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華能國際電力股份有限公司

HUANENG POWER INTERNATIONAL, INC.

(a Sino-foreign joint stock limited company incorporated in the People's Republic of China)

(Stock Code: 902)

2023 Interim Results Announcement

Consolidated operating revenue:	RMB126.032 billion
Net profit attributable to equity holders of the Company:	RMB6.490 billion
Earnings per share:	RMB0.32

INTERIM RESULTS

The Board of Directors of Huaneng Power International, Inc. (the “Company”) announces the unaudited operating results for the six months ended 30 June 2023 and a comparison with the operating results for the same period of last year. For the six months ended 30 June 2023, the Company and its subsidiaries recorded consolidated operating revenue of RMB126.032 billion, representing an increase of 7.84% compared to the same period of last year. The net profit attributable to equity holders of the Company was RMB6.490 billion, representing an increase of 301.53% compared to the same period of last year. The earnings per share was RMB0.32. The net asset (excluding non-controlling interests and other equity instruments) per share was RMB3.76.

Please refer to the unaudited financial information below for details of the operating results.

BUSINESS REVIEW FOR THE FIRST HALF OF THE YEAR

In the first half of the year, the Company closely focused on the annual objectives and tasks, seized the market opportunity, scientifically promoted production and operation, reform and development, and achieved a substantial year-on-year improvement in operating performance, actively fulfilling the responsibility of providing sufficient, reliable and environmentally friendly electricity to the society.

1. Power Generation

In the first half of the year, the Company's total on-grid power generation of the power plants within China on consolidated basis amounted to 211.148 billion kWh, representing an increase of 7.43% over the same period last year. The average utilization hours of the Company's power plants within China were 1,799 hours, representing an increase of 39 hours over the same period last year. The Company's market-based power transaction ratio was 87.68%, representing a decrease of 0.13 percentage point over the same period last year.

The increase in the electricity sold by the Company in the first half of 2023 was mainly attributable to (i) the overall increase in power use prompted by economic recovery and extreme heat; (ii) substantial fall in power generation from hydropower units nationwide due to decline in rainfall; (iii) the significant year-over-year increase in power generation from coal-fired units owing to the Company's proper operation of the coal-fired units and timely repair and maintenance to ensure the power supply in this peak season; and (iv) the continuous growth in installed generation capacity from wind power units and photovoltaic units of the Company leading to the greater increase in power generation volume from clean energy units.

2. Cost Control

In the first half of the year, the domestic coal supply maintained at a high level. The imported coal supply increased substantially year-on-year while the demand for coal non-thermal was less than expected. The inventory was at a historical high level, and as a result, the balance of coal supply and demand shifted from tight to loose situation, which brought down the coal price. In the first half of the year, in reaction to the favorable market opportunities presented on the market, the Company analytically adjusted its coal procurement strategy, bolstered its ability in price control and ensuring supply with a well-stocked inventory, and increased imports of coal in times when the coal market was in an over-supply state and the price was favorable to optimize its inventory portfolio, all of which helped achieve efficient fuel cost control. In the first half of the year, the Company purchased 105 million tons of coal, an increase of 18.72% year-on-year; accumulated unit price of standard coal charged into the furnace excluding tax is RMB1,137.76 per ton, down 10.49% year-on-year.

3. Energy Conservation and Environmental Protection

In the first half of the year, the coal consumption of power supply of the thermal power units of the Company was 287.25g/kWh and the house consumption rate of plants was 4.25% with energy consumption indicator maintaining at a good level in China. With respect to air pollution emissions, the power generation companies affiliated to the Company have maintained ultra-low-emissions. Pollutant emissions have met or outperformed the national emission standards. With respect to treatment of waste water discharge and coal yards and ash yards, the Company has carried out technological transformation projects in power plants in key regions. Such projects have been promoted in an orderly manner as scheduled to ensure that pollutant emissions in relevant power plants meet the requirements under pollution discharge permits and other ecological and environmental protection policies.

4. Project Development and Construction

In the first half of the year, the Company proceeded smoothly in the construction of power generation projects. The Company increased additional 4,051 MW of controlled generation capacity, including 650 MW of coal power controlled generation capacity, 495 MW of combined cycle controlled generation capacity, 409 MW of wind power controlled generation capacity, 2,497 MW of solar energy controlled generation capacity. As of 30 June 2023, the Company's controlled generation capacity was 129,995 MW, and low carbon clean energy (wind power, solar energy, hydropower, combined cycle, biomass power) accounted for 28.02% of the installed capacity.

5. Overseas Businesses

In the first half of the year, Tuas Power Limited (the “Tuas Power”) in Singapore, a wholly-owned subsidiary of the Company, contributed to 21.6% of the power generation in Singapore market cumulatively. The pre-tax profit of Singapore business was RMB2.890 billion, representing an increase in pretax profit of RMB2.149 billion over the same period last year. In the first half of the year, Singapore’s market electricity price was relatively high. Tuas Power maintained safe and stable operation of its generator units, and actively optimized its retail electricity business. The profit margin contribution of electricity sales increased significantly year-on-year.

In the first half of the year, the pre-tax profit of the operations in Pakistan was RMB312 million, representing an increase of RMB57 million compared to the same period last year.

PROSPECT FOR THE SECOND HALF OF THE YEAR

In the second half of the year, the Company will continue to focus on the “Fourteenth Five-Year Plan” and the Company’s development strategy, vigorously promote green and low-carbon transformation and development, accelerate the optimization and upgrading of coal-fired power structure, continue to deepen business reformation, promote major scientific and technological projects to tackle key problems and apply achievements, further push business performance to a new level, and complete the annual work objectives and tasks with high quality.

In terms of power market, in the second half of the year, it is more likely that the supply and demand of the coal market will remain relatively lenient, and the pressure of price reduction will continue to be transferred to the electricity price side, making it more difficult for the wholesale and retail markets to stabilize prices. The progress of new energy entering into the market is accelerating as the demand for green electricity is increasing. The difference in electricity purchase structure has an increasing impact on the retail market price while the competition for electricity sales is becoming more complicated. The Company will adhere to the principle of maximizing the overall interests, deeply analyze the growth of electricity demand in various regions, actively respond to market changes, do a good job of ensuring supply and stabilizing prices, take advantage of the favorable opportunities of peak summer and peak winter, strive to issue more beneficial electricity, and fully complete the annual work objectives and tasks.

In terms of coal market, in the second half of the year, the national supply policy will continue, the imported coal policy continues to be lenient, coal supply will still be at a high level, and the fundamental supply and demand situation is likely to continue to be loose. The Company will closely track changes in the coal market, implement the requirements of national policies, strive to improve the performance rate of the long-term contracts, and give full play to the role of ballast of the long-term contracts, grasp the situation of the international coal market, and do a good job in imported coal, continue to optimize the supply structure, enhance the ability of the unit to maintain the supply of the peak, strengthen the management of inventories, and give full play to the roles of low-storage and high-storage, as well as to take measures to control the cost of coal purchases.

In terms of capital market, the second quarterly meeting of the Monetary Policy Committee of the People's Bank of China pointed out that the People's Bank of China will precisely and vigorously implement a prudent monetary policy, provide stronger support for the real economy, and maintain a reasonably abundant liquidity. It will continue to increase support for key areas and weak links of the national economy, such as green development and scientific and technological innovation. The Committee will play a role in reforming the effectiveness and guidance of the lending market offer rate, and promote a steady decline in the cost of corporate financing and improve the green financial system with the goal of promoting the realization of carbon peak and carbon neutrality. The Company will focus on improving business performance, strengthening capital operation, further expanding financing channels, and safeguarding the safe supply of energy and the capital needs for green and low-carbon transformation. We will pay close attention to changes in the capital market, make good use of green financial policies, strive to control financing costs, prevent capital risks and realize cost reduction and efficiency.

MANAGEMENT'S DISCUSSION AND ANALYSIS

(Prepared under International Financial Reporting Standards (“IFRSs”))

General

The principal activities of the Company are construction, operation and management of power plants within China. The Company is among the largest listed power companies in China. As of 30 June 2023, the Company had a controlled installed capacity of 129,995 MW, 28.02% of which approximately was from clean energy sources (wind, photovoltaic, hydro, combine cycle and biomass power generation). The Company's power plants are located in 26 provinces, autonomous regions and municipalities within China. The Company is also the sole owner of a power enterprise in Singapore and has invested in a power company located in Pakistan.

For the six months ended 30 June 2023, the operating revenue of the Company amounted to RMB126.032 billion, representing an increase of 7.84% over the same period of last year. The net profit attributable to equity holders of the Company was RMB6.490 billion, representing an increase of 301.53% as compared with the same period of last year. The earnings per share was RMB0.32.

A. Operating Results

1. *Operating results for the first half of 2023*

For the second quarter of 2023, the Company's total electricity sold by power plants within the PRC on a consolidated basis amounted to 104.138 billion KWh, representing an increase of 17.24% over the same period last year. For the first half of 2023, the Company's total electricity sold by power plants within the PRC on a consolidated basis amounted to 211.148 billion KWh, representing an increase of 7.43% over the same period last year. For the first half of 2023, the Company's average on-grid electricity settlement price by its power plants within the PRC amounted to RMB515.23 per MWh, representing an increase of 1.89% over the same period last year. For the first half of 2023, the Company's proportion of market-based trading of electricity was 87.68%, representing a decrease of 0.13 percentage point over the same period last year.

The increase in the electricity sold by the Company in the first half of 2023 was mainly attributable to (i) the overall increase in power use prompted by economic recovery and extreme heat, (ii) substantial fall in power generation from hydropower units nationwide due to decline in rainfall, (iii) the significant year-over-year increase in power generation from coal-fired units owing to the Company's proper operation of the coal-fired units and timely repair and maintenance to ensure the power supply in this peak season, and (iv) the continuous growth in installed generation capacity from wind power units and photovoltaic units of the Company leading to the greater increase in power generation volume from clean energy units.

The volume of electricity sold by the Company's power plants in China during the six months ended 30 June 2023 is listed below (in billion kWh):

Types of generation/Region	Electricity Sold		Electricity Sold	
	April to June of 2023	Year-on-Year Change	January to June of 2023	Year-on-Year Change
Coal-fired	86.481	16.91%	176.016	5.19%
Combined cycle	5.587	7.60%	12.867	8.71%
Wind-power	8.695	15.93%	16.777	21.92%
PV	2.851	72.98%	4.705	72.04%
Hydro-power	0.263	-18.21%	0.327	-35.83%
Biomass power	0.261	36.60%	0.455	24.66%
Heilongjiang Province	2.840	2.05%	5.924	4.22%
Coal-fired	1.978	-10.07%	4.459	-3.68%
Wind-power	0.715	46.97%	1.227	41.00%
PV	0.086	2.62%	0.156	-3.08%
Biomass power	0.061	367.46%	0.082	251.91%
Jilin Province	3.110	25.00%	6.175	19.83%
Coal-fired	1.796	18.03%	3.701	5.81%
Wind-power	1.137	42.40%	2.146	59.94%
Hydro-power	0.023	-26.96%	0.024	-23.19%
PV	0.066	-3.37%	0.127	-6.87%
Biomass power	0.090	29.05%	0.176	21.12%
Liaoning Province	3.366	7.13%	7.512	3.78%
Coal-fired	2.787	-141.67%	6.381	-0.54%
Wind-power	0.508	35.99%	1.016	41.44%
Hydro-power	0.005	-38.47%	0.006	-35.18%
PV	0.066	24.39%	0.110	14.58%
Inner Mongolia	0.223	11.79%	0.441	12.22%
Wind-power	0.223	11.79%	0.441	12.22%
Hebei Province	2.847	9.14%	5.644	-1.26%
Coal-fired	2.321	1.07%	4.744	-7.74%
Wind-power	0.168	-4.62%	0.356	2.77%
PV	0.358	163.10%	0.545	138.62%

Types of generation/Region	Electricity Sold		Electricity Sold	
	April to June of 2023	Year-on-Year Change	January to June of 2023	Year-on-Year Change
Gansu Province	2.882	-18.53%	6.590	-9.71%
Coal-fired	2.149	-23.36%	5.339	-11.72%
Wind-power	0.733	-0.05%	1.251	-0.02%
Ningxia	0.006	-17.47%	0.011	-11.18%
PV	0.006	-17.47%	0.011	-11.18%
Beijing	1.601	4.77%	4.078	3.82%
Coal-fired	–	–	0.406	-30.97%
Combined cycle	1.601	4.77%	3.672	9.95%
Tianjin	1.316	21.60%	2.823	1.88%
Coal-fired	1.237	27.61%	2.355	7.90%
Combined cycle	0.072	-33.14%	0.459	-21.04%
PV	0.007	39.56%	0.010	26.11%
Shanxi Province	1.380	1.53%	4.263	2.63%
Coal-fired	0.917	3.19%	2.222	4.83%
Combined cycle	0.026	149.41%	1.180	-2.33%
Wind-power	0.179	6.66%	0.383	18.22%
PV	0.258	-11.72%	0.478	-4.76%
Shandong Province	17.737	-4.43%	37.908	-4.31%
Coal-fired	16.555	-5.46%	35.705	-5.58%
Wind-power	0.661	4.88%	1.328	17.95%
PV	0.410	32.44%	0.678	41.87%
Biomass power	0.111	2.05%	0.197	0.26%
Henan Province	5.096	-9.47%	10.816	-3.26%
Coal-fired	3.825	-13.28%	8.392	-7.63%
Combined cycle	0.034	10.10%	0.055	-5.60%
Wind-power	1.071	-9.26%	2.049	1.21%
PV	0.166	2,061.98%	0.320	2,474.48%
Jiangsu Province	11.053	25.13%	20.351	11.14%
Coal-fired	8.512	39.42%	15.009	16.03%
Combined cycle	1.042	-26.39%	2.413	-15.02%
Wind-power	1.283	5.40%	2.576	8.14%
PV	0.215	129.22%	0.353	129.71%

Types of generation/Region	Electricity Sold		Electricity Sold	
	April to June of 2023	Year-on-Year Change	January to June of 2023	Year-on-Year Change
Shanghai	4.898	81.88%	9.558	15.23%
Coal-fired	4.633	81.43%	9.115	15.23%
Combined cycle	0.254	97.16%	0.420	14.42%
PV	0.010	0.29%	0.022	33.32%
Chongqing	3.329	45.52%	7.657	28.34%
Coal-fired	2.627	53.25%	6.161	28.35%
Combined cycle	0.547	15.76%	1.249	26.49%
Wind-power	0.155	53.31%	0.247	38.06%
PV	0.0003	–	0.0003	–
Zhejiang Province	7.600	4.34%	15.159	8.24%
Coal-fired	6.960	4.75%	13.727	4.73%
Combined cycle	0.172	-48.28%	0.358	-2.82%
Wind-power	0.398	63.14%	0.952	123.74%
PV	0.070	10.28%	0.122	17.85%
Hubei Province	3.177	2.28%	8.012	3.79%
Coal-fired	2.646	-2.68%	7.151	1.22%
Wind-power	0.211	6.48%	0.396	11.94%
Hydro-power	0.090	-8.00%	0.112	-27.91%
PV	0.231	150.25%	0.353	142.91%
Hunan Province	2.232	29.43%	5.061	16.42%
Coal-fired	1.803	27.18%	4.346	15.92%
Wind-power	0.251	33.08%	0.467	27.40%
Hydro-power	0.109	13.06%	0.141	-28.84%
PV	0.069	213.59%	0.108	216.32%
Jiangxi Province	6.670	19.53%	13.670	6.87%
Coal-fired	6.144	19.48%	12.754	5.76%
Wind-power	0.292	5.14%	0.524	7.66%
PV	0.234	46.11%	0.392	59.83%

Types of generation/Region	Electricity Sold		Electricity Sold	
	April to June of 2023	Year-on-Year Change	January to June of 2023	Year-on-Year Change
Anhui Province	1.896	16.95%	3.781	7.76%
Coal-fired	1.370	8.15%	2.826	-0.51%
Wind-power	0.316	6.14%	0.623	7.48%
Hydro-power	0.015	-50.72%	0.016	-66.61%
PV	0.195	638.20%	0.316	684.80%
Fujian Province	4.161	60.91%	7.075	10.55%
Coal-fired	4.109	59.14%	6.999	9.48%
PV	0.053	1,125.71%	0.077	910.54%
Guangdong Province	7.931	24.38%	14.178	11.67%
Coal-fired	6.716	27.46%	12.143	12.43%
Combined cycle	1.177	7.27%	1.981	5.34%
PV	0.038	290.18%	0.054	248.18%
Guangxi	0.289	90.29%	0.524	50.41%
Combined cycle	0.088	31.88%	0.154	-8.61%
Wind-power	0.201	135.87%	0.370	105.61%
PV	0.0001	–	0.0001	–
Yunnan Province	4.630	332.18%	7.338	91.07%
Coal-fired	4.467	357.78%	7.028	97.05%
Wind-power	0.118	32.78%	0.265	-0.15%
Hydro-power	–	-100.00%	–	-100.00%
PV	0.045	–	0.045	–
Guizhou Province	0.267	29.49%	0.456	18.33%
Wind-power	0.056	56.95%	0.112	12.32%
PV	0.211	23.75%	0.344	20.42%
Hainan Province	3.599	51.23%	6.143	28.29%
Coal-fired	2.929	28.72%	5.054	10.11%
Combined cycle	0.572	331,144.36%	0.926	2,421.67%
Wind-power	0.019	-6.29%	0.049	2.43%
Hydro-power	0.022	-57.36%	0.029	-52.29%
PV	0.057	77.23%	0.084	59.15%
Total	104.138	17.24%	211.148	7.43%

For the second quarter of 2023, Tuas Power contributed to 22.5% of the power generation volume in Singapore market, representing a decrease of 1.1 percentage points compared to the same period of last year.

For the first half of 2023, Tuas Power contributed to 21.6% of the power generation volume in Singapore market cumulatively, representing a decrease of 1.6 percentage points compared to the same period of last year.

2. *Comparative analysis of operating results*

2.1 Operating revenue and tax and levies on operations

Operating revenue mainly consists of revenue from the sale of electricity. For the first half of 2023, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB126.032 billion, representing an increase of 7.84% from RMB116.869 billion for the same period of 2022. The operating revenue from domestic operations of the Company increased by RMB8.625 billion over the same period of last year, mainly due to the increase in electricity sold and average tariff in China. The operating revenue from the operations of the Company in Singapore increased by RMB1.587 billion over the same period of last year, which was mainly attributable to the increase in average tariff in Singapore.

Tax and levies on operations mainly consist of City Construction Tax, Real Estate Tax, Land Use Tax, Education Surcharges, Environment Protection Tax, Resources Tax, Stamp Duties, and Vehicle and Vessel Tax, etc. For the first half of 2023, the tax and levies on operations of the Company and its subsidiaries were RMB0.734 billion, representing an increase of RMB87 million from RMB0.647 billion for the same period of last year.

2.2 *Operating expenses*

For the first half of 2023, the consolidated operating expenses of the Company and its subsidiaries were RMB113.248 billion, representing a decrease of 2.85% from the same period last year. The operating expenses in domestic operations of the Company decreased by RMB1.306 billion, or 1.31%, from the same period last year due to the decrease in fuel costs. The operating expenses from the operations in Singapore decreased by RMB0.641 billion, or 4.67%, from the same period last year.

2.2.1 Fuel costs

Fuel costs account for the majority of the operating expenses of the Company and its subsidiaries. For the first half of 2023, fuel costs of the Company and its subsidiaries decreased by 4.01% to RMB77.501 billion due to the decrease in the purchase price of fuel. Fuel costs from domestic operations decreased by RMB3.896 billion. Fuel costs in Singapore increased by RMB0.661 billion from the same period last year.

2.2.2 Depreciation

For the first half of 2023, depreciation expenses of the Company and its subsidiaries amounted to RMB12.609 billion, representing an increase of RMB0.637 billion from the same period last year. The depreciation expenses of the Company's domestic operations increased by RMB0.622 billion from the same period last year. The main reason was the increase in depreciation expense of newly commissioned generators. The depreciation expenses of the Company's operations in Singapore increased by RMB15 million from the same period last year.

2.2.3 Labor

Labor costs consist of salaries of employees and contributions payable for employees' housing funds, medical insurance, pension and unemployment insurance, as well as training costs. For the first half of 2023, labor costs of the Company and its subsidiaries amounted to RMB7.419 billion, representing an increase of RMB0.685 billion from RMB6.734 billion for the same period last year, mainly due to the increase in social security expenses caused by the higher base, compared to the same period last year.

2.2.4 Maintenance

The maintenance costs of the Company and its subsidiaries for the first half of 2023 amounted to RMB1.708 billion, representing a decrease of RMB68 million from RMB1.776 billion for the same period last year.

2.2.5 Other operating expenses

For the first half of 2023, other operating expenses of the Company and its subsidiaries were RMB14.012 billion, representing a decrease of RMB1.338 billion from RMB15.350 billion, from the same period of last year. The other operating expenses from the Company's domestic operations increased by RMB1.409 billion, from the same period of last year, mainly due to the first appearance of safety funds required by the relevant national regulations, and due to the increase in main-business-related expenditures like R&D expenditure. Other operating expenses of the operations in Singapore decreased by RMB1.373 billion, from the same period of last year, mainly due to the decrease in operating cost of purchasing electricity.

2.3 Financial expenses, net

Financial expenses of the Company and its subsidiaries were RMB4.608 billion for the first half of 2023, representing a decrease of RMB416 million from RMB5.024 billion for the same period last year. Financial expenses for the Company's domestic operation decreased by RMB814 million, mainly due to the decrease in funding costs. Financial expenses for the Company's operations in Singapore increased by RMB105 million.

2.4 Share of profits and losses of associates and joint ventures

For the first half of 2023, the share of profits and losses of associates and joint ventures was RMB0.781 billion, representing an increase of RMB107 million from RMB0.674 billion for the same period last year, mainly due to the increase in profits of the Company's associates and joint ventures, for examples, Shenzhen Energy Group Co., Ltd. ("Shenzhen Energy").

2.5 Income tax expenses

For the first half of 2023, the Company and its subsidiaries recognized consolidated income tax expenses of RMB1.626 billion, representing an increase of RMB1.986 billion from RMB0.36 billion in negative for the same period last year. The income tax expenses for the Company's domestic operation increased by RMB1.598 billion due to the profitability realized for current period, while a loss occurred for the same period last year.

2.6 Net profit attributable to equity holders of the Company

For the first half of 2023, the net profit attributable to equity holders of the Company was RMB6.490 billion, representing an increase of 301.53% from a net loss of RMB3.220 billion of the same period last year. The profit attributable to equity holders of the Company from its domestic operations was RMB3.983 billion, representing an increase of 201.27%, mainly due to the decrease in the purchase price of coal

and the increase in the electricity sold. The net profit attributable to equity holders of the Company from its operations in Singapore was RMB2.389 billion, representing an increase of RMB1.776 billion as compared to RMB0.613 billion for the same period last year, which was due to the significant increase in tariff in Singapore, which in turn increased the marginal contribution of electricity sales per unit. The net profit attributable to equity holders of the Company from its operations in Pakistan was RMB118 million, representing an increase of RMB18 million from RMB100 million for the same period last year.

2.7 Comparison of financial positions

As of 30 June 2023, total consolidated assets of the Company and its subsidiaries amounted to RMB525.933 billion, representing an increase of 2.68% from RMB512.222 billion as of 31 December 2022. As of 30 June 2023, total consolidated liabilities of the Company and its subsidiaries were RMB367,166 billion, representing a decrease of 2.58% from RMB376.906 billion as of 31 December 2022. Our asset-liability ratio as of 30 June 2023 was 69.81%.

2.8 Comparison of major financial ratios

	The Company and its subsidiaries	
	30 June 2023	31 December 2022
	<u>2023</u>	<u>2022</u>
Ratio of liability to equity holders' equity	2.65	3.26
Current ratio	0.59	0.51
Quick ratio	0.50	0.43
	First six months of 2023	First six months of 2022
	<u>2023</u>	<u>2022</u>
Multiples of interest earned	2.66	0.10

Formula of the financial ratios:

Ratio of liabilities to equity holders' equity = balance of liabilities as of the year end/balance of shareholders' equity (excluding non-controlling interests) as of the year end

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

Quick ratio = (balance of current assets as of the year end – net inventories as of the year end)/balance of current liabilities as of the year end

Multiples of interest earned = (profit before tax + interest expense)/interest expenditure (inclusive of capitalized interest)

The ratio of liabilities to equity holders' equity as of 30 June 2023 decreased as compared to 31 December 2022 due to the increase in equity holders' equity as a result of the profit from operations. The current ratio and quick ratio increased compared to 31 December 2022. The multiples of interest earned increased as a result of turning losses into profits in the first half of this year.

As of 30 June 2023, the net current liabilities of the Company and its subsidiaries were RMB64.446 billion. Based on the Company's successful financing history, credit line granted by banks that can be withdrawn at any time and good credit support, the Company believes that it is able to repay its debts in a timely manner when due, obtain long-term loans through financing activities and meet the funding needs of its business development.

B. Liquidity and Cash Resources

1. Liquidity

	For the Six Months Ended 30 June		
	2023	2022	Change
	<u>RMB billion</u>	<u>RMB billion</u>	<u>%</u>
Net cash provided by operating activities	13.760	20.088	(31.50)
Net cash used in investing activities	(20.789)	(15.019)	38.42
Net cash provided by/(used in) financing activities	7.075	(5.469)	(229.37)
Currency exchange impact	(0.279)	0.071	(490.25)
Net increase/(decrease) in cash and cash equivalents	(0.233)	(0.328)	(29.18)
Cash and cash equivalents as at the beginning of the period	16.517	15.555	6.19
Cash and cash equivalents as at the end of the period	16.285	15.226	6.95

For the first half of 2023, net cash provided by operating activities of the Company and its subsidiaries was RMB13.760 billion, representing a decrease of 31.50% from the same period last year, mainly for the joint impact of turning losses and increasing profits in operations, decrease in renewable energy subsidies of previous years and value-added tax rebates received, as well as an increase in inventory occupation funds. Net cash used in investing activities was RMB20.789 billion for the first half of 2023, representing an increase of 38.42% from the same period last year, mainly due to the increase in large and medium-sized infrastructure expenditure during current period as compared with that of the same period last year. Financing activities conducted by the Company and its subsidiaries during the first half of 2023 included debt financing and equity financing. For the first half of 2023, the Company and its subsidiaries borrowed an additional

RMB76.383 billion, issued super short-term bond of RMB44.200 billion, repaid RMB81.717 billion of loans and RMB41.300 billion of super-short-term bond on maturity, issued RMB27.989 billion of perpetual bond and redeemed RMB11.000 billion of perpetual bond.

As of 30 June 2023, the cash and cash equivalents of the Company and its subsidiaries included RMB in the amount of RMB14.745 billion, SGD equivalent to RMB0.833 billion, US Dollars equivalent to RMB0.144 billion, Pakistan Rupees equivalent to RMB0.562 billion and Japanese Yen equivalent to RMB0.3067 million.

2. *Capital expenditure and cash resources*

2.1 *Capital expenditure on infrastructure construction and renovation projects*

The actual capital expenditure of the Company and its subsidiaries in the first half of 2023 was RMB20.153 billion, which was mainly used for the construction of infrastructure and renovation, including RMB1.516 billion for Zhejiang Cangnan Offshore Wind-power, RMB1.388 billion for Shantou Offshore Wind-power, RMB0.727 billion for Luohe Yangzhao New Energy, RMB0.649 billion for Fengcheng New Energy, RMB0.606 billion for Jiangsu Yangzhao New Energy, RMB0.584 billion for Zhuanghe Wind-power, RMB0.463 billion for Mengcheng Wind-power, RMB0.435 billion for Huajingchen New Energy, RMB0.409 billion for Qujing Zhanyi, RMB0.373 billion for Unitech Guangmei New Energy, RMB0.369 billion for Hefei Yangzhao New Energy, RMB0.347 billion for Rudong Wind-power, RMB0.329 billion for Hefei Yangyuan New Energy, RMB0.326 billion for Hefei Yangli New Energy, RMB0.320 billion for Qifan New Energy, RMB0.275 billion for Qujing Xuanwei, RMB0.262 billion for Da'an Clean Energy, RMB0.243 billion for Laiwu New Energy, RMB0.243 billion for Qujing Fuyuan, RMB0.243 billion for Diandong Power, RMB0.243 billion for Nanshan Power Plant, RMB0.242 billion for Ranghu District Clean Energy, RMB0.237 billion for Diandong Yuwang Mining Branch, RMB0.231 billion for Huaneng Libo New Energy, RMB0.231 billion for Ruicheng Co-generation, RMB0.225 billion for Caofeidian District Clean Energy, RMB0.223 billion for Hefei Yangjie New Energy, RMB0.215 billion for Serafu Gao An New

Energy, RMB0.212 billion for Lingao photovoltaic Plant, RMB0.209 billion for Xiyang New Energy. Capital construction and renovation expenditures for other projects totaled RMB7.778 billion.

2.2 *Cash resources and anticipated financing costs*

The capital expenditures of the Company are sourced mainly from internal capital, cash flows provided by operating activities, and debt and equity financing. The Company expects to incur significant capital expenditures for construction and renovation in the coming years. The Company plans to proceed with such plan following the principles of commercial viability, while proactively developing other planned new projects to lay the foundation for the Company's long-term growth. The Company plans to continue funding its capital expenditure requirement using internal capital, cash flows provided by operating activities, and debt and equity financing.

Good operating results and sound credit status provide the Company with strong financing capabilities. As of 30 June 2023, the unutilized banking facilities available to the Company and its subsidiaries exceeded RMB300 billion, which are granted by commercial banks such as Bank of China, China Construction Bank and Industrial and Commercial Bank of China.

In 2023, the Company completed the issuances of unsecured super short-term bonds in 14 tranches on 6 January, 16 January, 6 February, 10 February, 22 February, 13 March, 20 March, 11 April, 17 April, 9 May, 11 May, 24 May, 7 Jun and 28 Jun, in the principal amount of RMB2.5 billion, RMB2.5 billion, RMB2.5 billion, RMB2.5 billion, RMB2 billion, RMB3 billion, RMB3.5 billion, RMB5 billion, RMB3.5 billion, RMB4 billion, RMB4 billion, RMB4 billion, RMB5 billion and RMB200 million, with nominal annual interest rates of 1.80%, 2.05%, 1.83%, 1.90%, 2.02%, 2.11%, 2.18%, 2.10%, 2.13%, 1.97%, 1.90%, 1.98%, 1.79% and 2.10%, respectively. Each tranche of the bonds was denominated in RMB, issued at par value, and would successively mature in 33 days, 32 days, 32 days, 33 days, 30 days, 32 days, 30 days, 30 days, 30 days, 21 days, 29 days, 91 days, 34 days, and 50 days from the issuance date.

The Company, through its subsidiary SinoSing Power, issued two tranches of guaranteed corporate bonds of US\$300 million and US\$300 million on 20 February 2020 with coupon rate of 2.25% and 2.63%, respectively. The instruments were denominated in US dollars and issued at 99.653% and 99.277% of the par value with maturity of five years and ten years, respectively. The bonds are guaranteed by Huaneng International.

As of 30 June 2023, short-term loans of the Company and its subsidiaries were RMB69.038 billion (end of 2022: RMB83.573 billion). Loans from banks were charged at interest rates ranging from 0.79% to 18.01% per annum (end of 2022: 1.24% to 18.01%).

As of 30 June 2023, short-term bonds payable by the Company and its subsidiaries were RMB9.214 billion (end of 2022: RMB6.313 billion).

As of 30 June 2023, the Company and its subsidiaries' long-term loans (including long-term loans due within one year) totaled RMB180.160 billion (end of 2022: RMB170.808 billion), including RMB loans of RMB167.196 billion (end of 2022: RMB154.611 billion), USD loans of USD10.281 billion (end of 2022: USD1.495 billion), EUR loans of EUR4 million (end of 2022: EUR2 million), SGD loans of SGD2.580 billion (end of 2022: SGD1.092 billion), YEN loans of 0.099 billion yen (end of 2022: 2.044 billion yen). Among them, SGD loans are floating rate loans, EUR loans and YEN loans are fixed rate loans, and USD loans include both fixed rate loans and floating rate loans. As of 30 June 2023, the annual interest rate for long-term bank borrowings was 0.35% to 6.19% (end of 2022: 0.75% to 6.75%).

The Company and its subsidiaries will closely monitor any change in the exchange rate and interest rate markets and cautiously assess the currency rate and interest rate risks.

Combining the current development of the power generation industry and the growth of the Company, the Company will make continuous efforts to not only meet cash requirements of its daily operations, constructions, and acquisitions, but also establish an optimal capital structure to minimize the cost of capital and manage financial risks through effective financial management activities, thus generating sustainable and stable returns for the shareholders.

2.3 Other financing requirements

Pursuant to the memorandum and articles of the Company, given the negative realized net profit attributable to the equity holders of the Company and considering the need for future investments in accordance with the Company's transformational development plans and the increased debt-asset ratio of the Company's in year 2022, the board of directors proposed that the Company pay no dividends in year 2022 which has been approved by the annual general meeting of the Company. As of the date of this report, the Company has no declared but unpaid dividend.

C. Performance of Significant Investments and Their Prospects

The Company acquired 25% equity interest in Shenzhen City Energy Group Co., Ltd. (“Shenzhen Energy Group”) for RMB2.39 billion on 22 April 2003. In 2011, Shenzhen Energy Group divided into a remainder company of the same name and a new company Shenzhen Energy Management Company, and the Company holds 25% equity interests in each of the two successors. The Company acquired 200 million shares from Shenzhen Energy, a subsidiary of Shenzhen Energy Group in December 2007. Shenzhen Energy allotted shares with its capital surplus in 2011. In February 2013, Shenzhen Energy merged with SE Management through the combination of directional seasoned offering and cash payment to shareholders of SE management. After the merger, the Company held 991,741,659 shares of Shenzhen Energy, representing 25.02% of its equity interests. These investments brought a net profit attributable to the Company of RMB402 million for the first half year of 2023 under IFRSs. These investments are expected to provide stable returns to the Company.

The Company directly held 60% equity interest in Huaneng Sichuan Energy Development Co. Ltd. (“Sichuan Energy Development”) as of 31 December 2006. In January 2007, Huaneng Group increased its capital investment in Sichuan Energy Development by RMB615 million, thus reducing the Company’s equity interest in Sichuan Energy Development to 49% and making Huaneng Group the controlling shareholder of Sichuan Energy Development. This investment brought a net profit attributable to the Company of RMB116 million for the first half year of 2023 under IFRSs. This investment is expected to provide steady returns to the Company.

D. Employee Benefits

As of 30 June 2023, the Company and its subsidiaries had 56,160 employees. During the reporting period, there was no change to the Company’s compensation plan and training program.

E. Guarantee for Loans and Restricted Assets

As of 30 June 2023, the Company provided guarantee for long-term loans of Tuas Power in the amount of RMB0.653 billion (end of 2022: RMB3.109 billion). As of 30 June 2023, the Company provided guarantee for long-term loans of RMB618 million (end of 2022: RMB237 million) of the Company's domestic subsidiaries.

As of 30 June 2023, Huaneng Shandong Power Co., Ltd ("Shandong Power") provided guarantee for Huaneng Shandong Ruyi (HK) Energy Limited in the amount of RMB224 million (approximately US\$31 million) (end of 2022: RMB199 million (approximately US\$29 million)).

As of 30 June 2023, long-term loans of approximately RMB6,704 million (end of 2022: RMB6,766 million) were guaranteed by Shandong Power, China Export & Credit Insurance Corporation and Jining Chengtou Holding Group Co., Ltd. ("Jining Chengtou") at the liability ratios of 17.5%, 65.0% and 17.5% respectively (end of 2022: Shandong Power, China Export & Credit Insurance Corporation and Jining Chengtou at the liability ratios of 17.5%, 65.0% and 17.5% respectively).

As of 30 June 2023, long-term loans of approximately RMB1,157 million (end of 2022: RMB1,116 million) were guaranteed by Shandong Power and Jining Chengtou at the liability ratios of 50.0% and 50.0% respectively (end of 2022: Shandong Power and Jining Chengtou at the liability ratios of 50.0% and 50.0% respectively).

As of 30 June 2023, the details of secured loans of the Company and its subsidiaries were as follows:

1. As of 30 June 2023, short-term loans of approximately RMB194 million (end of 2022: RMB361 million) of the Company and its subsidiaries, represented the notes receivable that were discounted with recourse. As these notes receivable had not yet matured, the proceeds received were recorded as short-term loans.

2. As of 30 June 2023, short-term loans of approximately RMB148 million (end of 2022: RMB772 million) of the Company and its subsidiaries were secured by certain property, plant and equipment with net book value of RMB225 million (end of 2022: RMB1.519 billion).
3. As of 30 June 2023, long-term loans of approximately RMB3.035 billion (end of 2022: RMB4.633 billion) of the Company and its subsidiaries were secured by certain property, plant and equipment with net book value of RMB4.974 billion (end of 2022: RMB6.984 billion).
4. As of 30 June 2023, long-term loans of approximately RMB5.679 billion (end of 2022: RMB4.794 billion) were secured by electricity and heat receivables of the Company and its subsidiaries. Long-term loans of approximately RMB0 million (end of 2022: RMB461 million) were secured by equity interests of the Company and its subsidiaries. Long-term loans of approximately RMB20 million were secured by carbon emission trading rights (end of 2022: RMB50 million). Long-term loans of approximately RMB33 million were secured by franchise (end of 2022: RMB44 million).
5. As of 30 June 2023, the restricted bank deposits of the Company and its subsidiaries were RMB583 million (end of 2022: RMB658 million).

As of 30 June 2023, the Company had no material contingent liabilities.

F. Risk Factors

Risks Relating to Power Sector and the Market

- (1) With the power market-based reforms continue to deepen, the power spot market is fully rolled out, the proportion of market-based trading power continues to improve, the power market competition is more and more intense, and coal prices show a downward trend, thus the downward pressure on electricity prices increased.
- (2) New energy installed capacity is likely to maintain rapid growth, to ensure that the purchase of power continued to decline in size. Participation in market transactions gradually expanding the size of the green power trading price formation mechanism is not yet perfect. There are difficulties in stabilizing earnings of new energy enterprises.
- (3) With the fact that the current auxiliary services market, capacity market and other ancillary market mechanisms need to be perfected, medium-term and long-term, spot trading prices can not fully reflect the value of standby, regulating services, generating units are difficult to obtain due return on investment, the sustainable development of power generation enterprises need to be supported by relevant policies.

The Company will actively promote green transformation, accelerate the proportion of clean energy, and optimize and upgrade the Company's installed capacity structure. We will strengthen policy research, proactively adapt to the development of the power market under the "dual-carbon" goal, continue to promote the standardized operation of the market, adjust pricing strategies in a timely manner, and make every effort to prevent and control business risks. As the state gradually improves the auxiliary services, capacity compensation and price transmission mechanism, it will create favorable conditions for the Company's sound operation and sustainable development.

Risks Relating to the Fuel Procurement Market

- (1) With the recovery of the national macro-economy, social electricity consumption continues to rise. During the peak summer, peak winter and extreme weather and other peak hours of electricity consumption, some areas may appear time power supply tensions. Since thermal power will continue to play the role of energy pockets, local coal supply is still facing greater pressure.
- (2) The national policy of increasing production and maintaining supply continues to be strong, domestic coal production is growing rapidly, the contradiction between coal supply and demand is obviously easing. The coal prices go down, but still remain relatively high in general, and the Company's coal and power enterprises are still under greater operating pressure.
- (3) Low proportion of medium and long term contracts of domestic trade in the coastal region and the imported coal procurement ratio is high. Coal supply is greatly affected by the international market, and there is double pressure to maintain supply and price control.

The Company will closely track changes in the coal market, implement the requirements of national policies, strive to improve the performance rate of the long-term contracts, and give full play to the role of ballast of the long-term contracts, grasp the opportunity of the international coal market, and do a good job in imported coal, continue to optimize the supply structure, enhance the ability of the unit to maintain the supply of the peak, strengthen the management of inventories, and give full play to the roles of low-storage and high-storage, as well as to take measures to control the cost of coal purchases.

Risks Relating to the Carbon Market

Notice on the allocation of national carbon emission rights trading quotas in 2021 and 2022 by Ministry of ecology and environment has made clear that carbon emission baseline value shall be lowered, and the end of 2023 shall be the second deadline for performance of national carbon market's second performance cycle. Quota distribution has been sharply tightened, while policies like quota carryover details and voluntary emission reduction mechanism are not in place yet, and there is some indeterminacy of price trend of the carbon market.

The Company will pay close attention to the policy alteration and the price trend of the national carbon market, strengthen carbon transaction management continuously, and strive for accomplishing the national carbon market's second cycle transaction performance work at a comparatively lower cost on time.

Environmental Risks

Based on the status quo and demands of ecological civilization construction, the country has been completing and deepening the environmental protection policies of key regions including but not limited to Beijing-Tianjin-Hebei Region, Yangtze River Economic Belt, Pearl River Delta, putting forward new, more strict requirements in aspects like water body protection and flying dust control, and the cost of environmental protection for grass-roots enterprises is likely to increase.

The Company strictly carries out the national environment policies. The new units of the subsidiary fire coal power station are all equipped with technology-advanced and powerful flue gas purification system, and other coal-fired units in the country have also received ultra-low emission transformation in accordance with the national regulations, all of which have good adaptation to the fluctuations of internal and external factors like weather conditions, fuel quality and electric heating loads and have passed the acceptance check of local environment department. Meanwhile, The Company actively follows up the concerns of the environmental protection department, scientifically selects advanced and applicable technical solutions with a cautious attitude, and actively acts in improving water saving and wastewater treatment systems, building closed facilities in coal yards and improving comprehensive utilization of ash and slag so as to ensure that various environmental risks are timely identified and effectively resolved.

Risks Relating to Capital Market

The second quarter meeting of the Monetary Policy Committee of the People's Bank of China has pointed out that the People's Bank of China will precisely and vigorously implement a prudent monetary policy, provide stronger support for the real economy, and maintain a reasonably abundant liquidity. The committee will continue to increase support for key areas and weak links of the national economy, such as green development and scientific and technological innovation. It will play a role in reforming the effectiveness and guidance of the lending market offer rate, and promote a steady decline in the cost of corporate financing and improve the green financial system with the goal of promoting the realization of carbon peak and carbon neutrality.

The Company will focus on improving business performance, strengthening capital operation, further expanding financing channels, and safeguarding the safe supply of energy and the capital needs for green and low-carbon transformation. We will pay close attention to changes in the capital market, make good use of green financial policies, strive to control financing costs, prevent capital risks and realize cost reduction and efficiency.

SHARE CAPITAL STRUCTURE

As at 30 June 2023, total issued share capital of the Company amounted to 15,698,093,359 shares, of which 10,997,709,919 shares were domestic shares, representing 70.06% of the total issued share capital, and 4,700,383,440 shares were foreign shares, representing 29.94% of the total issued share capital. In respect of foreign shares, China Huaneng Group Co., Ltd. (the “Huaneng Group”) through its wholly-owned subsidiaries China Hua Neng Group Hong Kong Limited and China Huaneng Group Treasury Management (Hong Kong) Limited, held 472,000,000 and 131,596,000 shares, representing 3.01% and 0.84% of the total issued share capital of the Company, respectively. In respect of domestic shares, Huaneng International Power Development Corporation (the “HIPDC”) owned a total of 5,066,662,118 shares, representing 32.28% of the total issued share capital of the Company, while Huaneng Group held 1,555,124,549 shares, representing 9.91% of the total issued share capital of the Company. Through its controlling subsidiary China Huaneng Finance Corporation Limited, Huaneng Group held 9,994,199 shares, representing 0.06% of the total issued share capital of the Company. Other domestic shareholders held a total of 4,365,929,053 shares, representing 27.81% of the total issued share capital.

PURCHASE, SALE OR REDEMPTION OF SHARES

The Company and its subsidiaries did not sell any other types of securities and did not purchase or redeem its own shares or other securities in the first half of 2023.

SHAREHOLDINGS OF MAJOR SHAREHOLDERS

The following table summarises the shareholdings of the top ten shareholders of the Company's shares as at 30 June 2023:

Name of Shareholders	Total shareholdings as at end of the reporting period	Percentage of shareholding in total issued shares (%)
Huaneng International Power Development Corporation	5,066,662,118	32.28%
HKSCC Nominees Limited*	4,195,613,340	26.73%
China Huaneng Group Co., Ltd.	1,555,124,549	9.91%
Hebei Construction & Investment Group Co., Ltd.	493,316,146	3.14%
China Hua Neng Group Hong Kong Limited	472,000,000	3.01%
China Securities Finance Corporation Limited	466,953,720	2.97%
Dalian State Owned Capital Management and Operation Co., Ltd. **	301,500,000	1.92%
Jiangsu Guoxin Investment Group Limited	258,452,600	1.65%
Liaoning Energy Investment (Group) Limited	244,205,000	1.56%
Hong Kong Securities Clearing Company Limited	212,453,176	1.35%

* HKSCC Nominees Limited acts as nominee of holders of H shares securities of the Company and its shareholdings in the Company represent the total number of H shares held by it as nominee of H shareholders.

** During the reporting period, the original shareholder of the Company, Dalian Municipal Construction Investment Company Limited (the "Dalian Construction Investment") repurchased 176 million shares which were under pre-agreed securities repurchase transaction with Guotai Junan Securities Co., Ltd. and released the pledge of 33.06 million shares which were under pledge. Thereafter, Dalian Construction Investment transferred all the Company's shares held by Dalian Construction Investment to Dalian State-owned Capital Management and Operation Co., Ltd. for free in May 2023 in accordance with the requirements of the Dalian Municipal Government.

MATERIAL INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

As at 30 June 2023, the interests or short positions of persons who were entitled to exercise or control the exercise of 5% or more of the voting power at any of the Company's general meetings (excluding the Directors, Supervisors and chief executive) in the shares or underlying shares of equity derivatives of the Company as recorded in the register required to be kept under Section 336 of the Securities and Futures Ordinance (Cap. 571 of the laws of Hong Kong) were as follows:

Name of shareholder	Class of shares	Number of shares held (share)	Identity	Approximate percentage of shareholding in the Company's total issued share capital	Approximate percentage of shareholding in the Company's total issued domestic shares	Approximate percentage of shareholding in the Company's total issued H Shares
Huaneng International Power Development Corporation (Note 2)	Domestic shares	5,066,662,118(L)	Beneficial owner	32.28%(L)	46.07%(L)	–
China Huaneng Group Co., Ltd. (Note 3)	Domestic shares	1,555,124,549(L)	Beneficial owner	9.91%(L)	14.14%(L)	–
China Huaneng Group Co., Ltd. (Note 4)	H Shares	603,596,000(L)	Beneficial owner	3.84%(L)	–	12.84%(L)
Shanghai Wisdomshire Asset Management Co., Ltd.	H Shares	378,846,000(L)	Investment manager	2.41%(L)	–	8.06%(L)

Notes:

- (1) The letter “L” denotes a long position.
- (2) As of 30 June 2023, China Huaneng Group Co., Ltd. held 75% direct interests and 25% indirect interests in Huaneng International Power Development Corporation.
- (3) Besides of the 1,555,124,549 domestic shares, China Huaneng Group Co., Ltd. holds 9,994,199 domestic shares through its controlling subsidiary, China Huaneng Finance Corporation Limited.

- (4) China Huaneng Group Co., Ltd. holds 472,000,000 H shares through its wholly-owned subsidiary, China Hua Neng Group Hong Kong Limited, and holds 131,596,000 H shares through its indirect wholly-owned subsidiary, China Huaneng Group Treasury Management (Hong Kong) Limited.

Save as stated above, as at 30 June 2023, in the register required to be kept under Section 336 of SFO, no other persons were recorded to hold any interests or short positions in the shares or underlying shares of the equity derivatives of the Company.

DIRECTORS' AND SUPERVISORS' RIGHT TO PURCHASE SHARES

The Company has adopted a code with the standard not lower than that of the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (“**Listing Rules**”). Following enquiries made by the Company, all Directors and Supervisors confirmed that they have complied with the Code throughout the first half of 2023.

As at 30 June 2023, none of the directors, chief executive officer or supervisors of the Company had any interest or short position in the shares, underlying shares and/or debentures (as the case may be) of the Company or any of its associated corporations (within the definition of Part XV of the Securities and Futures Ordinance (“**SFO**”) which was required to be notified to the Company and the Stock Exchange of Hong Kong Limited (“**Hong Kong Stock Exchange**”) pursuant to Divisions 7 and 8 of Part XV of the SFO (including interest and short position which any such Director, chief executive officer or Supervisor is taken or deemed to have under such provisions of the SFO) or which was required to be entered 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 Companies as contained in Appendix 10 to the Listing Rules.

PUBLIC FLOAT

As at the date of this announcement, the Company has maintained the prescribed public float under the Listing Rules and as agreed with the Hong Kong Stock Exchange, based on the information that is publicly available to the Company and within the knowledge of the directors of the Company.

DIVIDENDS

It was resolved by the Board not to distribute dividends for the first half of 2023.

DISCLOSURE OF MATERIAL EVENTS

The Company held the 32nd meeting of the tenth session of the Board of Directors on 16 June 2023 to consider and approve on the appointment of Mr. Huang Lixin as the President of the Company.

CORPORATE GOVERNANCE

The Company always places emphasis on corporate governance. After years of experience and practice, the Company has gradually formed a standardised and enhanced governance structure, thereby establishing a sound and effective system that is appropriate to the Company's own development requirements.

During the reporting period, the Company had complied with all the code provisions except for code provisions C.2.1 of the Corporate Governance Code contained in Appendix 14 to the Listing Rules. Pursuant to code provision C.2.1, the role of chairman and the chief executive should be separate and should not be performed by the same individual. Mr. Zhao Ping, the President and executive Director of the Company, resigned as President, executive Director and from any other positions in the Company due to his age, effective from 26 September 2022. In order to fill the vacancy as soon as possible, the duties of the President of the Company were assumed by Mr. Zhao Keyu, the Chairman of the Company, effective from 26 September 2022. Although deviating from code provisions C.2.1 of the Listing Rules, Mr. Zhao Keyu provided solid and continuous leadership to the Group with his extensive experience and knowledge in management and the support of our management. Moreover, under the supervision of other existing members of the Board, the Board was appropriately structured with balance of power to provide sufficient checks to protect the interests of the Company and its shareholders. As such, the Board is of the view that the deviation from code provision C.2.1 of the Corporate Governance Code was appropriate.

The Company appointed Mr. Huang Lixin as the President on 16 June 2023, details of which are set out in the announcement of the Company published on 16 June 2023. As at the 30 June 2023, the Company is in compliance with code provision C.2.1.

(a) Code of Corporate Governance

In recent years, the Company adopted the following measures in order to strengthen corporate governance and enhance the Company's operation quality:

(1) Enhancing and improving corporate governance

In addition to complying with the provisions of the applicable laws, as a public company, the Company is subject to the regulations of the securities regulatory authorities of the listing places and the supervision of investors at large. Accordingly, our fundamental principles are to adopt a corporate governance structure that balances and coordinates the decision-making powers, supervisory powers and operating powers, to act with honesty and integrity.

Over the years, the Board has formulated and implemented the Rules and Procedures of the General Meetings; Rules and Procedures of the Board of Directors Meetings; the Rules and Procedures of the Supervisory Committee Meetings; the Detailed Rules on the Work of the General Manager; the Detailed Rules on the Work of the Strategy Committee of the Board of Directors; the Detailed Rules on the Work of the Audit Committee of the Board of Directors; the Detailed Rules on the Work of the Nomination Committee of the Board of Directors; the Detailed Rules on the Work of the Remuneration and Appraisal Committee of the Board of Directors; the System on Work of Independent Directors, the System on Work of Independent Directors on the Annual Report and the Work Regulations on Annual Report for the Audit Committee, and amended relevant regulations and systems according to the applicable laws and the development needs of the Company.

The Board of Directors of the Company always regards the enhancement of corporate governance and the regulation of the three meetings as its own responsibility, continuously strengthens its own construction, and operates in compliance with laws and regulations, laying a solid foundation for the Company's sustained and healthy development. In the first half of 2023, the Board of Directors and all directors of the Company, with a high sense of responsibility, assessed the situation, scientific research and judgment, careful deployment, joint efforts to attack, leading the management and all employees, and strive to do a good job in reform and development, transformation and upgrading, production and operation, scientific and technological innovation and other work. The Company's production safety is generally stable, and the supply of electricity and heat remains stable, actively fulfilling its corporate responsibility to provide society with sufficient, reliable and environmentally friendly electricity. The Company always adheres to the rule of law and compliant operation. The Company actively paid attention to new changes in regulatory laws and regulations in the country and listing places, effectively implemented new regulatory policies and requirements, continuously strengthened the construction of the Board of Directors, assisted the independent directors in diligently performing their duties, endeavored to protect the legitimate rights and interests of small and medium-sized investors, and promoted the continuous enhancement of the level of corporate governance. We will continue to strengthen risk prevention and control, solidly promote internal control management, carry out information disclosure with high quality, proactively strengthen communication and interaction with investors, continue to promote the construction of the ESG system, and build a win-win corporate culture in harmony with stakeholders.

All members of the Board jointly perform the duties of corporate governance. During the reporting period, the Board has included the following in its scope of duties and authority:

1. Establishing and reviewing the Company's corporate governance policies and codes, and making such amendments as it deems necessary to ensure the effectiveness of such policies and codes;
2. Reviewing and supervising the training and sustained professional development of the Company's directors and senior management;
3. Reviewing and supervising the Company's policies and codes regarding the observance of laws and regulatory requirements;
4. Formulating, reviewing and supervising the codes of conduct and compliance handbook applicable to directors and employees; and
5. Reviewing the Company's status on compliance with the Code on Corporate Governance Practices and the disclosures made in the Corporate Governance Report.

(2) Enhancing and improving the information disclosure system

The Company stresses on the importance of external information disclosure. The Company has established the Information Disclosure Committee which comprises the secretary to the Board of Directors, the chief accountant, managers of each functional department to be responsible for reviewing the Company's regular reports. The Company has implemented the system of holding regular information disclosure meetings every Monday, chaired by the secretary to the Board of Directors and attended by relevant business departments, to notify and discuss major issues relating to the Company's operations, which provide a guarantee for the Company to perform its information disclosure obligations timely. The Company has successively formulated and implemented the relevant information disclosure system, and has made timely amendments thereto according to regulatory requirements. The current functioning systems include the Measures on Information Disclosure Management, the Measures on Related Transaction Management, Measures for the Administration of Insiders, the Measures on Investor Relations Management, the Detailed Rules on the Work of the Information Disclosure Committee, Management Measures for Pursuing Responsibility regarding Material Errors in Information Disclosure of Annual Report, etc.. In 2023, in accordance with relevant regulatory rules and requirements and in conjunction with the Company's actual situation, the Measures on Information Disclosure Management, the Measures on Related Transaction Management, Measures for the Administration of Insiders and the Detailed Rules on the Work of the Information Disclosure Committee of the Company have correspondingly been revised to ensure that the system of the Company meets with the latest regulatory requirements. The above measures and system ensure the regulated operation of the Company, strengthen the truthfulness, accuracy, completeness and the timely disclosure of information, and at the same time enhance the quality as well as transparency of the information disclosure.

Relevant departments of the Company compiled answers and subsequent updates to questions regarding the hot topics of market concerns, and the Company's production, operation and operating results in a timely manner. The replies shall become the basis of external communication upon the approval of the Company's management and the authorised representatives of the Information Disclosure Committee. In addition, the Company conducts specialized training for the staff of the Company who are responsible for information disclosure on an irregular basis in order to continuously enhance their expertise.

(3) *Regulating financial management system, strengthening internal control*

The credibility of a listed company, to a large extent, relates to the quality of the preparation of financial statements and a regulated operation of financial activities. During the first half of 2023, the Company continued to adhere to the principle of good faith and fair treatment to its shareholders and made a lot of detailed work in preparing the financial reports and regulated financial operations, including:

1. In order to strictly implement the accounting rules, accounting standards and accounting systems, to strengthen accounting and accounts supervision, and to truthfully and fairly reflect the financial position, operating results and cash flow, the Company has formulated the Measures on Accounting, the Management Measures on Financial Accounting Reports, the Measures on Fixed Assets Management, the Measures on Cost Management and the Joint Audit Management Regulations on Financial Accounting and other rules and regulations. The Internal Control Manual of the Company includes the above rules into the internal control system, thus setting out clear procedures for its system. The Board, the Supervisory Committee and the Audit Committee of the Company have reviewed the Company's financial reports on a regular basis.

2. In regard to fund management, the Company has formulated a number of management measures including the Measures on Financial Management, the Measures on the Management of the Income and Expenditure of the Funds, the Measures on the Use and Management of Large Amount by Headquarter of the Company, the Measures on the Management of Bills of Exchange, the Measures on Management of Fund Raised, Rules on the Management of Transactions Involving Financial Derivatives, the Measures on Management of Financial Guarantee, the Measures on the Management of Provision of Security to Third Parties and the Measures for Regulating Fund Transfers with the Related Parties. The Company's Articles of Association also set out provisions relating to loans, guarantees and investment. In the annual reports of the Company over the previous years, the Company has engaged certified accountants to conduct auditing on the use of funds by the controlling shareholders and other related parties, and issue specific statements according to the requirements of the China Securities Regulatory Commission ("China Securities Regulatory Commission") and the Shanghai Stock Exchange ("Shanghai Stock Exchange") for confirmation that there has not been any violation of rules relating to the use of funds. Moreover, the Company also conducted quarterly review with respect to occupation of funds by related parties for non-operational purposes in order to avoid occupation of funds by related parties for non-operational purposes.

The overall objective of internal control of the Company is to promote implementation of the corporate strategy. Specific goals are to maintain lawful operation and management of the Company, asset safety, and truthfulness and completeness of financial reports and related information, thus promoting the overall enhancement of operating efficiency and actual effect.

The Company has comprehensively sort out internal and external risks and various business processes, and completed the “Internal Control Manual”. From 5 aspects of environment control, risk assessment, process control, information and communication and monitoring, the sixth version of the “Internal Control Manual” currently in use by the Company detailed 25 business processes in revenue, material procurement, fuel procurement and capital management, and 19 soft elements including organizational structures, human resources management, antifraud and risk management, thereby comprehensively elaborating the Company’s guiding principles and policies, work procedures and job duties of various posts, regulating the standard procedures of various business processes and realising a streamlined system. The Company has compiled the “Internal Control Evaluation Handbook”, clarifying the three-tier internal control evaluation management system, the internal control evaluation mode that cooperates with daily evaluation and key supervision, standardized internal control evaluation procedures, evaluation methods, defect defining procedures and standards, and realizes internal control and standardization of evaluation. The Company conducts annual assessment on the applicability and effectiveness of the above system and regularly conducts revision and perfection in order to realise dynamic maintenance of the internal control system.

For the purpose of risk identification, the Company in the “Internal Control Manual” stipulates the corresponding control measures and defines key control points. Through the implementation of the “one post for one item system” at each control point, the control responsibility is divided to every post at various levels so that internal control and job responsibilities are combined and all members of staff can participate in the construction of internal control. The Company has implemented the internal control routine evaluation mechanism, set up the post of internal control evaluators in each department and subordinate unit respectively, conducted monthly internal control evaluation, and established a three- tier evaluation quality supervision mechanism respectively at the three levels of the Company, regional offices and basic level units by way of the internal control management system in order to conduct real-time tracking of the implementation of internal control. The Company has implemented the internal control evaluator “license to work”, and made the completion of training and passing the examination as the necessary conditions for reviewing the qualification of the internal control evaluator, which strongly promotes the improvement of the professional quality of the internal control personnel. During the first half of 2023, the Company has successfully completed a six-month internal control routine evaluation, thus effectively protecting and promoting the sustained and healthy development of the businesses of the Company and realising the stable operation of the internal control system. The Company has combined the new requirements and new changes in business and management and constantly advanced experience and common issues, and launched comprehensive and multilevel internal control training each year, and widely publicised internal control concepts and knowledge, thus continuously optimising the internal control environment.

The internal control and management departments, internal audit department and external auditors regularly report the internal control work situation to the Audit Committee of the Board of Directors respectively, thus ensuring the continued and effective operation of the internal control system. The Company has continuously improved the internal control assessment system and formulated the Internal Control Objective Assessment Management Measures. The Company conducts internal control target assessment every year, and the assessment results are fulfilled in a timely manner, which effectively guides units at all levels to pay attention to the quality of internal control work, and earnestly realize the in-depth goal of promoting management through internal control.

Upon full assessment, the management of the Company is of the opinion that the internal control system of the Company is sound and effective.

(b) Securities transactions by Directors

As a public company, the Company has strictly complied with the relevant restrictive provisions on securities transactions by directors imposed by the regulatory authorities of places of listing and we insist on the principle of complying with the strictest provision, that is, abiding by the strictest provision among listing places. We have adopted the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules as the model code for securities dealings by directors of the Company. According to the Management Rules in respect of the Shares of the Company held by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc, the Company prohibited those who are in possession of securities transaction inside information using inside information in securities trading; and sets out detailed rules for those who are in possession of inside information. Following a specific enquiry on all the directors, supervisors and senior management of the Company, up to now, all the directors, supervisors and senior management do not hold any shares of the Company and there is no material contract in which the directors, supervisor and senior management directly or indirectly have material interests.

(c) Board of Directors

The Board of Directors of the Company currently comprises of 14 members. Of the members of the tenth session of the board of directors, Mr. Zhao Keyu as the Chairman; Mr. Zhao Keyu as the Executive Director; Mr. Huang Jian, Mr. Wang Kui, Mr. Lu Fei, Mr. Teng Yu, Mr. Mi Dabin, Mr. Cheng Heng, Mr. Li Haifeng and Mr. Lin Chong as the Non-executive Directors; and Mr. Xu Mengzhou, Mr. Liu Jizhen, Mr. Xu Haifeng, Mr. Zhang Xianzhi and Mr. Xia Qing as the Independent Non-executive Directors of the Company.

The Board of Directors of the Company has held three meetings during the reporting period, including regular meetings and ad hoc meetings. For details, please see the relevant announcements.

Details of the attendance of directors at the board meetings are as follows:

Name	Number of meetings to be attended	Number of meetings attended in person	Number of meetings attended by proxy	Rate of Attendance (%)
Executive Director				
Zhao Keyu	3	3	0	100%
Non-executive Directors				
Huang Jian	3	3	0	100%
Wang Kui	3	2	1	66.66%
Lu Fei	3	3	0	100%
Teng Yu	3	3	0	100%
Mi Dabin	3	2	1	66.66%
Cheng Heng	3	3	0	100%
Li Haifeng	3	3	0	100%
Lin Chong	3	3	0	100%
Independent non-executive Directors				
Xu Mengzhou	3	3	0	100%
Liu Jizhen	3	3	0	100%
Xu Haifeng	3	3	0	100%
Zhang Xianzhi	3	3	0	100%
Xia Qing	3	3	0	100%

As stated in the previous Corporate Governance Reports, the Company's Articles of Association set out in detail the duties and operational procedures of the Board (please refer to the Company's Articles of Association for details). The Board of the Company holds regular meetings to hear the reports on the Company's operating results and makes timely decisions. Material decisions on operation shall be discussed and approved by the Board. Ad hoc meetings may be held if necessary. Board meetings include regular meetings and ad hoc meetings. Regular meetings of the Board include: annual meeting, first quarterly meeting, half-yearly meeting and third quarterly meeting.

All arrangements for regular meetings have been notified to all directors at least 14 days prior to the meeting and the Company has ensured that each director thoroughly understood the agenda of the meeting and fully expressed his/her opinions, while all Independent Non-executive Directors expressed their independent directors' opinions on their respective duties. Minutes have been taken for all the meetings and filed at the Office of the Board.

Moreover, the Independent Non-executive Directors of the Company have submitted their independent non-executive director confirmation letters of 2022 according to the requirements of the Listing Rules.

The Directors considered that they have complied with the laws and regulations, and provisions of the Articles of Association, and have actively performed the duties faithfully and diligently. Apart from regular and ad hoc meetings, the Directors read the briefs of the Company on a regular basis, the Company's financial position and operating results and signing and performance of material agreements. The Directors reviewed the reports, data etc. of the Company regularly to understand the situation on production operation of the Company. Through on-site investigation, the independent Directors provided practical resolutions to the Company. All specialized committees under the Board actively carried out works and provided recommendations and policies which formed the basis of scientific policies for the Board.

During the period when the Board was not in session, the Chairman discharged part of the duties of the Board, including but not limited to (1) to examine and approve the proposals in respect of establishing or cancelling development and construction projects; (2) to examine and approve proposals of the in relation to the appointment, removal and transfer of managers of various departments of the Company and managers of external branches; (3) to examine and approve plans on the use of significant funds; (4) to examine and approve proposals on the establishment or cancellation of branch companies or branch organs; and (5) to examine and approve other major issues.

The Board has summarised the implementation and execution of work during the reporting period taking into consideration of opinions of the Supervisory Committee and the Senior Management of the Company. The Board is of the opinion that it has effectively fulfilled its duties to safeguard the interests of the Company and its shareholders.

Directors who attended the 2022 annual general meeting of the Company were Mr. Zhao Keyu (Chairman), Mr. Li Haifeng (Director) and Mr. Xu Haifeng (Independent Non-executive Director).

(d) Chairman and President

The Company shall have a Chairman and a President who shall perform their duties respectively and separately according to the Articles of Association.

The division of duties of the Board and the senior management remained the same as disclosed in the previous Corporate Governance Reports.

(e) Non-executive Directors

According to the Articles of Association, the term of office of each member of the Board of the Company shall not exceed three years (inclusive) and the members may be eligible for re-election. However, the term of office of Independent Non-executive Directors shall not exceed six years (inclusive) according to the relevant regulations of the China Securities Regulatory Commission.

The respective terms of office of the Non-executive Directors are as follows:

Name of Non-executive Directors	Term of office
Huang Jian	16 June 2020-2023
Wang Kui	16 June 2020-2023
Lu Fei	16 June 2020-2023
Teng Yu	16 June 2020-2023
Mi Dabin	16 June 2020-2023
Cheng Heng	16 June 2020-2023
Li Haifeng	22 December 2020-2023
Lin Chong	16 June 2020-2023

(f) Directors' Remuneration

According to the relevant PRC laws and the Articles of Association, the Board has established the Remuneration and Appraisal Committee which operates in accordance with the Detailed Rules on the Work of the Remuneration and Appraisal Committee and is mainly responsible for studying the appraisal standards of the directors and senior management personnel of the Company, conducting appraisals and making proposals; responsible for studying and examining the remuneration policies and proposals of the directors and senior management personnel of the Company. The Remuneration and Appraisal Committee will review and submit annual total wages to the board of directors annually. Each of the Executive Directors has signed a director's service contract in accordance with the requirement of the Stock Exchange.

Members of the tenth session of the Remuneration and Appraisal Committee of the board of directors are Mr. Xu Mengzhou, Mr. Cheng Heng, Mr. Li Haifeng, Mr. Liu Jizhen, Mr. Xu Haifeng and Mr. Zhang Xianzhi; among whom Mr. Xu Mengzhou, Mr. Liu Jizhen, Mr. Xu Haifeng and Mr. Zhang Xianzhi are Independent Non-executive Directors and Mr. Xu Mengzhou is the chairman of the committee.

The Remuneration and Appraisal Committee under the Board operates in accordance with the Detailed Rules on the Work of the Remuneration and Appraisal Committee. The Remuneration and Appraisal Committee convened the first meeting in 2023 on 20 March 2023, at which the Report of Total Wage Expenses was reviewed and the Company's arrangement for the total wage in 2023 was approved. In the second half of 2023, the Remuneration and Appraisal Committee will carry out the work according to the actual situation and the above Detailed Rules at appropriate time.

During the reporting period, the attendance of meetings of the Remuneration and Appraisal Committee of the Company's Board was as follows:

<u>Name of meeting</u>	<u>Date of meeting</u>	<u>Members who attended the meeting in person</u>	<u>Members who attended the meeting by proxy</u>
First meeting of the Remuneration and Appraisal Committee of the Tenth Session of the Board in 2023	20 March 2023	Xu Mengzhou, Cheng Heng, Li Haifeng, Liu Jizhen, Xu Haifeng and Zhang Xianzhi	–

(g) Nomination of Directors

According to the relevant PRC laws and the relevant provisions of the Articles of Association, the Board has established the Nomination Committee. Governed by the Detailed Rules on the Works of the Nomination Committee, the Committee is mainly responsible for studying the selection standards and procedures for candidates for directors and senior management personnel of the Company according to the directors' qualifications requirements under the Company Law and Securities Law and the needs of the operational management of the Company, and making proposals thereon to the Board; searching for qualified candidates for directors and suitable persons for senior management personnel on a wide basis; and examining the candidates for directors and suitable persons for senior management personnel and making proposals thereon. Currently, the nomination of the candidates for directors of the Company is mainly made by shareholders. The nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors. The President of the Company was appointed by the Board and the candidates for the Vice President and management were nominated by the President. Such nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors.

Members of the tenth session of the Nomination Committee of the board of directors are Mr. Liu Jizhen, Mr. Zhao Keyu, Mr. Mi Dabin, Mr. Lin Chong, Mr. Xu Mengzhou, Mr. Zhang Xianzhi and Mr. Xia Qing, among whom Mr. Liu Jizhen, Mr. Xu Mengzhou, Mr. Zhang Xianzhi and Mr. Xia Qing are Independent Non-executive Directors and Mr. Liu Jizhen is the chairman of the committee.

<u>Name of Meeting</u>	<u>Date of meeting</u>	<u>Members who attended the meeting in person</u>	<u>Members who attended the meeting by proxy</u>
First Meeting of the Nomination Committee of the Tenth Session of the Board in 2023	15 June 2023	Liu Jizhen, Zhao Keyu, Mi Dabin, Lin Chong, Xu Mengzhou, Zhang Xianzhi, Xia Qing	–

(h) Appointment of Auditors

Ernst & Young and Ernst & Young Hua Ming LLP were appointed as the overseas and domestic auditors of the Company for 2023, respectively.

(i) Audit Committee

According to the requirements of the regulatory authorities of the jurisdictions where the Company is listed and the relevant provisions of the Articles of Association, the Board has established the Audit Committee. Governed by the Detailed Rules on the work of the Audit Committee, the Audit Committee is mainly responsible for assisting the Board in the supervision of:

- (1) the accuracy of the Company's financial statements;
- (2) the Company's compliance with laws and regulations;
- (3) the qualification and independence of the Company's independent auditors;
- (4) the performance of the Company's independent auditors and internal auditing departments of the Company; and
- (5) the control and management of the related party transactions of the Company.

The Company convenes four regular meetings of the Audit Committee of the Board of Directors each year, at least two of which will be conducted with the Company's external auditors to listen to reports on audit planning, work arrangement and audit works generally. The Board has formulated the Management Rules on Whistle-Blowing through Hotlines and Mailboxes, and, pursuant to which the Audit Committee will be responsible for the management of the whistle-blowing hotlines and mailboxes.

Members of the Audit Committee comprises of five directors. Members of the tenth session of the Audit Committee of the board of directors are, namely, Mr. Zhang Xianzhi, Mr. Xu Mengzhou, Mr. Liu Jizhen, Mr. Xu Haifeng and Mr. Xia Qing, among whom Mr. Zhang Xianzhi is the chairman of the committee.

During the reporting period, the Audit Committee held three meetings. As per Audit Committee's duties, the Audit Committee has communicated separately and respectively with the Company's counsels, external auditors, management and the relevant functional departments of the Company. With the understandings on the applicable laws and regulations of those jurisdictions in which the shares of the Company are listed, the anti-fraud position in the Company, the recruitment of staff, the implementation and execution of internal control mechanisms, the audit work carried out by external auditors and the responsible officers of the audit department, the Audit Committee has rendered their views and suggestions.

During the reporting period, the attendance of meetings of members of the Audit Committee was as follows:

<u>Name of meeting</u>	<u>Date of meeting</u>	<u>Members who attended the meeting in person</u>	<u>Members who attended the meeting by proxy</u>
First meeting of the Audit Committee of the Tenth Session of the Board in 2023	24 February 2023	Zhang Xianzhi, Xu Mengzhou, Liu Jizhen, Xu Haifeng and Xia Qing	–
Second meeting of the Audit Committee of the Tenth Session of the Board in 2023	20 March 2023	Zhang Xianzhi, Xu Mengzhou, Xu Haifeng and Xia Qing	Liu Jizhen
Third meeting of the Audit Committee of the Tenth Session of the Board in 2023	24 April 2023	Zhang Xianzhi, Xu Mengzhou, Liu Jizhen, Xu Haifeng and Xia Qing	–

(j) Responsibility assumed by the Directors in relation to the financial statements

The Directors of the Company confirm that they shall assume the relevant responsibility in relation to the preparation of the financial statements of the Company, ensure that the preparation of the financial statements of the Company complies with the relevant laws and regulations and the applicable accounting standards and also warrant that the financial statements of the Company will be published in a timely manner.

(k) Senior management's interests in shares

None of the members of the senior management of the Company holds any shares of the Company.

(l) Strategy Committee

For compliance with the relevant requirements of the regulations in the jurisdictions where the shares of the Company are listed as well as the Articles of Association of the Company, the Board has established a Strategy Committee. Governed by the Detailed Rules on the Work of the Strategy Committee, the Strategy Committee is primarily responsible for:

- (1) reviewing and advising on the Company's long-term strategic development plan;
- (2) reviewing and advising on the major fund raising proposals that need to be approved by the Board;
- (3) reviewing and advising on the major production and operating projects that need to be approved by the Board;
- (4) studying and advising on the matters that would significantly affect the development of the Company;
- (5) examining the implementation of the abovementioned matters;
- (6) comprehensive risk management of the Company to improve the Company's overall risk resistance; and

(7) other matters as requested by the Board of Directors.

The tenth session of the Strategy Committee of the board of directors comprises of six directors, namely, Mr. Zhao Keyu, Mr. Huang Jian, Mr. Wang Kui, Mr. Lu Fei, Mr. Liu Jizhen and Mr. Xu Haifeng, of whom Mr. Liu Jizhen and Mr. Xu Haifeng are Independent Non-executive Directors. Mr. Zhao Keyu is the chairman of the Strategy Committee.

During the reporting period, members of the Strategy Committee did not arrange any meetings.

(m) Directors' and senior management's training

The Company organises its Directors and Supervisors to attend the trainings provided by regulatory authorities every year. During the reporting period, the directors and supervisors of the Company attended training of directors and supervisors according to regulatory requirements. A total of 10 person times of Directors, Supervisors and senior management attended various professional trainings during the first half of 2023.

The Company conducts introduction by legal counsels specifically to all Independent Non-executive Directors of the Audit Committee of the Company every six months with respect to the updated regulatory laws, the application of relevant systems to the Company and the Company's performance of the rules and regulations in places where the Company's shares are listed.

The Company attaches importance to the training and continuing development of senior management. The Company organises members of senior management to participate the training courses provided by relevant State authorities, industrial managing authorities and industrial associations.

REVIEW BY THE AUDIT COMMITTEE

The interim results of 2023 have been reviewed by the Audit Committee of the Company.

LEGAL PROCEEDINGS

As at 30 June 2023, the Company and its subsidiaries were not involved in any material litigation or arbitration and no material litigation or claim of material importance was pending or threatened against or by the Company as far as the Company is aware.

DOCUMENTS FOR INSPECTION

Copies of the interim results report for 2023 will be available at the following addresses and websites:

PRC: Huaneng Power International, Inc.
Huaneng Building
6 Fuxingmennei Street Xicheng District Beijing
The People's Republic of China

Telephone Number: (8610) 6322 6999

Fax Number: (8610) 6322 6888

Hong Kong: Wonderful Sky Financial Group Limited
9th Floor, Central Plaza,
99 Queen's Road Central, Hong Kong

Tel: (852) 2851 1038

Fax: (852) 3102 0210

Websites of the Company: <http://www.hpi.com.cn>

By Order of the Board
Huaneng Power International, Inc.
Zhao Keyu
Chairman

As at the date of this announcement, the directors of the Company are:

Zhao Keyu (*Executive Director*)

Huang Jian (*Non-executive Director*)

Wang Kui (*Non-executive Director*)

Lu Fei (*Non-executive Director*)

Teng Yu (*Non-executive Director*)

Mi Dabin (*Non-executive Director*)

Cheng Heng (*Non-executive Director*)

Li Haifeng (*Non-executive Director*)

Lin Chong (*Non-executive Director*)

Xu Mengzhou (*Independent Non-executive Director*)

Liu Jizhen (*Independent Non-executive Director*)

Xu Haifeng (*Independent Non-executive Director*)

Zhang Xianzhi (*Independent Non-executive Director*)

Xia Qing (*Independent Non-executive Director*)

Beijing, the PRC

26 July 2023

**A. FINANCIAL INFORMATION EXTRACTED FROM INTERIM
CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
PREPARED UNDER IFRSs**

**INTERIM CONDENSED CONSOLIDATED STATEMENT OF
FINANCIAL POSITION (UNAUDITED)**

AS AT 30 JUNE 2023

(Amounts expressed in thousands of RMB)

	<i>Notes</i>	As at 30 June 2023	As at 31 December 2022
ASSETS			
Non-current assets			
Property, plant and equipment		344,037,460	336,126,522
Right-of-use assets		18,242,378	18,998,833
Investments in associates and joint ventures		24,159,890	24,015,630
Investment properties		622,029	632,565
Other equity instrument investments		708,070	708,912
Power generation licences		4,286,048	4,156,846
Mining rights		1,609,672	1,611,486
Deferred income tax assets		5,244,735	5,632,709
Derivative financial assets		5,988	3,570
Goodwill		14,733,362	14,384,909
Other non-current assets		19,519,457	19,227,929
Total non-current assets		433,169,089	425,499,911
Current assets			
Inventories		14,140,057	12,701,908
Other receivables and assets	4	15,732,630	14,076,384
Accounts and notes receivable	5	45,917,632	42,654,332
Contract assets		49,523	68,738
Derivative financial assets		56,555	44,925
Bank balances and cash		16,867,876	17,175,575
Total current assets		92,764,273	86,721,862
Total assets		525,933,362	512,221,773

<i>Notes</i>	As at 30 June 2023	As at 31 December 2022
EQUITY AND LIABILITIES		
Equity attributable to equity holders of the Company		
Share capital	15,698,093	15,698,093
Other equity instruments	79,601,620	62,083,704
Capital surplus	23,880,222	23,710,686
Surplus reserves	8,140,030	8,140,030
Reserve funds	491,255	117,308
Currency translation differences	(458,783)	(602,823)
Retained earnings	11,209,617	6,517,524
	138,562,054	115,664,522
Non-controlling interests	20,204,882	19,651,537
Total equity	158,766,936	135,316,059
Non-current liabilities		
Long-term loans	161,303,872	151,677,526
Long-term bonds	34,435,716	39,062,047
Lease liabilities	5,278,196	5,622,536
Deferred income tax liabilities	2,407,173	2,169,841
Derivative financial liabilities	216,715	245,613
Other non-current liabilities	6,314,501	6,794,804
Total non-current liabilities	209,956,173	205,572,367

	<i>Notes</i>	As at 30 June 2023	As at 31 December 2022
EQUITY AND LIABILITIES (CONTINUED)			
Current liabilities			
Accounts payable and other liabilities	8	50,931,569	54,472,701
Contract liabilities		635,436	3,348,828
Taxes payable		1,834,442	1,647,373
Dividends payable		614,712	617,576
Derivative financial liabilities		133,331	417,237
Short-term bonds	9	9,214,198	6,312,777
Short-term loans		69,037,986	83,573,497
Current portion of long-term loans		18,856,492	19,129,989
Current portion of long-term bonds	7	5,376,806	730,336
Current portion of lease liabilities		506,169	1,009,339
Current portion of other non-current liabilities		69,112	73,694
Total current liabilities		<u>157,210,253</u>	<u>171,333,347</u>
Total liabilities		<u>367,166,426</u>	<u>376,905,714</u>
Total equity and liabilities		<u>525,933,362</u>	<u>512,221,773</u>

**INTERIM CONDENSED CONSOLIDATED STATEMENT OF
COMPREHENSIVE INCOME (UNAUDITED)
FOR THE SIX MONTHS ENDED 30 JUNE 2023**

(Amounts expressed in thousands of RMB, except per share data)

	<i>Notes</i>	For the six months ended 30 June	
		2023	2022
Operating revenue	3	126,032,267	116,869,062
Tax and levies on operations		(734,310)	(646,671)
		125,297,957	116,222,391
Operating expenses			
Fuel		(77,500,816)	(80,735,805)
Maintenance		(1,707,585)	(1,775,893)
Depreciation	11	(12,609,061)	(11,971,751)
Labour		(7,418,569)	(6,734,482)
Service fees on transmission and transformer facilities of HIPDC		(23,974)	(23,974)
Purchase of electricity		(7,782,736)	(9,170,378)
Impairment losses on financial and contract assets		(62,108)	(64,821)
Others	11	(6,142,745)	(6,091,267)
Total operating expenses		(113,247,594)	(116,568,371)
Profit/(loss) from operations		12,050,363	(345,980)
Interest income		210,301	159,635
Financial expenses, net			
Interest expense	11	(4,549,521)	(5,106,270)
Exchange (loss)/gain and bank charges, net		(58,142)	81,945
Total financial expenses, net		(4,607,663)	(5,024,325)
Share of profits and losses of associates and joint ventures		780,552	673,538
Other investment income		1,659	2,236

		For the six months ended 30 June	
	<i>Notes</i>	<u>2023</u>	<u>2022</u>
Profit/(loss) before income tax expense	<i>11</i>	8,435,212	(4,534,896)
Income tax expense	<i>12</i>	<u>(1,626,072)</u>	<u>359,641</u>
Net profit/(loss)		<u>6,809,140</u>	<u>(4,175,255)</u>
Other comprehensive income/(loss), net of tax			
<i>Items that will not be reclassified to profit or loss:</i>			
Fair value changes of other equity instrument investments		5,750	511
Share of other comprehensive loss of joint ventures and associates		(13,437)	(21,939)
Income tax effect		(1,438)	–
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Share of other comprehensive income of joint ventures and associates		14,289	28,618
Cash flow hedges:			
Effective portion of changes in fair value of hedging instruments arising during the period		4,943	1,367,092
Reclassification adjustments for gains/(losses) included in profit or loss		267,235	(1,244,445)
Exchange differences on translation of foreign operations		(276,519)	(160,135)
Income tax effect		<u>(46,270)</u>	<u>(20,850)</u>
Other comprehensive loss, net of tax		<u>(45,447)</u>	<u>(51,148)</u>
Total comprehensive income/(loss)		<u>6,763,693</u>	<u>(4,226,403)</u>
Net profit/(loss) attributable to:			
– Equity holders of the Company		6,489,663	(3,220,203)
– Non-controlling interests		<u>319,477</u>	<u>(955,052)</u>

	For the six months ended 30 June	
<i>Notes</i>	<u>2023</u>	<u>2022</u>
Total comprehensive income/(loss) attributable to:		
– Equity holders of the Company	6,863,532	(3,057,567)
– Non-controlling interests	(99,839)	(1,168,836)
Earnings/(losses) per share attributable to the ordinary shareholders of the Company (expressed in RMB per share)		
– Basic and diluted	<i>13</i> 0.32	(0.27)

NOTES TO THE UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL INFORMATION FOR THE SIX MONTHS ENDED 30 JUNE 2023

(Amounts expressed in thousands of RMB unless otherwise stated)

1. BASIS OF PREPARATION

This unaudited interim condensed consolidated financial information (“interim financial information”) for the six months ended 30 June 2023 has been prepared in accordance with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, and International Accounting Standard (“IAS”) 34 “Interim Financial Reporting”. This interim financial information should be read in conjunction with the annual financial statements for the year ended 31 December 2022, which have been prepared in accordance with International Financial Reporting Standards (“IFRSs”) issued by the International Accounting Standards Board (the “IASB”). This interim financial information was approved for issuance on 25 July 2023.

The accounting policies adopted in the preparation of the interim financial information are consistent with those applied in the preparation of the Group’s annual consolidated financial statements for the year ended 31 December 2022, except for the adoption of the revised IFRSs effective as of 1 January 2023. Details of any changes in accounting policies are set out in note 2.

The preparation of interim financial information in conformity with IAS 34 requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

This interim financial information contains condensed consolidated financial statements and selected explanatory notes. The notes include an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the Group since the 2022 annual financial statements. The interim condensed consolidated financial statements and notes thereto do not include all the information required for a full set of financial statements prepared in accordance with IFRSs.

The financial information relating to the financial year ended 31 December 2022 that is included in the interim financial information as comparative information does not constitute the Company's annual consolidated financial statements for that financial year but is derived from those financial statements. The annual consolidated financial statements for the year ended 31 December 2022 are available from the Company's registered office. The auditors have expressed an unqualified opinion on those financial statements in their report dated 21 March 2023.

As at and for the six months ended 30 June 2023, a portion of the Group's funding requirements for capital expenditures was partially satisfied by short-term financing. Consequently, as at 30 June 2023, the Group had net current liabilities of approximately Renminbi Yuan ("RMB") 64.446 billion. Taking into consideration of the Group's undrawn available banking facilities exceeded RMB300 billion as at 30 June 2023, the Group expects to refinance certain of its short-term loans and bonds and also considers alternative sources of financing, where applicable and when needed. Therefore, the directors of the Company are of the opinion that the Group will be able to meet its liabilities as they fall due within the next twelve months and accordingly, the interim financial information is prepared on a going concern basis.

2. PRINCIPAL ACCOUNTING POLICIES

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those applied in the preparation of the Group's annual consolidated financial statements for the year ended 31 December 2022, except for the adoption of the following revised IFRSs that are applicable to the Group for the first time for the current period's financial information.

Amendments to IAS 1 and IFRS Practice Statement 2	<i>Disclosure of Accounting Policies</i>
Amendments to IAS 8	<i>Definition of Accounting Estimates</i>
Amendments to IAS 12	<i>Deferred Tax related to Assets and Liabilities arising from a Single Transaction</i>
Amendments to IAS 12	<i>International Tax Reform – Pillar Two Model Rules</i>

The nature and impact of the revised IFRSs that are applicable to the Group are described below:

- (a) Amendments to IAS 1 require entities to disclose their material accounting policy information rather than their significant accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. Amendments to IFRS Practice Statement 2 provide non-mandatory guidance on how to apply the concept of materiality to accounting policy disclosures. The Group has applied the amendments since 1 January 2023. The amendments did not have any impact on the Group's interim condensed consolidated financial information but are expected to affect the accounting policy disclosures in the Group's annual consolidated financial statements.

- (b) Amendments to IAS 8 clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The Group has applied the amendments to changes in accounting policies and changes in accounting estimates that occur on or after 1 January 2023. Since the Group's policy of determining accounting estimates aligns with the amendments, the amendments did not have any impact on the financial position or performance of the Group.

- (c) Amendments to IAS 12 *Deferred Tax related to Assets and Liabilities arising from a Single Transaction* narrow the scope of the initial recognition exception in IAS 12 so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognise a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability for temporary differences arising from these transactions. The Group has applied the amendments on temporary differences related to leases as at 1 January 2022, with no cumulative effect recognised as an adjustment to the balance of retained profits or other component of equity as appropriate at that date. The net allowance of deferred tax assets and liabilities was equal to the amount originally recognised on a net basis and had no effect on the consolidated balance sheet items presented on a net allowance basis. Details of the effect of the amendments on the notes of the financial statements are as follows:

	As at 31 December of 2022	Effect of adoption of Amendments to IAS 12	As at 31 December of 2022 (Restated)
Deferred income tax assets			
before offsetting	7,261,129	341,641	7,602,770
Deferred income tax liabilities			
before offsetting	(3,798,261)	(341,641)	(4,139,902)
Offset amount	(1,628,420)	(341,641)	(1,970,061)
Deferred income tax assets after offsetting	5,632,709	–	5,632,709
Deferred income tax liabilities after offsetting	(2,169,841)	–	(2,169,841)

- (d) Amendments to IAS 12 *International Tax Reform – Pillar Two Model Rules* introduce a mandatory temporary exception from the recognition and disclosure of deferred taxes arising from the implementation of the Pillar Two model rules published by the Organisation for Economic Co-operation and Development. The amendments also introduce disclosure requirements for the affected entities to help users of the financial statements better understand the entities' exposure to Pillar Two income taxes, including the

disclosure of current tax related to Pillar Two income taxes separately in the periods when Pillar Two legislation is effective and the disclosure of known or reasonably estimable information of their exposure to Pillar Two income taxes in periods in which the legislation is enacted or substantively enacted but not yet in effect. Entities are required to disclose the information relating to their exposure to Pillar Two income taxes in annual periods beginning on or after 1 January 2023, but are not required to disclose such information for any interim periods ending on or before 31 December 2023. The Group has applied the amendments retrospectively. After assessment, the amendments did not have any impact to the Group.

3. REVENUE AND SEGMENT INFORMATION

(a) Disaggregation of revenue

In the following table, revenue is disaggregated by major products and/or service lines of revenue recognition. The table also includes a reconciliation of the disaggregated operating revenue to the Group's reportable segments (Note 3(b)).

	PRC power segment	Overseas segment	All other segments	Inter- segment revenue	Total
		<i>Note i</i>			
For the six months ended					
30 June 2023					
– Sales of power and heat	105,669,024	16,053,896	–	–	121,722,920
– Sales of coal and raw materials	566,558	5,500	–	–	572,058
– Port service	–	–	339,940	(213,138)	126,802
– Transportation service	–	–	100,561	(60,304)	40,257
– Lease income	47,842	1,038,150	–	–	1,085,992
– Others	1,216,561	1,262,261	16,927	(11,511)	2,484,238
Total	<u>107,499,985</u>	<u>18,359,807</u>	<u>457,428</u>	<u>(284,953)</u>	<u>126,032,267</u>

	PRC power segment	Overseas segment	All other segments	Inter- segment revenue	Total
		<i>Note i</i>			
For the six months ended					
30 June 2022					
– Sales of power and heat	96,868,713	14,431,974	–	–	111,300,687
– Sales of coal and raw materials	762,707	5,710	–	–	768,417
– Port service	–	–	298,789	(178,617)	120,172
– Transportation service	–	–	109,689	(89,746)	19,943
– Lease income	46,845	566,202	–	–	613,047
– Others	1,223,265	2,818,414	14,121	(9,004)	4,046,796
	<u>98,901,530</u>	<u>17,822,300</u>	<u>422,599</u>	<u>(277,367)</u>	<u>116,869,062</u>
Total	<u>98,901,530</u>	<u>17,822,300</u>	<u>422,599</u>	<u>(277,367)</u>	<u>116,869,062</u>

Note i: Overseas segment mainly consists of the operations in Singapore and Pakistan.

The revenue from the sale of power and heat and the sale of coal and raw materials is recognised at the point in time upon the transfer of products, whereas the revenue from port service, transportation service, maintenance service, and heating pipeline service is recognised over time during the provision of such services. Lease income is recognised over the lease term.

(b) Segment information

Directors and certain senior management of the Company perform the function as the chief operating decision maker (collectively referred to as the “senior management”). The senior management reviews the internal reporting of the Group in order to assess performance and allocate resources. The Company has determined the operating segments based on these reports. The reportable segments of the Group are the PRC power segment, overseas segment and all other segments (mainly including port and transportation operations). No operating segments have been aggregated to form a reportable segment.

Senior management assesses the performance of the operating segments based on a measure of profit before income tax expense under China Accounting Standards for Business Enterprises (“PRC GAAP”) excluding dividend income received from other equity instrument investments, share of profits of China Huaneng Finance Co., Ltd. (“Huaneng Finance”) and operating results of the centrally managed and resource allocation functions of the headquarters (“segment results”). Other information provided, except as noted below, to the senior management of the Company is measured under PRC GAAP.

Segment assets exclude prepaid income tax, deferred income tax assets, other equity instrument investments, investment in Huaneng Finance and assets related to the centrally managed and resource allocation functions of the headquarters that are not attributable to any operating segment (“corporate assets”). Segment liabilities exclude current income tax liabilities, deferred income tax liabilities and liabilities related to the centrally managed and resource allocation functions of the headquarters that are not attributable to any operating segment (“corporate liabilities”). These are part of the reconciliation to total assets and liabilities of the statement of financial position.

All sales among the operating segments have been eliminated as internal transactions when preparing consolidated financial statements.

(Under PRC GAAP)

	<u>PRC power segment</u>	<u>Overseas segment</u>	<u>All other segments</u>	<u>Total</u>
For the six months ended 30 June 2023				
Total revenue	107,499,985	18,359,807	457,428	126,317,220
Intersegment revenue	<u>-</u>	<u>-</u>	<u>(284,953)</u>	<u>(284,953)</u>
Revenue from external customers	<u>107,499,985</u>	<u>18,359,807</u>	<u>172,475</u>	<u>126,032,267</u>
Segment results	<u>5,080,978</u>	<u>3,219,503</u>	<u>118,356</u>	<u>8,418,837</u>
Interest income	96,844	112,605	852	210,301
Interest expense	(3,873,134)	(613,195)	(58,656)	(4,544,985)
Impairment loss	(444)	461	-	17
Credit loss	1,303	(63,411)	-	(62,108)
Depreciation and amortisation	(11,856,057)	(353,399)	(128,706)	(12,338,162)
Net gain on disposal of non-current assets	101,443	35	(3)	101,475
Share of profits and losses of associates and joint ventures	574,012	-	84,641	658,653
Income tax expense	<u>(1,197,632)</u>	<u>(513,074)</u>	<u>(16,606)</u>	<u>(1,727,312)</u>

(Under PRC GAAP)

	PRC power segment	Overseas segment	All other segments	Total
For the six months ended 30 June 2022				
Total revenue	98,901,530	17,822,300	422,599	117,146,429
Intersegment revenue	–	–	(277,367)	(277,367)
Revenue from external customers	<u>98,901,530</u>	<u>17,822,300</u>	<u>145,232</u>	<u>116,869,062</u>
Segment results	<u>(5,426,254)</u>	<u>1,016,797</u>	<u>315,073</u>	<u>(4,094,384)</u>
Interest income	96,963	61,711	961	159,635
Interest expense	(4,670,352)	(367,771)	(64,736)	(5,102,859)
Impairment loss	(1,526)	1,786	–	260
Credit loss	9,086	(73,907)	–	(64,821)
Depreciation and amortisation	(11,257,086)	(311,916)	(111,660)	(11,680,662)
Net gain on disposal of non-current assets	121,223	–	(2)	121,221
Share of profits and losses of associates and joint ventures	301,718	–	298,495	600,213
Income tax expense	<u>414,593</u>	<u>(127,508)</u>	<u>(14,475)</u>	<u>272,610</u>

	<i>(Under PRC GAAP)</i>			
	<u>PRC power segment</u>	<u>Overseas segment</u>	<u>All other segments</u>	<u>Total</u>
30 June 2023				
Segment assets	<u>453,158,195</u>	<u>44,345,110</u>	<u>10,650,607</u>	<u>508,153,912</u>
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	37,567,010	161,127	16,249	37,744,386
Investments in associates	14,994,176	-	5,357,386	20,351,562
Investments in joint ventures	1,212,508	-	1,042,220	2,254,728
Segment liabilities	<u>(336,843,542)</u>	<u>(24,616,473)</u>	<u>(1,930,299)</u>	<u>(363,390,314)</u>

	<i>(Under PRC GAAP)</i>			
	<u>PRC power segment</u>	<u>Overseas segment</u>	<u>All other segments</u>	<u>Total</u>
31 December 2022				
Segment assets	<u>438,449,391</u>	<u>44,394,771</u>	<u>10,779,389</u>	<u>493,623,551</u>
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	44,492,820	240,565	53,207	44,786,592
Investments in associates	14,748,090	-	5,320,368	20,068,458
Investments in joint ventures	1,208,183	-	1,145,430	2,353,613
Segment liabilities	<u>(344,746,791)</u>	<u>(27,166,963)</u>	<u>(2,015,618)</u>	<u>(373,929,372)</u>

A reconciliation of segment results to profit before income tax expense is provided as follows:

	For the six months ended 30 June	
	<u>2023</u>	<u>2022</u>
Segment results (PRC GAAP)	8,418,837	(4,094,384)
Reconciling items:		
Loss related to the headquarters	(142,029)	(149,949)
Investment income from Huaneng Finance	68,394	68,373
Dividend income of other equity instrument investments	2	–
Impact of IFRSs adjustments *	90,008	(358,936)
Profit/(loss) before income tax expense per unaudited interim consolidated statement of comprehensive income	<u>8,435,212</u>	<u>(4,534,896)</u>

Reportable segments' assets are reconciled to total assets as follows:

	As at 30 June 2023	As at 31 December 2022
Total segment assets (PRC GAAP)	508,153,912	493,623,551
Reconciling items:		
Investment in Huaneng Finance	1,444,720	1,476,326
Deferred income tax assets	5,759,718	6,322,055
Prepaid income tax	134,245	124,575
Other equity instrument investments	708,070	708,912
Corporate assets	294,530	350,560
Impact of IFRSs adjustments*	9,438,167	9,615,794
Total assets per unaudited interim condensed consolidated statement of financial position	<u>525,933,362</u>	<u>512,221,773</u>

Reportable segments' liabilities are reconciled to total liabilities as follows:

	As at 30 June 2023	As at 31 December 2022
Total segment liabilities (PRC GAAP)	(363,390,314)	(373,929,372)
Reconciling items:		
Current income tax liabilities	(764,565)	(331,928)
Deferred income tax liabilities	(1,250,975)	(1,086,765)
Corporate liabilities	(795,685)	(713,863)
Impact of IFRSs adjustments*	(964,887)	(843,786)
Total liabilities per unaudited interim consolidated statement of financial position	<u>(367,166,426)</u>	<u>(376,905,714)</u>

Other material items:

	<u>Reportable segment total</u>	<u>Headquarters</u>	<u>Share of profits of Huaneng Finance</u>	<u>Impact of other IFRSs adjustments*</u>	<u>Total</u>
For the six months ended 30 June 2023					
Total revenue	126,032,267	-	-	-	126,032,267
Interest expense	(4,544,985)	(4,536)	-	-	(4,549,521)
Depreciation and amortisation	(12,338,162)	(19,595)	-	(346,441)	(12,704,198)
Impairment loss	17	-	-	-	17
Credit loss	(62,108)	-	-	-	(62,108)
Share of profits and losses of associates and joint ventures	658,653	-	68,394	53,505	780,552
Net gain/(loss) on disposal of non-current assets	101,475	-	-	(868)	100,607
Income tax expense	(1,727,312)	-	-	101,240	(1,626,072)
For the six months ended 30 June 2022					
Total revenue	116,869,062	-	-	-	116,869,062
Interest expense	(5,102,859)	(3,411)	-	-	(5,106,270)
Depreciation and amortisation	(11,680,662)	(1,633)	-	(338,943)	(12,021,238)
Impairment loss	260	-	-	-	260
Credit loss	(64,821)	-	-	-	(64,821)
Share of profits and losses of associates and joint ventures	600,213	-	68,373	4,952	673,538
Net gain/(loss) on disposal of non-current assets	121,221	-	-	(17)	121,204
Income tax expense	272,610	-	-	87,031	359,641

- * IFRSs adjustments above primarily represented the classification adjustments and adjustments related to business combinations under common control and borrowing costs. Other than the classification adjustments, the differences will be gradually eliminated following subsequent depreciation and amortisation of related assets or the extinguishment of liabilities.

Geographical information (Under IFRSs):

(i) *External revenue generated from the following countries:*

	For the six months ended 30 June	
	<u>2023</u>	<u>2022</u>
PRC	107,672,460	99,046,762
Overseas	18,359,807	17,822,300
Total	<u>126,032,267</u>	<u>116,869,062</u>

The geographical location of customers is based on the location at which the electricity was transferred, goods were delivered, and services were provided.

(ii) *Non-current assets (excluding financial assets and deferred income tax assets) are located in the following countries:*

	As at 30 June 2023	As at 31 December 2022
	<u>2023</u>	<u>2022</u>
PRC	394,471,623	386,751,134
Overseas	22,990,872	22,586,601
Total	<u>417,462,495</u>	<u>409,337,735</u>

The non-current asset information above is based on the locations of the assets.

The information on sales to major customers of the Group which accounted for 10% or more of external revenue is as follows:

For the six months ended 30 June 2023, the revenue from grid companies under common control of State Grid Corporation of China within the PRC power segment in total accounted for 76% of external revenue (for the six months ended 30 June 2022: 75%). The sales to a subsidiary of State Grid Corporation of China which accounted for 10% or more of external revenue is as follows:

	For the six months ended 30 June			
	2023		2022	
	Amount	Proportion	Amount	Proportion
State Grid Shandong				
Electric Power Company	17,459,000	14%	17,783,677	15%

4. OTHER RECEIVABLES AND ASSETS

Other receivables and assets comprised the following:

	As at 30 June 2023	As at 31 December 2022
Prepayments for inventories	6,577,402	6,168,858
Prepaid income tax	134,245	124,575
Others	439,838	444,918
Subtotal of prepayments	7,151,485	6,738,351
Less: Loss allowances	2,638	2,638
Total prepayments, net	7,148,847	6,735,713
Dividends receivable	509,850	288,979
Receivables from sale of fuel	110,469	74,458
Others	2,978,966	2,665,686
Subtotal of other receivables	3,599,285	3,029,123
Less: Loss allowances	319,081	295,645
Total other receivables, net	3,280,204	2,733,478
VAT recoverable	3,868,940	3,441,183
Finance lease receivables	877,652	761,752
Designated loan to a joint venture	72,113	72,814
Others	549,489	396,059
Subtotal of other assets	5,368,194	4,671,808
Less: Loss allowances	64,615	64,615

	As at 30 June 2023	As at 31 December 2022
Total other assets, net	<u>5,303,579</u>	<u>4,607,193</u>
Gross total	<u>16,118,964</u>	<u>14,439,282</u>
Net total	<u>15,732,630</u>	<u>14,076,384</u>

5. ACCOUNTS AND NOTES RECEIVABLE

Accounts and notes receivable comprised the following:

	As at 30 June 2023	As at 31 December 2022
Accounts receivable	<u>44,836,507</u>	39,986,340
Notes receivable	<u>1,203,630</u>	<u>2,792,246</u>
	46,040,137	42,778,586
Less: Loss allowance	<u>122,505</u>	<u>124,254</u>
Total	<u>45,917,632</u>	<u>42,654,332</u>
Analysed into:		
Accounts receivable		
– At amortised cost	<u>44,836,507</u>	<u>39,986,340</u>
Notes receivable		
– At amortised cost	<u>1,203,630</u>	<u>2,792,246</u>

Ageing analysis of accounts receivable and notes receivable was as follows:

	As at 30 June 2023	As at 31 December 2022
Within 1 year	44,982,194	42,301,386
Between 1 and 2 years	726,051	241,380
Between 2 and 3 years	134,699	54,471
Over 3 years	197,193	181,349
Total	<u>46,040,137</u>	<u>42,778,586</u>

As at 30 June 2023, the maturity period of the notes receivable ranged from 1 month to 12 months (31 December 2022: from 1 month to 12 months).

6. DIVIDENDS OF ORDINARY SHARES AND CUMULATIVE DISTRIBUTION OF OTHER EQUITY INSTRUMENTS

(a) Dividends of ordinary shares

On 20 June 2023, upon the approval from shareholders at the annual general meeting, the Company declared no dividend in 2022 (2021 final: nil). As at 30 June 2023, the Company has no dividend to be paid (30 June 2022: the Company has no dividend to be paid).

(b) Cumulative distribution of other equity instruments

In 2017, the Company issued two tranches of perpetual corporate bonds with net proceeds of approximately RMB2,500 million (Bond A) and RMB2,500 million (Bond B), respectively. The perpetual corporate bonds are issued at par value with initial distribution rates of 5.05% and 5.17% with a term of 3 years and 5 years respectively. The interest of the perpetual corporate bonds is recorded as distributions, which are paid annually in arrears in September in each year and may be deferred at the discretion of the Company unless compulsory distribution payment events (e.g. distributions to ordinary shareholders of the Company or reduction of the registered capital of the

Company) occur. The Company has the right to defer current interest and all deferred interest. The perpetual corporate bonds have no fixed maturity date and are callable at the Company's discretion in whole in August 2020 and 2022 respectively, and the payment of the principal may be deferred for each renewal period to 3 years and 5 years respectively. The applicable distribution rate will be reset on the first call date and in each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of Bond A in September 2020, the Company decided to exercise the callable option. The bond was redeemed in whole on 25 September 2020. On the first call date of Bond B in September 2022, the Company decided to exercise the callable option. The bond was redeemed in whole on 25 September 2022.

In 2018, the Company issued three tranches of Yingda Insurance Financing Plan (the "Yingda plan") with aggregate proceeds of RMB5,000 million. The Yingda plan has no fixed period with an initial distribution rate of 5.79%. The interest of the financing plan is recorded as distributions, which are paid annually in arrears in June and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (e.g. distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The Yingda plan has no fixed maturity date and is callable at the Company's discretion in whole at each distribution date after the 8th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 9th to the 11th years after the issuance, the period from the 11th to the 13th years after the issuance and the 13th year onwards after the issuance, to the higher of the initial distribution rate plus 300 basis points and the 10-year treasury bond yield in the 9th year after the issuance plus 600 basis points, the higher of the initial distribution rate plus 600 basis points and the 10-year treasury bond yield in the 11th year after the issuance plus 900 basis points and the higher of the initial distribution rate plus 900 basis points and the 10-year treasury bond yield in the 13th year after the issuance plus 1,200 basis points, respectively. As at 24 November 2021, the Company signed a supplement agreement with regard to amending the clause of the applicable distribution rate. The applicable distribution rate will be reset during the

period from the 9th year after the issuance, to the basis rate plus 300 basis points, and will remain 8.79% afterwards.

In 2019, the Company issued two tranches of China Life Financing Plan (the “China Life plan”) with aggregate proceeds of RMB4,330 million. The China Life plan has no fixed period with an initial distribution rate of 5.05%. The interest of the China Life plan are recorded as distributions, which are paid annually in arrears in March, June, September and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The China Life plan has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after the 8th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 9th year after the issuance, to the basis rate plus 300 basis points, and will remain 8.05% afterwards.

In 2019, the Company issued two tranches of PICC Financing Plan (“the PICC plan”) with aggregate proceeds of RMB2,670 million. The PICC plan has no fixed period with an initial distribution rate of 5.10%. The interest of the PICC plan is recorded as distributions, which are paid annually in arrears in March, June, September and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The PICC plan has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after the 10th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 11th year after the issuance, to the basis rate plus 300 basis points, and will remain 8.10% afterwards.

In October 2019, the Company issued two tranches of medium-term notes with net proceeds of approximately RMB2,000 million and RMB2,000 million, respectively. The medium-term notes are issued at par value with

initial distribution rates of 4.08% and 4.05%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in October in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years, respectively. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of above medium-term notes in October 2022, the Company decided to exercise the callable option. The two tranches of medium-term notes were redeemed in whole on 18 October 2022 and 25 October 2022, respectively.

In November 2019, the Company issued two tranches of medium-term notes with net proceeds of approximately RMB2,500 million and RMB1,500 million. The medium-term notes are issued at par value with initial distribution rates of 4.15% and 4.53%, respectively. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in November in each year 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) occur. The Company has the right to defer current interests and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 and 5 years respectively. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of 2019 medium-term notes of RMB2,500 million, the Company decided to exercise the callable option. The bond was redeemed in whole on 5 November 2022.

In March 2020, the Company issued two tranches of perpetual corporate bonds with net proceeds of approximately RMB2,000 million (Bond C) and RMB1,000 million (Bond D), respectively. The perpetual corporate bonds are issued at par value with initial distribution rates of 3.58% and 3.85%. The interest of the perpetual corporate bonds is recorded as distributions, which are paid annually in arrears in March in each year and may be deferred at the discretion of the Company unless compulsory distribution payment events (e.g. distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The perpetual corporate bonds have no fixed maturity date and are callable at the Company's discretion in whole in February 2023 and 2025 respectively, and the payment of the principal may be deferred for each renewal period to 3 and 5 years respectively. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of Bond C in March, the Company decided to exercise the callable option. The bond was redeemed in whole on 23 March 2023.

In April 2020, the Company issued medium-term notes with net proceeds of approximately RMB3,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.18%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in April in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of 2020 medium-term notes of RMB3,000 million, the Company decided to exercise the callable option. The bond was redeemed in whole on 13 April 2023.

In April 2020, the Company issued China Life Financing Plan (“the China Life plan”) with proceeds of RMB3,570 million. The China Life plan has no fixed period with an initial distribution rate of 4.75%. The interest of the China Life plan is recorded as distributions, which are paid annually in arrears in March, June, September and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The China Life plan has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after the 8th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 9th year after the issuance, to the basis rate plus 300 basis points, and will remain 7.75% afterwards.

In April 2020, the Company issued the third tranche of the PICC plan with proceeds of RMB930 million. The PICC plan has no fixed period with an initial distribution rate of 4.75%. The interest of the PICC plan is recorded as distributions, which are paid annually in arrears in March, June, September and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The PICC plan has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after the 10th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 11th year after the issuance, to the basis rate plus 300 basis points, and will remain 7.75% afterwards.

In April 2020, the Company issued a perpetual corporate bond with net proceeds of approximately RMB2,500 million (Bond E). The perpetual corporate bond is issued at par value with an initial distribution rate of 3.09%. The interest of the perpetual corporate bond is recorded as distributions, which are paid annually in arrears in April in each year and may be deferred at the discretion of the Company unless compulsory distribution payment events (e.g. distributions to ordinary shareholders of the Company or

reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The perpetual corporate bond has no fixed maturity date and is callable at the Company's discretion in whole in March 2023, or the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of Bond E, the Company decided to exercise the callable option. The bond was redeemed in whole on 23 April 2023.

In June 2020, the Company issued medium-term notes with net proceeds of approximately RMB3,500 million. The medium-term notes are issued at par value with an initial distribution rate of 3.60%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in June in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards. On the first call date of 2020 medium-term notes of RMB3,500 million, the Company decided to exercise the callable option. The bond was redeemed in whole on 19 June 2023.

In August 2020 and September 2020, the Company issued two tranches of medium-term notes with net proceeds of approximately RMB2,000 million and RMB1,000 million, respectively. The medium-term notes are issued at par value with initial distribution rates of 3.99% and 4.40%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in August and September in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years, respectively. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In August 2020, the Company issued the fourth tranche of the PICC plan with proceeds of RMB3,000 million. The PICC plan has no fixed period with an initial distribution rate of 4.60%. The interest of the PICC plan is recorded as distributions, which are paid annually in arrears in March, June, September and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The PICC plan has no fixed maturity date and is callable at the Company's discretion in whole at each distribution date after the 10th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 11th year after the issuance, to the basis rate plus 300 basis points, and will remain 7.60% afterwards.

In September 2020, the Company issued a perpetual corporate bond with net proceeds of approximately RMB3,000 million (Bond F). The perpetual corporate bond is issued at par value with an initial distribution rate of 4.38%. The interest of the perpetual corporate bond is recorded as distributions, which are paid annually in arrears in September in each year and may be deferred at the discretion of the Company unless compulsory distribution payment events (e.g. distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occur. The Company has the right to defer current interest and all deferred interest. The perpetual corporate bond has no fixed maturity date and is callable at the Company's discretion in whole in August 2023, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In July 2022, the Company issued medium-term notes with net proceeds of approximately RMB2,000 million. The medium-term notes are issued at par value with an initial distribution rate of 2.93%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in October in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In September 2022, the Company issued medium-term notes with net proceeds of approximately RMB500 million. The medium-term notes are issued at par value with an initial distribution rate of 2.78%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in October in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In September 2022, the Company issued the first tranche of the Huaneng Trust Yingfeng No.1 Single Fund Trust ("Huaneng Trust (1st)") with the proceeds of RMB2,500 million. Huaneng Trust (1st) has no fixed period with initial distribution rate of 2.91%. The interest of Huaneng Trust (1st) is recorded as distributions, which is paid annually in arrears in August in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company or liquidation or bankruptcy the Company) occur. The Company has the right to defer current interest and all deferred interest. Huaneng Trust (1st) has no fixed maturity date and is callable at the Company's discretion in whole at each distribution date after the 5th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 6th year after the issuance, to the basis rate plus 300 basis points, and will remain 5.91% afterwards.

In October 2022, the Company issued two medium-term notes with net proceeds of approximately RMB2,000 million and RMB2,000 million. The medium-term notes are issued at par value with an initial distribution rate of 2.78% and 2.72% respectively. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in October in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In October 2022, the Company issued the second tranche of the Huaneng Trust Yingfeng No.1 Single Fund Trust ("Huaneng Trust (2nd)") with the proceeds of RMB3,050 million. Huaneng Trust (2nd) has no fixed period with initial distribution rate of 3.06%. The interest of Huaneng Trust (2nd) is recorded as distributions, which is paid annually in arrears in September in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company or liquidation or bankruptcy the Company) occur. The Company has the right to defer current interest and all deferred interest. Huaneng Trust (2nd) has no fixed maturity date and is callable at the Company's discretion in whole at each distribution date after the 5th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 6th year after the issuance, to the basis rate plus 300 basis points, and will remain 6.06% afterwards.

In November 2022, the Company issued medium-term notes with net proceeds of approximately RMB2,500 million. The medium-term notes are issued at par value with an initial distribution rate of 2.66%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in October in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In November 2022, the Company issued the third tranche of the Huaneng Trust Yingfeng No.1 Single Fund Trust ("Huaneng Trust (3rd)") with the proceeds of RMB4,000 million. Huaneng Trust (3rd) has no fixed period with initial distribution rate of 3.11%. The interest of Huaneng Trust (3rd) is recorded as distributions, which is paid annually in arrears in October in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company or liquidation or bankruptcy the Company) occur. The Company has the right to defer current interest and all deferred interest. Huaneng Trust (3rd) has no fixed maturity date and is callable at the Company's discretion in whole at each distribution date after the 5th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 6th year after the issuance, to the basis rate plus 300 basis points, and will remain 6.11% afterwards.

In November 2022, the Company issued the fourth tranche of the Huaneng Trust Yingfeng No.1 Single Fund Trust (“Huaneng Trust (4th)”) with the proceeds of RMB4,000 million. Huaneng Trust (4th) has no fixed period with initial distribution rate of 3.11%. The interest of Huaneng Trust (4th) is recorded as distributions, which is paid annually in arrears in October in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company or liquidation or bankruptcy the Company) occur. The Company has the right to defer current interest and all deferred interest. Huaneng Trust (4th) has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after the 5th year of issuance, or the payment of the principal may be deferred at each distribution date mentioned above. The applicable distribution rate will be reset during the period from the 6th year after the issuance, to the basis rate plus 300 basis points, and will remain 6.11% afterwards.

In January 2023, the Company issued medium-term notes with net proceeds of approximately RMB3,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.93%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in January in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company’s discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In February 2023, the Company issued medium-term notes with net proceeds of approximately RMB3,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.74%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in February in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In February 2023, the Company issued medium-term notes with net proceeds of approximately RMB3,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.55%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in February in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In February 2023, the Company issued medium-term notes with net proceeds of approximately RMB2,500 million. The medium-term notes are issued at par value with an initial distribution rate of 3.58%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in February in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In March 2023, the Company issued medium-term notes with net proceeds of approximately RMB3,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.61%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in March in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In March 2023, the Company issued medium-term notes with net proceeds of approximately RMB2,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.38%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in March in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 2 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In March 2023, the Company issued medium-term notes with net proceeds of approximately RMB2,500 million. The medium-term notes are issued at par value with an initial distribution rate of 3.53%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in March in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 3 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In April 2023, the Company issued medium-term notes with net proceeds of approximately RMB2,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.23%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in April in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 2 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In April 2023, the Company issued medium-term notes with net proceeds of approximately RMB2,000 million. The medium-term notes are issued at par value with an initial distribution rate of 3.21%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in April in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 2 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In April 2023, the Company issued medium-term notes with net proceeds of approximately RMB1,500 million. The medium-term notes are issued at par value with an initial distribution rate of 3.14%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in April in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 2 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In June 2023, the Company issued medium-term notes with net proceeds of approximately RMB2,000 million. The medium-term notes are issued at par value with an initial distribution rate of 2.96%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in June in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 2 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

In June 2023, the Company issued medium-term notes with net proceeds of approximately RMB1,500 million. The medium-term notes are issued at par value with an initial distribution rate of 2.92%. The interest of the medium-term notes is recorded as distributions, which are paid annually in arrears in June in each year 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) occur. The Company has the right to defer current interest and all deferred interest. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at specific time, and the payment of the principal may be deferred for each renewal period to 2 years. The applicable distribution rate will be reset on the first call date and for each renewal period after the first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum, and will remain it afterwards.

The perpetual corporate bonds, financing plans and medium-term notes were recorded as other equity instruments in the consolidated financial statements. During the six months ended 30 June 2023, the profit attributable to holders of other equity instruments, based on the applicable distribution rate, was RMB1,429 million (for the six months ended 30 June 2022: RMB1,060 million).

7. LONG-TERM BONDS

Long-term bonds comprised the following:

	As at 30 June 2023	As at 31 December 2022
2016 corporate bonds 1st batch (10 years)	1,202,375	1,226,454
2017 medium-term notes 1st batch (5 years)	4,481	8,962
2018 medium-term notes 2nd batch (3 years)	2,790	2,799
2018 corporate bonds 2nd batch (10 years)	5,203,488	5,078,254
2019 corporate bonds 1st batch (10 years)	2,320,416	2,374,962
2019 medium-term notes 1st batch (5 years)	1,553,385	1,524,031
2020 corporate bonds (5 years) – SSPL	2,188,408	2,100,246
2020 corporate bonds (10 years) – SSPL	2,181,241	2,094,973
2021 green medium-term notes 1st batch (3 years)	1,016,043	1,032,499
2021 green medium-term notes 2nd batch (3 years)	2,518,342	2,560,025
2021 corporate bonds 1st batch (3 years)	501,760	510,199
2021 corporate bonds 1st batch (10 years)	1,506,204	1,536,221
2021 corporate bonds 2nd batch (3 years)	501,111	509,499
2021 corporate bonds 2nd batch (10 years)	3,509,146	3,579,184
2021 corporate bonds 3rd batch (10 years)	1,801,972	1,838,173
2021 medium-term notes 1st batch (3 years)	2,051,767	2,022,570
2021 medium-term notes 2nd batch (3 years)	2,036,586	2,006,042
2021 medium-term notes 1st batch (3 years)-Jiangsu	304,510	300,121
2022 medium-term notes 1st batch (10 years)	1,520,248	1,548,175
2022 medium-term notes 2nd batch (3 years)	3,025,277	3,067,588
2022 medium-term notes 3rd batch (10 years)	1,511,388	1,539,040
2022 medium-term notes 1st batch (3 years)-Jiangsu	502,640	510,000
2022 medium-term notes 4th batch (2 years)	300,220	303,765
2022 medium-term notes 6th batch (3 years)	2,039,374	2,014,621
2022 medium-term notes 7th batch (2 years)	509,350	503,980
Subtotal	39,812,522	39,792,383
Less: Current portion of long-term bonds	5,376,806	730,336
Total	34,435,716	39,062,047

Details of the outstanding corporate bonds, medium-term notes and debt financing instruments of the Group as at 30 June 2023 are summarised as follows:

Type of Instruments	Face Value	Issuance Date	Initial Period	Initial Distribution Rate	Effective Rate	Balance as at		Issued Amount	Amortisation	Interest	Repayment	Foreign	Foreign	Interest Payable	Balance as at 30 June 2023
						Exchange Gain	Currency Translation Differences								
2016 corporate bonds 1st batch (10 years)	1,200,000	June 2016	10 years	3.98%	3.98%	1,200,000	1,226,454	-	4	23,677	(47,760)	-	-	2,347	1,202,375
2017 medium-term notes 1st batch (5 years)	5,000,000	July 2017	5 years	4.69%	4.90%	5,000,000	8,962	-	(4,481)	-	-	-	-	-	4,481
2018 medium-term notes 2nd batch (3 years)	2,000,000	July 2018	3 years	4.41%	4.56%	2,000,000	2,799	-	(9)	-	-	-	-	-	2,790
2018 corporate bonds 2nd batch (10 years)	5,000,000	September 2018	10 years	5.05%	5.05%	5,000,000	5,078,254	-	22	125,212	-	-	-	203,384	5,203,488
2019 corporate bonds 1st batch (10 years)	2,300,000	April 2019	10 years	4.70%	4.70%	2,300,000	2,374,962	-	4	53,550	(108,100)	-	-	20,380	2,320,416
2019 medium-term notes 1st batch (5 years)	1,500,000	July 2019	5 years	3.85%	3.96%	1,500,000	1,524,031	-	716	28,638	-	-	-	54,902	1,553,385
2020 corporate bonds (5 years) – SSPL	2,108,865	February 2020	5 years	2.25%	2.32%	2,108,865	2,100,246	-	1,203	23,470	(23,086)	13,070	73,505	17,806	2,188,408
2020 corporate bonds (10 years) – SSPL	2,108,865	February 2020	10 years	2.63%	2.72%	2,108,865	2,094,973	-	950	27,381	(26,933)	13,070	71,800	20,774	2,181,241
2021 green medium-term notes 1st batch (3 years)	1,000,000	February 2021	3 years	3.45%	3.66%	1,000,000	1,032,499	-	936	17,108	(34,500)	-	-	13,422	1,016,043
2021 green medium-term notes 2nd batch (3 years)	2,500,000	April 2021	3 years	3.35%	3.40%	2,500,000	2,560,025	-	584	41,483	(83,750)	-	-	17,391	2,518,342
2021 corporate bonds 1st batch (3 years)	500,000	May 2021	3 years	3.35%	3.35%	500,000	510,199	-	5	8,306	(16,750)	-	-	1,744	501,760
2021 corporate bonds 1st batch (10 years)	1,500,000	May 2021	10 years	3.97%	3.97%	1,500,000	1,536,221	-	3	29,530	(59,550)	-	-	6,200	1,506,204
2021 corporate bonds 2nd batch (3 years)	500,000	June 2021	3 years	3.33%	3.33%	500,000	509,499	-	5	8,257	(16,650)	-	-	1,095	501,111
2021 corporate bonds 2nd batch (10 years)	3,500,000	June 2021	10 years	3.97%	3.97%	3,500,000	3,579,184	-	8	68,904	(138,950)	-	-	9,136	3,509,146
2021 corporate bonds 3rd batch (10 years)	1,800,000	June 2021	10 years	3.99%	3.99%	1,800,000	1,838,173	-	4	35,615	(71,820)	-	-	1,968	1,801,972
2021 medium-term notes 1st batch (3 years)	2,000,000	August 2021	3 years	2.99%	3.01%	2,000,000	2,022,570	-	(457)	29,654	-	-	-	51,936	2,051,767
2021 medium-term notes 2nd batch (3 years)	2,000,000	November 2021	3 years	3.07%	3.07%	2,000,000	2,006,042	-	96	30,448	-	-	-	36,672	2,036,586
2021 medium-term notes 1st batch (3 years)- Jiangsu	300,000	December 2021	3 years	2.95%	2.95%	300,000	300,121	-	-	4,389	-	-	-	4,510	304,510
2022 medium-term notes 1st batch (10 years)	1,500,000	February 2022	10 years	3.74%	3.80%	1,500,000	1,548,175	-	354	27,819	(56,100)	-	-	19,366	1,520,248
2022 medium-term notes 2nd batch (3 years)	3,000,000	March 2022	3 years	2.84%	2.89%	3,000,000	3,067,588	-	715	42,174	(85,200)	-	-	27,702	3,025,277
2022 medium-term notes 3rd batch (10 years)	1,500,000	April 2022	10 years	3.70%	3.76%	1,500,000	1,539,040	-	355	27,493	(55,500)	-	-	10,615	1,511,388
2022 medium-term notes 1st batch (3 years)- Jiangsu	500,000	April 2022	3 years	2.92%	2.92%	500,000	510,000	-	-	7,240	(14,600)	-	-	2,640	502,640
2022 medium-term notes 4th batch (2 years)	300,000	June 2022	2 years	2.37%	2.40%	300,000	303,765	-	40	3,525	(7,110)	-	-	155	300,220
2022 medium-term notes 6th batch (3 years)	2,000,000	August 2022	3 years	2.40%	2.51%	2,000,000	2,014,621	-	950	23,803	-	-	-	43,397	2,039,374
2022 medium-term notes 7th batch (2 years)	500,000	August 2022	2 years	2.14%	2.17%	500,000	503,980	-	64	5,306	-	-	-	9,264	509,350
Total						46,117,730	39,792,383	-	2,071	692,982	(846,359)	26,140	145,305	576,806	39,812,522

8. ACCOUNTS PAYABLE AND OTHER LIABILITIES

Accounts payable and other liabilities comprised:

	As at 30 June 2023	As at 31 December 2022
Accounts and notes payable	21,202,721	24,367,693
Payables to contractors for construction	20,114,968	21,443,219
Retention payables to contractors	3,567,083	1,773,257
Consideration payables for business acquisition	22,842	22,842
Others	6,023,955	6,865,690
Total	<u>50,931,569</u>	<u>54,472,701</u>

Ageing analysis of accounts and notes payable, based on the invoice date, was as follows:

	As at 30 June 2023	As at 31 December 2022
Within 1 year	20,481,925	23,857,045
Between 1 and 2 years	367,635	368,324
Over 2 years	353,161	142,324
Total	<u>21,202,721</u>	<u>24,367,693</u>

9. SHORT-TERM BONDS

Details of the outstanding short-term bonds as at 30 June 2023 are summarised as follows:

Type of Instruments	Face Value	Issuance Date	Maturity	Coupon Rate	Issue Amount	Balance as at 31 December 2022	Issued Amount	Interest	Amortisation	Repayment	Balance as at 30 June 2023
Super short-term bond (JiangSu2022 2nd)	300,000	September 2022	180 days	1.66%	300,000	301,555	-	900	-	(302,455)	-
Super short-term bond (2022 14th)	3,000,000	November 2022	61 days	2.09%	3,000,000	3,007,593	-	2,920	(34)	(3,010,479)	-
Super short-term bond (2022 16th)	3,000,000	December 2022	34 days	1.83%	3,000,000	3,003,629	-	1,504	(19)	(3,005,114)	-
Super short-term bond (2023 1st)	2,500,000	January 2023	33 days	1.80%	2,500,000	-	2,500,000	4,068	-	(2,504,068)	-
Super short-term bond (2023 2nd)	2,500,000	January 2023	32 days	2.05%	2,500,000	-	2,500,000	4,493	-	(2,504,493)	-
Super short-term bond (2023 3rd)	2,500,000	February 2023	32 days	1.83%	2,500,000	-	2,500,000	4,011	-	(2,504,011)	-
Super short-term bond (2023 4th)	2,500,000	February 2023	33 days	1.90%	2,500,000	-	2,500,000	4,295	-	(2,504,295)	-
Super short-term bond (2023 5th)	2,000,000	February 2023	30 days	2.02%	2,000,000	-	2,000,000	3,321	-	(2,003,321)	-
Super short-term bond (2023 6th)	3,000,000	March 2023	32 days	2.11%	3,000,000	-	3,000,000	5,534	-	(3,005,534)	-
Super short-term bond (2023 7th)	3,500,000	March 2023	30 days	2.18%	3,500,000	-	3,500,000	6,254	-	(3,506,254)	-
Super short-term bond (2023 8th)	5,000,000	April 2022	30 days	2.10%	5,000,000	-	5,000,000	8,607	-	(5,008,607)	-
Super short-term bond (2023 9th)	3,500,000	April 2023	30 days	2.13%	3,500,000	-	3,500,000	6,111	-	(3,506,111)	-
Super short-term bond (2023 10th)	4,000,000	May 2023	21 days	1.97%	4,000,000	-	4,000,000	4,521	-	(4,004,521)	-
Super short-term bond (2023 11th)	4,000,000	May 2023	29 days	1.90%	4,000,000	-	4,000,000	6,022	-	(4,006,022)	-
Super short-term bond (2023 12th)	4,000,000	May 2023	91 days	1.98%	4,000,000	-	4,000,000	8,223	41	-	4,008,264
Super short-term bond (2023 13th)	5,000,000	June 2023	34 days	1.79%	5,000,000	-	5,000,000	5,869	31	-	5,005,900
Super short-term bond (JiangSu2023 1st)	200,000	June 2023	50 days	2.10%	200,000	-	200,000	34	-	-	200,034
Total					50,500,000	6,312,777	44,200,000	76,687	19	(41,375,285)	9,214,198

10. ADDITIONAL FINANCIAL INFORMATION ON UNAUDITED INTERIM CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 30 June 2023, the net current liabilities of the Group amounted to approximately RMB64.446 billion (31 December 2022: RMB84.611 billion), total assets less current liabilities were approximately RMB368.723 billion (31 December 2022: RMB340.888 billion).

11. PROFIT/(LOSS) BEFORE INCOME TAX EXPENSE

Profit/(loss) before income tax expense was determined after charging/(crediting) the following:

	For the six months ended 30 June	
	2023	2022
Total interest expense on borrowings	4,880,814	5,573,569
Less: Amounts capitalised in property, plant and equipment	331,293	467,299
Interest expenses charged to unaudited interim consolidated statement of comprehensive income	4,549,521	5,106,270
Including: Interest expenses on lease liabilities	148,004	85,437
Depreciation of property, plant and equipment	12,222,167	11,507,966
Depreciation of investment properties	12,212	11,898
Depreciation of right-of-use assets	374,682	451,887
	12,609,061	11,971,751

**For the six months
ended 30 June**

	2023	2022
Included in other operating expenses:		
– Operating expense of Huaneng Shandong Ruyi (Pakistan) Energy (Private) Ltd.	1,444,849	2,795,254
– Other materials expense	825,745	723,085
– Electricity charges	967,656	734,781
– Cost of sales of raw materials	361,760	358,548
– Water charges	265,661	267,881
– Insurance expense	244,721	230,536
– Cleaning, greening and fire protection expense	155,758	172,649
– Water conservancy fund and disabled security fund	45,683	36,364
– Test and inspection expense	81,583	95,964
– Service charge	250,693	201,312
– Auditors’ remuneration-audit services	17,556	20,752
– Other consulting expense	78,175	65,450
– Transportation expense	91,810	83,681
– Office expense	130,021	124,090
– Minimum lease payments under operating leases, lease payments not included in the measurement of lease liabilities	73,298	60,129
– Service concession construction cost	3,980	69,575
– Research and development expenditure	512,847	279,155
– Amortisation of other non-current assets	95,137	49,487
– Heating pipeline related cost	98,593	91,377
– Property management expense	57,610	47,607
– Pollutant charge	8,960	10,427
– Information technology maintenance expense	39,995	28,763
– Travel expense	64,881	33,872
– Donations	8,724	14,071
– Business entertainment expense	14,836	11,895
– Penalties	3,471	2,580
– Reversal of provision for inventory provision	(17)	(1,423)
– Impairment loss of other non-current assets	–	1,163

	For the six months ended 30 June	
	2023	2022
– Net gain on disposal of non-current assets	(100,607)	(121,204)
– Gain of Three Supplies and Property Management	–	(76,457)
– Government grants	(719,873)	(820,297)
– Safety funds*	535,816	–
– Others	483,423	500,200
Total	<u>6,142,745</u>	<u>6,091,267</u>

* In accordance with the “Administrative Measures for the Withdrawal and Use of Safety Funds for Enterprises” (Caizi [2022] No. 136) issued by the Ministry of Finance of the People’s Republic of China and the Ministry of Emergency Management of the People’s Republic of China on November 21, 2022, the Company and its subsidiaries recorded safety production related expenditures as safety funds.

12. INCOME TAX EXPENSE

	For the six months ended 30 June	
	2023	2022
Current income tax expense	1,081,547	467,804
Deferred income tax	544,525	(827,445)
Total	<u>1,626,072</u>	<u>(359,641)</u>

No Hong Kong profits tax has been provided as there were no estimated assessable profits in Hong Kong for the six months ended 30 June 2023 (for the six months ended 30 June 2022: Nil).

The Company and its PRC branches and subsidiaries are subject to income tax at 25%, except for certain PRC branches and subsidiaries that are tax exempted or taxed at preferential tax rates, as determined in accordance with the relevant PRC income tax rules and regulations for the six months ended 30 June 2023 and 2022.

The income tax rate applicable to Singapore subsidiaries is 17% (for the six months ended 30 June 2022: 17%). The Company's overseas subsidiary in Pakistan engaged in the power generation business is entitled to an income tax exemption according to Pakistani 2015 Fiscal Act. Another subsidiary located in Pakistan is engaged in the provision of maintenance services. Before 1 July 2019, the subsidiary's tax liability would be calculated as the amount which is the highest of (i) normal tax at the rate of 29% of taxable income; (ii) Alternative Corporate Tax (ACT) at the rate of 17% of accounting profit; and (iii) minimum tax deductible at 8% of the revenue. If the income tax calculated is above the normal tax at the rate of 29%, it would be carried forward to subsequent years for settlement against the liabilities of the following years. The carryforward period is 5 years in the case of minimum tax and 10 years in the case of ACT. However, from 1 July 2019, if the minimum tax liability is above the normal tax calculated, it cannot be carried forward to subsequent years.

The reconciliation of the effective income tax rate from the statutory income tax rate is as follows:

	For the six months ended 30 June	
	2023	2022
PRC statutory enterprise income tax rate	25.00%	25.00%
Effect of different tax rates of certain subsidiaries	(10.63%)	14.48%
Utilisation of previously unrecognised tax losses and deductible temporary differences	(3.49%)	3.39%
Unrecognised deductible temporary differences	0.27%	(0.56%)
Unrecognised tax losses for the period	7.35%	(37.61%)
Effect of non-taxable income	(2.29%)	3.74%
Effect of non-deductible expenses	0.24%	(0.78%)
Others	2.83%	0.27%
Effective tax rate	<u>19.28%</u>	<u>7.93%</u>

For the six months ended 30 June 2023, the effective tax rate was proportioned by income tax expense to profit before tax (For the six months ended 30 June 2022: income tax credit to loss before tax).

13. EARNINGS/(LOSSES) PER SHARE

The basic earnings/(losses) per share is calculated by dividing the consolidated net profit/(loss) attributable to the equity holders of the Company excluding cumulative distribution of other equity instruments by the weighted average number of the Company's outstanding ordinary shares during the period.

	For the six months ended 30 June	
	2023	2022
Consolidated net profit/(loss) attributable to equity holders of the Company	6,489,663	(3,220,203)
Less: Cumulative distribution of other equity instruments	1,429,357	1,059,926
Consolidated net profit/(loss) attributable to ordinary shareholders of the Company	<u>5,060,306</u>	<u>(4,280,129)</u>
Weighted average number of the Company's outstanding ordinary shares ('000)	15,698,093	15,698,093
Basic and diluted earnings/(losses) per share (RMB)	<u>0.32</u>	<u>(0.27)</u>

There was no dilutive effect on earnings per share since the Company had no dilutive potential ordinary shares for the six months ended 30 June 2023 and 2022.

14. CONTINGENT LIABILITIES

Disputes over responsibilities for damage caused by vessel collision over the 400MW Offshore Wind Power Project of Shengdong Rudong Offshore Windpower Co., Ltd. ("Shengdong Rudong")

Shengdong Rudong, a subsidiary of the Company, was in charge of the construction and operation of a 400MW Offshore Wind-power Project. As stipulated by the construction contract signed between Shengdong Rudong and CCCC Third Harbor Engineering Bureau Co., Ltd. (“CCCC Third Harbor Bureau”) on 18 April 2019, CCCC Third Harbor Bureau was responsible for the construction of the offshore wind farm and related construction safety management. On 1 August 2019, a vessel chartering contract was signed between CCCC Third Harbor Bureau and Nantong Ocean Water Construction Engineering Co., Ltd. (“Nantong Water Construction”). As stipulated by the contract, Vessel “Wen Qiang 8”, which was owned by Nantong Water Construction, would be chartered by CCCC Third Harbor Bureau as the construction operation vessel. During the chartering period, Nantong Water Construction was responsible for the safety of Vessel “Wen Qiang 8” and the security of the personnel on board.

On 22 September 2019, in order to evade typhoon, Vessel “Wen Qiang 8” anchored nearby the #32 wind turbine pile foundation of Shengdong Rudong 400MW Offshore Wind-farm located around Nantong coastal area. Affected by strong wind, violent waves and big tides, the anchor steel cable was broken, leading to dragging-of-anchor of Vessel “Wen Qiang 8”, and collision with the pipeline bridge of land-island access of Nantong Gang Yangkou Port. The pipeline bridge, bearing line pipes, and Vessel “WenQiang 8” all suffered damages from this collision accident, constituting a relatively large level of water traffic accident.

The above accident has resulted in three lawsuits in 2020, with the litigation claiming amount being approximately RMB831 million in total. Shengdong Rudong, together with other several entities, were joint defendants. At the end of 2021, the lawsuits were accepted by the court and are pending for judge up to now. Since the lawsuits are still at the stage of evidences exchange and loss identification between the plaintiff and the joint defendants, it is not possible to estimate the financial impact on the Company’s financial statements.

B. Financial Information Extracted from Consolidated Financial Statements Prepared Under PRC GAAP (Unaudited)

(Amounts expressed in RMB Yuan unless otherwise stated)

1 FINANCIAL HIGHLIGHTS AND FINANCIAL RATIOS

	Unit	For the six months ended 30 June		Fluctuation
		2023	2022	
Operating revenue	RMB	126,032,267,458	116,869,061,918	7.84%
Profit/(loss) before income tax expense	RMB	8,345,204,040	(4,175,961,213)	299.84%
Net profit/(loss) attributable to equity holders of the Company	RMB	6,308,284,637	(3,008,687,276)	309.67%
Net profit/(loss) attributable to equity holders of the Company less non-recurring profit or loss	RMB	5,571,078,782	(3,833,670,603)	245.32%
Basic and diluted earnings/(losses) per share	RMB/share	0.31	(0.26)	219.23%
Basic earnings/(losses) per share less non-recurring profit or loss	RMB/share	0.26	(0.31)	183.87%
Weighted average of return on equity	%	9.90	(7.35)	234.69%
Weighted average of return on equity less non-recurring profit or loss	%	8.41	(8.84)	195.14%
Net cash generated from operating activities	RMB	13,759,731,750	20,087,646,052	(31.50%)
		As At 30	As At 31	
	Unit	June 2023	December 2022	Fluctuation
Total assets	RMB	516,495,194,666	502,605,977,488	2.76%
Equity to equity holders of the Company	RMB	131,675,397,173	108,535,478,172	21.32%

Note: The formula of major financial ratio:

Earnings/(losses) per share = Consolidated net profit/(loss) attributable to ordinary shareholders of the Company (less cumulative distribution of other equity instruments)/Weighted average number of the Company's outstanding ordinary shares

Weighted average of return on equity = Consolidated net profit attributable to equity holders of the Company/Weighted average number of equity attributable to equity holders of the Company (less non-controlling interests) *100%

2 ITEMS AND AMOUNTS OF NON-RECURRING PROFIT OR LOSS

	For the six months ended 30 June 2023
Net gain on disposal of non-current assets	101,475,288
Government grants recognised through profit or loss, excluding those having close relationships with the company and its subsidiaries' operation and enjoyed in fixed amount or quantity according to uniform national standard (Note 1)	689,060,076
Reversal of loss allowances for receivables and contract assets individually tested for impairments	1,880,549
Profits from entrusted loans	1,245,451
Non-operating income and expenses besides items above (Note 2)	14,550,115
Other items recorded in the profit and loss in accordance with the definition of non-recurring profit or loss (Note 3)	<u>52,230,303</u>
Subtotal	860,441,782
Impact of income tax	82,883,545
Impact of non-controlling interests (net of tax)	<u>40,549,698</u>
Total	<u><u>737,008,539</u></u>

Note 1: In accordance with the requirement of explanatory Announcement No.1 on Information Disclosure for Companies Offering Their Securities to the Public Non-recurring Profit or Loss (CSRC announcement [2008] No. 43), non-recurring profit or loss arises in various trading and issues that have no direct relation with the normal operations of a company, or that are related with normal operations but affect the users of the statement to make reasonable judgment of the company's operating performance and profitability due to the special and occasional nature of such trading and issues.

Among the government subsidies, the ones, closely related with the normal operation and gained constantly at a fixed amount or quantity according to certain standard based on state policies, should not be defined as non-recurring profit or loss and are listed as below:

	For the six months ended 30 June 2023	Reason
Value-added tax levied immediately returned, refund of individual income tax handling fee	86,788,288	Closely related to the normal business of the Company
Carbon emissions trading incomes	60,705,107	Closely related to the normal business of the Company

Note 2: Other non-operating income other than the items mentioned above was mainly income from penalties for breach of contract, the non-operating expenses were mainly donations contributed by the Company and its subsidiaries.

Note 3: Other items satisfy the definition of non-recurring profit or loss are expenses of entrusted management service purchased and income of entrusted operation services rendered.

3 INCOME STATEMENT

(Amounts expressed in RMB, except for share data)

	For the six months ended 30 June			
	2023	2022	2023	2022
	Consolidated	Consolidated	Company	Company
Operating revenue	126,032,267,458	116,869,061,918	14,204,037,661	14,140,496,703
Less: Operating cost	110,864,061,248	114,611,659,714	13,313,664,784	14,934,034,462
Taxes and surcharges	734,310,076	646,671,404	132,359,273	102,779,427
Selling expenses	108,700,184	93,946,102	11,324,604	12,145,402
General and administrative expenses	2,688,975,681	2,403,025,985	763,106,091	710,888,613
Research and development expenses	512,846,888	279,154,860	32,655,109	83,873,521
Financial expenses	4,397,362,519	4,864,690,554	984,998,797	1,103,155,538
Including: Interest expenses	4,549,521,356	5,106,270,240	1,131,210,162	1,244,790,727
Interest income	210,300,770	159,634,852	155,874,264	177,520,193
Add: Other income	772,686,275	919,275,125	200,977,080	243,114,033
Investment income	728,705,648	670,821,863	3,482,423,218	4,643,416,857
Including: investment income from				
associates and joint ventures	727,046,619	668,586,106	718,425,681	772,198,941
Credit losses	(62,108,488)	(64,820,839)	–	(504,208)
Impairment losses	17,144	260,060	(460,054)	(1,114,502)
Gain on disposal of non-current assets	86,286,390	106,533,149	19,640	31,020
Operating profit/(loss)	8,251,597,831	(4,398,017,343)	2,648,888,887	2,078,562,940
Add: Non-operating income	135,009,469	249,428,502	30,278,757	11,809,377
Less: Non-operating expenses	41,403,260	27,372,372	8,982,729	2,055,202
Profit/(loss) before income tax expense	8,345,204,040	(4,175,961,213)	2,670,184,915	2,088,317,115
Less: Income tax expense	1,727,312,603	(272,610,023)	–	–
Net profit/(loss)	6,617,891,437	(3,903,351,190)	2,670,184,915	2,088,317,115

	For the six months ended 30 June			
	2023	2022	2023	2022
	Consolidated	Consolidated	Company	Company
(1) Classification according to the continuity of operations				
– Net profit/(loss) from continuing operations	<u>6,617,891,437</u>	<u>(3,903,351,190)</u>	<u>2,670,184,915</u>	<u>2,088,317,115</u>
(2) Classification according to ownership				
Attributable to:				
– Equity holders of the Company	<u>6,308,284,637</u>	<u>(3,008,687,276)</u>	<u>2,670,184,915</u>	<u>2,088,317,115</u>
– Non-controlling interests	<u>309,606,800</u>	<u>(894,663,914)</u>	<u>–</u>	<u>–</u>
Other comprehensive income/(loss), net of tax	<u>(45,447,652)</u>	<u>(51,146,713)</u>	<u>5,163,851</u>	<u>6,679,176</u>
Other comprehensive income, net of tax, attributable to equity holders of the Company	<u>373,868,403</u>	<u>162,637,547</u>	<u>5,163,851</u>	<u>6,679,176</u>
(1) Items that will not be reclassified to profit or loss:	<u>(9,124,877)</u>	<u>(21,427,466)</u>	<u>(9,124,877)</u>	<u>(21,938,666)</u>
Including:				
Share of other comprehensive loss of investees accounted for under the equity method	<u>(13,437,494)</u>	<u>(21,938,666)</u>	<u>(13,437,494)</u>	<u>(21,938,666)</u>
Fair value changes of other equity instrument investments	<u>4,312,617</u>	<u>511,200</u>	<u>4,312,617</u>	<u>–</u>

	For the six months ended 30 June			
	2023	2022	2023	2022
	Consolidated	Consolidated	Company	Company
(2) Items that may be reclassified subsequently to profit or loss:	382,993,280	184,065,013	14,288,728	28,617,842
Including:				
Share of other comprehensive income of investees accounted for under the equity method	14,288,728	28,617,842	14,288,728	28,617,842
Effective portion of cash flow hedges	224,664,992	70,541,949	-	-
Translation differences of the financial statements of foreign operations	144,039,560	84,905,222	-	-
Other comprehensive loss attributable to non-controlling interests, net of tax	(419,316,055)	(213,784,260)		
Total comprehensive income/(loss)	<u>6,572,443,785</u>	<u>(3,954,497,903)</u>	<u>2,675,348,766</u>	<u>2,094,996,291</u>
Attributable to:				
– Equity holders of the Company	6,682,153,040	(2,846,049,729)		
– Non-controlling interests	<u>(109,709,255)</u>	<u>(1,108,448,174)</u>		
Earnings/(losses) per share				
Basic earnings/(losses) per share	<u>0.31</u>	<u>(0.26)</u>		
Diluted earnings/(losses) per share	<u>0.31</u>	<u>(0.26)</u>		

FINANCIAL STATEMENTS RECONCILIATION BETWEEN PRC GAAP AND IFRSs

(Amounts expressed in thousands of RMB)

The financial statements, which have been prepared by the Group in conformity with PRC GAAP, differ in certain respects from those of IFRSs. The major impact of adjustments for IFRSs, on the consolidated net profit and equity attributable to equity holders of the Company, is summarised as follows:

	Consolidated net profit/ (loss) attributable to equity holders of the Company	
	For the six months ended 30 June	
	2023	2022
Consolidated net profit/(loss) attributable to equity holders of the Company under PRC GAAP	6,308,285	(3,008,687)
Impact of IFRSs adjustments:		
Differences in accounting treatment on business combinations under common control and depreciation, amortisation, disposal and impairment of assets acquired in business combinations under common control (A)	(356,935)	(360,300)
Difference on depreciation related to borrowing costs capitalised in previous years (B)	(9,211)	(12,862)
Difference on reserve funds (C)	431,202	–
Others	24,952	14,226
Applicable deferred income tax impact of the GAAP differences above (D)	101,240	87,031
Profit/(loss) attributable to non-controlling interests on the adjustments above	(9,870)	60,389
Consolidated net profit/(loss) attributable to equity holders of the Company under IFRSs	6,489,663	(3,220,203)

(A) DIFFERENCES IN THE ACCOUNTING TREATMENT ON BUSINESS COMBINATIONS UNDER COMMON CONTROL AND DEPRECIATION, AMORTISATION, DISPOSAL AND IMPAIRMENT UNDER COMMON CONTROL

Huaneng Group is the parent company of HIPDC, which in turn is also the ultimate parent of the Company. The Company has carried out a series of acquisitions from Huaneng Group and HIPDC in recent years. As the acquired power companies and plants and the Company were under common control of Huaneng Group before and after the acquisitions, such acquisitions were regarded as business combinations under common control.

In accordance with PRC GAAP, for business combinations under common control, the assets and liabilities acquired in business combinations are measured at the carrying amounts of the acquirees in the consolidated financial statements of the ultimate controlling party on the acquisition date. The difference between the carrying amounts of the net assets acquired and the consideration paid is adjusted to the equity account of the acquirer. The operating results for all periods presented are retrospectively restated as if the current structure and operations resulting from the acquisition had been in existence since the beginning of the earliest year presented, with financial data of previously separate entities consolidated. The cash consideration paid by the Company is treated as an equity transaction in the year of acquisition. The subsequent adjustment of contingent consideration after the acquisition date is also accounted for as an equity transaction.

For business combinations occurred prior to 1 January 2007, in accordance with the previous PRC GAAP, when equity interests acquired were less than 100%, the assets and liabilities of the acquirees were measured at their carrying amounts. The excess of the consideration over the proportionate share of the carrying amounts of the net assets acquired was recorded as an equity investment difference and amortised on a straight-line basis for not more than 10 years. When acquiring the entire equity, the entire assets and liabilities are accounted for in a manner similar to purchase accounting. Goodwill arising from such transactions was amortised over the estimated useful lives on a straight-line basis. On 1 January 2007, in accordance with PRC GAAP, the unamortised equity investment differences and goodwill arising from business combinations under common control were written off against undistributed profits.

Under IFRSs, the Company and its subsidiaries have adopted the purchase method to account for the acquisitions above. The assets and liabilities acquired in acquisitions were recorded at fair value by the acquirer. The excess of the acquisition cost over the proportionate share of fair value of net identifiable assets acquired was recorded as goodwill. Goodwill is not amortised but is tested annually for impairment and carried at cost less accumulated impairment losses. The operating results of the acquirees are consolidated in the operating results of the Company and its subsidiaries from the acquisition dates onwards. The contingent consideration not classified as equity is measured at fair value at each reporting date with the changes in fair value recognised in profit or loss, if such changes are not measurement period adjustments.

As mentioned above, the differences in the accounting treatment under PRC GAAP and IFRSs on business combinations under common control affect both equity and profit. Meanwhile, due to different measurement bases of the assets acquired, depreciation and amortisation in the period subsequent to the acquisition will be affected which will also affect the equity and profit or loss upon subsequent disposals and impairment of such investments. Such differences will be gradually eliminated following subsequent depreciation, amortisation and disposal of the related assets.

(B) EFFECT OF DEPRECIATION ON THE CAPITALISATION OF BORROWING COSTS IN PREVIOUS YEARS

In previous years, under the previous PRC GAAP, the scope of capitalisation of borrowing costs was limited to specific borrowings, and thus, borrowing costs arising from general borrowings were not capitalised. In accordance with IFRSs, the Company and its subsidiaries capitalised borrowing costs on general borrowings used for the purpose of obtaining qualifying assets in addition to the capitalisation of borrowing costs on specific borrowings. From 1 January 2007 onwards, the Company and its subsidiaries adopted PRC GAAP No. 17 prospectively. The current adjustments represent the related depreciation on capitalised borrowing costs included in the cost of the related assets under IFRSs in previous years.

(C) EFFECT OF RESERVE FUNDS

Reserve funds represent safety funds. In accordance with PRC GAAP, appropriation of safety funds is recognized in profit or loss and to reserve funds. In accordance with IFRSs, unutilized safety funds are treated as appropriation from retained earnings to reserve funds and the relevant expenses are recognized in profit or loss only when it is incurred.

(D) DEFERRED INCOME TAX IMPACT ON GAAP DIFFERENCES

This represents related deferred income tax impact on the GAAP differences above where applicable.