 20 INTANGIBLE ASSETS

	Concession assets <i>RMB'000</i>	Development right of hydropower <i>RMB'000</i>	Others <i>RMB'000</i>	Total <i>RMB'000</i>
<b>Cost</b>				
At 1 January 2021	3,749,225	1,382,954	1,028,184	6,160,363
Additions	–	–	144,932	144,932
Disposal of subsidiaries	(3,682,186)	–	(248,956)	(3,931,142)
Disposals	–	–	(59,804)	(59,804)
<b>At 31 December 2021 and 1 January 2022</b>	<b>67,039</b>	<b>1,382,954</b>	<b>864,356</b>	<b>2,314,349</b>
Additions	–	–	<b>173,962</b>	<b>173,962</b>
Disposals	<b>(583)</b>	–	<b>(22,686)</b>	<b>(23,269)</b>
<b>At 31 December 2022</b>	<b>66,456</b>	<b>1,382,954</b>	<b>1,015,632</b>	<b>2,465,042</b>
<b>Accumulated amortisation</b>				
At 1 January 2021	1,527,745	16,949	451,928	1,996,622
Charge for the year	120,265	14,685	70,429	205,379
Disposal of subsidiaries	(1,644,137)	–	(129,667)	(1,773,804)
Written back on disposals	–	–	(14,475)	(14,475)
<b>At 31 December 2021 and 1 January 2022</b>	<b>3,873</b>	<b>31,634</b>	<b>378,215</b>	<b>413,722</b>
Charge for the year	<b>2,675</b>	<b>19,518</b>	<b>89,359</b>	<b>111,552</b>
Written back on disposals	–	–	<b>(91)</b>	<b>(91)</b>
<b>At 31 December 2022</b>	<b>6,548</b>	<b>51,152</b>	<b>467,483</b>	<b>525,183</b>
<b>Net book value</b>				
At 31 December 2022	<b>59,908</b>	<b>1,331,802</b>	<b>548,149</b>	<b>1,939,859</b>
At 31 December 2021	63,166	1,351,320	486,141	1,900,627

Intangible assets mainly represent concession assets to operate power plants granted by the government under service concession arrangements and development right of hydropower.

Development right of hydropower was obtained through acquisition of Sichuan Liangshan Shuiluohe Hydropower Development Company Limited (“**Shuiluohe Company**”) in 2011. As at the acquisition date, all preliminary hydropower projects of Shuiluohe Company had obtained approval for basic development and preliminary work from the Development and Reform Commission of Sichuan Province.

The amortisation recognised for the year amounting to approximately RMB112 million (2021: RMB205 million) is included in “Depreciation and amortisation” in the consolidated statement of profit or loss and other comprehensive income.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 21 GOODWILL

	2022 RMB'000	2021 RMB'000
<b>Cost</b>		
At 1 January	1,838,351	1,448,813
Arising on acquisition of subsidiaries (note 47)	–	389,538
At 31 December	1,838,351	1,838,351
<b>Impairment losses</b>		
At 1 January	638,650	215,447
Impairment loss recognised during the year (note 11)	167,218	423,203
At 31 December	805,868	638,650
<b>Net book value</b>		
At 31 December	1,032,483	1,199,701

The carrying amount of goodwill at the end of the reporting period is attributable to below subsidiaries or power plants:

	2022 RMB'000	2021 RMB'000
Huadian Weifang Power Generation Company Limited	20,845	20,845
Hebei Huadian Shijiazhuang Thermal Power Company Limited	–	99,946
Hangzhou Huadian Banshan Power Generation Company Limited	59,322	59,322
Hebei Huarui Energy Group Corporation Limited	38,491	38,491
Huadian Longkou Power Generation Company Limited ("Longkou Company")	–	5,111
Guangdong Huadian Pingshi Power Generation Company Limited (formerly known as "Shaoguan Pingshi Power Plant Company Limited (Plant B)")	–	62,161
Lixian Star River Hydropower Company Limited	89,184	89,184
Hubei Power Generation	427,679	427,679
Hunan Area Companies (note 47)	389,538	389,538
Others	7,424	7,424
<b>Total</b>	<b>1,032,483</b>	<b>1,199,701</b>

During the year ended 31 December 2022, the Group recognised an impairment loss of approximately RMB167 million (2021: RMB423 million).

The basis of the recoverable amounts of the CGUs containing goodwill and their major underlying assumptions are summarised below:

The recoverable amounts of the CGUs are determined based on value in use calculations. These calculations use cash flow projections based on financial forecasts prepared by management covering a five-year period (2021: a five-year period). Cash flows beyond the five-year period are projected using zero growth rates (2021: zero growth rates). The cash flows are discounted using a discount rate of 8.40% (2021: 8.53%). The discount rates used are pre-tax and reflect specific risks relating to the relevant CGUs. Management believes that any reasonably possible change in any of these assumptions would not cause the carrying amount to exceed the recoverable amount of these units.

Other assumptions for the value in use calculations include the expected sales price of electricity, demands of electricity in specific regions where these power plants are located and fuel cost. Management determined these key assumptions based on past performance and its expectations on market development.



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 22 INTERESTS IN ASSOCIATES AND JOINT VENTURES

	2022 RMB'000	2021 RMB'000 (Restated)
Share of net assets	41,581,300	37,486,425
Less: impairment loss	(99,290)	(99,290)
	<b>41,482,010</b>	37,387,135
Fair value of listed investment (Note)	<b>348,314</b>	299,266

Note: The fair value of the listed investment is determined based on the quoted market bid price at the Shenzhen Stock Exchange in the PRC multiplied by the quantity of share held by the Group.

### (a) General information of associates

The following list contains only the particulars of associates as at 31 December 2022, all of which are limited liability companies established and operating in the PRC, which principally affected the results, assets or liabilities of the Group:

Name of company	Paid up capital RMB'000	Proportion of ownership interest and voting rights		Principal activities
		Held by the Company %	Held by subsidiaries %	
Otog Front Banner Changcheng No.3 Mining Company Limited ("Changcheng No.3 Mining") 鄂托克前旗長城三號礦業有限公司	1,246,307	35.00	-	Production and sale of coal
China Huadian Finance Corporation Limited ("China Huadian Finance") 中國華電集團財務有限公司	5,541,117	14.85 (Note (i))	-	Provision of corporate financial service to its group companies
Huadian Coal Industry Group Company Limited ("Huadian Coal") 華電煤業集團有限公司	3,657,143	11.82 (Note (i))	1.16	Provision of coal procurement service
Ningxia Yinxing Coal Company Limited ("Yinxing Coal") 寧夏銀星煤業有限公司	1,069,950	50.00 (Note (ii))	-	Production and sale of coal
Otog Front Banner Changcheng No. 5 Mining Company Limited ("Changcheng No.5 Mining") 鄂托克前旗長城五號礦業有限公司	653,995	35.00	-	Production and sale of coal
Otog Front Banner Zhengtai Trading Company Limited sale of coal 鄂托克前旗正泰商貿有限公司	6,770	35.00	-	Production and
Huadian Property Company Limited 華電置業有限公司	2,697,500	8.31 (Note (i))	1.07	Property development
Huadian Jinsha River Upstream Hydropower Development Company Limited ("Jinsha River Hydropower Company") 華電金沙江上游水電開發有限公司	6,398,270 (2021: 4,977,486)	12.00 (Note (iii))	-	Generation and sale of electricity
Otog Front Banner Changcheng Mine Company Limited ("Changcheng Mine") 鄂托克前旗長城煤礦有限公司	756,270	35.00	-	Sale of mines machinery and accessory
Inner Mongolia Fucheng Mining Company Limited ("Fucheng Mining Company") 內蒙古福城礦業有限公司	937,369	35.00	-	Sale of ores steels products
Ningxia Western Venture Industrial Co., Ltd. ("Ningxia West") 寧夏西部創業實業股份有限公司	1,458,375	4.87 (Note (i))	-	Railway development and management
CNNP CHD Hebei Nuclear Power Company Limited ("Hebei Nuclear Power") 中核華電河北核電有限公司	421,102 (2021: 369,202)	39.00 (Note (iv))	-	Generation and sale of electricity
Huadian New Energy Group Corporation Limited ("Huadian New Energy") 華電新能源集團股份有限公司 (formerly known as "Huadian Fuxin Energy Development Company Limited" 華電福新能源發展有限公司)	36,000,000	31.03 (Note (v))	-	Generation and sale of electricity and heat

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 22 INTERESTS IN ASSOCIATES AND JOINT VENTURES (Continued)

### (a) General information of associates (Continued)

Notes:

- (i) According to the articles of association of these companies, the Company has representations in the board of directors and therefore can participate in the financial and operating policy decisions of these companies so as to have significant influence in their activities.
- (ii) The Group holds 50% ownership of Yinxing Coal. According to the articles of associations of Yinxing Coal, the financial and operating policy decisions do not require unanimous consent of the parties sharing control. Thus, Yinxing Coal is accounted for as an associate of the Company.
- (iii) During the year ended 31 December 2022, the Company has made an additional capital injection in Jinsha River Hydropower Company amounting to RMB73,693,000 (2021: RMB120,384,000).
- (iv) During the year ended 31 December 2022, the Company has made an additional capital injection in Hebei Nuclear Power amounting to RMB9,910,000.
- (v) On 15 June 2021, the Company has made a capital injection in Huadian New Energy amounting to RMB21,541,700,000 in exchange for its 37.19% equity interests (note 46). In December 2021, following a capital increase agreement of Huadian New Energy, the shareholding of the Company has been subsequently diluted to 31.03% (note 22(e)).
- (vi) The English translation of the names is for identification only. The official names of these entities are in Chinese.

### (b) Summarised financial information of material associates

Summarised financial information in respect of each of the Group's material associates is set out below. The summarised financial information below represents amounts shown in the associate's financial statements prepared in accordance with IFRSs.

#### (i) Huadian Coal

	2022 RMB'000	2021 RMB'000
Current assets	19,610,513	18,882,326
Non-current assets	73,191,531	53,562,318
Current liabilities	(30,565,380)	(18,201,945)
Non-current liabilities	(27,311,834)	(20,226,412)

	2022 RMB'000	2021 RMB'000
Revenue	44,539,298	39,776,525
Profit for the year	5,881,042	13,675,761
Other comprehensive income for the year	222,362	213,784
Total comprehensive income for the year	6,103,404	13,889,545
Dividends received during the year	674,293	207,680

Reconciliation of the above summarised financial information to the carrying amount of the interest in Huadian Coal recognised in the consolidated financial statements:

	2022 RMB'000	2021 RMB'000
Net assets	34,924,830	34,016,287
Non-controlling interests of Huadian Coal	(12,969,699)	(12,942,874)
Proportion of the Group's ownership interest	12.98%	12.98%
Carrying amount of the Group's interest	2,849,776	2,735,329

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 22 INTERESTS IN ASSOCIATES AND JOINT VENTURES (Continued)

#### (b) Summarised financial information of material associates (Continued)

##### (ii) China Huadian Finance

	2022 RMB'000	2021 RMB'000
Current assets	20,354,027	8,916,047
Non-current assets	53,102,928	56,420,595
Current liabilities	(62,466,479)	(55,444,381)
Non-current liabilities	(90,880)	(86,645)
	2022 RMB'000	2021 RMB'000
Revenue	1,929,266	1,529,621
Profit for the year	1,093,980	949,025
Other comprehensive income for the year	–	180
Total comprehensive income for the year	1,093,980	949,205
Dividends received during the year	–	80,390

Reconciliation of the above summarised financial information to the carrying amount of the interest in China Huadian Finance recognised in the consolidated financial statements:

	2022 RMB'000	2021 RMB'000
Net assets	10,899,596	9,805,616
Proportion of the Group's ownership interest	14.85%	14.85%
Goodwill recognised at acquisition	21,435	21,435
Carrying amount of the Group's interest	1,640,025	1,477,569

##### (iii) Yinxing Coal

	2022 RMB'000	2021 RMB'000
Current assets	695,198	319,115
Non-current assets	2,521,893	2,741,059
Current liabilities	(889,332)	(1,162,077)
Non-current liabilities	(312,035)	(459,885)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 22 INTERESTS IN ASSOCIATES AND JOINT VENTURES (Continued)

#### (b) Summarised financial information of material associates (Continued)

##### (iii) Yinxing Coal (Continued)

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Revenue	1,743,444	987,123
Profit for the year	791,712	246,205
Other comprehensive income for the year	–	–
Total comprehensive income for the year	791,712	246,205
Dividends received during the year	107,100	84,884

Reconciliation of the above summarised financial information to the carrying amount of the interest in Yinxing Coal recognised in the consolidated financial statements:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Net assets	2,015,724	1,438,212
Proportion of the Group's ownership interest	50%	50%
Effect of fair value adjustments at acquisition	357,181	358,418
Carrying amount of the Group's interest	1,365,043	1,077,524

##### (iv) Huadian New Energy

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i> (Restated)
Current assets	39,744,423	43,517,091
Non-current assets	243,033,319	189,577,039
Current liabilities	(73,627,328)	(63,343,620)
Non-current liabilities	(118,677,812)	(89,918,397)

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i> (Restated)
Revenue	24,452,732	21,668,105
Profit for the year	10,622,001	7,839,902
Other comprehensive income for the year	18,488	102,582
Total comprehensive income for the year	10,640,489	7,942,484
Dividends received during the year	–	327,980

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 22 INTERESTS IN ASSOCIATES AND JOINT VENTURES (Continued)

#### (b) Summarised financial information of material associates (Continued)

##### (iv) Huadian New Energy (Continued)

Reconciliation of the above summarised financial information to the carrying amount of the interest in Huadian New Energy recognised in the consolidated financial statements:

	2022 RMB'000	2021 RMB'000 (Restated)
Net assets	90,472,602	79,832,113
Non-controlling interests of Huadian New Energy	(5,255,960)	(3,091,046)
Proportion of the Group's ownership interest	31.03%	31.03%
Carrying amount of the Group's interest	26,442,724	23,812,753

#### (c) Aggregate information of associates and joint ventures that are not individually material

	2022 RMB'000	2021 RMB'000
The Group's share of profit/(loss) and total comprehensive income/(expenses) for the year	144,360	(466,131)
Aggregate carrying amount of the Group's interests in these associates and joint ventures	9,184,442	8,283,960

The joint ventures held by the Group are not material to the consolidated financial statements.

#### (d) Disposal of investments in associates

During the year ended 31 December 2021, the Group disposed of its 38.13% equity interest in Hebei Huadian Guyuan Wind Power Company Limited; 39.62% equity interest in Hebei Huadian Yuzhou Wind Power Company Limited and 36.08% equity interest in Huadian International Ningxia New Energy Power Company Limited, respectively. The carrying amount of investment was RMB2,639,947,000 at the date of disposal and the cash consideration received was RMB2,759,101,000, resulting in a gain on disposal of RMB119,154,000.

	2021 RMB'000
Proceeds of disposal	2,759,101
Less: carrying amount of the investments disposed	(2,639,947)
Gain recognised (note 8)	119,154
Total consideration received in cash	2,759,101



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 22 INTERESTS IN ASSOCIATES AND JOINT VENTURES (Continued)

#### (e) Deemed partial disposal of Huadian New Energy

In December 2021, Huadian New Energy further entered into a capital increase agreement with multiple parties, who have injected approximately RMB15 billion in exchange for approximately 16.57% equity interest in Huadian New Energy. Accordingly, the Group's equity interest in Huadian New Energy was diluted from 37.19% to approximately 31.03% and a dilution gain on investment in an associate of RMB1,793,703,000 (restated)(note 8) was recognised during the year ended 31 December 2021.

#### (f) Unrecognised share of losses of associates

	2022 RMB'000	2021 RMB'000
The unrecognised share of losses of associates for the year	<b>(113,338)</b>	(136,085)
Cumulative unrecognised share of losses of associates	<b>(297,551)</b>	(184,213)

### 23 FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2022 RMB'000	2021 RMB'000
Unlisted equity securities, at FVPL	<b>370,055</b>	330,064

The above unlisted equity securities are issued by private entities incorporated in the PRC.

The fair value of unlisted equity securities is measured using valuation technique with significant unobservable inputs and hence was classified as Level 3 of the fair value hierarchy.

### 24 OTHER NON-CURRENT ASSETS

	2022 RMB'000	2021 RMB'000
Financial assets		
– Other long-term receivables with fixed-rate and non-current feature (Note (i))	<b>231,354</b>	254,430
Deductible Value Added Tax and other tax	<b>573,809</b>	1,434,315
Deferred differences arising from sales and leaseback arrangements and others (Note (ii))	<b>18,773</b>	73,350
	<b>823,936</b>	1,762,095

Notes:

- (i) Other long-term receivables are balances due from an associate (note 39(a)).
- (ii) Deferred differences arising from sales and leaseback arrangements represent the deficit of sale proceeds over the carrying amounts of the assets disposed under the sales and leaseback arrangements which resulted in finance lease. The differences are deferred and amortised as adjustments to the depreciation of the assets over their estimated useful lives.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 25 SERVICE CONCESSION ARRANGEMENT

The Group entered into certain service concession agreements with local governments (the “Grantors”) to construct and operate power plants during the concession period, which is normally for 25 years of operation. The Group is responsible for construction and maintenance of the power plants during the concession period. At the end of the concession period, the Group needs to dispose of the power plants to local government at nil consideration. Service concession construction revenue represents the revenue recognised during the construction stage of the service concession period. The same amount of cost is recorded since substantially all construction activities are sub-contracted. No additions to concession assets were recognised for service concession arrangements in both 2022 and 2021 (note 20).

The Group has recognised intangible assets (note 20) relating to the service concession arrangements, which represent the Group’s rights to charge a fee for sales of electricity. The Group has not recognised service concession receivables as the Grantor will not provide the Group with any guaranteed minimum payment for the operating period of the power plants.

The Group recognises the intangible assets at the fair value of the concession construction service and amortises the intangible assets over the operating period of the service concession projects.

### 26 INVENTORIES

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Coal, gas and stalk	3,331,473	5,405,703
Fuel oil	53,478	52,340
Materials, components and spare parts	552,429	672,849
	<b>3,937,380</b>	6,130,892

All of the inventories for future usage and sales are expected to be utilised within one year.

### 27 TRADE DEBTORS AND BILLS RECEIVABLE

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Trade debtors and bills receivable for the sale of electricity	11,215,958	8,187,764
Trade debtors and bills receivable for the sale of heat	994,957	841,053
Trade debtors and bills receivable for the sale of coal	539,884	565,380
	<b>12,750,799</b>	9,594,197
Less: allowance for impairment	<b>(361,332)</b>	(328,917)
	<b>12,389,467</b>	9,265,280

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 27 TRADE DEBTORS AND BILLS RECEIVABLE (Continued)

	2022 RMB'000	2021 RMB'000
Analysed into:		
– At amortised cost	12,002,063	8,839,157
– At FVOCI (Note (i))	748,736	755,040
	<b>12,750,799</b>	9,594,197

Notes:

- (i) The Group's bills receivable are managed with a business model under which bills receivable are held to collect contractual cash flows or endorsed to suppliers prior to their expiry date. Accordingly, these bills receivable are classified as financial assets at FVOCI.
- (ii) As at 31 December 2022, bank acceptance bills discounted of approximately RMB1,090 million (2021: RMB1,858 million) were derecognised by the Group (the "Derecognised Bills"). In accordance with the Law of Negotiable Instruments in the PRC, the holders of the Derecognised Bills have a right of recourse against the Group if the PRC banks default (the "Continuing Involvement"). In the opinion of the directors, the Group has transferred substantially all risks and rewards relating to the Derecognised Bills. Accordingly, it has derecognised the full carrying amounts of the Derecognised Bills and the associated trade payables. In the opinion of the directors, the fair values of the Group's Continuing Involvements in the Derecognised Bills are not significant. Losses related to derecognition of the Derecognised Bills were charged to profit or loss for approximately RMB8 million (2021: RMB37 million) in total respectively.
- (iii) As at 31 December 2021, trade receivables of RMB2,959 million had been factored to a bank on a non-recourse basis. These trade receivables were derecognised as the Group had transferred substantially all risks and rewards relating to the trade receivables to the bank under the non-recourse factoring agreements. Loss of RMB0.8 million related to derecognition of the derecognised trade receivables in total and charged to profit or loss. As at 31 December 2022, no trade receivables had been factored and derecognised and thus, no losses were charged to profit or loss.

### (a) Ageing analysis

As at 31 December 2022, the ageing analysis of trade debtors and bills receivable (net of allowance for impairment), presented based on the invoice date, which approximated to the revenue recognition date, is as follows:

	2022 RMB'000	2021 RMB'000
Within 1 year	12,348,427	9,174,783
1 to 2 years	33,779	24,385
2 to 3 years	6,754	22,115
Over 3 years	507	43,997
	<b>12,389,467</b>	9,265,280

### (b) Impairment of trade debtors and bills receivable

Impairment loss in respect of trade debtors and bills receivable are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade debtors and bills receivable directly (see note 2(m)(i)).

The movement in allowance for impairment during the year is as follows:

	2022 RMB'000	2021 RMB'000
At 1 January	328,917	274,361
Impairment loss recognised	42,417	103,590
Reversal of impairment loss	(1,045)	(5,959)
Write-off	(8,957)	(43,075)
At 31 December	<b>361,332</b>	328,917

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 27 TRADE DEBTORS AND BILLS RECEIVABLE (Continued)

#### (b) Impairment of trade debtors and bills receivable (Continued)

The Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. Except for debtors with significant outstanding balances or credit-impaired, the Group determines the ECL on these items on a collective basis.

At 31 December 2022, the Group's trade debtors and bills receivable totalling of approximately RMB42 million (2021: RMB104 million) were individually determined to be credit-impaired and an increase in loss allowance of the same amount has been recognised during the year. A write-off of trade debtors and bills receivable with a gross carrying amount of approximately RMB9 million (2021: RMB47 million) resulted in a decrease in loss allowance of approximately RMB9 million (2021: RMB43 million). The Group does not hold any collateral over these balances.

The information about the ECLs on the Group's trade debtors and bills receivable are disclosed in note 43(b).

### 28 DEPOSITS, OTHER RECEIVABLES AND PREPAYMENTS

	2022 RMB'000	2021 RMB'000
Financial assets		
– Dividends receivable	353,150	591,647
– Deposits	24,649	28,214
– Consideration receivables	134,437	933,554
– Machinery and equipment related receivables	327,583	543,123
– Other receivables	801,682	1,092,270
	<b>1,641,501</b>	3,188,808
Less: allowance for impairment (Note)	<b>(482,429)</b>	(503,868)
	<b>1,159,072</b>	2,684,940
Deductible Value Added Tax	<b>1,537,089</b>	2,728,996
Prepayments	<b>3,728,564</b>	2,066,807
Others	<b>96,552</b>	73,514
	<b>6,521,277</b>	7,554,257

Note:

ECLs are estimated by applying a loss rate approach with reference to the historical loss record of the Group. The loss rate is adjusted to reflect the current conditions and forecasts of future economic conditions, as appropriate.

As at 31 December 2022, ECLs of deposits and other receivables of the Group amounted to approximately RMB482 million (2021: RMB504 million). The information about the ECLs on the Group's deposits and other receivables are disclosed in note 43(b).

### 29 RESTRICTED DEPOSITS

Restricted deposits mainly represent performance bonds and frozen deposits at banks and other financial institutions with maturity of over three months.

### 30 CASH AND CASH EQUIVALENTS

	2022 RMB'000	2021 RMB'000
Cash at bank and in hand	26,636	688,571
Cash at other financial institutions	5,880,979	5,256,496
	<b>5,907,615</b>	5,945,067

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 31 BORROWINGS

### (a) Bank loans

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Due:		
Within 1 year		
– short-term bank loans	22,111,828	23,908,939
– current portion of long-term bank loans	6,726,229	6,059,554
	<b>28,838,057</b>	29,968,493
After 1 year but within 2 years	12,711,715	7,760,968
After 2 years but within 5 years	19,876,472	19,251,362
After 5 years	16,963,275	18,341,280
	<b>49,551,462</b>	45,353,610
	<b>78,389,519</b>	75,322,103

As at 31 December 2022, all of the bank loans are unsecured, except for amounts of approximately RMB10,620 million (2021: RMB11,361 million) which are secured by the income stream in respect of the sale of electricity and heat and trade debtors for the sale of electricity and heat of certain subsidiaries, amounts of approximately RMB1,242 million (2021: RMB1,354 million) which are secured by lease prepayments and property, plant and equipment with an aggregate carrying amount of approximately RMB1,114 million (2021: RMB1,851 million) of certain subsidiaries. As at 31 December 2021, bank loans of approximately RMB1 million are secured by guarantee from China Huadian Corporation Limited (“China Huadian”) and the loans are repaid in 2022. None of the bank loans contain financial covenants.

Details of the currencies, interest rates and maturity dates of bank loans are as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
<b>RMB loans</b>		
Floating interest rates ranging from 1.75% to 4.90% (2021: 2.80% to 5.39%) per annum with maturities up to 2043	52,580,210	50,060,599
Fixed interest rates ranging from 1.80% to 4.30% (2021: 2.35% to 4.60%) per annum with maturities up to 2034	25,809,309	25,260,528
<b>Euro loans</b>		
Fixed interest rate of 2.50% per annum as at 31 December 2021, with maturity up to 2022	–	976
	<b>78,389,519</b>	75,322,103



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 31 BORROWINGS (Continued)

#### (b) Loans from shareholders

	2022 RMB'000	2021 RMB'000
Due:		
Within 1 year		
– current portion of long-term loans from shareholders	1,358,019	617,054
After 1 year but within 2 years	179,400	4,100,000
After 2 years but within 5 years	3,416,460	679,400
After 5 years	800,000	800,000
	4,395,860	5,579,400
	5,753,879	6,196,454

All of the loans from shareholders are unsecured and denominated in RMB. Details of the interest rates and maturity dates of loans from shareholders are as follows:

	2022 RMB'000	2021 RMB'000
<b>Loans from China Huadian</b>		
Floating interest rates ranging from 3.00% to 4.00% (2021: 3.39% to 4.00%) per annum, with maturities up to 2027	200,214	662,527
Fixed interest rates ranging from 2.69% to 5.00% (2021: 3.34% to 5.00%) per annum, with maturities up to 2030	5,553,406	5,526,070
<b>Others</b>		
Fixed interest rate of 4.65% (2021: 4.60%) per annum, with maturities up to 2023	259	7,857
	5,753,879	6,196,454

#### (c) State loans

	2022 RMB'000	2021 RMB'000
Due:		
Within 1 year		
– current portion of long-term state loans	1,781	1,733
After 1 year but within 2 years	1,781	917
After 2 years but within 5 years	5,345	5,198
After 5 years	37,754	39,269
	44,880	45,384
	46,661	47,117

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 31 BORROWINGS (Continued)

#### (c) State loans (Continued)

Details of the currencies, interest rates and maturity dates of state loans are as follows:

	2022 RMB'000	2021 RMB'000
<b>Euro loan</b>		
Fixed interest rate of 0.75% (2021: 0.75%) per annum, with maturities up to 2048	<b>46,661</b>	47,117

The Euro state loan represents a loan facility maximum of approximately Euro14.50 million granted by the KfW Bankengruppe of Germany to the PRC State Government pursuant to a loan agreement entered into in December 2008 based on a series of bilateral financial cooperation agreements between The Federal Republic of Germany and the PRC State Government. The loan is to finance the Qingdao central heating system under the Energy Efficiency programme. The PRC State Government on-lent the loan facility to Qingdao Heat Company through China Agricultural Bank and is guaranteed by Qingdao Finance Bureau. At 31 December 2022, the total amount of the above state loan is approximately Euro6.29 million (2021: Euro6.53 million).

#### (d) Other loans

	2022 RMB'000	2021 RMB'000
Due:		
Within 1 year		
– short-term other loans	<b>5,873,315</b>	3,735,606
– current portion of long-term other loans	<b>1,576,901</b>	1,755,885
	<b>7,450,216</b>	5,491,491
After 1 year but within 2 years	<b>1,791,047</b>	1,641,986
After 2 years but within 5 years	<b>2,358,583</b>	2,614,058
After 5 years	<b>1,597,951</b>	1,447,672
	<b>5,747,581</b>	5,703,716
	<b>13,197,797</b>	11,195,207

Other loans are mainly borrowed from China Huadian Finance, an associate of the Group, and certain fellow subsidiaries of the Company. Other loans bear interest rates ranging from 1.20% to 5.00% per annum as at 31 December 2022 (2021: 2.85% to 5.64% per annum), with maturities from 2023 to 2037 (2021: 2021 to 2041).

During the current year, the Group has 2 newly signed sales and leaseback agreements with fellow subsidiaries of the Company (note 39) and 1 third-party financial leasing company with both contract terms of 1 year, in order to sell certain property, generator and related machinery and equipment (note 17) and in the meantime, leased back those assets. According to the agreements, the Group has an option to buy back the equipment at a nominal price (RMB1) when the lease term expires. The substance of the transaction was to obtain financing secured by relevant assets within the leasing period and repaid them in instalment. Meanwhile, the Group has certain financing and factoring agreements with fellow subsidiaries (note 39). As at 31 December 2022, the loans mentioned above bear interest rate ranging from 1.20% to 5.00% (2021: 1.50% to 5.64%) per annum and will be due from 2023 to 2037 (2021: 2022 to 2036).

As at 31 December 2022, the other loans borrowed from China Huadian Finance, a fellow subsidiary and a third party financial leasing company totalling of approximately RMB485 million (2021: RMB533 million) are secured by the income stream in respect of the sale of electricity.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 31 BORROWINGS (Continued)

#### (d) Other loans (Continued)

Apart from the aforementioned secured loans, all of the other loans are unsecured. All of the other loans are denominated in RMB. Details of the interest rates and maturity dates of other loans are as follows:

	2022 RMB'000	2021 RMB'000
<b>Loans from China Huadian Finance</b>		
Floating interest rates ranging from 2.60% to 4.41% (2021: 2.90% to 4.75%) per annum, with maturities up to 2035	4,727,807	7,507,777
Fixed interest rates ranging from 2.50% to 3.85% (2021: 3.35% to 4.35%) per annum, with maturities up to 2025	6,871,104	2,124,329
<b>Others</b>		
Floating interest rates ranging from 3.80% to 4.53% (2021: 3.48% to 5.64%) per annum, with maturities up to 2037	1,082,027	1,332,808
Fixed interest rates of ranging from 1.20% to 5.00% (2021: 2.85% to 3.10%) per annum, with maturities up to 2025	516,859	230,293
	<b>13,197,797</b>	11,195,207

#### (e) Short-term debentures payable

	2022 RMB'000	2021 RMB'000
First tranche of super short-term debentures for the year of 2021	–	2,023,880

On 16 July 2021, the Group issued the first tranche of super short-term debentures of 2021 in PRC interbank debenture market. The super short-term debenture was issued at a par value of RMB2,000 million with a maturity period of 180 days and bears interest at 2.58% per annum. The tranche is unsecured. During the current year, the Group has redeemed the above mentioned super short-term debentures.

In 2021, the Group redeemed four tranches of super short-term debentures with a total principal amount of RMB8,500 million.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 31 BORROWINGS (Continued)

### (f) Long-term debentures payable

	2022 RMB'000	2021 RMB'000
First tranche of medium-term notes for the year of 2017	–	3,611,991
First tranche of company debentures for the year of 2019	–	2,014,834
First tranche of medium-term notes for the year of 2019	3,091,058	3,090,492
Third tranche of medium-term notes for the year of 2020	2,032,233	2,032,044
First tranche of green mid-term notes for the year of 2021	2,322,468	2,321,601
Second tranche of medium-term notes for the year of 2021	2,526,636	2,525,693
Third tranche of medium-term notes for the year of 2021	2,017,004	2,016,250
Fourth tranche of medium-term notes for the year of 2021	1,814,185	1,813,506
Fifth tranche of medium-term notes for the year of 2021	2,513,752	2,512,809
First tranche of company debentures for the year of 2022 (Energy Supply Assurance Bond)	2,570,574	–
First tranche of medium-term notes for the year of 2022 (Revolutionary Base Area Bond)	2,053,915	–
Second tranche of medium-term notes for the year of 2022 (Type 1)	1,020,039	–
Second tranche of medium-term notes for the year of 2022 (Type 2)	1,022,559	–
Third tranche of medium-term notes for the year of 2022	1,521,014	–
Second tranche of company debentures for the year of 2022	1,509,622	–
	<b>26,015,059</b>	21,939,220
Less: Long-term debentures due within one year	<b>(2,442,132)</b>	(5,861,218)
	<b>23,572,927</b>	16,078,002

On 6 January 2022, the Group issued the first tranche of company debentures for the year of 2022 (Energy Supply Assurance Bond) in Shanghai Stock Exchange. The company debenture was issued at a total par value of RMB2,500 million with a maturity period of 3 years and bears interest at 2.92% per annum. The tranche is unsecured.

On 17 January 2022, the Group issued the first tranche of medium-term notes for the year of 2022 (Revolutionary Base Area Bond) in PRC interbank debenture market. The medium-term notes was issued at a total par value of RMB2,000 million with a maturity period of 3 years and bears interest at 2.90% per annum. The tranche is unsecured.

On 20 April 2022, the Group issued the second tranche of medium-term notes for the year of 2022 (Type 1) in PRC interbank debenture market. The medium-term note was issued at a total par value of RMB1,000 million with a maturity period of 3 years and bears interest at 2.95% per annum. The tranche is unsecured.

On 20 April 2022, the Group issued the second tranche of medium-term notes for the year of 2022 (Type 2) in PRC interbank debenture market. The medium-term note was issued at a total par value of RMB1,000 million with a maturity period of 5 years and bears interest at 3.39% per annum. The tranche is unsecured.

On 20 June 2022, the Group issued the third tranche of medium-term notes for the year of 2022 in PRC interbank debenture market. The medium-term note was issued at a total par value of RMB1,500 million with a maturity period of 2 years and bears interest at 2.70% per annum. The tranche is unsecured.

On 16 September 2022, the Group issued the second tranche of company debentures for the year of 2022 in Shanghai Stock Exchange. The company debenture was issued at a total par value of RMB1,500 million with a maturity period of 3 years and bears interest at 2.58% per annum. The tranche is unsecured.

During the year, the Group repaid 1 tranche of medium-term notes and 1 tranche company debentures with principal amount of RMB3,500 million and RMB2,000 million respectively (2021: repaid 1 tranche of medium-term notes with principal amount of RMB2,000 million) at par value.

At 31 December 2022, the effective interest rates of the long-term debentures are ranged from 2.54% to 4.08% (2021: from 2.53% to 4.85%) per annum after considering the effect of issue costs.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 32 CONVERTIBLE BONDS

On 28 September 2021, the Company completed the issuance of 14,701,590 convertible bonds (“CBs”) at a par value of RMB100 each, which were due on 28 September 2024 with an aggregate principal amount of RMB1,470,159,000. The annual coupon rate of the CBs is 2% for the first year, 3% for the second year, and 3% for the third year from the date of completion of the issuance of CBs. The CBs were denominated in Renminbi and entitled the holders to convert them into ordinary A shares of the Company during the conversion period at a conversion price of RMB4.36 per share. The conversion period of the CBs shall commence on the first trading day (inclusive) immediately following the expiry of the 12-month period after the completion date of the issuance of CBs and end on the maturity date (inclusive) of the CBs. If the CBs are not converted, they will be redeemed by the Company at maturity at a redemption price of 104% of the nominal value of the CBs (excluding the third year accrued interest). Refer to the Company’s announcement dated 30 September 2021 for the details of the terms of the CBs.

At initial recognition, the equity component of the CBs was separated from the liability component. The equity element is presented in equity heading “convertible bonds reserve”. The effective interest rate of the liability component is 3.91%.

No redemption, purchase or cancellation by the Company has been made in respect of the CBs during the years ended 31 December 2022 and 2021.

On 28 July 2022, as a result of the Company’s declaration of dividend, the conversion price of the CBs was adjusted from RMB4.36 to RMB4.11 per share. Save for this alteration, all other terms and conditions of the outstanding CBs remained unchanged. The relevant ordinary resolution was duly passed at the special general meeting.

The movement of the liability component of the convertible loans for the year is set out below:

	<b>Liability component of CBs RMB’000</b>
As at 1 January 2021	–
Issued during the year	1,418,980
Effective interest expenses (note 10)	14,657
As at 31 December 2021 and 1 January 2022	1,433,637
Effective interest expenses (note 10)	57,011
Interest paid	(29,403)
As at 31 December 2022	1,461,245

### 33 TRADE CREDITORS AND BILLS PAYABLE

As at 31 December 2022, the ageing analysis of trade creditors and bills payable, presented based on the invoice date, is as follows:

	<b>2022 RMB’000</b>	2021 RMB’000
Within 1 year	<b>14,407,697</b>	12,487,154
1 to 2 years	<b>1,001,702</b>	764,963
Over 2 years	<b>1,196,809</b>	1,541,309
	<b>16,606,208</b>	14,793,426



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 34 OTHER PAYABLES AND CONTRACT LIABILITIES

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Financial liabilities		
– Construction deposits	<b>1,172,282</b>	1,074,841
– Consideration payables on acquisitions	<b>330,400</b>	340,789
– Wages payable	<b>214,982</b>	222,627
– Payables for installed capacity quota	<b>200,000</b>	257,530
– Payables for sewage charges	<b>1,740</b>	10,309
– Dividend payables to non-controlling interests	<b>109,638</b>	322,477
– Distribution payables to holder of perpetual capital securities	<b>250,639</b>	229,667
– Others (Note (i))	<b>654,355</b>	718,653
	<b>2,934,036</b>	3,176,893
Other tax payables	<b>1,125,876</b>	1,378,777
Contract liabilities	<b>2,028,884</b>	1,875,588
	<b>6,088,796</b>	6,431,258

Notes:

- (i) Others mainly include payables on service fees, water charges and other miscellaneous items.
- (ii) All of the other payables of the Group are expected to be settled or recognised as income within one year or are repayable on demand.

### Contract liabilities

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Contract liabilities arising from:		
Sale of heat	<b>1,878,840</b>	1,729,460
Sale of coal	<b>67,502</b>	18,539
Others	<b>82,542</b>	127,589
	<b>2,028,884</b>	1,875,588

Contract liabilities mainly relate to the deposits received from customers for sale of heat. The Group expects to deliver the goods to satisfy the performance obligations of these contract liabilities within one year or less.

Between the total contract liabilities of approximately RMB1,876 million as of 31 December 2021 (approximately RMB1,940 million as of 31 December 2020), approximately RMB1,861 million has been recognised as revenue for the year ended 31 December 2022 (2021: approximately RMB1,935 million) from performance obligations satisfied.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 35 INCOME TAX IN THE CONSOLIDATION STATEMENT OF FINANCIAL POSITION

(a) Taxation in the consolidation statement of financial position represents:

	2022 RMB'000	2021 RMB'000
Net tax (recoverable)/payable at 1 January	(346,910)	548,721
Provision for the year (note 14(a))	173,079	416,058
Arising on acquisition of subsidiaries (note 47)	–	32,049
Disposal of subsidiaries	–	(328)
Over-provision in respect of prior years (note 14(a))	(10,325)	(11,729)
Income tax refunded/(paid)	161,278	(1,331,681)
Net tax recoverable at 31 December	(22,878)	(346,910)
Representing:		
Tax payable	76,954	205,952
Tax recoverable	(99,832)	(552,862)

(b) Deferred tax assets and liabilities recognised:

The components of deferred tax assets/(liabilities) recognised in the consolidated statement of financial position and the movements during the year are as follows:

	At 1 January 2021 RMB'000	Acquisition/ disposal of subsidiaries, net RMB'000	Credited/ (charged) to profit or loss RMB'000 (note 14(a))	At 31 December 2021 and 1 January 2022 RMB'000	Credited/ (charged) to profit or loss RMB'000 (note 14(a))	At 31 December 2022 RMB'000
Impairment of assets	109,653	(5,174)	26,648	131,127	60,400	191,527
Accelerated tax depreciation	(807,824)	–	(460,489)	(1,268,313)	(10,701)	(1,279,014)
Fair value adjustments on assets arising from business combinations	(1,140,794)	(328,041)	485,696	(983,139)	149,265	(833,874)
Long-term payables discounting	(76,918)	76,918	–	–	–	–
Accrued staff cost	14,984	(44)	(6,646)	8,294	192	8,486
Tax losses	672,946	(101,169)	2,071,971	2,643,748	571,580	3,215,328
Others (Note)	9,938	(4,558)	61,873	67,253	6,839	74,092
	(1,218,015)	(362,068)	2,179,053	598,970	777,575	1,376,545

Note: Others represent deferred tax arising from provision for miscellaneous expenses.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 35 INCOME TAX IN THE CONSOLIDATION STATEMENT OF FINANCIAL POSITION (*Continued*)

#### (b) Deferred tax assets and liabilities recognised: (*Continued*)

Reconciliation to the consolidated statement of financial position is as follows:

	2022 RMB'000	2021 RMB'000
Net deferred tax assets recognised in the consolidated statement of financial position	2,858,796	2,289,323
Net deferred tax liabilities recognised in the consolidated statement of financial position	(1,482,251)	(1,690,353)
	<b>1,376,545</b>	598,970

In accordance with the accounting policy set out in note 2(v), the Group has not recognised deferred tax assets in respect of cumulative tax losses of approximately RMB12,330 million (2021: RMB10,131 million) and deductible temporary differences of approximately RMB5,313 million (2021: RMB4,806 million) due to the unpredictability of future profit streams. The expiration of tax losses under current tax legislation is as follows:

	2022 RMB'000	2021 RMB'000
2022	–	876,430
2023	1,236,049	1,248,517
2024	655,255	564,173
2025	142,337	177,353
2026	6,908,051	7,265,128
2027	3,388,264	–
	<b>12,329,956</b>	10,131,601

### 36 DEFERRED INCOME

Deferred income represents the unearned portion of upfront installation fees received from customers for connecting the customers' premises to the heat network of the Group. The amount is deferred and recognised in profit or loss on a straight-line basis over the expected useful life of the relevant assets installed, which approximates to the expected service terms of the relevant contracts of sale of heat.

The upfront installation fee recognised for the year amounting to approximately RMB227 million (2021: RMB264 million) is included in "Other revenue" in the consolidated statement of profit or loss and other comprehensive income (note 9).

### 37 PROVISIONS

The provisions represent the Group's best estimate of the remediation costs for Group's liability on mine disposal and environmental restoration, which is based on industry standards and historical experience.

	2022 RMB'000	2021 RMB'000
At 1 January	64,242	236,717
Additions	2,664	7,173
Settlement	(7,173)	–
Loss of control of subsidiaries	–	(179,648)
At 31 December	<b>59,733</b>	64,242

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 38 SHARE CAPITAL, RESERVES AND DIVIDENDS

#### (a) Dividends

##### (i) Dividends payable to equity shareholders of the Company attributable to the year:

	2022 RMB'000	2021 RMB'000
Final dividend proposed after the end of reporting period of RMB0.20 per share (2021: RMB0.25 per share)	1,973,972	2,467,465

Pursuant to a resolution passed at the directors' meeting held on 29 March 2023, a final dividend of RMB0.20 per share will be payable to shareholders for 2022, subject to the approval of the shareholders at the coming annual general meeting.

The final dividend proposed after the end of the reporting period has not been recognised as a liability at the end of the reporting period.

##### (ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year:

	2022 RMB'000	2021 RMB'000
Final dividend in respect of the previous financial year approved and paid during the year, of RMB0.25 per share (2021: RMB0.25 per share)	2,467,465	2,465,744

#### (b) Share capital

Movement of the Company's registered, issued and fully paid up capital is tabled below.

	Number of shares		Nominal value	
	2022 '000	2021 '000	2022 RMB'000	2021 RMB'000
<i>A shares of RMB1 each</i>				
At beginning of year	8,152,624	8,145,743	8,152,624	8,145,743
Issues of shares	–	6,881	–	6,881
At end of year	8,152,624	8,152,624	8,152,624	8,152,624
<i>H shares of RMB1 each</i>				
At beginning of year and end of year	1,717,234	1,717,234	1,717,234	1,717,234
Total of A and H shares:				
At end of year	9,869,858	9,869,858	9,869,858	9,869,858
At beginning of year	9,869,858	9,862,977	9,869,858	9,862,977

On 28 September 2021, the Company issued 6,881,562 A shares at a price of RMB4.36 (adjusted) to certain investors. These shares are not transferrable within 12 months from 28 September 2021. All A shares and H shares rank pari passu in all material aspects.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 38 SHARE CAPITAL, RESERVES AND DIVIDENDS (*Continued*)

### (c) Reserves

#### (i) Capital reserve

Capital reserve represents premium received from issuance of shares, share of joint ventures or associates' capital reserve movements which are required to be included in this reserve by the PRC regulations and the difference between the fair value of the interest-free loans provided by the parent company initially recognised in the financial statements and the nominal amount of loans received by the Group.

#### (ii) Statutory surplus reserve

##### *General reserve*

According to the Company's Articles of Association, the Company is required to transfer at least 10% (at the discretion of the board of directors) of its profit after taxation, as determined under PRC accounting rules and regulations, to a statutory general surplus reserve until the reserve balance reaches 50% of the registered capital. The transfer to this reserve must be made before distribution of a dividend to shareholders.

The statutory general surplus reserve can be used to make good previous years' losses, if any, and may be converted into share capital by the issue of new shares to shareholders in proportion to their existing shareholdings or by increasing the par value of the shares currently held by them, provided that the balance after such issue is not less than 25% of the registered capital.

##### *Specific reserve*

Pursuant to the relevant PRC regulations for power generation companies and coal mining companies, the Group is required to set aside an amount to maintenance and production funds. The funds can be used for maintenance of production and improvements of safety at the power plants and mines, and are not available for distribution to shareholders.

#### (iii) Revaluation reserve

Revaluation reserve represents the fair value adjustment of acquisition of Huadian Weifang Power Company Limited ("**Weifang Company**") relating to the previously held interest of the Group.

#### (iv) Fair value reserve

The fair value reserve comprises the Group's share of the cumulative net change in the fair value of financial asset at other comprehensive income of an associate at the end of the reporting period and is dealt with in accordance with the accounting policies in note 2(l).

#### (v) Convertible bonds reserve

	Equity component of CBs RMB'000
As at 1 January 2021	–
Recognition of the equity component, net of issuance cost	41,250
As at 31 December 2021, 1 January 2022 and 31 December 2022	41,250

The convertible bonds reserve represents the equity component (conversion rights) of convertible bonds issued by the Company as set out in note 32. Items included in convertible bonds reserve will not be reclassified subsequently to profit or loss.

### (d) Distributability of reserve

According to the Company's Articles of Association, the retained profits available for distribution are the lower of the amount as determined under PRC accounting rules and regulations and the amount determined under IFRSs. As of 31 December 2022, the retained profits available for distribution were approximately RMB11,142 million (2021: RMB11,532 million).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 38 SHARE CAPITAL, RESERVES AND DIVIDENDS (Continued)

#### (e) Perpetual capital securities

During the year ended 31 December 2022, the Company issued 4 tranches of public perpetual capital securities, which included (1) 1st tranche of renewable company debentures for the year of 2022; (2) 2nd tranche of renewable company debentures for the year of 2022; (3) 3rd tranche of renewable company debentures for the year of 2022; and (4) 4th tranche of renewable company debentures for the year of 2022.

During the year ended 31 December 2021, the Company issued 2 tranches of public perpetual capital securities, which included (1) 1st tranche of medium-term note of 2021; and (2) 6th tranche of medium-term note for the year of 2021, to third parties with an aggregate principal amount of RMB4.5 billion.

Type of securities	Issuance date	Category	Issue price RMB'000	Number	Par value RMB'000
1st tranche of renewable company debentures for the year of 2022	April 2022	Equity Instrument	0.1	25,000,000	2,500,000
2nd tranche of renewable company debentures for the year of 2022	July 2022	Equity Instrument	0.1	15,000,000	1,500,000
3rd tranche of renewable company debentures for the year of 2022	November 2022	Equity Instrument	0.1	20,000,000	2,000,000
4th tranche of renewable company debentures for the year of 2022	December 2022	Equity Instrument	0.1	15,000,000	1,500,000
					7,500,000

The perpetual capital securities are issued at par value with a range of initial distribution rate from 2.49% to 5.20%. The interests of perpetual capital securities are recorded as distributions, which are payable annually after the approval of the directors of the Company and may be deferred at the discretion of the Company unless compulsory distribution payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occurred.

The perpetual capital securities have no fixed maturity date and are redeemable at the Company's discretion in whole in accordance with their terms. The Company is entitled to redeem the perpetual capital securities at par value plus payable interest (including all deferred interest) on the 2, 3 or 5 years and each of the subsequent interest payment dates of the perpetual bonds.

The applicable distribution rate will be reset on first call date and each renewal period after first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum.

The directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay any distribution for the perpetual capital securities. Therefore, the perpetual capital securities are classified as equity instrument and recorded in equity in the consolidated statement of financial position. As at 31 December 2022, the profit attributable to holders of perpetual capital securities, based on the applicable distribution rate, was approximately RMB156 million (2021: RMB163 million).

The above financial instruments do not have a definite maturity period, and will exist until the right of redemption is exercised. The Company has the rights to deferred payment of principal and deferred payment of interest.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 38 SHARE CAPITAL, RESERVES AND DIVIDENDS (Continued)

#### (e) Perpetual capital securities (Continued)

Movement of the perpetual capital securities is as follows:

	Principal RMB'000	Distribution RMB'000	Total RMB'000
As at 1 January 2021	24,444,020	201,155	24,645,175
Issue of perpetual capital securities	4,496,319	–	4,496,319
Profit attributable to holders of perpetual capital securities (note 16(a))	–	1,023,261	1,023,261
Distributions payable to holders of perpetual capital securities	–	(1,061,382)	(1,061,382)
Redemption of perpetual capital securities	(6,630,024)	–	(6,630,024)
As at 31 December 2021 and 1 January 2022	<b>22,310,315</b>	<b>163,034</b>	<b>22,473,349</b>
Issue of perpetual capital securities	<b>7,494,189</b>	–	<b>7,494,189</b>
Profit attributable to holders of perpetual capital securities (note 16(a))	–	<b>900,875</b>	<b>900,875</b>
Distributions payable to holders of perpetual capital securities	–	<b>(907,697)</b>	<b>(907,697)</b>
Redemption of perpetual capital securities	<b>(6,454,503)</b>	–	<b>(6,454,503)</b>
As at 31 December 2022	<b>23,350,001</b>	<b>156,212</b>	<b>23,506,213</b>

#### (f) Capital management

The Group's capital management objectives are:

- to ensure the Group's ability to continue as a going concern;
- to provide an adequate return to shareholders; and
- to maintain an optimal capital structure to reduce cost of capital.

In order to maintain and improve the capital structure, the Group may, for the purpose of business expansion, issue new shares to reduce its liabilities to assets ratio.

The Group monitors its capital structure on the basis of liabilities to assets ratio. This ratio is calculated as total liabilities divided by total assets.

The liabilities to assets ratios as at 31 December 2022 and 2021 were as follows:

	2022 RMB'000	2021 RMB'000 (Restated)
Total liabilities	<b>153,773,504</b>	146,117,473
Total assets	<b>226,802,413</b>	222,464,187
Liabilities to assets ratio	<b>68%</b>	66%

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 39 MATERIAL RELATED PARTY TRANSACTIONS

### (a) Transactions with shareholders, fellow subsidiaries and associates

Shareholders, fellow subsidiaries and associates that had material transactions with the Group are as follows:

Name of related parties	Nature of relationship
China Huadian Corporation Limited	Immediate parent and ultimate holding company of the Company
China Huadian Finance	An associate of the Group
Huadian Coal	An associate of the Group
Beijing Huabin Investment Company Limited	A subsidiary of an associate of the Group
Beijing Huabin Property Management Company Limited	A subsidiary of an associate of the Group
Fucheng Mining Company	An associate of the Group
Yinxing Coal	An associate of the Group
Sichuan Huayingshan Longtan Coal	An associate of the Group
Hebei Nuclear Power	An associate of the Group
Changcheng No.3 Mining	An associate of the Group
Changcheng No.5 Mining	An associate of the Group
Changcheng Mine	An associate of the Group
Lu'an Municipal Thermal Power Generation Company Limited	An associate of the Group
Jinsha River Hydropower Company	An associate of the Group
Huadian New Energy	An associate of the Group
China Huadian Engineering Corporation and its subsidiaries	Fellow subsidiaries of the Company
Guodian Nanjing Automation Company Limited and its subsidiaries	Fellow subsidiaries of the Company
CHD Power Plant Operation Company Limited and its subsidiaries	Fellow subsidiaries of the Company
China Huadian Group Science and Technology Research Institutes Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Huadian Xinjiang Power Generation Company Limited and its subsidiaries	Fellow subsidiaries of the Company
China Huadian Materials Company Limited and its subsidiaries	Fellow subsidiaries of the Company
China Huadian Capital Holdings Company Limited and its subsidiaries	Fellow subsidiaries of the Company
China Huadian Clean Energy Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Huadian Energy Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Huadian Shanxi Energy Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Huadian Jiangsu Energy Limited Company and its subsidiaries	Fellow subsidiaries of the Company
Huadian Shaanxi Energy Company Limited	A fellow subsidiary of the Company
Huadian Sichuan Power Company Limited and its subsidiaries	Fellow subsidiaries of the Company
China Huadian Electrical Construction Technical and Economic Consulting Centre	A fellow subsidiary of the Company
Huadian Inner Mongolia Energy Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Anhui Huadian Lu'an Power Generation Company Limited	A fellow subsidiary of the Company
China Huadian Advanced Training Centre	A fellow subsidiary of the Company
Fujian Huadian Furui Energy Development Company Limited and its subsidiaries	Fellow subsidiaries of the Company

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 39 MATERIAL RELATED PARTY TRANSACTIONS (Continued)

### (a) Transactions with shareholders, fellow subsidiaries and associates (Continued)

Name of related parties	Nature of relationship
China Huadian HongKong Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Guizhou Wujiang Hydroelectric Development Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Zhejiang Huadian Wuxijiang Hydropower Company Limited	A fellow subsidiary of the Company
Huadian Electric Power Research Institute Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Huadian Jinshan Energy Company Limited	A fellow subsidiary of the Company
Huadian Tibet Energy Company Limited	A Fellow subsidiary of the Company
Hangzhou Huadian Zhakou Power Generation Company Limited	A fellow subsidiary of the Company
Huadian Asset Management (Tianjin) Company Limited and its subsidiaries	Fellow subsidiaries of the Company
China Huadian Group Carbon Assets Operation Company Limited	A fellow subsidiary of the Company
Huadian Yunnan Power Generation Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Huadian Commercial Factoring (Tianjin) Company Limited and its subsidiaries	Fellow subsidiaries of the Company
Hunan Huadian Xiangtan New Energy Company Limited	A fellow subsidiary of the Company
China Huadian Group Xiongan Energy Company Limited	A fellow subsidiary of the Company
Yankuang Energy Group Company Limited (" <b>Yankuang Energy</b> ") (note (i))	A connected person of the Group
Shaanxi Coal Transportation and Marketing (Group) Company Limited (" <b>Shaanxi Coal Transportation and Marketing</b> ") (note (ii))	A connected person of the Group
Shaanxi Coal and Chemical Industry Group Company Limited (" <b>Shaanxi Coal and Chemical</b> ") (note (ii))	A connected person of the Group
Shandong Development Investment Holding Group Company Limited (" <b>Shandong Development</b> ") (note (iii))	A connected person of the Group

Notes:

- (i) Yankuang Energy is a substantial minority shareholder of a non-wholly owned subsidiary of the Company.
- (ii) Shaanxi Coal Transportation and Marketing is a company of a substantial minority shareholder of a non-wholly owned subsidiary of the Company and Shaanxi Coal and Chemical is a fellow subsidiary of Shaanxi Coal Transportation and Marketing.
- (iii) Shandong Development is a substantial minority shareholder of the Company.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 39 MATERIAL RELATED PARTY TRANSACTIONS (Continued)

#### (a) Transactions with shareholders, fellow subsidiaries and associates (Continued)

The Group had the following material transactions with shareholders, fellow subsidiaries and associates during the years ended 31 December 2022 and 2021:

	2022 RMB'000	2021 RMB'000
<i>Sale of electricity to</i> Fellow subsidiaries	–	89,449
<i>Purchase of electricity from</i> A fellow subsidiary	99,795	163,000
<i>Sales of coal to</i> Associates Fellow subsidiaries	77,563 1,245,642	– 12,276,854
<i>Purchase of coal from</i> An associate Fellow subsidiaries Connected persons	8,609,076 1,402,226 3,916,847	8,102,664 1,770,386 3,609,850
<i>Purchase of natural gas from</i> A fellow subsidiary	179,706	208,115
<i>Purchase of construction service and equipment from</i> China Huadian Fellow subsidiaries	962 2,569,979	– 2,645,185
<i>Sales of equipment to</i> An associate Fellow subsidiaries	103,507 625	– 15,806
<i>Other services income from</i> China Huadian An associate Fellow subsidiaries	66,020 30,184 26,617	13,208 40,985 51,231
<i>Loan provided to</i> An associate	73,408	157,650
<i>Loans repayment from</i> An associate	73,408	157,650
<i>Loans proceeds obtained from</i> China Huadian An associate Fellow subsidiaries	3,416,460 26,374,500 4,350,125	4,219,740 19,387,100 3,831,146

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 39 MATERIAL RELATED PARTY TRANSACTIONS *(Continued)*

#### (a) Transactions with shareholders, fellow subsidiaries and associates *(Continued)*

The Group had the following material transactions with shareholders, fellow subsidiaries and associates during the years ended 31 December 2022 and 2021: *(Continued)*

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
<i>Loans repaid to</i>		
China Huadian	4,230,000	4,000,000
An associate	24,408,000	15,772,761
A fellow subsidiary	280,232	732,518
<i>Bills receivable discounted to</i>		
An associate	2,293,413	2,002,162
<i>Derecognised bills receivable collected by</i>		
An associate	2,229,585	1,037,033
<i>Lease payment under sales and leaseback arrangement to</i>		
A fellow subsidiary	76,841	1,033,650
<i>Interest paid to</i>		
China Huadian	208,425	343,861
An associate	341,475	275,654
A fellow subsidiary	29,562	76,053
<i>Interest received from</i>		
Associates	85,012	85,704
<i>Rental and property management service expenses paid to</i>		
Associates	69,398	72,798
Fellow subsidiaries	18,826	17,505
<i>Rental and property management service income from</i>		
An associate	3,113	–
Fellow subsidiaries	5,543	2,503
<i>Guarantee service expenses paid to</i>		
China Huadian	3	33
<i>Other service expenses paid to</i>		
China Huadian	78,498	100,088
Associates	26,756	11,320
Fellow subsidiaries	491,024	305,390
<i>Additional capital injection in</i>		
Associates	83,603	21,901,889

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 39 MATERIAL RELATED PARTY TRANSACTIONS (Continued)

#### (a) Transactions with shareholders, fellow subsidiaries and associates (Continued)

The balances due from/(to) shareholders, fellow subsidiaries and associates are as follows:

	2022 RMB'000	2021 RMB'000
<i>Construction in progress-construction and construction material prepayments</i>		
Fellow subsidiaries	163,525	282,603
<i>Trade debtors and bills receivable</i>		
China Huadian	59,381	–
Associates	251,377	–
Fellow subsidiaries	239,059	719,251
<i>Deposits, other receivables and prepayments</i>		
China Huadian	575,445	822
Associates	257,048	478,441
Fellow subsidiaries	117,848	599,504
A connected person	63,239	142,532
<i>Other long-term receivables</i>		
An associate (note 24)	231,354	254,430
<i>Cash and cash equivalents and restricted deposits</i>		
An associate	6,245,772	5,376,276
<i>Loans from a shareholder</i>		
China Huadian	(5,753,620)	(6,188,597)
<i>Other loans</i>		
An associate	(11,598,911)	(9,632,106)
A fellow subsidiary	(1,088,346)	(1,095,784)
<i>Trade creditors and bills payable</i>		
China Huadian	(7,487)	(9,799)
Associates	(499,294)	–
Fellow subsidiaries	(2,000,341)	(2,495,962)
A Connected person	(165,663)	–
<i>Other payables</i>		
China Huadian	(3,892)	(17,800)
An associate	(431)	–
Fellow subsidiaries	(289,385)	(333,760)
<i>Contract liabilities</i>		
Fellow subsidiaries	(67,459)	(18,997)
<i>Lease liabilities</i>		
A fellow subsidiary	–	(74,959)

Note: As at 31 December 2022, China Huadian did not provided guarantee to banks for loans granted to the Group (2021: RMB1 million).



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 39 MATERIAL RELATED PARTY TRANSACTIONS (Continued)

#### (b) Transactions with key management personnel

Remuneration for key management personnel of the Group, including amounts paid to the Company's directors and supervisors as disclosed in note 12 and certain highest paid employees as disclosed in note 13, is as follows:

	2022 RMB'000	2021 RMB'000
Salaries and other emoluments	3,044	2,789
Retirement benefits	419	461
Bonuses	3,075	2,698
	<b>6,538</b>	5,948

Total remuneration is included in "personnel costs" (see note 6).

#### (c) Contributions to defined contribution retirement plans

The Group participates in various defined contribution retirement plans organised by municipal and provincial governments and China Huadian for its staff. As at 31 December 2022 and 2021, there was no material outstanding contribution to post-employment benefit plans.

#### (d) Transactions with other government-related entities in the PRC

China Huadian is a PRC state-owned enterprise. Government-related entities, other than entities under China Huadian, over which the PRC government has control, joint control or significant influence are also considered as related parties of the Group ("other government-related entities"). The majority of the business activities of the Group are conducted with other government-related entities.

The transactions between the Group and other government-related entities are conducted in the ordinary course of the Group's business within normal business operations. The Group has established its approval process for sales of electricity, purchase of products and services and its financing policy for borrowing. Such approval processes and financing policy do not depend on whether the counterparties are government-related entities or not.

Having considered the potential for transactions to be impacted by related party relationships, the Group's approval processes and financing policy, and information that would be necessary for an understanding of the potential effect of the relationship on the consolidated financial statements, the directors believe that the following transactions are collectively significant for disclosure purpose:

- sale of electricity to the grid

The Group sells substantially all its electricity to local government-related power grid companies, and the tariff of electricity is regulated by relevant government. For the year ended 31 December 2022, management estimates that the aggregate amount of the Group's significant transactions with other government-related entities are at least 99% of its sale of electricity.

- depositing and borrowing

The Group deposits most of its cash in government-related financial institutions, and also obtains most of short-term and long-term loans from these financial institutions in the ordinary course of business. The interest rates of the bank deposits and loans are regulated by the People's Bank of China.

- other transactions

Other collectively significant transactions with other government-related entities include a large portion of fuel purchases and property, plant and equipment construction. The pricing and the selection of suppliers and service providers are not dependent on whether the counterparties are government-related entities or not.

#### (e) Commitment with related parties

	2022 RMB'000	2021 RMB'000
Capital commitment	732,192	1,470,504
Commitment on properties rental and management fees	7,559	15,118

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 40 RETIREMENT PLANS

The Group is required to make contributions to retirement plans operated by the State at range from 15% to 20% (2021: 15% to 20%) of the staff salaries. A member of the plan is entitled to receive from the State a pension equal to a fixed proportion of his or her salary prevailing at the retirement date. In addition, the Group participates in a retirement plan managed by China Huadian to supplement the above-mentioned plan. The Group has no other material obligation to make payments in respect of pension benefits associated with these plans other than the annual contributions described above.

Contributions to the plans vest immediately, there is no forfeited contributions that may be used by the Group to reduce the existing level of contribution.

The Group's contribution to these plans amounted to approximately RMB1,184 million during the year (2021: RMB1,212 million) which was charged to the consolidated statement of profit or loss and other comprehensive income (note 6).

### 41 COMMITMENTS

#### Capital commitments

The Group had capital commitments at 31 December as follows:

	2022 RMB'000	2021 RMB'000
Contracted for but not provided in the financial statements		
– Development of power plants	5,583,830	12,387,053
– Improvement projects and others	407,503	715,320
	<b>5,991,333</b>	<b>13,102,373</b>

### 42 CONTINGENT LIABILITIES

As at 31 December 2022, certain subsidiaries of the Company were the defendant in certain lawsuits for events incurred before the acquisition date. At the end of reporting period, the lawsuits were in progress whose final outcomes cannot be determined at present. The directors of the Company considered that the outcome of these outstanding lawsuits will not result in significant adverse effect on the financial position and operating results of the Group.

Apart from the above, the Group has no other material contingent liabilities as at 31 December 2022 (2021: Nil).

### 43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES

#### Categories of financial instruments

	2022 RMB'000	2021 RMB'000
<b>Financial assets</b>		
At amortised cost		
– Other non-current assets	231,354	254,430
– Trade debtors and bills receivable	11,640,731	8,510,240
– Other receivables	840,754	2,219,500
– Restricted deposits	374,824	145,463
– Cash and cash equivalents	5,907,615	5,945,067
At FVOCI		
– Trade debtors and bills receivable	748,736	755,040
At FVPL		
– Financial assets at FVPL	370,055	330,064
	<b>20,114,069</b>	<b>18,159,804</b>
<b>Financial liabilities</b>		
At amortised cost	<b>144,123,001</b>	<b>135,847,376</b>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

### Categories of financial instruments (Continued)

Exposure to interest rate, credit, liquidity and currency risks arises in the normal course of the Group's business.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

#### (a) Interest rate risk

The interest rates and terms of repayment of the outstanding interest-bearing liabilities of the Group are disclosed in notes 18(b), 31 and 32. As at 31 December 2022, fixed rate borrowings comprise 53% of total borrowings of the Group (2021: 50%).

#### Sensitivity analysis

As at 31 December 2022, it is estimated that a general increase of 100 basis points in interest rates, with all other variables held constant, would have increased the Group's loss after tax and decreased the Group's total equity by approximately RMB450 million (2021: increased the Group's loss after tax and decreased the Group's total equity by approximately RMB448 million).

The sensitivity analysis above indicates the Group's exposure to cash flow interest rate risk arising from floating rate non-derivative instruments held by the Group at the end of the reporting period. The impact on the Group's loss after tax (and retained profits) and consolidated equity is estimated as an annualised impact on interest expense or income of such a change in interest rates. The analysis is performed on the same basis for prior year.

#### (b) Credit risk

The Group's credit risk is primarily attributable to trade debtors, bills receivable, deposits and other receivables. Management has a credit policy in place and the exposures to these credit risks are monitored on an ongoing basis.

In respect of trade debtors and bills receivable, individual credit evaluations are performed regularly on all customers granted with credit period. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer. Trade debtors are due within 30 to 90 days from the date of billing. For bills received from customers, the Group generally accepts only bank acceptance bills in order to minimise the risk of default payment. Normally, the Group does not obtain collateral from customers.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the end of the reporting period, 31% and 63% (2021: 27% and 65%) of the total trade debtors and bills receivable were due from the Group's largest customer and the five largest customers respectively.

The Group measures loss allowances for trade debtors and bills receivable at an amount equal to lifetime ECLs, which is calculated using a provision matrix. As the Group's historical credit loss experience does not indicate significantly different loss patterns for different customer segments, the loss allowance based on past due status is not further distinguished between the Group's different customer bases, which are based on days past due for groupings of various customer segments that have similar loss patterns. ECLs rates are based on actual loss experience. These rates are adjusted to reflect differences between economic conditions during the year over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables. Over 60% of trade debtors with past due more than 3 years are related to the local government-related power grid companies. After considering the historical loss patterns, the management considers that the impairment loss provided is adequate. No further impairment for trade debtors and bills receivable is provided as the amount of additional impairment measured under the ECLs model is immaterial.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (b) Credit risk (Continued)

In respect of other receivables, the Group adopts individual credit evaluations continuously assessing the credit risk and financial situation of different customers. Movement in the loss allowance account in respect of other financial assets measured at amortised cost (i.e. deposits and other receivables) during the year is as follows:

Loss allowance	2022			Total RMB'000
	12-month ECLs (Stage 1) RMB'000	Lifetime ECL, non-credit impaired (Stage 2) RMB'000	Lifetime ECL, credit-impaired (Stage 3) RMB'000	
At 1 January	–	–	503,868	503,868
Impairment loss recognised	–	–	4,244	4,244
Reversal of impairment loss	–	–	(716)	(716)
Write-off	–	–	(24,967)	(24,967)
At 31 December	–	–	482,429	482,429

Loss allowance	2021			Total RMB'000
	12-month ECLs (Stage 1) RMB'000	Lifetime ECL, non-credit impaired (Stage 2) RMB'000	Lifetime ECL, credit-impaired (Stage 3) RMB'000	
At 1 January	–	–	558,784	558,784
Impairment loss recognised	–	–	384,359	384,359
Reversal of impairment loss	–	–	(10,913)	(10,913)
Write-off	–	–	(428,362)	(428,362)
At 31 December	–	–	503,868	503,868

The Group does not provide any guarantees which would expose the Group to credit risk.

Further quantitative disclosures in respect of the Group's exposure to credit risk arising from trade debtors and bills receivable are set out in note 27.

#### (c) Liquidity risk

Individual operating entities within the Group are responsible for their own cash management, including the short-term investment of cash surpluses and the raising of loans to cover expected cash demands, subject to approval by the parent company's board when the borrowings exceed certain predetermined levels of authority. The Group's policy is to regularly monitor its liquidity requirements to ensure that it maintains sufficient reserves of cash and readily realisable marketable securities and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and long-term.

At the end of the reporting period, the Group had net current liabilities of approximately RMB33,861 million (2021: RMB36,069 million). With regards to its future capital commitments and other financing requirements, the Group has unutilised banking facilities of approximately RMB167.9 billion (2021: RMB133.9 billion) and an aggregate amount of debentures and bonds of approximately RMB31.4 billion (2021: RMB22.4 billion) registered in the PRC interbank debenture market which has not been issued as at 31 December 2022.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

### (c) Liquidity risk (Continued)

The following tables show the remaining contractual maturities at the end of the reporting period of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of the reporting period) and the earliest date the Group can be required to pay:

	2022						2021					
	Contractual undiscounted cash outflow					Carrying amount	Contractual undiscounted cash outflow					Carrying amount
Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	Total	Within 1 year or on demand		More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	Total		
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Short-term debentures payable	-	-	-	-	-	-	2,025,447	-	-	-	2,025,447	2,023,880
Bank loans	31,057,932	14,282,897	22,599,120	21,438,132	89,378,081	78,389,519	32,529,990	9,517,149	22,540,842	23,898,924	88,486,905	75,322,103
Loans from shareholders	1,517,140	324,592	3,783,919	885,067	6,510,718	5,753,879	862,398	4,196,217	796,572	924,767	6,779,954	6,196,454
State loans	2,131	2,118	6,274	43,704	54,227	46,661	2,086	1,258	6,160	45,752	55,256	47,117
Other loans	7,796,277	1,984,248	2,656,966	1,935,567	14,373,058	13,197,797	5,854,428	1,851,686	2,922,245	1,735,558	12,363,917	11,195,207
Trade creditors and bills payable	16,606,208	-	-	-	16,606,208	16,606,208	14,793,426	-	-	-	14,793,426	14,793,426
Amount due to the parent company	11,245	-	-	-	11,245	11,245	27,599	-	-	-	27,599	27,599
Lease liabilities	226,260	23,538	34,099	15,053	298,950	279,894	262,894	281,153	58,127	24,165	626,339	568,387
Other payables	2,358,777	-	-	-	2,358,777	2,358,777	2,285,268	-	-	-	2,285,268	2,285,268
Long-term debentures payable	2,802,790	14,552,190	10,229,420	-	27,584,400	26,015,059	6,143,085	2,496,889	14,466,886	47,535	23,154,395	21,939,220
Convertible bonds – liability components	44,105	1,573,070	-	-	1,617,175	1,461,245	29,403	44,105	1,573,070	-	1,646,578	1,433,637
Retirement benefit obligations	201	451	3,091	6,195	9,938	9,929	293	478	2,698	11,565	15,034	15,078
	62,415,854	32,743,104	39,312,889	24,323,718	158,795,565	144,123,001	64,816,317	18,388,935	42,366,600	26,688,266	152,260,118	135,847,376

### (d) Currency risk

#### (i) Recognised assets and liabilities

The Group is exposed to currency risk primarily arising from cash and cash equivalents denominated in United States dollar (“US\$”) and borrowings which are denominated in Euro. Depreciation or appreciation of US\$ and Euro against RMB would affect the financial position and operating results of the Group.

#### (ii) Exposure to currency risk

The following table details the Group's major exposure at the end of the reporting period to currency risk arising from monetary assets and liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in RMB, translated using the spot rate at the year end date.

	2022		2021	
	US\$ RMB'000	Euro RMB'000	US\$ RMB'000	Euro RMB'000
Cash and cash equivalents	25	-	23	-
Bank loans	-	-	-	(976)
State loans	-	(46,661)	-	(47,117)
Net exposure	25	(46,661)	23	(48,093)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (d) Currency risk (Continued)

##### (iii) Sensitivity analysis

The following table indicates the instantaneous change in the Group's loss after tax (and retained profits) and consolidated equity in that would arise if foreign exchange rates to which the Group has significant exposure at the end of the reporting period had changed at that date, assuming all other risk variables remained constant.

	2022			2021		
	Decrease in foreign exchange rate %	Effect on results after tax and retained profits RMB'000	Effect on consolidated equity RMB'000	Decrease in foreign exchange rate %	Effect on results after tax and retained profits RMB'000	Effect on consolidated equity RMB'000
US\$	(10)	(2)	(2)	(10)	(2)	(2)
Euro	(10)	3,500	3,500	(10)	3,607	3,607

Note: Positive figures in the above table represent an increase in profit after tax/decrease in loss after tax and an increase in retained profits and consolidated equity while negative figures represent corresponding opposite effects.

A 10% weakening of RMB against the above currencies would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of the reporting period. The analysis is performed on the same basis for 2021.

#### (e) Fair values

##### (i) Fair value of the Group's financial assets that are measured at fair value on a recurring basis

Some of the Group's financial assets are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets are determined (in particular, the valuation technique(s) and inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorised (levels 1 to 3) based on the degree to which the inputs to the fair value measurements is observable (note 2(b)).

Financial assets	Fair value as at		Fair value hierarchy	Valuation technique(s) and key input(s)
	At 31 December 2022 RMB'000	At 31 December 2021 RMB'000		
Bills receivable measured at FVOCI (included in trade debtors and bills receivable)	748,736	755,040	Level 2	Future cash flows are estimated based on discount rate observed in the available market. The fair value of bills receivable was close to their carrying amounts given all bills receivable will mature within 1 year.
Financial assets at FVPL – unlisted equity securities in the consolidated statement of financial position	370,055	330,064	Level 3	The financial assets at FVPL are unlisted equity securities. The fair value is estimated by an external valuer. The fair value is measured by applying income approach and after considering the expected distributable profits of the investment discounted by a range of discount rate from 9.40% to 13.51% (2021: from 9.40% to 13.51%).



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 43 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (e) Fair values (Continued)

##### (i) Fair value of the Group's financial assets that are measured at fair value on a recurring basis (Continued)

Reconciliation for financial instruments carried at fair value based on significant unobservable inputs (Level 3) are as follows:

	2022 RMB'000	2021 RMB'000
Financial assets at FVPL:	370,055	330,064
At 1 January	330,064	307,890
Addition	42,609	82,365
Disposal	(12,940)	(4,169)
Gain/(loss) on fair value	10,322	(37,228)
Disposal of subsidiaries	–	(18,794)
At 31 December	370,055	330,064

During the reporting period there is no transfer between instruments in Level 1 and Level 2.

##### (ii) Financial instruments carried at other than fair value

Except as detailed in the following table, the directors consider that the carrying amounts of financial assets and financial liabilities recognised in the consolidated financial statements approximate their fair values.

	2022		2021	
	Carrying amount RMB'000	Fair value RMB'000	Carrying amount RMB'000	Fair value RMB'000
Fixed rate borrowings and debentures payable	40,054,605	39,578,638	36,773,258	36,243,696

The fair value measurements of above financial liabilities are within the level 2 category, which have been determined based on a discounted cash flow analysis, with the most significant input being the discount rate that reflects the credit risk of the Group entities.

### 44 IMMEDIATE PARENT AND ULTIMATE HOLDING COMPANY

The directors of the Company consider its immediate parent and ultimate holding company to be China Huadian, which is a state-owned enterprise established in the PRC. China Huadian does not produce financial statements available for public use.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 45 SUBSIDIARIES

### (a) General information of subsidiaries

The following list contains only the particulars of subsidiaries as at 31 December 2022, all of which are limited liability companies established and operating in the PRC, which principally affect the results, assets or liabilities of the Group:

Name of company	Paid up capital RMB'000	Proportion of ownership interest and voting rights		Principal activities
		Held by the Company %	Held by subsidiaries %	
Sichuan Huadian Luding Hydropower Company Limited 四川華電瀘定水電有限公司	1,516,090	100.00	–	Generation and sale of electricity
Huadian Zouxian Power Generation Company Limited ("Zouxian Company") 華電鄒縣發電有限公司	3,000,000	69.00	–	Generation and sale of electricity
Huadian Luohe Power Generation Company Limited 華電漯河發電有限公司	600,800	75.00	–	Generation and sale of electricity and heat
Huadian Qudong Power Generation Company Limited 華電渠東發電有限公司	568,000	90.00	–	Generation and sale of electricity and heat
Anhui Huadian Lu'an Power Plant Company Limited 安徽華電六安電廠有限公司	921,500	95.00	–	Generation and sale of electricity
Huadian Laizhou Power Generation Company Limited ("Laizhou Power Generation") 華電萊州發電有限公司	2,632,803	75.00	–	Generation and sale of electricity
Huadian Weifang Power Company Limited ("Weifang Company") 華電濰坊發電有限公司	930,222	64.29 (Note(ii))	–	Generation and sale of electricity and heat
Sichuan Huadian Power Investment Company Limited 四川華電電力投資有限公司	1,377,606	100.00	–	Electricity and power equipment production
Tianjin Huadian Fuyuan Thermal Power Company Limited ("Fuyuan Thermal") 天津華電福源熱電有限公司	407,004	100.00 (Note(iii))	–	Generation and sale of electricity and heat
Hangzhou Huadian Xiasha Thermal Power Company Limited 杭州華電下沙熱電有限公司	259,338	56.00	–	Generation and sale of electricity and heat
Huadian Zhejiang Longyou Thermal Company Limited 華電浙江龍遊熱電有限公司	292,500	100.00	–	Generation and sale of electricity and heat
Hangzhou Huadian Jiangdong Thermal Power Company Limited 杭州華電江東熱電有限公司	600,000	70.00	–	Generation and sale of electricity and heat
Huadian Group Beijing Fuel Logistics Company Limited 華電集團北京燃料物流有限公司	400,000	91.00	–	Coal wholesale business
Hebei Huadian Shijiazhuang Yuhua Thermal Power Company Limited 河北華電石家莊裕華熱電有限公司	726,020	60.00	40.00	Generation and sale of electricity and heat
Hebei Huadian Shijiazhuang Luhua Thermal Power Company Limited 河北華電石家莊鹿華熱電有限公司	500,550	90.00	–	Generation and sale of electricity and heat
Sichuan Guang'an Power General Company Limited 四川廣安發電有限責任公司	1,826,135	80.00	–	Generation and sale of electricity
Huadian Xinxiang Power Generation Company Limited 華電新鄉發電有限公司	853,386	98.72	–	Generation and sale of electricity
Anhui Huadian Suzhou Power Generation Company Limited ("Suzhou Company") 安徽華電宿州發電有限公司	1,479,118	98.27 (Note(iii))	–	Generation and sale of electricity
Anhui Huadian Wuhu Power Generation Company Limited 安徽華電蕪湖發電有限公司	1,658,733	65.00	–	Generation and sale of electricity and heat
Hangzhou Huadian Banshan Power Generation Company Limited 杭州華電半山發電有限公司	1,706,610	64.00	–	Generation and sale of electricity and heat
Hebei Huadian Shijiazhuang Thermal Power Company Limited 河北華電石家莊熱電有限公司	1,132,530	82.00	–	Generation and sale of electricity and heat
Huadian Hubei Power Generation Company Limited ("Hubei Power Generation") 華電湖北發電有限公司	4,685,158	82.56	–	Generation and sale of electricity and heat
Guangdong Huadian Pingshi Power Generation Company Limited 廣東華電坪石發電有限公司	1,410,490	100.00	–	Generation and sale of electricity
Huadian Qingdao Thermal Power Company Limited 華電青島熱力有限公司	30,000	55.00	–	Generation and sale of electricity and heat
Huadian Zibo Thermal Power Company Limited 華電濰博熱電有限公司	773,850	100.00	–	Generation and sale of electricity and heat

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 45 SUBSIDIARIES (Continued)

### (a) General information of subsidiaries (Continued)

The following list contains only the particulars of subsidiaries as at 31 December 2022, all of which are limited liability companies established and operating in the PRC, which principally affect the results, assets or liabilities of the Group: (Continued)

Name of company	Paid up capital RMB'000	Proportion of ownership interest and voting rights		Principal activities
		Held by the Company %	Held by subsidiaries %	
Huadian Zhangqiu Power Generation Company Limited 華電章丘發電有限公司	758,114	87.50	-	Generation and sale of electricity and heat
Huadian Tengzhou Xinyuan Thermal Power Company Limited 華電滕州新源熱電有限公司	514,205	93.26	-	Generation and sale of electricity
Sichuan Huadian Zagunao Hydroelectric Development Company Limited 四川華電雜谷腦水電開發有限責任公司	980,563	64.00	-	Generation and sale of electricity
Hebei Huarui Energy Group Corporation Limited 河北華瑞能源集團有限公司	938,000	100.00	-	Sale of electricity and investment on power resources
Huadian Longkou Power Generation Plant Company Limited 華電龍口發電有限公司	471,433	100.00 (Note(iv))	-	Generation and sale of electricity and heat
Shijiazhuang Huadian Heat Corporation Limited 石家莊華電供熱集團有限公司	553,370	100.00	-	Sale of heat
Hebei Huadian Hybrid Storage Hydropower Company Limited 河北華電混合蓄能水電有限公司	88,500	100.00	-	Generation and sale of electricity
Huadian Zoucheng Thermal Power Company Limited 華電鄒城熱力有限公司	80,000	70.00	-	Generation and sale of electricity and heat
Guangdong Huadian Shaoguan Thermal Power Company Limited 廣東華電韶關熱電有限公司	815,019	100.00	-	Sales of coal mine machinery equipment and accessories
Tianjin Huadian Nanjiang Thermal Power Company Limited 天津華電南疆熱電有限公司	560,253	65.00	-	Generation and sale of electricity and heat
Qingdao Huatuo Technology Company Limited 青島華拓科技有限公司	100,000	100.00	-	Design and development
Guangdong Huadian Huizhou Energy Company Limited 廣東華電惠州能源有限公司	186,000	100.00	-	Generation and sale of electricity and heat
Hunan Huadian Changde Power Generation Company Limited ("Changde Company") 湖南華電常德發電有限公司	990,944	48.98 (Note(v))	-	Generation and sale of electricity and heat
Hunan Huadian Changsha Power Generation Company Limited 湖南華電長沙發電有限公司	928,571	70.00	-	Generation and sale of electricity and heat
Hunan Huadian Pingjiang Power Generation Company Limited 湖南華電平江發電有限公司	1,959,950	100.00	-	Generation and sale of electricity and heat
Guangdong Huadian Qingyuan Energy Company Limited 廣東華電清遠能源有限公司	419,731	100.00	-	Generation and sale of electricity and heat

#### Notes:

- (i) On 28 October 2021, the Group has entered into a capital reduction agreement with the minority shareholders of Weifang Company. Weifang Company would repurchase the shares held by the minority shareholders with a consideration of approximately RMB939 million. Upon completion of the capital reduction, the Group's effective equity interests in Weifang Company increased to 64.29%.
- (ii) During the year ended 31 December 2021, the Group acquired additional equity interests in Fuyuan Thermal for a consideration of approximately RMB500 million by issuance of shares and convertible bond. Upon completion of the acquisition, the Group's effective equity interests in Fuyuan Thermal increased to 100%.
- (iii) During the year ended 31 December 2021, the Group acquired additional equity interests in Suzhou Company for a consideration of approximately RMB1,000 million. Upon completion of the acquisition, the Group's effective equity interests in Suzhou Company increased to 98.27%.
- (iv) On 28 October 2021, the Group has entered into a capital reduction agreement with the minority shareholders of Longkou Company. Longkou Company would repurchase the shares held by the minority shareholders with a consideration of approximately RMB181 million. Upon completion of the capital reduction, the Group's effective equity interests in Longkou Company increased to 100%.
- (v) In the opinion of the directors of the Company, the Group controls Changde Company by virtue of having the power to direct the relevant activities of the investee, and is exposed, or has rights to variable returns from the involvement with the investee, and has the ability to use its power to affect the amount of those returns.
- (vi) The English translation of the names is for the identification only. The official names of these entities are in Chinese.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 45 SUBSIDIARIES (Continued)

#### (b) Details of non-wholly owned subsidiaries that have material non-controlling interests

The table below shows details of non-wholly-owned subsidiaries of the Group that have material non-controlling interests:

Name of the subsidiary	Place of establishment and principal place of business	Proportion of ownership Interests and voting Rights held by Non-controlling interests		(Loss)/profit allocated to non-controlling interests		Accumulated non-controlling interests	
		2022	2021	2022	2021	2022	2021
				RMB'000	RMB'000	RMB'000	RMB'000
Weifang Company	the PRC	35.71%	35.71%	(40,826)	(229,584)	668,893	709,719
Zouxian Company	the PRC	31%	31%	54,479	(89,853)	1,018,231	963,752
Hubei Power Generation	the PRC	17.44%	17.44%	(81,278)	(114,054)	873,285	954,563
Laizhou Power Generation	the PRC	25%	25%	169,047	(121,903)	948,783	779,736
Individually immaterial subsidiaries with non-controlling interests						8,089,165	9,144,508
Total						11,598,357	12,552,278

Summarised financial information in respect of each of the Group's subsidiaries that has material non-controlling interests is set out below. The summarised financial information including goodwill and effect of fair value adjustments of assets and liabilities recognised upon acquisition of these subsidiaries but before inter-company eliminations is as follows:

#### (i) Weifang Company and its subsidiary

	2022 RMB'000	2021 RMB'000
Current assets	781,288	1,012,423
Non-current assets	3,915,797	4,050,446
Current liabilities	(1,360,027)	(2,133,277)
Non-current liabilities	(1,442,017)	(920,674)
Total equity	1,895,041	2,008,918
Non-controlling interests of Weifang Company	(22,143)	(21,706)

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 45 SUBSIDIARIES (Continued)

### (b) Details of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

#### (i) Weifang Company and its subsidiary (Continued)

	2022 RMB'000	2021 RMB'000
Revenue	4,476,180	3,649,805
Expenses	(4,590,057)	(4,072,700)
Loss for the year	(113,877)	(422,895)
Non-controlling interests of Weifang Company	437	(291)
Dividends paid to non-controlling interests	–	–
Net cash inflow/(outflow) from operating activities	628,767	(795,928)
Net cash outflow from investing activities	(216,359)	(287,856)
Net cash (outflow)/inflow from financing activities	(413,325)	1,066,738
Net cash outflow	(917)	(17,046)

#### (ii) Zouxian Company

	2022 RMB'000	2021 RMB'000
Current assets	1,104,962	668,797
Non-current assets	3,940,352	4,249,293
Current liabilities	(1,504,739)	(1,709,213)
Non-current liabilities	(255,960)	(100,000)
Total equity	3,284,615	3,108,877

	2022 RMB'000	2021 RMB'000
Revenue	4,236,587	3,851,174
Expenses	(4,060,849)	(4,160,145)
Profit/(loss) for the year	175,738	(308,971)
Dividends paid to non-controlling interests	–	43,036
Net cash inflow/(outflow) from operating activities	32,683	(299,824)
Net cash outflow from investing activities	(147,632)	(432,894)
Net cash inflow from financing activities	110,698	737,042
Net cash (outflow)/inflow	(4,251)	4,324

#### (iii) Hubei Power Generation and its subsidiaries

	2022 RMB'000	2021 RMB'000
Current assets	3,835,727	4,365,458
Non-current assets	12,354,592	13,079,684
Current liabilities	(4,348,612)	(6,086,751)
Non-current liabilities	(5,464,574)	(4,199,000)
Total equity	6,377,133	7,159,391
Non-controlling interests of Hubei Power Generation	(1,368,987)	(1,685,131)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 45 SUBSIDIARIES (Continued)

#### (b) Details of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

##### (iii) Hubei Power Generation and its subsidiaries (Continued)

	2022 RMB'000	2021 RMB'000
Revenue	15,318,596	12,375,362
Expenses	(16,100,854)	(13,414,526)
Loss for the year	(782,258)	(1,039,164)
Non-controlling interests of Hubei Power Generation	(316,144)	(385,086)
Dividends paid to non-controlling interests	–	106,770
Net cash inflow/(outflow) from operating activities	480,984	(1,049,743)
Net cash (outflow)/inflow from investing activities	(62,425)	43,970
Net cash (outflow)/inflow from financing activities	(566,000)	1,313,834
Net cash (outflow)/inflow	(147,441)	308,061

##### (iv) Laizhou Power Generation

	2022 RMB'000	2021 RMB'000
Current assets	1,213,314	1,151,288
Non-current assets	9,175,541	9,871,944
Current liabilities	(3,113,853)	(3,420,917)
Non-current liabilities	(3,479,880)	(4,483,380)
Total equity	3,795,122	3,118,935
	2022 RMB'000	2021 RMB'000
Revenue	7,800,099	7,592,678
Expenses	(7,123,912)	(8,116,016)
Profit/(loss) for the year	676,187	(523,338)
Dividends paid to non-controlling interests	–	147,826
Net cash inflow/(outflow) from operating activities	1,547,402	(172,059)
Net cash outflow from investing activities	(185,487)	(505,872)
Net cash (outflow)/inflow from financing activities	(1,350,558)	663,521
Net cash inflow/(outflow)	11,357	(14,410)



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 46 DISPOSAL OF NEW ENERGY COMPANIES FOR EQUITY INTERESTS IN HUADIAN NEW ENERGY

On 24 May 2021, the Company entered into a Capital Increase Agreement (“**Agreement**”) with Huadian Fuxin Energy Corporation Limited (“**Huadian Fuxin**”), a fellow subsidiary of the Group, and Huadian Fuxin’s subsidiary, Huadian New Energy, pursuant to which the Company agreed to make a capital contribution of approximately RMB21,237 million in Huadian New Energy, by way of (i) a transfer of the equity interests held by the Company in 27 subsidiaries (together the “**New Energy Companies**”) to Huadian New Energy, representing an amount of not more than approximately RMB13,609 million; and (ii) a cash payment of not lower than approximately RMB7,628 million by the Company to Huadian New Energy. Details of the transaction are set out in the circular issued by the Company dated 15 June 2021.

The transaction has been approved by shareholders in the annual general meeting on 30 June 2021 and the directors considered the date of completion of transaction to be 30 June 2021. Upon the completion of transaction, the Group holds 37.19% interest in Huadian New Energy in the amount of approximately RMB21,542 million, which becomes an associate of the Group, and the New Energy Companies cease to be subsidiaries of the Company on the same date.

The Group’s equity interests in the New Energy Companies disposed of are as follows:

	Equity interests
Huadian Huzhou New Energy Power Generation Company Limited	100%
Huadian Ningbo New Energy Power Generation Company Limited	100%
Huadian Henan New Energy Power Generation Company Limited	100%
Huadian Taiqian Photovoltaic Power Generation Company Limited	50%
Huadian Laizhou Wind Power Company Limited	55%
Huadian Laizhou Wind Power Generation Company Limited	55%
Huadian Laizhou Wind Energy Power Company Limited	55%
Huadian Longkou Wind Power Company Limited	65%
Longkou Dongyi Wind Power Company Limited	55%
Huadian Shandong New Energy Company Limited	100%
Huadian Xuwen Wind Power Company Limited	100%
Huadian Xiaxian Wind Power Company Limited	100%
Shanxi Huadian Pinglu New Energy Company Limited	100%
Shanxi Huadian Ying County New Energy Company Limited	100%
Zezhou County Huadian Wind Power Company Limited	100%
Shaanxi Huadian Xunyi Wind Power Company Limited	100%
Huadian Chongqing New Energy Power Generation Company Limited	100%
Hebei Huadian Guyuan Wind Power Company Limited (Note (i))	61.87%
Hebei Huadian Kangbao Wind Power Company Limited	100%
Huadian Tangshan Wind Power Company Limited	100%
Huadian Zhangjiakou Saibei New Energy Generation Company Limited	100%
Huadian Power International Ningxia New Energy Power Company Limited (Note (ii))	63.93%
Huadian Ningxia Ningdong Shangde Solar Power Generation Company Limited	60%
Huadian Kezuo zhongqi Wind Power Company Limited	100%
Huadian Wengniuteqi Wind Power Company Limited	100%
Huadian Fengzhen City Fengdi Wind Power Generation Company Limited	100%
Huadian (Zhengxiangbai Banner) New Energy Company Limited	100%

Notes:

- (i) The Group retained 38.13% in Hebei Huadian Guyuan Wind Power Company Limited. Hence, it becomes an associate of the Group on the same date upon completion of the disposal.
- (ii) The Group retained 36.07% in Huadian Power International Ningxia New Energy Power Company Limited. Hence, it becomes an associate of the Group on the same date upon completion of the disposal.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 46 DISPOSAL OF NEW ENERGY COMPANIES FOR EQUITY INTERESTS IN HUADIAN NEW ENERGY *(Continued)*

	<i>RMB'000</i>
<b>Gain on disposal of New Energy Companies</b>	
Net assets of New Energy Companies disposed of (Note (i))	16,298,692
Less: Fair value of investment retained	(2,336,237)
Less: Non-controlling interests	(3,111,183)
Net assets attributable to equity holders of the Company	10,851,272
Add: Cash consideration (Note (ii))	7,686,554
Less: Share of 37.19% of net assets of Huadian New Energy (Note (iii))	(21,541,700)
Gain on disposal of subsidiaries	(3,003,874)
<b>Cash outflow arising from disposal of New Energy Companies:</b>	
Cash and cash equivalents disposed of	(553,985)
<b>Cash outflow arising from acquisition of Huadian New Energy:</b>	
Cash consideration	(7,686,554)

Notes:

- (i) The major classes of assets and liabilities of New Energy Companies at the date of disposal upon the completion of the Agreement as described above was as follows:

	<i>RMB'000</i>
<b>Assets:</b>	
Property, plant and equipment	25,183,956
Right-of-use assets	567,162
Construction in progress	1,110,295
Intangible assets	847,616
Inventories	69,496
Trade debtors and bills receivable	4,962,198
Cash and cash equivalents	553,985
Other assets	1,408,233
	34,702,941
<b>Liabilities:</b>	
Bank loans	(13,525,836)
Trade creditors and bills payable	(2,927,066)
Other liabilities	(1,951,347)
	(18,404,249)
<b>Net assets of New Energy Companies disposed of</b>	<b>16,298,692</b>

- (ii) Pursuant to the Agreement, the cash consideration is adjusted for the value of the transferred assets and capital contribution from Huadian Fuxin and the contributed amount for all the dividends received and change in capital of the New Energy Companies by the Company to Huadian New Energy during the transitional period (i.e., the period from 1 January to 30 June 2021).
- (iii) The amount represents the fair value of 37.19% equity interest in Huadian New Energy at completion date. The fair value of approximately RMB57,923 million comprises appraised value of 100% equity interests as at 31 December 2020 in New Energy Companies, Huadian New Energy and New Energy Equity, appraised value of New Energy Assets as at 31 December 2020, the cash receipts and payments by Huadian New Energy for the New Energy Companies, New Energy Assets and Equity, as well as the adjustments during the transition period (i.e., 1 January 2021 to 30 June 2021).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 47 ACQUISITION OF SUBSIDIARIES

On 1 July 2021, the Group has completed the acquisition of 48.98%, 70% and 100% equity interests in Hunan Huadian Changde Power Generation Company Limited, Hunan Huadian Changsha Power Generation Company Limited, and Hunan Huadian Pingjiang Power Generation Company Limited (together the “Hunan Area Companies”) respectively held by China Huadian. The acquisition has been accounted for as an acquisition of business using the acquisition method. The cash consideration is RMB3,495,675,000. The acquisition was made by the Group with the aim to provide support to the sustainable and stable development of the business of the Group, and enhance the Group’s overall competitiveness through integration of relevant prime assets, expansion of its production scale and optimisation of the assets structure in Hunan region, in order to further improve the Company’s profitability and its market position in the industry.

The fair value of identifiable assets and liabilities of Hunan Area Companies as at the completion date of the acquisition was:

	<i>RMB'000</i>
<b>Assets:</b>	
Property, plant and equipment (note 17)	6,043,972
Construction in progress (note 19)	1,379,762
Right-of-use asset	1,035,616
Interests in associates and joint ventures	44,911
Financial assets at fair value through profit or loss	15,217
Inventories	193,892
Trade debtors and bills receivable	546,751
Deposit, other receivables and prepayments	179,895
Restricted deposits	4,576
Cash and cash equivalents	296,963
Deferred tax assets	2,008
Other asset	72,296
	<b>9,815,859</b>
<b>Liabilities:</b>	
Bank loans	(3,255,910)
Trade creditors and bills payable	(419,807)
Other payables	(123,339)
Tax payable	(32,049)
Deferred government grants	(698)
Deferred tax liabilities	(328,041)
Other liabilities	(698,293)
	<b>(4,858,137)</b>
<b>Net asset</b>	<b>4,957,722</b>

The fair value of trade debtors and bills receivable, deposits and other receivables amounted to RMB726,646,000. The gross amount of these receivables is RMB726,646,000. None of these receivables have been impaired and it is expected that the full contractual amounts can be collected.

## Goodwill arising on acquisition

	<i>RMB'000</i>
Consideration transferred	3,495,675
Plus: non-controlling interests	1,851,585
Less: recognised amount of identifiable net assets acquired	(4,957,722)
<b>Goodwill on acquisition (note 21)</b>	<b>389,538</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 47 ACQUISITION OF SUBSIDIARIES (Continued)

#### Goodwill arising on acquisition (Continued)

Goodwill arose in the acquisition of Hunan Area Companies because the cost of the combination included a control premium. In addition, the consideration paid for the combination effectively included amounts in relation to the benefit of future market development in Hunan Province and expected synergies. These benefits are not recognised separately from goodwill because they do not meet the recognition criteria for identifiable intangible assets.

Net cash outflows from the acquisition:

	RMB'000
Cash consideration	3,495,675
Cash and cash equivalents in the subsidiary acquired	(296,963)
Net outflow of cash and cash equivalents included in cash flows from investing activities	3,198,712

Since the acquisition date, Hunan Area Companies have contributed approximately RMB3,087 million and RMB493 million to the Group's turnover and loss, respectively. If the acquisition had occurred on 1 January 2021, the Group's turnover and loss would have been approximately RMB4,857 million and RMB362 million, respectively. This pro forma information is for illustrative purposes only and is not necessarily an indication of turnover and results of operations of the Group that actually would have been achieved had the acquisition been completed on 1 January 2021, nor is it intended to be a projection of future performance.

### 48 LOSS OF CONTROL OF SUBSIDIARIES

During the year ended 31 December 2021, the Group has lost control over certain subsidiaries, of which the details are set out as follows. Upon loss of control, the Group derecognised non-controlling interests of RMB1,576,386,000 and the disposed cash and cash equivalents amounting to RMB994,929,000, which resulted in net cash inflows of RMB10,583,718,000 during the year ended 31 December 2021.

		Equity interests
Ningxia Lingwu	(a)	65%
Ningxia Heating	(a)	53%
Shanxi Maohua Energy Investment Company Limited	(b)	100%
Shanxi Shuozhou Pinglu Maohua Bailu Coal Company Limited	(b)	100%
Shanxi Shuozhou Pinglu Maohua Dongyi Coal Company Limited	(b)	70%
Shanxi Shuozhou Pinglu Maohua Wantongyuan Coal Company Limited	(b)	70%
Shanxi Shuozhou Pinglu Maohua Xialiyuan Coal Company Limited	(b)	100%
Hubei Huadian Wuxue New Energy Co., Ltd.	(c)	100%
Hubei Huadian Suixian Yindian Photovoltaic Power Generation Co., Ltd.	(c)	100%
Hubei Huadian Zaoyang Photovoltaic Power Generation Co., Ltd.	(c)	100%
Hebei Huadian Yuzhou Wind Power Co., Ltd.	(c)	100%
Zanhuang County Mingchengyumeng Energy Technology Company Limited	(d)	100%
Inner Mongolia Huadian Mengdong Energy Company Limited	(d)	100%
Huadian Chengwu New Energy Company Limited	(d)	60%
Huadian Liaocheng New Energy Company Limited	(d)	60%
Inner Mongolia Haoyuan Coal Company Limited ("Haoyuan Company")	(e)	100%

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

## 48 LOSS OF CONTROL OF SUBSIDIARIES (Continued)

	<i>RMB'000</i>
<b>Gain on disposal of subsidiaries</b>	
Net assets of subsidiaries of disposed of (Note)	11,509,464
Less: Non-controlling interests	(1,576,386)
Net assets attributable to equity holders of the Company	9,933,078
Less: Cash consideration	(11,578,647)
Gain on disposal of subsidiaries	(1,645,569)
<b>Cash inflow arising from disposal of subsidiaries:</b>	
Cash consideration	11,578,647
Less: Cash and cash equivalents disposed of	(994,929)
	10,583,718

Note:

The major classes of assets and liabilities of subsidiaries at the date of disposal upon the completion of the agreements as described above was as follows:

	<i>RMB'000</i>
<b>Assets:</b>	
Property, plant and equipment	16,595,953
Construction in progress	561,044
Intangible assets	1,309,722
Cash and cash equivalents	994,929
Other assets	9,628,641
	29,090,289
<b>Liabilities:</b>	
Bank loans	(6,153,110)
Trade creditors and bills payable	(2,008,460)
Other liabilities	(9,419,255)
	(17,580,825)
<b>Net assets of subsidiaries</b>	<b>11,509,464</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 48 LOSS OF CONTROL OF SUBSIDIARIES (*Continued*)

#### (a) Disposal of Ningxia Lingwu and Ningxia Heating

On 26 February 2021, the Group entered into 2 sales and purchase agreements with China Huadian, pursuant to which, the Group agreed to sell, and China Huadian agreed to purchase (i) 65% equity interest in Huadian Ningxia Lingwu Power Generation Company Limited (“**Ningxia Lingwu**”) and the dividends receivable from Ningxia Lingwu; and (ii) 53% equity interest in Ningxia Huadian Heating Corporation Limited (“**Ningxia Heating**”). Details of the transaction are set out in the circular issued by the Company dated 31 March 2021.

In May 2021, the Group completed the above disposal for a total consideration of RMB4,335,986,000 and recorded a gain on disposal of RMB881,820,000.

#### (b) Disposal of Maohua Company

On 27 September 2021, the Group entered into a sale and purchase agreement with China Huadian, pursuant to which, the Group agreed to sell, and China Huadian agreed to purchase (i) 100% equity interest in Shanxi Maohua Energy Investment Company Limited (“**Maohua Company**”) and its subsidiaries held by the Group; and (ii) the Maohua Debt Receivables. Details of the transaction are set out in the circular issued by the Company dated 27 October 2021.

In November 2021, the Group completed the above disposal for a total consideration of RMB1 and recorded a loss on disposal of RMB137,438,000.

#### (c) Disposal of subsidiaries and assets group to Huadian New Energy and its subsidiaries

On 24 May 2021, the Group entered equity and assets disposal agreements with certain subsidiaries of Huadian New Energy, pursuant to which the subsidiaries of Huadian New Energy agreed to purchase, and the subsidiaries of the Company agreed to sell 4 subsidiaries and certain assets group. Details of the transaction are set out in the circular issued by the Company dated 15 June 2021.

On 30 June 2021, except for Lechang Branch assets group, the Group completed the above disposal for a total consideration of RMB1,776,338,000 and recorded a loss on disposal of RMB51,252,000.

#### (d) Disposal of subsidiaries to Huadian New Energy and its subsidiaries

On 28 October 2021, the Group entered into multiple equity disposal agreements, the assets disposal agreements and preliminary project transfer agreement with Huadian New Energy and certain of its subsidiaries, pursuant to which Huadian New Energy and certain of its subsidiaries agreed to purchase, and the Company and certain of its subsidiaries agreed to dispose of the 4 subsidiaries, 3 associates, certain assets groups and preliminary project. Details of the transaction are set out in the circular issued by the Company dated 24 November 2021 and announcement issued by the Company dated 28 October 2021.

On 31 December 2021, the Group completed the above disposal for a total consideration of RMB5,466,323,000 and a gain of RMB139,341,000 was recognised in the profit or loss during the year ended 31 December 2021.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 48 LOSS OF CONTROL OF SUBSIDIARIES (Continued)

#### (e) Deconsolidation of a subsidiary

On 10 November 2020, a creditor of Haoyuan Company applied for the bankruptcy and liquidation of Haoyuan Company to the Ordos Dongsheng People's Court (the "Court") on the ground that Haoyuan Company is unable to pay its outstanding debt. Pursuant to the judgement on 31 October 2021, the Court ruled the case in favor of the creditor and designated Inner Mongolia Sanheng Law Firm as the bankruptcy administrator of Haoyuan Company.

The directors of the Company considered that the control over Haoyuan Company had been lost since 31 October 2021 and accordingly, the assets and liabilities of Haoyuan Company was deconsolidated from the Group's consolidated financial statements since then and a gain of RMB813,098,000 was recognised in the profit or loss during the year ended 31 December 2021.

The loan to Haoyuan Company of RMB339,198,000 has been fully impaired. The directors of the Company are of the opinion that the deconsolidation of Haoyuan Company would not incur additional material losses to the Group subsequently.

### 49 RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Debtenture	Loans	Lease liabilities	Bills financing	Dividend payables	Perpetual capital securities	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2021	12,492,235	93,917,038	1,817,015	(72,221)	873,821	24,645,175	133,673,063
Financing cash flows	11,099,429	22,052,672	(1,275,275)	(1,536,967)	(4,689,182)	(2,150,000)	23,500,677
New leases	-	-	175,442	-	-	-	175,442
Other adjustments	-	(27,334,703)	(187,411)	-	(540,750)	16,295	(28,046,569)
Dividends of perpetual securities recognised as distribution	-	-	-	-	1,061,382	(1,061,382)	-
Dividends recognised as distribution	-	-	-	-	2,465,744	-	2,465,744
Dividends declared to non-controlling interests	-	-	-	-	1,381,129	-	1,381,129
Interest expense	371,436	4,125,874	38,616	-	-	-	4,535,926
Profit attributable to holders of perpetual capital securities	-	-	-	-	-	1,023,261	1,023,261
At 31 December 2021 and 1 January 2022	<b>23,963,100</b>	<b>92,760,881</b>	<b>568,387</b>	<b>(1,609,188)</b>	<b>552,144</b>	<b>22,473,349</b>	<b>138,708,673</b>
Financing cash flows	<b>2,000,000</b>	<b>4,487,466</b>	<b>(304,902)</b>	<b>(498,349)</b>	<b>(3,643,840)</b>	<b>1,000,000</b>	<b>3,099,950</b>
New leases	-	-	11,825	-	-	-	11,825
Other adjustments	-	156,444	4,584	-	-	39,686	141,139
Dividends of perpetual securities recognised as distribution	-	-	-	-	907,697	(907,697)	-
Dividends recognised as distribution	-	-	-	-	2,467,465	-	2,467,465
Dividends declared to non-controlling interests	-	-	-	-	76,811	-	76,811
Interest paid	(795,986)	(3,333,529)	(19,524)	(56,878)	-	-	(4,205,917)
Interest expense	847,945	3,316,594	19,524	67,897	-	-	4,251,960
Profit attributable to holders of perpetual capital securities	-	-	-	-	-	900,875	900,875
At 31 December 2022	<b>26,015,059</b>	<b>97,387,856</b>	<b>279,894</b>	<b>(2,096,518)</b>	<b>360,277</b>	<b>23,506,213</b>	<b>145,452,781</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 50 STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	2022 RMB'000	2021 RMB'000 (Restated)
<b>Non-current assets</b>		
Property, plant and equipment	15,905,504	15,128,825
Right-of-use assets	840,591	1,034,453
Construction in progress	1,656,100	3,778,194
Investment properties	21,339	22,375
Intangible assets	30,762	20,201
Goodwill	34,413	34,413
Interests in subsidiaries	46,076,024	43,873,987
Interests in associates and joint ventures	39,537,832	34,647,546
Financial asset at fair value through profit or loss	107,072	79,971
Other non-current assets	329,458	737,988
	<b>104,539,095</b>	99,357,953
<b>Current assets</b>		
Inventories	620,911	768,778
Trade debtors and bills receivable	1,949,221	1,443,804
Amounts due from subsidiaries	15,328,225	11,470,797
Deposits, other receivables and prepayments	1,173,362	2,841,682
Restricted deposits	–	9
Cash and cash equivalents	1,092,910	739,455
	<b>20,164,629</b>	17,264,525
<b>Current liabilities</b>		
Bank loans	7,144,362	6,263,357
Loans from shareholders	2,500	–
Other loans	2,932,455	3,249,961
Short-term debentures payable	–	2,023,880
Long-term debentures payable – current portion	2,442,131	5,861,218
Amount due to the parent company	2,303	13,068
Amounts due to subsidiaries	1,505,189	1,644,573
Lease liabilities	77,979	56,331
Trade creditors and bills payable	1,247,043	404,468
Other payables	832,133	1,487,287
	<b>16,186,095</b>	21,004,143
<b>Net current assets/(liabilities)</b>	<b>3,978,534</b>	(3,739,618)
<b>Total assets less current liabilities</b>	<b>108,517,629</b>	95,618,335

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 50 STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY *(Continued)*

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i> <i>(Restated)</i>
<b>Non-current liabilities</b>		
Bank loans	12,764,916	12,492,889
Loans from shareholders	2,719,400	–
Other loans	1,303,500	599,990
Long-term debentures payable	23,572,927	16,078,002
Convertible bonds – liability component	1,461,245	1,433,637
Lease liabilities	6,205	93,907
Deferred government grants	27,748	43,334
Deferred income	58,809	123,167
Deferred tax liabilities	62,281	62,703
	<b>41,977,031</b>	30,927,629
<b>Net assets</b>	<b>66,540,598</b>	64,690,706
<b>Capital and reserves</b>		
Share capital	9,869,858	9,869,858
Perpetual capital securities	23,506,213	22,473,349
Reserves	33,164,527	32,347,499
<b>Total equity</b>	<b>66,540,598</b>	64,690,706

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the year ended 31 December 2022 (Expressed in Renminbi)

### 50 STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (Continued)

#### Movement in the Company's reserves

	Share capital RMB'000	Capital reserve RMB'000	Statutory surplus reserve RMB'000	Discretionary surplus reserve RMB'000	Retained profits RMB'000	Convertible bonds reserve RMB'000	Perpetual capital securities RMB'000	Total equity RMB'000
Balance at 1 January 2021	9,862,977	14,835,394	3,839,611	68,089	9,819,503	-	24,645,175	63,070,749
Profit for the year (Restated)	-	-	-	-	6,170,858	-	1,023,261	7,194,119
Profit and total comprehensive income (Restated)	-	-	-	-	6,170,858	-	1,023,261	7,194,119
Issue of shares	6,881	22,914	-	-	-	-	-	29,795
Share of reserve of associates	-	37,261	-	-	-	-	-	37,261
Issue of perpetual capital securities	-	-	-	-	-	-	4,496,319	4,496,319
Dividends recognised as distribution	-	-	-	-	(2,465,744)	-	-	(2,465,744)
Redemption of perpetual capital securities	-	(19,976)	-	-	-	-	(6,630,024)	(6,650,000)
Issue of convertible bonds	-	-	-	-	-	41,250	-	41,250
Appropriation of general reserve	-	-	479,833	-	(479,833)	-	-	-
Distributions payable to holders of perpetual capital securities	-	-	-	-	-	-	(1,061,382)	(1,061,382)
Others	-	-	1,395	-	(3,056)	-	-	(1,661)
Balance at 31 December 2021 and 1 January 2022 (Restated)	<b>9,869,858</b>	<b>14,875,593</b>	<b>4,320,839</b>	<b>68,089</b>	<b>13,041,728</b>	<b>41,250</b>	<b>22,473,349</b>	<b>64,690,706</b>
Profit for the year	-	-	-	-	<b>3,309,147</b>	-	<b>900,875</b>	<b>4,210,022</b>
Profit and total comprehensive income	-	-	-	-	<b>3,309,147</b>	-	<b>900,875</b>	<b>4,210,022</b>
Share of reserve of associates	-	<b>20,843</b>	-	-	-	-	-	<b>20,843</b>
Issue of perpetual capital securities	-	-	-	-	-	-	<b>7,494,189</b>	<b>7,494,189</b>
Dividends recognised as distribution	-	-	-	-	<b>(2,467,465)</b>	-	-	<b>(2,467,465)</b>
Redemption of perpetual capital securities	-	<b>(45,497)</b>	-	-	-	-	<b>(6,454,503)</b>	<b>(6,500,000)</b>
Appropriation of general reserve	-	-	<b>330,915</b>	-	<b>(330,915)</b>	-	-	-
Distributions payable to holders of perpetual capital securities	-	-	-	-	-	-	<b>(907,697)</b>	<b>(907,697)</b>
Balance as at 31 December 2022	<b>9,869,858</b>	<b>14,850,939</b>	<b>4,651,754</b>	<b>68,089</b>	<b>13,552,495</b>	<b>41,250</b>	<b>23,506,213</b>	<b>66,540,598</b>

### 51 EVENTS AFTER THE REPORTING PERIOD

Subsequent to 31 December 2022, the Group had the following non-adjusting events:

- In January 2023, the Group issued the first tranche of medium-term notes (Energy Supply Assurance Bond) for the year of 2023 in the PRC interbank debenture market. The medium-term note was issued at a total par value of RMB2,000 million with an initial maturity period of 2 years and bears interest at 3.77% per annum. The tranche is unsecured.
- In February 2023, the Group issued the second tranche of medium-term notes (Energy Supply Assurance Bond) for the year of 2023 in the PRC interbank debenture market. The medium-term note was issued at a total par value of RMB2,500 million with an initial maturity period of 2 years and bears interest at 3.53% per annum. The tranche is unsecured.
- In March 2023, the Group issued the third tranche of medium-term notes (Energy Supply Assurance Bond) for the year of 2023 in the PRC interbank debenture market. The medium-term note was issued at a total par value of RMB2,500 million with an initial maturity period of 2 years and bears interest at 3.28% per annum. The tranche is unsecured.

Details of above transactions are set out in the Company's announcements dated 30 January 2023, 13 February 2023 and 21 March 2023, respectively.

## FIVE YEARS FINANCIAL SUMMARY

	2018 <i>RMB'000</i>	2019 <i>RMB'000</i>	2020 <i>RMB'000</i>	2021 <i>RMB'000</i> <i>(Restated)</i>	<b>2022 <i>RMB'000</i></b>
Turnover	87,419,418	91,752,980	89,382,243	101,168,876	<b>105,960,339</b>
Profit/(loss) before taxation	2,738,894	5,361,142	6,891,833	(6,912,464)	<b>(1,536,927)</b>
Income tax(expenses)/credit	(826,862)	(1,036,440)	(1,216,202)	1,774,724	<b>614,821</b>
Profit/(loss) for the year	1,912,032	4,324,702	5,675,631	(5,137,740)	<b>(922,106)</b>
Attributable to:					
Equity holders of the Company	1,445,736	3,385,324	4,166,756	(3,255,963)	<b>(30,791)</b>
Non-controlling interests	466,296	939,378	1,508,875	(1,881,777)	<b>(891,315)</b>
Profit/(loss) for the year	1,912,032	4,324,702	5,675,631	(5,137,740)	<b>(922,106)</b>
Total non-current assets	201,724,007	20,564,187	211,834,333	192,870,366	<b>197,572,018</b>
Total current assets	25,772,114	26,600,168	24,856,602	29,593,821	<b>29,230,395</b>
Total assets	227,496,121	232,164,355	236,690,935	222,464,187	<b>226,802,413</b>
Total current liabilities	(75,534,410)	(67,329,784)	(59,145,559)	(65,662,934)	<b>(63,091,810)</b>
Total non-current liabilities	(83,719,847)	(84,226,928)	(83,152,267)	(80,454,539)	<b>(90,681,694)</b>
Net assets	68,241,864	80,607,643	94,393,109	76,346,714	<b>73,028,909</b>
Equity holders of the Company	53,131,142	62,601,738	73,145,361	63,794,436	<b>61,430,552</b>
Non-controlling interests	15,110,722	18,005,905	21,247,748	12,552,278	<b>11,598,357</b>
Total equity	68,241,864	80,607,643	94,393,109	76,346,714	<b>73,028,909</b>

# SUPPLEMENTAL INFORMATION

## 1. DIFFERENCE ON ACCOUNTING FIGURES BY ADOPTING DOMESTIC AND FOREIGN ACCOUNTING PRINCIPLES

### Reconciliation of the Financial Statements Prepared Under CAS and IFRSs

Effects of major differences between the CAS and IFRSs on net profit/(loss) and net assets attributable to equity holders of the Company are analysed as follows:

	Notes	Net profit/(loss) attributable to equity holders of the Company		Net assets attributable to equity holders of the Company	
		2022 RMB'000	2021 RMB'000 (Restated)	2022 RMB'000	2021 RMB'000 (Restated)
Amounts under CAS		99,811	(4,982,427)	59,513,957	61,915,663
Adjustments:					
Business combination involving entities					
under common control	(i)	(500,950)	(351,083)	3,540,062	3,642,536
Government grants	(ii)	34,682	33,592	(392,741)	(253,209)
Maintenance and production safety funds	(iii)	79,144	90,604	-	-
Separation and transfer of equipment	(iv)	-	19,586	-	-
Dilution gain on investment in an associate	(v)	-	1,793,703	-	-
Taxation impact of the adjustments		103,129	55,051	(567,662)	(686,877)
Attributable to minority interest		153,393	85,011	(663,064)	(823,677)
Amounts under IFRSs		(30,791)	(3,255,963)	61,430,552	63,794,436

#### Notes:

- (i) According to the accounting policies adopted in the Group's financial statements prepared under IFRSs, assets and liabilities acquired by the Group during business combination, irrespective of whether such business combination is involving entities under common control or not, are measured at the fair value of identifiable assets and liabilities of the acquiree at the date of acquisition. In preparing the consolidated financial statements, the respective financial statements of subsidiaries are adjusted based on the fair value of individual identifiable assets and liabilities at the date of acquisition. The excess of purchase consideration paid by the Company over its share of fair value of identifiable net assets of the acquired was recognised as goodwill.
- In accordance with CAS, assets and liabilities acquired by the Group in business combination involving entities under common control are measured at their carrying value at the date of combination. The excess of carrying value of purchase consideration paid by the Company over its share of carrying value of identifiable net assets of the acquiree for business combination involving entities under common control reduces the share premium of capital reserve or retained profits.
- In addition, according to CAS, in respect of business combination involving entities under common control, when preparing consolidated financial statements, the opening balances as well as the comparative figures of the financial statements should be adjusted as if the current structure and operations resulting from the acquisitions had been in existence since prior periods (no earlier than the later of both parties were under common control).
- (ii) According to IFRSs, conditional government grants should be first recorded in long-term liabilities and amortised to profit or loss using the straight line method over the useful lives of the relevant assets after fulfilling the requirements from the government in respect of the construction projects.
- According to CAS, government grants related to assets (required to be recorded in capital reserve pursuant to the relevant government notice) are not recognised as deferred income.
- (iii) Pursuant to the relevant PRC regulations for power generation and coal mining companies, the funds for production maintenance and production safety are accrued by the Group at fixed rates based on previous year's operating income or coal production volume. Provision for maintenance and production funds is recognised as expense in profit or loss with a corresponding adjustment to the specific reserve. The maintenance and production funds could be utilised when expenses or capital expenditures on production maintenance and safety measures are incurred. The amount of maintenance and production funds utilised would be transferred from the specific reserve back to retained earnings.
- According to IFRSs, power generation and coal mining companies are required to set aside an amount to a fund for production maintenance, production safety and other similar funds through transferring from retained earnings to specific reserve. When qualifying revenue expenditures are incurred, such expenses are recorded in the profit or loss as incurred. When capital expenditures are incurred, an amount is transferred to property, plant and equipment and is depreciated in accordance with the depreciation policy of the Group. Internal equity items transfers take place based on the actual application amount of such expenses whereas specific reserve is offset against retained earnings to the extent of zero.
- (iv) Pursuant to the relevant PRC regulations for the separation and transfer of "Water/Electricity/Heat Supply and Property Management", the Group required to transfer certain equipment to relevant parties without any consideration, which the loss will directly recognise to equity.
- According to IFRSs, the loss from the separation and transfer of equipment should be first recorded in profit or loss as incurred, then to equity as reduced the retained profits for the Group.
- (v) Under CAS, gains or losses arising from dilution of investments in associates and joint ventures should be recorded in equity while adjusting the carrying amount of the long-term investment. Under IFRSs, gains or losses of which should be recorded in profit or loss, while adjusting the carrying amount of the long-term investment.





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