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SINOSING SERVICES PTE. LTD.

(a company incorporated under the laws of Singapore)

Unconditionally and Irrevocably Guaranteed by



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)

U.S.\$300,000,000 2.250 per cent. Guaranteed Bonds due 2025

Stock Code: 40155

U.S.\$300,000,000 2.625 per cent. Guaranteed Bonds due 2030

Stock Code: 40156

Issue Price for the 2025 Bonds: 99.653 per cent.

Issue Price for the 2030 Bonds: 99.277 per cent.

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The information contained in appendix to this announcement has been published by Huaneng Power International, Inc. using equity stock code (stock code: 902) on 26 July 2022 and is now republished using debt stock codes, i.e. stock code: 40155 and stock code: 40156, respectively, for the debt holders' information.

By Order of the Board
Sinosing Services Pte. Ltd.
Jiang Hanbin
Director

26 July 2022

As at the date of this announcement, the directors of Sinosing Services Pte. Ltd. are Jiang Hanbin and Chia Wee Chiang Joseph.

As at the date of this announcement, the directors of Huaneng Power International, Inc. are

Zhao Keyu (*Executive Director*)

Zhao Ping (*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*)

APPENDIX

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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)

2022 Interim Results Announcement

Consolidated operating revenue:	RMB116.87 billion
Net loss attributable to equity holders of the Company:	RMB3.22 billion
Losses per share:	RMB0.27

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 2022 and a comparison with the operating results for the same period of last year. For the six months ended 30 June 2022, the Company and its subsidiaries recorded consolidated operating revenue of RMB116.87 billion, representing an increase of 22.68% compared to the same period of last year. The net loss attributable to equity holders of the Company was RMB3.22 billion, representing a decrease of 176.91% compared to the same period of last year. The losses per share was RMB0.27. The net asset (excluding equity interests attributable to minority shareholders and other equity instruments) per share was RMB3.89.

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, in the face of the complex and severe market situation, the Company closely focused on the annual goals and tasks and proactively responded to and overcame a variety of challenges, such as the sharp rise in fuel prices, maintained general stability in safety production and pushed forward transformation and development in an orderly manner, actively fulfilling the responsibility of providing sufficient, reliable and environmentally friendly electric energy for 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 196.544 billion kWh, representing a decrease of 5.61% over the same period last year. The average utilization hours of the Company's power plants within China were 1,760 hours, representing a decrease of 220 hours over the same period last year. The Company's market-based power transaction ratio was 87.81%, representing an increase of 26.76 percentage points over the same period last year.

The decrease in the Company's power generation was mainly attributable to: in the second quarter, the demand for electricity in the areas where the Company's power plants are located dropped significantly and the Company's coal-fired power plants were greatly affected; the water supply of hydropower was relatively better, the installed capacity of wind power and photovoltaics continued to grow, and the power generation of clean energy increased year-on-year, occupying the growth space of thermal power; the fuel cost of thermal power units continued to operate at a high level, and the thermal power generation of the Company decreased year-on-year; in order to ensure the power supply during the peak summer period, the Company arranged the coal-fired power units to carry out maintenance work during the trough period in advance.

Meanwhile, the Company adhered to the overall balancing of volume and price, and continuously strengthened the coordination between the wholesale power market and the retail market, as well as the coordination of medium and long-term transactions and spot transactions, thereby effectively consolidating and improving the electricity price level comprehensively. In the first half of the year, the Company's average on-grid electricity settlement price for its power plants within China was RMB505.69 per MWh, representing an increase of 20.70% over the same period last year.

2. Cost Control

In the first half of the year, the coal price was at a high level due to various factors including continuous tight supply of domestic and foreign coal resources. The Company scientifically researched and judged the market trend, actively solicited the support of national policies, vigorously carried out the signing and performance of medium and long-term thermal coal contracts and the supplementary signing of emergency guarantee contracts for imported coal, and continuously optimized the supply structure of domestic and foreign trade. With long-term agreement realization as the mainstay and spot replenishment as the supplement, the Company increased the inventory level in an orderly manner, and gave play to the role of inventory as a "reservoir" for control risks. The Company strengthened the internal coordination within the coal power industry, stabilized the basic supply under long-term agreements, and endeavored to control coal purchase prices to ensure safe and stable supply. However, affected by the overall market situation, the Company's fuel purchase price rose sharply year-on-year, especially the coal purchase price of power plants in the seaborne coal area where the Company's installed capacity accounted for a large proportion. In the first half of the year, the fuel cost per unit of power sold by the Company's domestic power plants increased by 50.49% 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 286.04g/kWh and the house consumption rate of plants was 4.24% with energy consumption maintaining a leading position 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 wastewater 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. In the first half of the year, the Company added 3,503.72 MW of controlled generation capacity, including 350 MW of coal power controlled generation capacity, 1,945.9 MW of wind power controlled generation capacity, 1,136.42 MW of solar energy controlled generation capacity, 40 MW of biomass controlled generation capacity, 1.4 MW of hydropower controlled generation capacity and 30 MW arising from acquisition of Hebei Nangong agricultural photovoltaic project. As of 30 June 2022, the Company's controlled generation capacity was 122,199 MW, and low carbon clean energy (wind power, solar energy, hydropower, combined cycle, biomass power) accounted for 24.33% of the installed capacity.

5. Overseas Businesses

In the first half of the year, the accumulated power generation of Tuas Power Ltd. (“Tuas Power”), a wholly-owned subsidiary of the Company in Singapore, accounted for a market share of 23.2%, representing an increase of 2.7 percentage points compared to the same period last year. The pre-tax profit of Singapore business was RMB741 million, representing an increase in pre-tax profit of RMB796 million over the same period last year. In the first half of the year, Singapore’s economy and electricity demand grew faster, and the market electricity price was relatively high. Tuas Power maintained the safe and stable operation of its generator units, and actively expanded 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 RMB255 million, representing a decrease of RMB152 million compared to the same period last year.

PROSPECT FOR THE SECOND HALF OF THE YEAR

At present, China’s macroeconomic operation continues to stabilize and recover, and positive factors are increasing. In the second half of the year, a package of policy measures to continuously deepen and stabilize the economy will be implemented and effective, driving the gradual return of economic growth to a reasonable range. Adhere to the policy of seeking progress while maintaining stability, the Company will seize opportunities, overcome difficulties and create benefits, and further improve production safety, business management, green development, technological innovation, deepening reform, corporate governance, and other areas, striving to complete the annual work goals and tasks.

In terms of power market, in the second half of the year, upholding the principle of maximization of the overall interests, the Company will closely monitor the growth of power demand in various regions, and strive to generate more and additional profitable electricity by taking advantage of the favorable opportunities during the peak in summer and winter. The Company will strengthen industry synergy, actively respond to market changes, take advantage of the policy of the increase in tariff, and maintain the electricity price level. The Company will fully develop the electricity sales market, improve the operation level of the energy sales company, and fulfil contract for carbon market transactions in lower cost.

In terms of the coal market, in the second half of the year, as the state will further promote the increase in production and supply and implement price supervision policies, domestic coal supply will continue to remain high. The full coverage of medium and long-term contracts for thermal coal will play a supportive role in controlling fuel costs for coal power companies. It is expected that the coal market will maintain stable operation in the second half of the year. Affected by the tight global energy supply, the complementary role of imported coal will be weakened. In the face of the complicated coal market situation, the Company will seize the policy opportunity of full coverage of long-term contracts and the signing of emergency guarantee contracts for imported coal, and strive to achieve 100% contract signing, 100% contract performance, and 100% implementation of price policy under the medium and long-term contract. The Company will endeavor to improve the fulfillment rate of long-term contracts, and give full play to the ballast role of long-term contracts in securing supply and stabilizing prices. The Company will continue to adjust the proportion of domestic and foreign trade structures, dynamically optimize the procurement structure of imported coal, and continuously improve the capability of price control. The Company will use the advantages of the internal industrial chain and the coal production capacity of Huaneng Group to stabilize the market and control coal prices. The Company will increase coal blending efforts without compromising safety and environmental protection, and make endeavors to reduce fuel costs.

In terms of the capital market, judging from the second quarter regular meeting of the Monetary Policy Committee of the PBOC, in the second half of the year, the state will continue to increase efforts in implementation of a prudent monetary policy. It will give full play to the dual functions of monetary policy tools in terms of volume and structure to provide stronger support for the real economy, and give full play to the efficiency and guiding role of the reform of the interest rate quoted in the loan market to promote the reduction of the comprehensive financing cost of enterprises. With respect to debts denominated in foreign currencies, given the Company has only a small amount of such debts, the fluctuation in the corresponding interest rates has a less impact on the Company. The Company will enhance capital operation, innovate financing instrument and expand financing channels. The Company will also proactively take advantage of green finance policy and speed up capital turnover by means of the issuance of ultra-short financing bonds, and etc.. Meanwhile, the Company will pay close attention to changes in domestic and overseas capital markets, adjust financing strategies in a timely manner on the premise of ensuring capital needs, seize the market window period and make good use of policies such as special re-lending tools for supporting clean and efficient use of coal and carbon emission reduction support tools, to make efforts to control financing costs, mitigate capital risks, and realise cost reduction and efficiency improvement.

In the second half of the year, the Company will continue to adhere to the concept of safe development, and continuously deepen risk examination and management in key areas. It will persevere in improving quality and efficiency, focus on maintaining coal quantity and controlling price, strengthen electric heating marketing management, continuously optimise capital management and control, and further improve the benefits of overseas projects. It will adhere to green and low-carbon development, promote the implementation of the carbon peaking action plan, intensify the development and construction of new energy, accelerate the optimization of thermal power structure, and expand comprehensive energy services. It will adhere to independent technological innovation, deepen the research on key core technologies, increase the achievement conversion and application promotion, accelerate digital transformation, and continuously improve the system and mechanism of scientific and technological innovation. It will persistently deepen enterprise reform and improve management, deepen the governance of the listed company, strengthen internal management of enterprises, and effectively improve management efficiency. It will persistently deepen the construction of corporate culture, solidly perform social responsibilities, and establish a good corporate image.

MANAGEMENT'S DISCUSSION AND ANALYSIS

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

General

The principal activities of the Company are construction, operation and management of large power plants within China. As of 30 June 2022, the Company had a controlled installed capacity of 122,199 MW, of which approximately 24.33% 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. The Company is among the largest listed power companies in China.

In accordance with the provisions on trial operation sales revenue in the amendment to IAS No. 16 “Property, Plant and Equipment: Proceeds Before Intended Use” issued by the International Accounting Standards Board in May 2020, the Company has made retrospective adjustments to the data for the same period of last year.

For the six months ended 30 June 2022, the operating revenue of the Company amounted to RMB116,869 million, representing an 22.68% increase over the same period of last year. The net loss attributable to equity holders of the Company was RMB3.22 billion, representing a decrease of 176.91% as compared with the same period of last year. The losses per share was RMB0.27.

A. Operating Results

1. *Operating results for the first half of 2022*

For the second quarter of 2022, the Company's total power generation by power plants within China on a consolidated basis amounted to 88.827 billion kWh, representing a decrease of 13.81% from the same period last year. For the first half of 2022, the Company's total power generation by power plants within China on a consolidated basis amounted to 196.544 billion kWh, representing a decrease of 5.61% from the same period last year. For the first half of 2022, the Company's average on-grid electricity

settlement price for its power plants within China amounted to RMB505.69 per MWh, representing an increase of 20.70% over the same period last year. For the first half of 2022, 87.81% of the total volume of electricity sold by the Company were completed through market-based transactions, representing an increase of 26.76 percentage points over the same period last year.

The decrease in the Company's power generation was mainly attributable to:

1. In the second quarter, the Company witnessed a huge decline in electricity demand in regions such as Shanghai, Guangdong, Jilin, Hainan, Liaoning, Jiangsu, Fujian, Hebei, Hunan, Zhejiang, Shandong and Heilongjiang, which resulted in a significant adverse impact on the operating performance of the Company's coal power plants in these regions.
2. In the first half of 2022, there was relatively sufficient water supply for hydropower plants and the installed capacity of wind power and photovoltaic power plants continued to grow, resulting in the increase in clean energy power generation, which in turn deterred the growth of the Company's thermal power generation. Meanwhile, the fuel cost of thermal power units continued to run at a high level, resulting in a year-on-year reduction of the Company's thermal power generation.
3. To ensure power supply during the peak summer season, the Company scheduled maintenance work for thermal power generation units in-advance and during low-demand periods.

The volume of electricity sold by the Company's power plants in China during the six months ended 30 June 2022 is listed below (in billion kWh):

Region	Electricity Sold			
	April to June 2022	Change	January to June 2022	Change
Coal-fired	73.973	-17.70%	167.338	-8.04%
Combined Cycle	5.192	-20.91%	11.836	-11.66%

Region	Electricity Sold			
	April to June 2022	Change	January to June 2022	Change
Wind-power	7.500	43.53%	13.761	30.61%
PV	1.648	77.43%	2.735	69.63%
Hydro-power	0.322	6.59%	0.510	17.32%
Biomass	0.191	17.30%	0.365	29.79%
Heilongjiang Province	2.783	-16.06%	5.684	-8.67%
Coal-fired	2.199	-24.83%	4.630	-16.01%
Wind-power	0.487	37.94%	0.870	35.34%
PV	0.084	127.74%	0.161	134.57%
Biomass	0.013	–	0.023	–
Jilin Province	2.488	1.49%	5.153	9.22%
Coal-fired	1.521	-21.75%	3.498	-6.37%
Wind-power	0.798	137.92%	1.342	101.13%
Hydro-power	0.031	87.94%	0.031	87.73%
PV	0.068	-10.24%	0.137	-1.43%
Biomass	0.069	-12.66%	0.145	-9.01%
Liaoning Province	3.142	-34.21%	7.239	-19.34%
Coal-fired	2.707	222.85%	6.416	-25.78%
Wind-power	0.373	211.50%	0.718	200.30%
Hydro-power	0.008	-32.45%	0.009	-27.89%
PV	0.053	21.53%	0.096	20.60%
Inner Mongolia	0.199	5.05%	0.393	14.27%
Wind-power	0.199	5.05%	0.393	14.27%
Hebei Province	2.609	-0.08%	5.717	6.00%
Coal-fired	2.296	-7.01%	5.142	0.75%
Wind-power	0.177	37.11%	0.346	30.06%
PV	0.136	961.47%	0.228	897.24%
Gansu Province	3.537	10.21%	7.299	-4.05%
Coal-fired	2.804	8.48%	6.048	-4.59%
Wind-power	0.733	17.37%	1.251	-1.33%
Ningxia	0.008	12.45%	0.012	10.62%
PV	0.008	12.45%	0.012	10.62%
Beijing	1.528	-11.80%	3.928	-3.96%

Region	Electricity Sold			
	April to June 2022	Change	January to June 2022	Change
Coal-fired	–	-100.00%	0.588	-9.18%
Combined Cycle	1.528	-11.80%	3.339	-2.98%
Tianjin	1.082	-12.85%	2.771	-3.81%
Coal-fired	0.969	-9.71%	2.182	-2.29%
Combined Cycle	0.108	-33.92%	0.581	-9.21%
PV	0.005	2.03%	0.008	3.56%
Shanxi Province	1.360	-18.42%	4.154	-8.55%
Coal-fired	0.889	-33.53%	2.120	-23.71%
Combined Cycle	0.010	–	1.208	2.84%
Wind-power	0.168	16.86%	0.324	27.63%
PV	0.292	57.46%	0.502	49.96%
Shandong Province	18.560	0.32%	39.613	4.54%
Coal-fired	17.511	-2.08%	37.813	2.91%
Wind-power	0.630	63.04%	1.126	48.92%
PV	0.309	108.88%	0.478	76.01%
Biomass	0.109	30.32%	0.196	61.47%
Henan Province	5.63	3.82%	11.181	4.17%
Coal-fired	4.410	0.40%	9.085	4.11%
Combined Cycle	0.031	-55.17%	0.059	-34.84%
Wind-power	1.181	23.89%	2.025	6.34%
PV	0.008	5.71%	0.012	-4.48%
Jiangsu Province	8.834	-13.63%	18.313	-10.50%
Coal-fired	6.105	-18.05%	12.936	-15.67%
Combined Cycle	1.416	-18.59%	2.840	-3.80%
Wind-power	1.218	26.34%	2.382	16.86%
PV	0.094	27.75%	0.155	16.85%
Shanghai	2.693	-39.51%	8.295	-15.52%
Coal-fired	2.554	-36.64%	7.911	-13.92%
Combined Cycle	0.129	-68.79%	0.367	-40.14%
PV	0.010	23.00%	0.017	12.22%
Chongqing	2.288	-19.43%	5.966	-8.28%
Coal-fired	1.714	-22.25%	4.800	-4.65%

Region	Electricity Sold			
	April to June 2022	Change	January to June 2022	Change
Combined Cycle	0.473	-17.32%	0.987	-26.54%
Wind-power	0.101	59.62%	0.179	40.97%
Zhejiang Province	7.283	-12.61%	14.003	-5.70%
Coal-fired	6.644	-16.24%	13.107	-8.16%
Combined Cycle	0.332	-11.37%	0.368	-31.95%
Wind-power	0.244	2,129.14%	0.425	3,782.11%
PV	0.062	286.58%	0.103	289.05%
Hubei Province	3.106	-15.96%	7.719	-7.74%
Coal-fired	2.719	-21.12%	7.065	-10.51%
Wind-power	0.198	30.47%	0.354	6.93%
Hydro-power	0.097	5.79%	0.155	18.42%
PV	0.092	1,527.99%	0.145	1,290.68%
Hunan Province	1.725	-25.03%	4.347	-13.17%
Coal-fired	1.418	-29.54%	3.749	-16.47%
Wind-power	0.189	12.47%	0.366	6.90%
Hydro-power	0.096	-11.65%	0.198	27.55%
PV	0.022	86.87%	0.034	63.76%
Jiangxi Province	5.580	10.87%	12.791	25.56%
Coal-fired	5.142	9.58%	12.059	25.96%
Wind-power	0.278	14.45%	0.486	12.23%
PV	0.160	64.09%	0.245	36.46%
Anhui Province	1.621	30.61%	3.509	26.12%
Coal-fired	1.267	23.12%	2.840	24.39%
Wind-power	0.298	71.44%	0.579	34.92%
Hydro-power	0.030	-21.90%	0.049	-29.63%
PV	0.026	–	0.040	–
Fujian Province	2.586	-44.33%	6.400	-28.04%
Coal-fired	2.582	-44.39%	6.393	-28.08%
PV	0.004	38.66%	0.008	29.10%
Guangdong Province	6.377	-30.67%	12.697	-22.44%
Coal-fired	5.270	-33.83%	10.801	-24.07%

Region	Electricity Sold			
	April to June 2022	Change	January to June 2022	Change
Combined Cycle	1.097	-10.65%	1.880	-11.88%
PV	0.010	61.96%	0.015	30.56%
Guangxi	0.152	-23.36%	0.348	-9.00%
Combined Cycle	0.067	-37.91%	0.168	-20.73%
Wind-power	0.085	-6.14%	0.180	5.62%
Yunnan Province	1.071	-52.98%	3.841	-27.90%
Coal-fired	0.976	-54.67%	3.567	-29.46%
Wind-power	0.089	-28.80%	0.266	-1.19%
Hydro-power	0.007	436.78%	0.008	422.25%
Guizhou Province	0.206	48.85%	0.386	82.09%
Wind-power	0.036	-25.23%	0.100	-2.40%
PV	0.171	87.77%	0.286	160.78%
Hainan Province	2.380	-29.10%	4.788	-15.34%
Coal-fired	2.276	-26.86%	4.590	-12.75%
Combined Cycle	0.000	-99.89%	0.037	-85.49%
Wind-power	0.020	16.68%	0.048	24.01%
Hydro-power	0.052	59.58%	0.061	22.87%
PV	0.032	3.20%	0.053	-2.98%
Total	88.827	-13.81%	196.544	-5.61%

Note 1: In accordance with the relevant provisions of the Notice of the Ministry of Finance of the People's Republic of China on the Interpretation of Accounting Standards for Business Enterprises (No. 15), the on-grid electricity generated by the commissioning units was included in the electricity sold statistics, and the on-grid electricity generated by the commissioning units during the same period last year was restated and adjusted.

For the second quarter of 2022, the accumulated power generation of Tuas Power Ltd., the Company's wholly owned subsidiary in Singapore, accounted for a market share of 23.7%, representing an increase of 3.3 percentage points from the same period last year. For the first half of 2022, the total power generation of Tuas Power Ltd. accounted for a market share of 23.2%, representing an increase of 2.7 percentage points from the same period 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 2022, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB116.869 billion, representing an increase of 22.68% from RMB95.261 billion for the same period of 2021. The operating revenue from domestic operations of the Company increased by RMB11.949 billion over the same period of last year, mainly due to the increase in average tariff in China. The operating revenue from the operations of the Company in Singapore increased by RMB8.887 billion over the same period of last year, which was mainly attributable to the simultaneous increase in both the tariff and electricity sold. The operating revenue from the operations of the Company in Pakistan increased by RMB0.772 billion.

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 2022, the tax and levies on operations of the Company and its subsidiaries were RMB0.647 billion, representing a decrease of RMB294 million from RMB0.941 billion for the same period of last year.

2.2 *Operating expenses*

For the first half of 2022, the total operating expenses of the Company and its subsidiaries were RMB116.568 billion, representing an increase of 37.12% from the same period last year. The operating expenses in domestic operations of the Company increased by RMB22.350 billion, or 28.80%, from the same period last year due to the increase in fuel costs. The operating expenses from the operations in Singapore increased by RMB8.144 billion. The increase was mainly due to the increase in tariff in Singapore, which in turn increased the cost of electricity procurement. The operating expenses from the operations in Pakistan increased by RMB1.061 billion primarily due to the increase in coal price.

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 2022, fuel costs of the Company and its subsidiaries increased by 40.70% to RMB80.736 billion due to the sharp increase in the purchase price of fuel. Fuel costs from domestic operations of the Company and its subsidiaries increased by RMB21.884 billion. Fuel costs in Singapore increased by RMB1.470 billion from the same period last year.

2.2.2 Depreciation

For the first half of 2022, depreciation expenses of the Company and its subsidiaries amounted to RMB11.972 billion, representing an increase of RMB0.877 billion. The depreciation expenses of the Company's domestic operations increased by RMB854 million compared to the same period last year. The depreciation expenses of the Company's operations in Singapore decreased by RMB23 million.

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 2022, labor costs of the Company and its subsidiaries amounted to RMB6.734 billion, representing a decrease of RMB0.153 billion from RMB6.887 billion for the same period last year.

2.2.4 Maintenance

The maintenance costs of the Company and its subsidiaries for the first half of 2022 remained relatively stable at RMB1.776 billion. The maintenance costs of the Company and its subsidiaries were RMB1.778 billion for the same period last year.

2.2.5 Other operating expenses (including electricity power purchase costs and service fees paid to HIPDC)

For the first half of 2022, other operating expenses of the Company and its subsidiaries were RMB15.350 billion, representing an increase of RMB7.478 billion from RMB7.872 billion for the same period of last year. The other operating expenses from the Company's domestic operations decreased by RMB0.226 billion. Other operating expenses of the operations in Singapore increased by RMB6.643 billion compared to the same period last year, mainly due to an increase of RMB6.601 billion in electricity procurement costs. Other operating expenses of the Company's operations in Pakistan increased by RMB1.061 billion compared to the same period last year, mainly due to an increase in fuel costs led by the increase in coal price.

2.3 *Financial expenses*

Financial expenses of the Company and its subsidiaries were RMB5.024 billion for the first half of 2022, representing an increase of RMB701 million from RMB4.323 billion for the same period last year. Financial expenses for the Company's domestic operation increased by RMB887 million, mainly due to the increase in interest-bearing debts. Financial expenses for the Company's operations in Singapore decreased by RMB50 million. Financial expenses for the Company's operations in Pakistan decreased by RMB136 million.

2.4 *Share of profits less losses of associates and joint ventures*

For the first half of 2022, the share of profits less losses of associates and joint ventures was RMB0.674 billion, representing a decrease of RMB253 million from RMB0.927 billion for the same period last year, mainly due to the decrease 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 2022, the Company and its subsidiaries recognized income tax expenses of RMB360 million in the negative, representing a decrease of RMB1.417 billion from RMB1.057 billion for the same period last year. The income tax expenses for the Company's domestic operation decreased by RMB1.545 billion due to the loss incurred for such operation.

2.6 Net profit attributable to equity holders of the Company

For the first half of 2022, the net loss attributable to equity holders of the Company was RMB3.22 billion, representing a decrease of 176.91% from RMB4.187 billion of the same period last year. The loss attributable to equity holders of the Company from its domestic operations was RMB3.933 billion, representing a decrease of 196.21%, mainly due to the sharp increase in the purchase price of coal. The net profit attributable to equity holders of the Company from its operations in Singapore was RMB613 million, representing an increase of RMB675 million as compared to a loss of RMB62 million 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 RMB100 million.

2.7 Comparison of financial positions

As of 30 June 2022, consolidated total assets of the Company and its subsidiaries amounted to RMB490.021 billion, representing a decrease of 2.21% from RMB501.104 billion as of 31 December 2021. As of 30 June 2022, consolidated total liabilities of the Company and its subsidiaries were RMB360.978 billion, representing a decrease of 1.70% from RMB367.213 billion as of 31 December 2021. Our asset-liability ratio as of 30 June 2022 was 73.67%.

2.8 Major financial position ratios

	<u>30 June 2022</u>	<u>31 December 2021</u> (Restated)
Ratio of liability to equity holders' equity	3.29	3.24
Current ratio	0.49	0.50
Quick ratio	0.41	0.41
	<u>First six months of 2022</u>	<u>First six months of 2021</u>
Multiples of interest earned	0.10	2.12

Formula of the financial ratios:

Ratio of liabilities to shareholders' 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 shareholder's equity as of 30 June 2022 increased as compared to 31 December 2021 due to the decrease in shareholders' equity as a result of the loss from operations. The current ratio and quick ratio remained relatively stable. The multiples of interest earned decreased due to the incurrence of pre-tax loss for the first six months this year, as compared to a gain of pre-tax profits for the same period last year.

As of 30 June 2022, the net current liabilities of the Company and its subsidiaries were RMB85.762 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		
	2022 <i>RMB billion</i>	2021 <i>RMB billion</i> (Restated)	Change %
Net cash provided by operating activities	20.088	19.269	4.25
Net cash used in investing activities	(15.019)	(17.220)	(12.78)
Net cash used in financing activities	(5.47)	(1.755)	211.61
Currency exchange impact	0.071	0.073	(2.74)
Net increase in cash and cash equivalents	(0.328)	0.368	(189.13)
Cash and cash equivalents as at the beginning of the period	15.555	13.258	17.33
Cash and cash equivalents as at the end of the period	15.226	13.626	11.74

For the first half of 2022, net cash provided by operating activities of the Company and its subsidiaries was RMB20.088 billion, representing a decrease of 4.25% from the same period last year, mainly attributable to the decrease of operating receivables and increase of the amount of funds occupied by inventory as compared with the same period of last year. Net cash used in investing activities was RMB15.019 billion for the first half of

2022, representing an increase of 12.78% from the same period last year, mainly due to decrease of large and medium-sized infrastructure projects during current period as compared with that of last period. Major financing activities conducted by the Company during the first half of 2022 were debt financing. For the first half of 2022, the Company's borrowed an additional RMB111.990 billion, issued super short-term bond of RMB10.300 billion and long-term bond of RMB6.9 billion, repaid RMB110.364 million of loans and RMB18 billion of super-short-term bond, interest payment of RMB6.237 billion.

As of 30 June 2022, the cash and cash equivalents of the Company and its subsidiaries included RMB in the amount of 13.239 billion, SGD equivalent to RMB1.246 billion, US Dollars equivalent to RMB0.500 billion, Pakistan Rupees equivalent to RMB0.203 billion and Japanese Yen equivalent to RMB0.038 billion.

2. Capital expenditure and cash resources

2.1 Capital expenditure on infrastructure construction and renovation projects

The actual capital expenditure of the Company in the first half of 2022 was RMB11.435 billion, which was mainly used for the construction of infrastructure and renovation, including RMB1.502 billion for Zhejiang Cangnan Offshore, RMB853 million for Zhuanghe Wind-power, RMB537 million for Dalian Chuanbo, RMB520 million for Jiangxi Clean Energy, RMB475 million for Shidongkou I, RMB330 million for Zaoyang New Energy, MB312 million for Yangpu Co-generation, RMB308 million for Yuhuan Power, RMB276 million for Diandong Yuwang Mining, RMB226 million for Jilin Renewable Energy, RMB217 million for Liaocheng Gaotang New Energy, MB217 million for Dalian Co-generation, RMB215 million for Da'an Clean Energy, RMB213 million for Qingdao Co-generation, RMB202 million for Diandong Power, RMB194 million for Dashiqiao New Energy, RMB184 million for Tongyu Clean Energy, RMB173 million for Ranghuluqu Clean Energy, RMB168 million for Caofeidian Clean Energy, RMB165 million for Napo Clean Energy, RMB157 million

for Chaoan New Energy. RMB151 million for Hanhao New Energy, RMB146 million for Wulian New Energy, RMB145 million for Lantian Co-generation, RMB134 million for Beijing Co-generation. Capital construction and renovation expenditures for other projects totaled RMB3.415 billion.

2.2 Cash resources and anticipated financing costs

The above capital expenditures 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 2022, the undrawn banking facilities available to the Company and its subsidiaries exceeded RMB300 billion, which were granted by commercial banks such as Bank of China, China Construction Bank and Industrial and Commercial Bank of China.

The Company completed the issuances of unsecured super short-term bonds in 6 installments on January 5, January 7, January 26, February 9, February 11 and March 17, in the principal amount of RMB2 billion, 2 billion, 300 million, 2 billion, 2 billion and 2 billion, with nominal annual interest rates of 2.10%, 2.08%, 2.32%, 2.00%, 2.00% and 2.00%, respectively. Each installment of the notes was denominated in RMB, issued at par value, and would successively mature in 58 days, 46 days, 180 days, 41 days, 32 days and 90 days from the value date.

The Company, through its subsidiary SinoSing Power, issued two tranches of secured corporate bonds of RMB300 million and RMB300 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 from the value date, respectively. The bonds are guaranteed by Huaneng Group.

The Company completed the issuances of mid-term notes in 5 installments on February 25, March 4, April 22, April 26 and June 23, in the principal amount of RMB1.5 billion, 3 billion, 1.5 billion, 500 million and 300 million, with nominal annual interest rates of 3.74%, 2.84%, 3.70%, 2.92% and 2.37%, respectively. Each installment of the notes was denominated in RMB, issued at par value, and would successively mature in ten years, three years, fifteen years, three years and three years from the value date.

As of 30 June 2022, short-term loans of the Company and its subsidiaries totaled RMB89.344 billion (end of 2021: RMB91.897 billion). Loans from banks carried interest rates ranging from 1.63% to 14.79% per annum (end of 2021: 2.00% to 11.35%).

As of 30 June 2022, short-term bonds payable by the Company and its subsidiaries were RMB506 million (end of 2021: RMB8.223 billion).

As of 30 June 2022, the Company and its subsidiaries' long-term loans (including long-term loans due within one year) totaled RMB158.810 billion (end of 2021: RMB154.072 billion), including RMB loans of RMB143.262 billion (end of 2021: RMB138.436 billion), USD loans of USD1.244 billion (end of 2021: USD1.376 billion), EUR loans of EUR5 million (end of 2021: EUR7 million), SGD loans of SGD1.466 billion (end of 2021: SGD1.456 billion), YEN loans of 2.101 billion yen (end of 2021: 2.151 billion yen). Among them, US dollar loans and SGD loans are floating rate loans, and other foreign currency loans are fixed rate loans. As of 30 June 2022, the annual interest rate for long-term bank borrowings was 0.75% to 5.46% (end of 2021: 0.75% to 4.98%).

The Company and its subsidiaries will closely monitor any change in the exchange rate and interest rate markets and carefully 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 its shareholders.

2.3 Other financing requirements

Pursuant to the memorandum and articles of the Company, given the net loss attributable to its shareholders for the year of 2021 and considering the need for future investments in accordance with the Company's plan for transformation and development and the increase of the Company's debt-asset ratio in 2021, the board of directors of the company has recommended no dividends be distributed for 2021, 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 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 ("SE Management"), and the Company holds 25% equity interests in each of the two successors. The Company acquired 200 million shares from Shenzhen Energy Corporation ("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, Shenzhen State-owned Assets Administration Commission and the Company. After the merger, the Company held 992 million shares of Shenzhen Energy, representing 25.02% of its equity interests. These investments brought a net profit attributable to the Company of RMB230 million for the first half year of 2022 under IFRS. These investments are expected to provide stable returns to the Company.

The Company held 60% direct 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 RMB142 million for the first half year of 2022 under IFRS. This investment is expected to provide stable returns to the Company.

D. Employee Benefits

As of 30 June 2022, the Company and its subsidiaries had 56,746 employees within and outside the PRC. During the six months ended 30 June 2022, there was no change to the Company’s compensation plan and training program.

E. Guarantee for Loans and Restricted Assets

As of 30 June 2022, (i) the Company provided guarantee for long-term bank loans of Tuas Power Ltd in the amount of RMB6.393 billion, (ii) Huaneng Heilongjiang Power Company Limited, a subsidiary of the Company, provided guarantees to its subsidiary Daqing Lvyuan Wind-Power Company Limited of RMB538 million, and (iii) Huaneng Shandong Power Company Limited, a subsidiary of the Company, provided guarantee for Huaneng Shandong Ruyi(HK) Energy Limited in the amount of RMB1.075 billion, a subsidiary of the Company, provided guarantee for Huaneng Shandong Ruyi (Pakistan) Energy (Private) Company Limited in the amount of RMB6.653 billion, a subsidiary of the Company, provided guarantee for Huaneng Shandong Ruyi (HK) investment Company Limited in the amount of RMB201 million.

As of 30 June 2022, the details of secured loans of the Company and its subsidiaries were as follows:

1. As of 30 June 2022, short-term loans of approximately RMB747 million (RMB829 million at the end of 2021) 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 2022, long-term loans of approximately RMB4.352 billion (RMB4.595 billion at the end of 2021) of the Company and its subsidiaries were secured by certain property, plant and equipment with net book value of RMB5.159 billion (RMB5.025 billion at the end of 2021).
3. As of 30 June 2022, long-term loans of approximately RMB4.420 billion (RMB4.516 billion at the end of 2021) were secured by the rights to receive payment for electricity generated of the Company and its subsidiaries.

As of 30 June 2022, long-term loans of RMB2.013 billion (RMB2.814 billion at the end of 2021) of the Company and its subsidiaries were secured by certain equity interests; the long-term loans of RMB50 million (RMB20 million at the end of 2021) were secured by the carbon emission trading rights.

As of 30 June 2022, the restricted bank deposits of the Company and its subsidiaries were RMB0.356 billion (RMB0.796 billion at the end of 2021).

As of 30 June 2022, book of bills receivable discounted or endorsed but not expired or derecognized amounted to RMB2.310 billion (RMB2.237 billion at the end of 2021).

As of 30 June, 2022, the Company had no material contingent liabilities.

As at 30 June 2022, certain land use right with net book value of RMB17 million (31 December 2021: RMB17 million) was in a state of seizure due to pre-litigation preservation.

F. Risk Factors

Risks Relating to Covid-19

China is currently faced with increasing challenges from foreign imported COVID-19 cases amid the resurgence of the pandemic around the world. China has reported several regional cluster infections and its prevention and control efforts continue to be tested by the complexity and severity of the pandemic.

The Company remains committed to the “dynamic COVID-zero” policy. The Company will promptly and actively respond to new COVID cases, comply with pandemic prevention and control requirements prescribed by governmental authorities, strictly implement normalized pandemic prevention and control measures, closely monitor and manage its pandemic prevention and control efforts, and maintain the normal operation of its business.

Risks Relating to the Electricity Sector and Market Risks

- (1) The growth in nation-wide electricity consumption noticeably slowed down in the first half of 2022 and the demand for electricity fell sharply in several regions in China as a result of the pandemic during the same period. The rate of increase of electricity consumption normalized in the second half of 2022 as China implemented a series of policies aimed at maintaining stable economic performance. Risks of regional and local COVID-19 outbreaks persist nonetheless, which could continue to challenge the growth of electricity consumption and result in uncertainties in the prospect of an increase in power generation.
- (2) New energy maintained a strong growth momentum in the first half of 2022 and is accounting for a growing proportion of the total installed capacity in China. Thermal power plants are faced with increased pressure to ensure sustainable supply during peak demand and in performing peak-shaving services. Certain regions in China are expected to be exposed to risks of temporary electricity shortages in the second half of the year, and thermal power companies are about to experiencing challenges in their operations as well as in meeting electricity demand due to high fuel prices and the price inversion related to imported coal.
- (3) The increase in electricity tariff, including on a reasonable basis, is regulated in several regional markets. The guaranteed volume of fixed-price purchase of electricity continues to decline in the new energy sector and the market is dominated by a downward pricing regime. The pricing mechanism for green power has yet to be developed and new energy power generating enterprises continue to be daunted by the difficulty in reaping the benefit of the “green premium.” In addition, the mid-term, long-term and spot electricity prices

tend to only reflect the value of the energy per se while leaving the values of backup and peak-shaving services out of the equation, rendering it difficult to obtain sufficient return on investments in generator sets.

The Company's operation is encumbered by the foregoing challenges. Meanwhile, from the policy-making perspective, China continues to introduce policies to enhance the reliability of coal supply and the stability of coal price and promote the development of power ancillary services, capacity compensation and price transmission mechanisms in order to ensure a balance of interests among market participants. As it continues to improve, the market mechanism of the power sector will provide sound foundation and conditions for the steady operation and sustainable development of the Company's business. The Company will actively pursue a green transformation, accelerate its adoption of clean energy, optimize and upgrade the composition of its installed capacity. The Company is also committed to strengthening its policy research effort, actively adapting to the development of the power sector as guided by the carbon peak and carbon neutrality goal, continuing to promote the standardization of market operation, adjusting pricing strategies in a timely manner, and making every endeavor to prevent and control risks relating to electricity price.

Risks Relating to the Coal Market

- (1) The first half of 2022 saw an increase in coal production in China and soaring price for domestically produced coal. On the other hand, imported coal was beset with price inversion. Uncertainties with respect to the increase in coal supply in China are expected for the second half of the year amid a tightening global energy supply and considering the potential impact of the pandemic and environmental and safety inspections that may be carried out.
- (2) The Chinese economy is expected to recover in the latter half of 2022 and generate an increase in electricity consumption. As the off-season of clean energy approaches, thermal power will continue to be relied upon to ensure that energy demands are met and coal consumption will likely increase as compared with the first half of the year.

- (3) Policies promoting the full coverage of medium and long-term contracts for coal for power generation and the associated pricing mechanisms have yet to be fully implemented at the moment. There are also difficulties with the signing of medium and long-term contracts for imported coal as emergency supply. Coal prices remain high and the dual challenges of ensuring sufficient fuel supply and controlling fuel price have surfaced.

The Company will closely monitor changes in China's policy landscape and the coal market, actively promote the signing of mid- and long-term contracts for power coal as well as for imported emergency supply coal, continuously improve the level of internal coal and electricity coordination, give full play to the supporting role of industrial coordination, endeavor to secure more long term contracts, strengthen the performance of long term contracts, improve the fulfilment of long term contracts, stabilize long term coal supply, effectively control coal price, and ensure the safe and stable supply of coal.

Risks Relating to the Carbon Market

After the launch of China's national emissions trading schemes, the Company has created a carbon trading management system and successfully completed the first transaction on the national carbon market. The Company leads the industry in terms of its overall energy utilization rate and its overall fulfilment cost for carbon trading in 2019-2020 remains at a healthy level compared with similar companies. While the allocation of emission allowances for 2021 and beyond has yet to be determined, the Company expects a gradual tightening of quotas which will be accompanied by the risks of increased cost for power generation. Trading by institutions and individuals, once permitted, may further result in an increase of fulfilment cost for carbon trades by electricity generating companies. In addition, the Singapore government has announced its plan to impose a higher carbon tax in 2024 and 2025. If the Company's Singapore subsidiary, Tuas Power, is unable to pass such carbon tax to electricity users through the operation of the market, its economic efficiency will be affected.

The Company will closely monitor the policy landscape relating to the carbon market in China and overseas, continue to strengthen its management of carbon trading activities and optimize its carbon trading strategies. At the same time, the

Company will pay close attention to the relaunch of the China Certified Emission Reductions scheme and to make full use of the offset mechanism under such scheme and strive to timely bring its carbon trading fulfilment cost to a relatively low level.

Environmental Risks

New generation units of the Company's coal-fired power plants are equipped with advanced technologies and powerful flue gas purification systems, while other generation units were retooled to achieve ultra-low emission as stipulated by the Chinese government. The Company's generation units are readily adaptable to changes in weather conditions, fuel quality, electric and thermal loads as well as other internal and external factors and are in compliance with standards prescribed by local environmental protection agencies and energy regulators. The Chinese government attaches great importance to the prevention and control of pollution, and has imposed strict requirements on power companies in this regard. Some of the Company's power plants located near the Yangtze River, Yellow River basins and around the Bohai Sea face environmental risks in terms of their wastewater treatment, ash yards and coal yards.

The Company actively follows up on the concerns of environmental protection authorities, cautiously select from advanced technical solutions that are applicable, and make efforts to upgrade its wastewater treatment systems, build closed coal yards, and improve the recycling and utilization of coal ash in order to ensure that risks to the environment are addressed and effectively resolved in a timely manner.

Risks Relating to the Capital Market

The second quarterly meeting of the PBOC's Monetary Policy Committee indicated that a prudent monetary policy would continue to be implemented in fulfilling the dual mandates of monetary policy tools to regulate the overall money supply and alter the market structure. Such policy will be brought into play to provide stronger support to the real economy, promote the efficiency and guiding effect of the reform of loan prime rate and lower the financing cost for enterprises. The Company's total debts denominated in foreign currencies are relatively not material in amount and fluctuations in interest rates applicable to

its foreign currency debts are not expected to have a material impact overall. The Company will strengthen the management of its capital structure, innovate financing tools, expand financing channels, actively utilize green financing policies, and accelerate capital turnover through super-short-term financings. At the same time, the Company will closely monitor changes in the domestic and overseas capital markets and strive to control its financing cost, stave off funding risks and achieve cost reduction and improved efficiency by adjusting its financing strategies in a timely manner while ensuring its capital demand is met, seizing market opportunities and benefiting from favorable policies such as refinancing programs dedicated to the clean and efficient use of coal and schemes supporting carbon emission reduction.

SHARE CAPITAL STRUCTURE

As at 30 June 2022, 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. (“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 (“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 29,994,199 shares, representing 0.19% of the total issued share capital of the Company. Other domestic shareholders held a total of 4,345,929,053 shares, representing 27.68% 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 2022.

SHAREHOLDINGS OF MAJOR SHAREHOLDERS

The following table summarises the shareholdings of the top ten shareholders of the Company's shares as at 30 June 2022:

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*	4,127,184,180	26.29%
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%
Jiangsu Guoxin Investment Group Limited	309,774,700	1.97%
Liaoning Energy Investment (Group) Limited Liability Company	244,205,000	1.56%
Dalian Municipal Construction Investment Company Limited	231,650,000	1.48%
Hong Kong Securities Clearing Company Limited	130,030,349	0.83%

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

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 2022.

As at 30 June 2022, 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 2022.

DISCLOSURE OF MATERIAL EVENTS

In view of the extremely low market demand and trading volume for the Company's American Depositary Shares ("ADSs"), the considerable administrative burden and costs associated with the ongoing disclosure obligations and related matters associated with listing in the U.S., based on its growth needs and its own business considerations, the Company voluntarily elected to delist from the New York Stock Exchange ("NYSE") and deregistered its ADSs facility. On 7 July 2022 (U.S. Eastern time), the Company's delisting of ADSs from the NYSE became effective. On 12 July 2022, the Company's ADS depository bank, The Bank of New York Mellon, gave notice to holders of ADSs of the termination of the deposit agreement, which will be terminated on 11 October 2022.

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. The Company persists on maximising the benefits of the Company and its shareholders as a whole, treating all of its shareholders fairly and striving for the long-term, stable and increasing returns for shareholders of the Company.

During the reporting period, the Company has complied with the relevant provisions of the Corporate Governance Code set out in Appendix 14 of the Listing Rules.

(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, and to operate in accordance with laws and regulations.

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 2022, under the proper leadership of the Board of Directors, the Company strengthened its mission, paid close attention to the implementation of responsibilities, actively responded to multiple challenges, and coordinated the work of epidemic prevention and control, production and operation, and reform and development. The Company maintained a stable production safety and a stable supply of electricity and heat, and actively performed its duty of providing sufficient, reliable and environmentally friendly electricity for the community. The Company always adheres to the rule of law and operates in compliance with regulations. The Company continues to pay attention to new changes in national and local regulatory laws and regulations, effectively implements new regulatory policies and requirements, continuously strengthens risk prevention and control, solidly promotes internal control management, carries out high-quality information disclosure, actively strengthens communication and interaction with investors, continuously promotes the construction of ESG system, builds a harmonious and win-win corporate culture with stakeholders, actively safeguards the interests of shareholders, strives to protect the legitimate rights and interests of small and medium investors, and promotes the continuous improvement of corporate governance.

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 2022, in accordance with relevant regulatory rules and requirements and in conjunction with the Company's actual situation, the Administrative Measures on Investor Relations 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 2022, 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.
3. 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. During the first half of 2022, 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 strictly requires the transfer of shares of the Company to be in accordance with the Company Law and relevant systems, prohibiting 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, all the directors, supervisors and senior management currently 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 comprises of 15 members. Of the members of the tenth session of the board of directors, Mr. Zhao Keyu as the Chairman; Mr. Zhao Keyu and Mr. Zhao Ping as the Executive Directors; 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 five 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 Directors				
Zhao Keyu	5	5	0	100%
Zhao Ping	5	5	0	100%
Non-executive Directors				
Huang Jian	5	5	0	100%
Wang Kui	5	5	0	100%
Lu Fei	5	5	0	100%
Teng Yu	5	5	0	100%
Mi Dabin	5	5	0	100%
Cheng Heng	5	5	0	100%
Li Haifeng	5	5	0	100%
Lin Chong	5	5	0	100%
Independent non-executive Directors				
Xu Mengzhou	5	5	0	100%
Liu Jizhen	5	5	0	100%
Xu Haifeng	5	5	0	100%
Zhang Xianzhi	5	5	0	100%
Xia Qing	5	5	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 2021 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 accurate 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 2021 annual general meeting of the Company were Zhao Keyu (Chairman), Zhao Ping (Director), Huang Jian (Director), Wang Kui (Director), Lu Fei (Director), Teng Yu (Director), Xu Mengzhou (Independent Non-executive Director) and Zhang Xianzhi (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. Zhao Ping, 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 2022 on 21 March 2022, at which the Report of Total Wage Expenses was reviewed and the Company's arrangement for the total wage in 2022 was approved. In the second half of 2022, 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 2022	21 March 2022	Xu Mengzhou, Zhao Ping, 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.

During the reporting period, the Nomination Committee of the Company's Board did not convene any meeting.

(h) Appointment of Auditors

Ernst & Young and Ernst & Young Hua Ming LLP were appointed as the overseas and domestic auditor for 2022, 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 2022	25 February 2022	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 2022	21 March 2022	Zhang Xianzhi, Xu Mengzhou, Liu Jizhen, Xu Haifeng and Xia Qing	–
Third meeting of the Audit Committee of the Tenth Session of the Board in 2022	25 April 2022	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 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 seven directors, namely, Mr. Zhao Keyu, Mr. Zhao Ping, 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 20 person times of Directors, Supervisors and senior management attended various professional trainings.

The Company conducts introduction by legal counsels of all three listing jurisdictions specifically to all Independent Non-executive Directors of the Audit Committee of the Company twice a year 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 2022 have been reviewed by the Audit Committee of the Company.

LEGAL PROCEEDINGS

As at 30 June 2022, 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 2022 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*)

Zhao Ping (*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

27 July 2022

**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 2022

(Amounts expressed in thousands of RMB)

	<i>Notes</i>	As at 30 June 2022	As at 31 December 2021 (Restated)
ASSETS			
Non-current assets			
Property, plant and equipment		321,271,158	320,874,058
Right-of-use assets		19,379,292	19,603,927
Investments in associates and joint ventures		23,345,762	23,085,782
Investment properties		623,378	635,268
Other equity instrument investments		722,205	729,070
Power generation licences		3,863,234	3,783,756
Mining rights		1,611,486	1,611,486
Deferred income tax assets		5,576,291	4,907,081
Derivative financial assets		86,815	69,753
Goodwill		14,490,573	14,276,224
Other non-current assets		17,857,203	19,056,005
Total non-current assets		408,827,397	408,632,410
Current assets			
Inventories		12,511,958	16,824,431
Other receivables and assets	4	13,783,886	14,698,932
Accounts and notes receivable	5	38,519,642	43,877,997
Contract assets		57,286	66,974
Derivative financial assets		737,523	652,458
Bank balances and cash		15,582,951	16,350,332
Total current assets		81,193,246	92,471,124
Total assets		490,020,643	501,103,534

	<i>Notes</i>	As at 30 June 2022	As at 31 December 2021 (Restated)
EQUITY AND LIABILITIES			
Equity attributable to equity holders of the Company			
Share capital		15,698,093	15,698,093
Other equity instruments	6	48,565,562	48,417,977
Capital surplus		25,957,012	25,667,502
Surplus reserves		8,140,030	8,140,030
Currency translation differences		(1,358,491)	(1,443,398)
Retained earnings		12,626,462	16,900,471
		109,628,668	113,380,675
Non-controlling interests		19,414,347	20,509,649
Total equity		129,043,015	133,890,324
Non-current liabilities			
Long-term loans		144,438,891	136,857,716
Long-term bonds	7	36,378,393	29,396,919
Lease liabilities		5,268,804	6,138,846
Deferred income tax liabilities		2,156,677	2,300,088
Derivative financial liabilities		21,896	99,323
Other non-current liabilities		5,757,627	6,022,017
Total non-current liabilities		194,022,288	180,814,909

	<i>Notes</i>	As at 30 June 2022	As at 31 December 2021 (Restated)
EQUITY AND LIABILITIES (CONTINUED)			
Current liabilities			
Accounts payable and other liabilities	8	51,131,051	54,609,553
Contract liabilities		804,963	3,274,770
Taxes payable		1,113,615	2,053,418
Dividends payable		903,478	1,041,452
Derivative financial liabilities		20,131	41,034
Short-term bonds	9	506,235	8,222,517
Short-term loans		89,343,944	91,896,725
Current portion of long-term loans		14,371,332	17,213,799
Current portion of long-term bonds	7	7,276,398	7,175,540
Current portion of lease liabilities		1,417,397	800,521
Current portion of other non-current liabilities		66,796	68,972
Total current liabilities		<u>166,955,340</u>	<u>186,398,301</u>
Total liabilities		<u>360,977,628</u>	<u>367,213,210</u>
Total equity and liabilities		<u>490,020,643</u>	<u>501,103,534</u>

**INTERIM CONDENSED CONSOLIDATED STATEMENT OF
COMPREHENSIVE INCOME (UNAUDITED)
FOR THE SIX MONTHS ENDED 30 JUNE 2022**

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

		For the six months ended 30 June	
	<i>Notes</i>	2022	2021
			(Restated)
Operating revenue	3	116,869,062	95,260,685
Tax and levies on operations		(646,671)	(941,228)
		116,222,391	94,319,457
Operating expenses			
Fuel		(80,735,805)	(57,381,701)
Maintenance		(1,775,893)	(1,777,587)
Depreciation	11	(11,971,751)	(11,094,935)
Labour		(6,734,482)	(6,887,317)
Service fees on transmission and transformer facilities of HIPDC		(23,974)	(47,947)
Purchase of electricity		(9,170,378)	(2,608,897)
Others	11	(6,156,088)	(5,215,390)
Total operating expenses		(116,568,371)	(85,013,774)
(Loss)/profit from operations		(345,980)	9,305,683
Interest income		159,635	135,032
Financial expenses, net			
Interest expense	11	(5,106,270)	(4,258,960)
Exchange gain/(loss) and bank charges, net		81,945	(64,301)
Total financial expenses, net		(5,024,325)	(4,323,261)
Share of profits and losses of associates and joint ventures		673,538	926,872
Loss on fair value changes of financial assets/liabilities		-	(28)
Other investment income/(loss)		2,236	(943)

		For the six months ended 30 June	
	<i>Notes</i>	<u>2022</u>	<u>2021</u> (Restated)
(Loss)/profit before income tax expense	<i>11</i>	(4,534,896)	6,043,355
Income tax expense	<i>12</i>	<u>359,641</u>	<u>(1,056,714)</u>
Net (loss)/profit		<u>(4,175,255)</u>	<u>4,986,641</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		511	4,180
Share of other comprehensive loss of joint ventures and associates		(21,939)	(34,206)
Income tax effect		–	(1,045)
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Share of other comprehensive income of joint ventures and associates		28,618	980
Cash flow hedges:			
Effective portion of changes in fair value of hedging instruments arising during the period		1,367,092	991,452
Reclassification adjustments for gains included in profit or loss		(1,244,445)	(237,742)
Exchange differences on translation of foreign operations		(160,135)	(305,307)
Income tax effect		<u>(20,850)</u>	<u>(128,132)</u>
Other comprehensive (loss)/income, net of tax		<u>(51,148)</u>	<u>290,180</u>
Total comprehensive (loss)/income		<u>(4,226,403)</u>	<u>5,276,821</u>
Net (loss)/profit attributable to:			
– Equity holders of the Company		(3,220,203)	4,186,861
– Non-controlling interests		<u>(955,052)</u>	<u>799,780</u>

	For the six months ended 30 June	
<i>Notes</i>	<u>2022</u>	<u>2021</u> (Restated)
Total comprehensive (loss)/income attributable to:		
– Equity holders of the Company	(3,057,567)	4,455,738
– Non-controlling interests	(1,168,836)	821,083
(Losses)/earnings per share attributable to the ordinary shareholders of the Company (expressed in RMB per share)		
– Basic and diluted	<i>13</i> (0.27)	0.20

NOTES TO THE UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL INFORMATION FOR THE SIX MONTHS ENDED 30 JUNE 2022

(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 2022 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 2021, 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 26 July 2022.

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 2021, except for the adoption of the revised IFRSs effective as of 1 January 2022. 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 2021 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 2021 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 2021 are available from the Company's registered office. The auditors have expressed an unqualified opinion on those financial statements in their report dated 22 March 2022.

As at and for the six months ended 30 June 2022, a portion of the Group's funding requirements for capital expenditures was partially satisfied by short-term financing. Consequently, as at 30 June 2022, the Group had net current liabilities of approximately Renminbi Yuan ("RMB") 85,762 million. Taking into consideration of the Group's undrawn available banking facilities exceeded RMB300 billion as at 30 June 2022, 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 2021, except for the adoption of the following revised IFRSs for the first time for the current period's financial information.

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

The nature and impact of the revised IFRSs are described below:

- (a) Amendments to IFRS 3 replace a reference to the previous Framework for the Preparation and Presentation of Financial Statements with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements. The amendments also add to IFRS 3 an exception to its recognition principle for an entity to refer to the Conceptual Framework to determine what constitutes an asset or a liability. The exception specifies that, for liabilities and contingent liabilities that would be within the scope of IAS 37 or IFRIC 21 if they were incurred separately rather than assumed in a business combination, an entity applying IFRS 3 should refer to IAS 37 or IFRIC 21 respectively instead of the Conceptual Framework. Furthermore, the amendments clarify that contingent assets do not qualify for recognition at the acquisition date. The Group has applied the amendments prospectively to business combinations that occurred on or after 1 January 2022. As there were no contingent assets, liabilities and contingent liabilities within the scope of the amendments arising in the business combination that occurred during the period, the amendments did not have any impact on the financial position and performance of the Group.

- (b) Amendments to IAS 16 prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling any such items, and the cost of those items, in profit or loss. The Group has applied the amendments retrospectively to items of property, plant and equipment made available for use on or after 1 January 2021.

Set out below are the amounts by which each financial statement line item was affected as at 1 January 2022 as a result of the adoption of the amendments to IAS 16:

	Increase/ (decrease) <i>RMB'000</i>
Assets	
Property, plant and equipment	284,433
Investments in associates and joint ventures	47,878
	<hr/>
Total assets	332,311
	<hr/> <hr/>
Equity	
Retained earnings	332,861
Non-controlling interests	(550)
	<hr/>
	332,311
	<hr/> <hr/>

- (c) Amendments to IAS 37 clarify that for the purpose of assessing whether a contract is onerous under IAS 37, the cost of fulfilling the contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract include both the incremental costs of fulfilling that contract (e.g., direct labour and materials) and an allocation of other costs that relate directly to fulfilling that contract (e.g., an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract as well as contract management and supervision costs). General and administrative costs do not relate directly to a contract and are

excluded unless they are explicitly chargeable to the counterparty under the contract. The Group has applied the amendments prospectively to contracts for which it has not yet fulfilled all its obligations at 1 January 2022 and no onerous contracts were identified. Therefore, the amendments did not have any impact on the financial position or performance of the Group.

(d) *Annual Improvements to IFRSs 2018-2020* sets out amendments to IFRS 1, IFRS 9, Illustrative Examples accompanying IFRS 16, and IAS 41. Details of the amendments that are applicable to the Group are as follows:

- IFRS 9 *Financial Instruments*: clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. The Group has applied the amendment prospectively to financial liabilities that are modified or exchanged on or after 1 January 2022. As there was no modification of the Group's financial liabilities during the period, the amendment did not have any impact on the financial position or performance of the Group.
- IFRS 16 *Leases*: removes the illustration of payments from the lessor relating to leasehold improvements in Illustrative Example 13 accompanying IFRS 16. This removes potential confusion regarding the treatment of lease incentives when applying IFRS 16.

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)).

For the six months ended 30 June 2022	PRC power segment	Overseas segment	All other segments	Inter- segment revenue	Total
		<i>Note i</i>			
- 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	1,233,265	2,818,414	14,121	(9,004)	4,046,796
Total	<u>98,901,530</u>	<u>17,822,300</u>	<u>422,599</u>	<u>(277,367)</u>	<u>116,869,062</u>

For the six months ended 30 June 2021 (Restated)	PRC power segment	Overseas segment	All other segments	Inter- segment revenue	Total
		<i>Note i</i>			
- Sales of power and heat	84,753,960	5,542,341	-	-	90,296,301
- Sales of coal and raw materials	1,086,965	547	-	-	1,087,512
- Port service	-	-	326,136	(199,921)	126,215
- Transportation service	-	-	95,467	(71,331)	24,136
- Lease income	49,148	894,249	-	-	943,397
- Others	1,056,085	1,725,681	17,271	(15,913)	2,783,124
Total	<u>86,946,158</u>	<u>8,162,818</u>	<u>438,874</u>	<u>(287,165)</u>	<u>95,260,685</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.

	<i>(Under PRC GAAP)</i>			
	<u>PRC power segment</u>	<u>Overseas segment</u>	<u>All other segments</u>	<u>Total</u>
For the six months ended 30 June 2022				
Total revenue	98,901,530	17,822,300	422,599	117,146,429
Intersegment revenue	<u>-</u>	<u>-</u>	<u>(277,367)</u>	<u>(277,367)</u>
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 less 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>			
	PRC power segment	Overseas segment	All other segments	Total
For the six months ended 30 June 2021				
(Restated)				
Total revenue	86,946,158	8,162,818	438,874	95,547,850
Intersegment revenue	—	—	(287,165)	(287,165)
Revenue from external customers	<u>86,946,158</u>	<u>8,162,818</u>	<u>151,709</u>	<u>95,260,685</u>
Segment results	<u>5,911,840</u>	<u>367,705</u>	<u>335,794</u>	<u>6,615,339</u>
Interest income	75,598	58,418	1,016	135,032
Interest expense	(3,831,679)	(349,919)	(68,732)	(4,250,330)
Impairment loss	(1,660)	909	—	(751)
Credit loss	3,572	(246)	—	3,326
Depreciation and amortisation	(10,405,542)	(290,094)	(112,256)	(10,807,892)
Net gain on disposal of non-current assets	190,115	52	—	190,167
Share of profits less losses of associates and joint ventures	572,523	—	284,874	857,397
Income tax expense	<u>(1,134,044)</u>	<u>918</u>	<u>(21,657)</u>	<u>(1,154,783)</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 2022				
Segment assets	<u>418,100,238</u>	<u>41,740,790</u>	<u>10,880,935</u>	<u>470,721,963</u>
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	13,688,353	19,821	3,984	13,712,158
Investments in associates	14,324,319	-	5,122,485	19,446,804
Investments in joint ventures	1,100,073	-	1,262,294	2,362,367
Segment liabilities	<u>(331,448,132)</u>	<u>(24,438,645)</u>	<u>(2,068,139)</u>	<u>(357,954,916)</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 2021 (Restated)				
Segment assets	<u>430,475,031</u>	<u>40,378,092</u>	<u>10,938,171</u>	<u>481,791,294</u>
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	48,632,163	485,642	674,173	49,791,978
Investments in associates	14,030,416	-	4,995,904	19,026,320
Investments in joint ventures	1,346,963	-	1,151,581	2,498,544
Segment liabilities	<u>(337,445,709)</u>	<u>(23,857,688)</u>	<u>(2,655,232)</u>	<u>(363,958,629)</u>

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

	For the six months ended 30 June	
	<u>2022</u>	<u>2021</u>
		(Restated)
Segment results (PRC GAAP)	(4,094,384)	6,615,339
Reconciling items:		
Loss related to the headquarters	(149,949)	(193,327)
Investment income from Huaneng Finance	68,373	77,312
Dividend income of other equity instrument investments	-	(16)
Impact of other IFRS adjustments*	(358,936)	(455,953)
	<u> </u>	<u> </u>
(Loss)/profit before income tax expense per unaudited interim consolidated statement of comprehensive income	<u>(4,534,896)</u>	<u>6,043,355</u>

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

	As at 30 June 2022	As at 31 December 2021 (Restated)
Total segment assets (PRC GAAP)	470,721,963	481,791,294
Reconciling items:		
Investment in Huaneng Finance	1,419,359	1,426,986
Deferred income tax assets	6,328,203	5,503,847
Prepaid income tax	350,790	695,156
Other equity instrument investments	722,205	729,070
Corporate assets	264,853	254,442
Impact of other IFRS adjustments*	10,213,270	10,702,739
 Total assets per unaudited interim condensed consolidated statement of financial position	 <u>490,020,643</u>	 <u>501,103,534</u>

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

	As at 30 June 2022	As at 31 December 2021
Total segment liabilities (PRC GAAP)	(357,954,916)	(363,958,629)
Reconciling items:		
Current income tax liabilities	(273,301)	(227,880)
Deferred income tax liabilities	(999,639)	(900,885)
Corporate liabilities	(908,289)	(1,089,086)
Impact of other IFRS adjustments*	(841,483)	(1,036,730)
 Total liabilities per unaudited interim consolidated statement of financial position	 <u>(360,977,628)</u>	 <u>(367,213,210)</u>

Other material items:

	<u>Reportable segment total</u>	<u>Headquarters</u>	<u>Share of profits of Huaneng Finance</u>	<u>Impact of other IFRS adjustments*</u>	<u>Total</u>
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)
Impairment loss	260	-	-	-	260
Credit loss	(64,821)	-	-	-	(64,821)
Depreciation and amortisation	(11,680,662)	(1,633)	-	(338,943)	(12,021,238)
Net gain/(loss) on disposal of non-current assets	121,221	-	-	(17)	121,204
Share of profits less losses of associates and joint ventures	600,213	-	68,373	4,952	673,538
Income tax expense	272,610	-	-	87,031	359,641

**For the six months ended
30 June 2021**

Total revenue (Restated)	95,260,685	-	-	-	95,260,685
Interest expense	(4,250,330)	(8,630)	-	-	(4,258,960)
Impairment loss	(751)	-	-	-	(751)
Credit loss	3,326	-	-	-	3,326
Depreciation and amortisation (Restated)	(10,807,892)	(25,232)	-	(328,537)	(11,161,661)
Net gain/(loss) on disposal of non-current assets	190,167	-	-	(12,836)	177,331
Share of profits less losses of associates and joint ventures (Restated)	857,397	-	77,312	(7,837)	926,872
Income tax expense	(1,154,783)	-	-	98,069	(1,056,714)

- * Other IFRS 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	
	2022	2021
		(Restated)
PRC	99,046,762	87,097,867
Overseas	17,822,300	8,162,818
Total	<u>116,869,062</u>	<u>95,260,685</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 2022	As at 31 December 2021
PRC	370,842,256	371,576,714
Overseas	22,271,407	22,087,875
Total	<u>393,113,663</u>	<u>393,664,589</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 2022, the revenue from grid companies under common control of State Grid Corporation of China within the PRC power segment in total accounted for 75% of external revenue (for the six months ended 30 June 2021: 81%). 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			
	2022		2021	
	Amount	Proportion	Amount	Proportion
State Grid Shandong Electric Power Company	17,783,677	15%	13,655,789	14%

4. OTHER RECEIVABLES AND ASSETS

Other receivables and assets comprised the following:

	As at 30 June 2022	As at 31 December 2021
	<u> </u>	<u> </u>
Prepayments for inventories	4,220,598	4,002,491
Prepaid income tax	350,790	695,156
Others	467,768	436,411
	<u> </u>	<u> </u>
Subtotal prepayments	5,039,156	5,134,058
Less: Loss allowances	4,638	2,638
	<u> </u>	<u> </u>
Total prepayments, net	5,034,518	5,131,420
	<u> </u>	<u> </u>
Dividends receivable	522,129	206,539
Receivables from sale of fuel	174,643	179,712
Others (Note i)	4,767,037	3,362,070
	<u> </u>	<u> </u>
Subtotal other receivables	5,463,809	3,748,321
Less: Loss allowances	275,483	220,826
	<u> </u>	<u> </u>
Total other receivables, net	5,188,326	3,527,495
	<u> </u>	<u> </u>
VAT recoverable	2,915,410	5,109,848
Finance lease receivables	635,156	550,594
Designated loan to a joint venture	75,091	75,100
Others	–	369,090
	<u> </u>	<u> </u>
Subtotal other assets	3,625,657	6,104,632
Less: Loss allowance	64,615	64,615
	<u> </u>	<u> </u>

	As at 30 June 2022	As at 31 December 2021
Total other assets, net	3,561,042	6,040,017
Gross total	14,128,622	14,987,011
Net total	13,783,886	14,698,932

Note i: Included in others were advances amounting to RMB447 million as at 30 June 2022 (31 December 2021: RMB462 million) which were due from Huangtai #8 Power Plant. For the six months ended 30 June 2022, the Group received total repayments amounting to RMB15 million (for the year ended 31 December 2021: paid total advances amounting to RMB240 million). According to an acquisition plan, Shandong Power paid an advance payment amounting to RMB1 billion to Shuifa Fengyuan Energy Co. Ltd. in March 2022. Due to the dispute on acquisition consideration, this acquisition was terminated, and the advance payment has not been repaid as of 30 June 2022.

5. ACCOUNTS AND NOTES RECEIVABLE

Accounts and notes receivable comprised the following:

	As at 30 June 2022	As at 31 December 2021
Accounts receivable	34,426,196	40,274,603
Notes receivable	4,229,422	3,743,482
	38,655,618	44,018,085
Less: Loss allowance	135,976	140,088
Total	38,519,642	43,877,997
Analysed into:		
Accounts receivable		
– At amortised cost	34,426,196	39,996,822
– At fair value through other comprehensive income	–	277,781
Notes receivable		
– At amortised cost	4,229,422	3,743,482

During the period ended 30 June 2022, the Group recognised no loss on the date of transfer of the accounts receivable (for the year ended 31 December 2021: RMB41,482 thousand).

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

	As at 30 June 2022	As at 31 December 2021
	<u> </u>	<u> </u>
Within 1 year	37,945,860	43,683,311
Between 1 and 2 years	381,999	114,471
Between 2 and 3 years	105,904	59,241
Over 3 years	221,855	161,062
	<u> </u>	<u> </u>
Total	<u>38,655,618</u>	<u>44,018,085</u>

As at 30 June 2022, the maturity period of the notes receivable ranged from 1 month to 6 months (31 December 2021: from 1 month to 12 months).

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

(a) Dividends of ordinary shares

On 28 June 2022, upon the approval from shareholders at the annual general meeting, the Company declared no dividend in 2021 (2020 final: RMB0.180 per ordinary share, totalling approximately RMB2,826 million). As at 30 June 2022, the Company has no dividend to be paid (30 June 2021: the Company has not paid the dividend).

(b) Cumulative distribution of other equity instruments

In 2017, the Company issued two tranches of perpetual corporate bonds with the net proceeds of approximately RMB2,500 million and RMB2,500 million, respectively. The perpetual corporate bonds are issued at par value with an initial distribution rate of 5.05% and 5.17%, respectively. The interests of the perpetual corporate bonds are 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 interests and all deferred interests. 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 and 5 years respectively. The applicable distribution rate will be reset on the first call date and 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. On the first call date of the bond with renewal period of 3 years in September 2020, the Company decided to exercise the callable option. The bond was redeemed in whole on 25 September 2020.

In 2018, the Company issued three tranches of Yingda Insurance Financing Plan (the "Yingda plan") with the aggregate proceeds of RMB5,000 million. The Yingda plan has no fixed period with an initial distribution rate of 5.79%. The interests of the financing plan are 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 interests and all deferred interests. 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 aforementioned. 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 the aggregate proceeds of RMB4,330 million. The China Life plan has no fixed period with an initial distribution rate of 5.05%. The interests 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 interests and all deferred interests. 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 aforementioned. 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 the aggregate proceeds of RMB2,670 million. The PICC plan has no fixed period with an initial distribution rate of 5.10%. The interests of the PICC 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 interests and all deferred interests. The PICC plan has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after 10th year of issuance, or the payment of the principal may be deferred at each distribution date aforementioned. 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 the net proceeds of approximately RMB2,000 million and RMB2,000 million, respectively. The medium-term notes are issued at par value with an initial distribution rate of 4.08% and 4.05%, respectively. The interests of the medium-term notes are 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 interests and all deferred interests. The medium-term notes have no fixed maturity date and are callable at the Company’s discretion at a 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.

In November 2019, the Company issued two tranches of medium-term notes with the net proceeds of approximately RMB2,500 million and RMB1,500 million. The medium-term notes are issued at par value with an initial distribution rate of 4.15% and 4.53%, respectively. The interests of the medium-term notes are 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 interests. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at a 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.

In March 2020, the Company issued two tranches of perpetual corporate bonds with the net proceeds of approximately RMB2,000 million and RMB1,000 million, respectively. The perpetual corporate bonds are issued at par value with an initial distribution rate of 3.58% and 3.85%, respectively. The interests of the perpetual corporate bonds are 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 interests and all deferred interests. 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.

In April 2020, the Company issued medium-term notes with the 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 interests of the medium-term notes are 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 interests and all deferred interests. 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.

In April 2020, the Company issued China Life Financing Plan (the "China Life plan") with the proceeds of RMB3,570 million. The China Life plan has no fixed period with an initial distribution rate of 4.75%. The interests 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 interests and all deferred interests. The China Life plan has no fixed maturity date and are 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 aforementioned. 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 the proceeds of RMB930 million. The PICC plan has no fixed period with an initial distribution rate of 4.75%. The interests of the PICC 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 interests and all deferred interests. 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 aforementioned. 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 the net proceeds of approximately RMB2,500 million. The perpetual corporate bond is issued at par value with an initial distribution rate of 3.09%. The interests of the perpetual corporate bond are 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 interests and all deferred interests. 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.

In June 2020, the Company issued medium-term notes with the 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 interests of the medium-term notes are 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 interests and all deferred interests. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at a 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.

In August 2020 and September 2020, the Company issued two tranches of medium-term notes with the net proceeds of approximately RMB2,000 million and RMB1,000 million, respectively. The medium-term notes are issued at par value with an initial distribution rate of 3.99% and 4.40%, respectively. The interests of the medium-term notes are 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 interests and all deferred interests. The medium-term notes have no fixed maturity date and are callable at the Company's discretion at a 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.

In August 2020, the Company issued the fourth tranche of the "PICC plan" with the proceeds of RMB3,000 million. The PICC plan has no fixed period with an initial distribution rate of 4.60%. The interests of the PICC 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 interests and all deferred interests. The PICC plan has no fixed maturity date and are 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 aforementioned. 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 the net proceeds of approximately RMB3,000 million. The perpetual corporate bond is issued at par value with an initial distribution rate of 4.38%. The interests of the perpetual corporate bond are 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 interests and all deferred interests. 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.

The perpetual corporate bonds, financing plans and medium-term notes were recorded as equity in the consolidated financial statements. During the six months ended 30 June 2022, the profit attributable to holders of other equity instruments, based on the applicable distribution rate, was RMB1,060 million (for the six months ended 30 June 2021: RMB1,060 million).

7. LONG-TERM BONDS

Long-term bonds comprised the following:

	As at 30 June 2022	As at 31 December 2021
2016 corporate bonds 1st batch (5 years)	9	9
2016 corporate bonds 1st batch (10 years)	1,202,370	1,226,442
2017 medium-term notes 1st batch (5 years)	5,236,124	5,114,928
2018 medium-term notes 2nd batch (3 years)	2,799	2,799
2018 corporate bonds 2nd batch (10 years)	5,203,458	5,078,224
2019 corporate bonds 1st batch (10 years)	2,320,458	2,374,948
2019 corporate bonds 2nd batch (3 years)	1,034,773	1,017,160
2019 medium-term notes 1st batch (3 years)	516,851	507,807
2019 medium-term notes 1st batch (5 years)	1,551,941	1,522,587
2020 corporate bonds (5 years) – SSPL	1,995,737	1,920,795
2020 corporate bonds (10 years) – SSPL	1,987,066	1,915,197
2021 green mid-term notes 1st batch (3 years)	1,014,156	1,030,612
2021 green mid-term notes 2nd batch (3 years)	2,517,683	2,559,318
2021 corporate bonds 1st batch (3 years)	501,750	510,189
2021 corporate bonds 1st batch (10 years)	1,506,195	1,536,212
2021 corporate bonds 2nd batch (3 years)	501,101	509,489
2021 corporate bonds 2nd batch (10 years)	3,509,125	3,579,163
2021 corporate bonds 3rd batch (10 years)	1,801,961	1,838,162
2021 medium-term bonds 1st batch (3 years)	2,051,730	2,022,070
2021 medium-term bonds 2nd batch (3 years)	2,036,580	2,006,225
2021 medium-term bonds 1st batch (3 years) – Jiangsu	304,573	300,123
2022 medium-term bonds 1st batch (3 years) – Jiangsu	502,640	–
2022 medium-term bonds 1st batch (10 years)	1,519,534	–
2022 medium-term bonds 2nd batch (3 years)	3,025,318	–
2022 medium-term bonds 3rd batch (15 years)	1,510,702	–
2022 medium-term bonds 4th batch (3 years)	300,157	–
Subtotal	43,654,791	36,572,459
Less: Current portion of long-term bonds	7,276,398	7,175,540
Total	<u>36,378,393</u>	<u>29,396,919</u>

Details of the outstanding corporate bonds, medium-term notes and debt financing instrument of the Group as at 30 June 2022 are summarised as follows:

Type of Instruments	Face Value	Issuance Date	Initial Period	Initial Distribution Rate	Effective Rate	Issue Price	Balance as at 31		Repayment	Foreign			Interest Payable	Balance as at 30 June 2022	
							December 2021	Issued Amount		Exchange Loss	Currency Translation Differences	Accrued Interest			
2016 corporate bonds 1st batch (5 years)	3,000,000	June 2016	5 years	3.48%	3.48%	3,000,000	9	-	-	-	-	-	-	9	
2016 corporate bonds 1st batch (10 years)	1,200,000	June 2016	10 years	3.98%	3.98%	1,200,000	1,226,442	-	5	-	-	-	23,683	47,760	1,202,370
2017 medium-term notes 1st batch (5 years)	5,000,000	July 2017	5 years	4.69%	4.90%	5,000,000	5,114,928	-	4,910	-	-	-	116,286	-	5,236,124
2018 medium-term notes 2nd batch (3 years)	2,000,000	July 2018	3 years	4.41%	4.56%	2,000,000	2,799	-	-	-	-	-	-	-	2,799
2018 corporate bonds 2nd batch (10 years)	5,000,000	September 2018	10 years	5.05%	5.05%	5,000,000	5,078,224	-	21	-	-	-	125,213	-	5,203,458
2019 corporate bonds 1st batch (10 years)	2,300,000	April 2019	10 years	4.70%	4.70%	2,300,000	2,374,948	-	4	-	-	-	53,606	108,100	2,320,458
2019 corporate bonds 2nd batch (3 years)	1,000,000	July 2019	3 years	3.55%	3.55%	1,000,000	1,017,160	-	10	-	-	-	17,603	-	1,034,773
2019 medium-term notes 1st batch (3 years)	500,000	July 2019	3 years	3.55%	3.65%	500,000	507,807	-	242	-	-	-	8,802	-	516,851
2019 medium-term notes 1st batch (5 years)	1,500,000	July 2019	5 years	3.85%	3.96%	1,500,000	1,522,587	-	716	-	-	-	28,638	-	1,551,941
2020 corporate bonds (5 years) - SSPL	2,108,865	February 2020	5 years	2.25%	2.32%	2,108,865	1,920,795	49,856	-	-	6,630	(5,074)	45,557	22,027	1,995,737
2020 corporate bonds (10 years) - SSPL	2,108,865	February 2020	10 years	2.63%	2.72%	2,108,865	1,915,197	49,856	-	-	6,630	(12,068)	53,149	25,698	1,987,066
2021 green mid-term notes 1st batch (3 years)	1,000,000	February 2021	3 years	3.45%	3.66%	1,000,000	1,030,612	-	936	-	-	-	17,108	34,500	1,014,156
2021 green mid-term notes 2nd batch (3 years)	2,500,000	April 2021	3 years	3.35%	3.40%	2,500,000	2,559,318	-	585	-	-	-	41,530	83,750	2,517,683
2021 corporate bonds 1st batch (3 years)	500,000	May 2021	3 years	3.35%	3.35%	500,000	510,189	-	5	-	-	-	8,306	16,750	501,750
2021 corporate bonds 1st batch (10 years)	1,500,000	May 2021	10 years	3.97%	3.97%	1,500,000	1,536,212	-	3	-	-	-	29,530	59,550	1,506,195
2021 corporate bonds 2nd batch (3 years)	500,000	June 2021	3 years	3.33%	3.33%	500,000	509,489	-	5	-	-	-	8,257	16,650	501,101
2021 corporate bonds 2nd batch (10 years)	3,500,000	June 2021	10 years	3.97%	3.97%	3,500,000	3,579,163	-	7	-	-	-	68,905	138,950	3,509,125
2021 corporate bonds 3rd batch (10 years)	1,800,000	June 2021	10 years	3.99%	3.99%	1,800,000	1,838,162	-	4	-	-	-	35,615	71,820	1,801,961
2021 medium-term bonds 1st batch (3 years)	2,000,000	August 2021	3 years	2.99%	3.01%	2,000,000	2,022,070	-	6	-	-	-	29,654	-	2,051,730
2021 medium-term bonds 2nd batch (3 years) - Jiangsu	2,000,000	November 2021	3 years	3.07%	3.07%	2,000,000	2,006,225	-	(92)	-	-	-	30,447	-	2,036,580
2021 medium-term bonds 1st batch (3 years) - Jiangsu	300,000	December 2021	3 years	2.95%	2.95%	300,000	300,123	-	-	-	-	-	4,450	-	304,573
2022 medium-term bonds (3 years)	500,000	April 2022	3 years	2.92%	2.92%	500,000	-	500,000	-	-	-	-	2,640	-	502,640
2022 medium-term bonds-1st batch (10 years)	1,500,000	February 2022	10 years	3.74%	3.80%	1,500,000	-	1,500,000	168	-	-	-	19,366	-	1,519,534
2022 medium-term bonds-2nd batch (3 years)	3,000,000	March 2022	3 years	2.84%	2.89%	3,000,000	-	3,000,000	(2,459)	-	-	-	27,777	-	3,025,318
2022 medium-term bonds-3rd batch (15 years)	1,500,000	April 2022	15 years	3.70%	3.74%	1,500,000	-	1,500,000	58	-	-	-	10,644	-	1,510,702
2022 medium-term bonds-4th batch (3 years)	300,000	June 2022	3 years	2.37%	2.91%	300,000	-	300,000	2	-	-	-	155	-	300,157
Total						48,117,730	36,572,459	6,899,712	5,136	-	13,260	(17,142)	806,921	625,555	43,654,791

Details of the outstanding corporate bonds, medium-term notes and debt financing instrument of the Group as at 31 December 2021 are summarised as follows:

Type of Instruments	Face Value	Issuance Date	Initial Period	Initial		Balance as at			Foreign					Balance as at 31 December 2021	
				Distribution Rate	Effective Rate	31 December 2020	Issued Amount	Amortisation	Interest	Repayment	Exchange Loss	Currency Transition Differences	Interest Payable		
2016 corporate bonds 1st batch (5 years)	3,000,000	June 2016	5 years	3.48%	3.48%	3,000,000	3,057,912	-	(125)	46,622	(3,104,400)	-	-	-	9
2016 corporate bonds 1st batch (10 years)	1,200,000	June 2016	10 years	3.98%	3.98%	1,200,000	1,226,429	-	12	47,761	(47,760)	-	-	26,432	1,226,442
2017 medium-term notes 1st batch (5 years)	5,000,000	July 2017	5 years	4.69%	4.90%	5,000,000	5,113,989	-	939	234,500	(234,500)	-	-	111,147	5,114,928
2018 corporate bonds 2nd batch (3 years)	1,500,000	April 2018	3 years	4.90%	4.90%	1,500,000	1,554,843	-	(70)	18,727	(1,573,500)	-	-	-	-
2018 medium-term notes 2nd batch (3 years)	3,000,000	May 2018	3 years	4.80%	4.91%	3,000,000	3,095,285	-	977	47,738	(3,144,000)	-	-	-	-
2018 medium-term notes 2nd batch (3 years)	2,000,000	July 2018	3 years	4.41%	4.56%	2,000,000	2,043,397	-	1,448	46,154	(2,088,200)	-	-	-	2,799
2018 debt financing instrument 1st batch (3 years)	2,500,000	July 2018	3 years	4.68%	4.81%	2,500,000	2,549,443	-	1,524	66,033	(2,617,000)	-	-	-	-
2018 corporate bonds 2nd batch (10 years)	5,000,000	September 2018	10 years	5.05%	5.05%	5,000,000	5,078,194	-	30	252,500	(252,500)	-	-	78,171	5,078,224
2019 corporate bonds 1st batch (10 years)	2,300,000	April 2019	10 years	4.70%	4.70%	2,300,000	2,374,934	-	14	108,100	(108,100)	-	-	74,930	2,374,948
2019 corporate bonds 2nd batch (3 years)	1,000,000	July 2019	3 years	3.55%	3.55%	1,000,000	1,017,142	-	17	35,501	(35,500)	-	-	17,118	1,017,160
2019 medium-term notes 1st batch (3 years)	500,000	July 2019	3 years	3.55%	3.65%	500,000	507,320	-	488	17,749	(17,750)	-	-	8,073	507,807
2019 medium-term notes 1st batch (5 years)	1,500,000	July 2019	5 years	3.85%	3.96%	1,500,000	1,521,142	-	1,445	57,750	(57,750)	-	-	26,264	1,522,587
2020 corporate bonds (5 years) – SSPL	2,108,865	February 2020	5 years	2.25%	2.32%	2,108,865	1,963,164	40,197	2,092	42,354	(42,728)	8,520	(92,804)	16,011	1,920,795
2020 corporate bonds (10 years) – SSPL	2,108,865	February 2020	10 years	2.63%	2.72%	2,108,865	1,957,722	40,196	1,643	49,415	(49,849)	8,520	(92,450)	18,679	1,915,197
2021 green mid-term notes 1st batch (3 years)	1,000,000	February 2021	3 years	3.45%	3.66%	1,000,000	-	1,000,000	(202)	30,814	-	-	-	30,814	1,030,612
2021 green mid-term notes 2nd batch (3 years)	2,500,000	April 2021	3 years	3.35%	3.40%	2,500,000	-	2,500,000	(340)	59,658	-	-	-	59,658	2,559,318
2021 corporate bonds 1st batch (3 years)	500,000	May 2021	3 years	3.35%	3.35%	500,000	-	500,000	2	10,187	-	-	-	10,188	510,189
2021 corporate bonds 1st batch (10 years)	1,500,000	May 2021	10 years	3.97%	3.97%	1,500,000	-	1,500,000	(8)	36,220	-	-	-	36,219	1,536,212
2021 corporate bonds 2nd batch (3 years)	500,000	June 2021	3 years	3.33%	3.33%	500,000	-	500,000	1	9,488	-	-	-	9,488	509,489
2021 corporate bonds 2nd batch (10 years)	3,500,000	June 2021	10 years	3.97%	3.97%	3,500,000	-	3,500,000	(19)	79,182	-	-	-	79,182	3,579,163
2021 corporate bonds 3rd batch (10 years)	1,800,000	June 2021	10 years	3.99%	3.99%	1,800,000	-	1,800,000	(10)	38,172	-	-	-	38,173	1,838,162
2021 corporate bonds 1st batch (3 years)	2,000,000	August 2021	3 years	2.99%	3.01%	2,000,000	-	2,000,000	(211)	22,281	-	-	-	22,282	2,022,070
2021 corporate bonds 2nd batch (3 years)	2,000,000	November 2021	3 years	3.07%	3.07%	2,000,000	-	1,500,000	58	-	-	-	10,644	6,224	2,006,225
2021 medium-term bonds 1st batch (3 years) – Jiangsu	300,000	December 2021	3 years	2.95%	2.95%	300,000	-	300,000	2	-	-	-	155	123	300,123
Total						48,317,730	33,060,916	15,680,393	9,648	1,363,253	(13,373,537)	17,040	(185,254)	669,176	36,572,459

8. ACCOUNTS PAYABLE AND OTHER LIABILITIES

Accounts payable and other liabilities comprised:

	As at 30 June 2022	As at 31 December 2021
Accounts and notes payable	24,639,374	25,774,238
Payables to contractors for construction	16,595,854	19,922,953
Retention payables to contractors	2,983,096	1,795,819
Consideration payables for business acquisition	22,842	22,842
Others	6,889,885	7,093,701
Total	<u>51,131,051</u>	<u>54,609,553</u>

Ageing analysis of accounts and notes payable was as follows:

	As at 30 June 2022	As at 31 December 2021
Within 1 year	23,982,599	25,271,613
Between 1 and 2 years	469,091	373,752
Over 2 years	187,684	128,873
Total	<u>24,639,374</u>	<u>25,774,238</u>

9. SHORT-TERM BONDS

Details of the outstanding short-term bonds as at 30 June 2022 are summarised as follows:

Type of Instruments	Face Value	Issuance Date	Maturity	Coupon Rate	Issue Price	Balance as at 31 December 2021	Issued Amount	Interest	Amortisation	Repayment	Balance as at 30 June 2022
Super short-term bond (2021 16th)	5,000,000	November 2021	98 days	2.38%	5,000,000	5,018,932	-	13,367	44	(5,032,277)	66
Super short-term bond (2021 17th)	3,000,000	December 2021	29 days	2.22%	3,000,000	3,003,542	-	2,007	(6)	(3,005,474)	69
Super short-term bond (JiangSu 2021 1st)	200,000	December 2021	270 days	2.60%	200,000	200,043	-	2,615	-	-	202,658
Super short-term bond (2021 18th)	2,000,000	January 2022	58 days	2.10%	2,000,000	-	2,000,000	6,674	152	(2,006,674)	152
Super short-term bond (2022 1st)	2,000,000	January 2022	46 days	2.08%	2,000,000	-	2,000,000	5,243	140	(2,005,243)	140
Super short-term bond (JiangSu 2022 1st)	300,000	January 2022	180 days	2.32%	300,000	-	300,000	2,975	-	-	302,975
Super short-term bond (2022 2nd)	2,000,000	February 2022	41 days	2.00%	2,000,000	-	2,000,000	4,493	74	(2,004,493)	74
Super short-term bond (2022 3rd)	2,000,000	February 2022	32 days	2.00%	2,000,000	-	2,000,000	3,507	53	(2,003,507)	53
Super short-term bond (2022 4th)	2,000,000	March 2022	90 days	2.00%	2,000,000	-	2,000,000	9,863	47	(2,009,862)	48
Total					18,500,000	8,222,517	10,300,000	50,744	504	(18,067,530)	506,235

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

As at 30 June 2022, the net current liabilities of the Group amounted to approximately RMB85,762 million (31 December 2021: RMB93,927 million). On the same date, total assets less current liabilities were approximately RMB323,065 million (31 December 2021 (restated): RMB314,705 million).

11. (LOSS)/PROFIT BEFORE INCOME TAX EXPENSE

(Loss)/profit before income tax expense was determined after charging/(crediting) the following:

	For the six months ended 30 June	
	<u>2022</u>	<u>2021</u>
		(Restated)
Total interest expense on borrowings	5,573,569	4,834,840
Less: Amounts capitalised in property, plant and equipment	467,299	575,880
Interest expenses charged to unaudited interim consolidated statement of comprehensive income	5,106,270	4,258,960
Including: Interest expenses on lease liabilities	85,437	106,339
Depreciation of property, plant and equipment	11,519,864	10,750,687
Depreciation of right-of-use assets	451,887	344,248
	11,971,751	11,094,935
Included in other operating expenses:		
– Operating expense of Ruyi Pakistan Energy	2,795,254	1,808,230
– Other materials expense	723,085	595,559
– Electricity charges	734,781	534,761
– Cost of sales of raw materials	358,548	182,821
– Water charges	267,881	286,478
– Insurance expense	230,536	198,855
– Cleaning, greening and fire protection expense	172,649	171,007
– Purchase of the power generation quota	–	115,531
– Water conservancy fund and disabled security fund	36,364	42,316
– Test and inspection expense	95,964	101,482
– Service charge	201,312	195,275
– Auditors’ remuneration-audit services	20,752	20,786
– Other consulting expense	65,450	71,345
– Transportation allowance	83,681	87,475
– Office expense	124,090	88,254

**For the six months
ended 30 June**

	2022	2021
		(Restated)
– Minimum lease payments under operating leases, lease payments not included in the measurement of lease liabilities	60,129	56,017
– Service concession construction cost	69,575	90,872
– Research and development expenditure	279,155	121,546
– Amortisation of other non-current assets	49,487	66,726
– Heating pipeline related cost	91,377	98,204
– Property management expense	47,607	45,201
– Pollutant charge	10,427	49,219
– Information technology maintenance expense	28,763	52,914
– Travel expense	33,872	49,730
– Donations	14,071	12,307
– Business entertainment expense	11,895	17,362
– Recognition/(reversal) of loss allowance for receivables	64,821	(3,326)
– Penalties	2,580	1,841
– Reversal of provision for inventory obsolescence	(1,423)	(969)
– Impairment loss of other non-current assets	1,163	1,720
– Net gain on disposal of non-current assets	(121,204)	(177,331)
– Gain of Three Supplies and Property Management	(76,457)	(20,192)
– Government grants	(820,297)	(463,313)
– Others	500,200	716,687
	6,156,088	5,215,390
Total	6,156,088	5,215,390

12. INCOME TAX EXPENSE

	For the six months ended 30 June	
	2022	2021
Current income tax expense	467,804	1,327,158
Deferred income tax	(827,445)	(270,444)
Total	<u>(359,641)</u>	<u>1,056,714</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 2022 (for the six months ended 30 June 2021: 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 2022 and 2021.

The income tax rate applicable to Singapore subsidiaries is 17% (for the six months ended 30 June 2021: 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	
	2022	2021
PRC statutory enterprise income tax rate	25.00%	25.00%
Effect of different tax rates of certain subsidiaries	14.48%	(11.33%)
Utilisation of previously unrecognised tax losses and deductible temporary differences	3.39%	(2.10%)
Unrecognised deductible temporary differences	(0.56%)	0.09%
Unrecognised tax losses for the period	(37.61%)	9.41%
Effect of non-taxable income	3.74%	(3.85%)
Effect of non-deductible expenses	(0.78%)	0.49%
Others	0.27%	(0.23%)
Effective tax rate	<u>7.93%</u>	<u>17.48%</u>

For the six months ended 30 June 2022, the effective tax rate was proportioned by income tax credit to loss before tax (for the six months ended 30 June 2021: income tax expense to profit before tax).

13. (LOSSES)/EARNINGS PER SHARE

The basic (losses)/earnings per share is calculated by dividing the consolidated net (loss)/profit 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	
	2022	2021
		(Restated)
Consolidated net (loss)/profit attributable to equity holders of the Company	(3,220,203)	4,186,861
Less: Cumulative distribution of other equity instruments	1,059,926	1,059,926
Consolidated net (loss)/profit attributable to ordinary shareholders of the Company	<u>(4,280,129)</u>	<u>3,126,935</u>
Weighted average number of the Company's outstanding ordinary shares ('000)	<u>15,698,093</u>	<u>15,698,093</u>
Basic and diluted (losses)/earnings per share (RMB)	<u>(0.27)</u>	<u>0.20</u>

There was no dilutive effect on earnings per share since the Company had no dilutive potential ordinary shares for the six-month periods ended 30 June 2022 and 2021.

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

(Amounts expressed in RMB unless otherwise stated)

1 FINANCIAL HIGHLIGHTS AND FINANCIAL RATIOS

	Unit	For the six months ended 30 June		Fluctuation
		2022	2021 (restated)	
Operating revenue	RMB	116,869,061,918	95,260,685,703	22.68%
(Loss)/profit before income tax expense	RMB	(4,175,961,213)	6,499,307,589	(164.25%)
Net (loss)/profit attributable to equity holders of the Company	RMB	(3,008,687,276)	4,450,457,319	(167.60%)
Net (loss)/profit attributable to equity holders of the Company less non-recurring items	RMB	(3,833,670,603)	4,036,671,632	(194.97%)
Basic and diluted (losses)/earnings per share	RMB/share	(0.26)	0.22	(218.18%)
Basic (losses)/earnings per share less non-recurring items	RMB/share	(0.31)	0.19	(263.16%)
Weighted average of return on equity	%	(7.35)	4.48	(264.06%)
Weighted average of return on equity less non-recurring items	%	(8.84)	3.99	(321.55%)
Net cash provided by operating activities	RMB	20,087,646,052	19,268,775,248	4.25%
	Unit	As at 30 June 2022	As at 31 December 2021 (restated)	Fluctuation
Total assets	RMB	479,807,372,211	490,400,797,129	(2.16%)
Equity attributable to equity holders of the Company	RMB	102,069,275,627	105,588,451,508	(3.33%)

Note: The financial ratio:

(Losses)/earnings per share = Consolidated net (loss)/profit attributable to ordinary shareholders of the Company/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 ITEMS

	For the six months 30 June 2022
Net gain on disposal of non-current assets	121,220,812
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)	830,609,929
Reversal of loss allowances for receivables and contract assets individually tested for impairments	11,500,211
Profits from entrusted loans	1,547,465
Non-operating income and expenses besides items above (Note 2)	191,772,253
Other items recorded in the profit and loss in accordance with the definition of non-recurring items (Note 3)	<u>(3,713,642)</u>
Subtotal	1,152,937,028
Impact of income tax	(110,989,600)
Impact of non-controlling interests (net of tax)	<u>(216,964,101)</u>
Total	<u><u>824,983,327</u></u>

Note 1: The Company and its subsidiaries recognised extraordinary profit and loss items in accordance with the requirement of explanatory Announcement No.1 on Information Disclosure for Companies Offering Their Securities to the Public_ Extraordinary Profit and Loss (CSRC announcement [2008] No. 43).

According to the definition of non-recurring items, the non-recurring items that are defined as recurring items are as below:

	For the six months ended 30 June 2022	Reason
Value-added tax levied immediately returned	92,699,850	Closely related to the normal business of the Company
Carbon emissions trading incomes	11,561,559	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 the gratuitous transfer of assets, the non-operating expenses were mainly donations contributed by the Company and its subsidiaries.

Note 3: Other items satisfy the definition of extraordinary profit and loss are expenses of entrusted management service purchased and income of entrusted operation services provided.

3 INCOME STATEMENTS FOR THE SIX MONTHS ENDED 30 JUNE 2022

(Amounts expressed in RMB, except for share data)

	For the six months ended 30 June			
	2022	2021	2022	2021
	Consolidated	Consolidated (Restated)	Company	Company (Restated)
Operating revenue	116,869,061,918	95,260,685,703	14,140,496,703	12,632,567,850
Less: Operating cost	114,611,659,714	82,499,604,631	14,934,034,462	11,670,545,493
Taxes and surcharges	646,671,404	941,228,201	102,779,427	152,501,770
Selling expenses	93,946,102	92,230,950	12,145,402	3,495,044
General and administrative expenses	2,403,025,985	2,486,146,418	710,888,613	709,864,863
Research and development expenses	279,154,860	121,545,919	83,873,521	36,544,807
Financial expenses	4,864,690,554	4,188,229,067	1,103,155,538	1,026,107,256
Including: Interest expenses	5,106,270,240	4,258,959,611	1,244,790,727	1,080,902,551
Interest income	159,634,852	135,031,524	177,520,193	61,671,068
Add: Other income	919,275,125	473,054,802	243,114,033	55,251,126
Investment income	670,821,863	933,765,452	4,643,416,857	1,656,769,797
Including: investment income from associates and joint ventures	668,586,106	934,708,002	772,198,941	886,984,844
Credit losses	(64,820,839)	3,325,996	(504,208)	–
Loss from changes in fair value	–	(27,789)	–	–
Impairment losses	260,060	(750,591)	(1,114,502)	(1,720,248)
Gain on disposal of non-current assets	106,533,149	177,191,805	31,020	3,147,510
Operating (loss)/profit	(4,398,017,343)	6,518,260,192	2,078,562,940	746,956,802
Add: Non-operating income	249,428,502	112,511,679	11,809,377	18,126,265
Less: Non-operating expenses	27,372,372	131,464,282	2,055,202	71,062,259
(Loss)/profit before income tax expense	(4,175,961,213)	6,499,307,589	2,088,317,115	694,020,808
Less: Income tax expense	(272,610,023)	1,154,782,960	–	10,293,437
Net (loss)/profit	(3,903,351,190)	5,344,524,629	2,088,317,115	683,727,371

	For the six months ended 30 June			
	2022	2021	2022	2021
	Consolidated	Consolidated (Restated)	Company	Company (Restated)
(1) Classification according to the continuity of operation				
– Continuous operating net (loss)/profit	<u>(3,903,351,190)</u>	<u>5,344,524,629</u>	<u>2,088,317,115</u>	<u>683,727,371</u>
(2) Classification according to ownership				
Attributable to:				
– Equity holders of the Company	<u>(3,008,687,276)</u>	4,450,457,319	<u>2,088,317,115</u>	683,727,371
– Non-controlling interests	<u>(894,663,914)</u>	894,067,310	<u>–</u>	<u>–</u>
Other comprehensive (loss)/income, net of tax	<u>(51,146,713)</u>	290,181,303	<u>6,679,176</u>	<u>(33,225,259)</u>
Other comprehensive income/(loss), net of tax, attributable to equity holders of the Company	<u>162,637,547</u>	<u>268,877,843</u>	<u>6,679,176</u>	<u>(33,225,259)</u>
(1) Items that will not be reclassified to profit or loss:				
Including:				
Share of other comprehensive loss of investees accounted for under the equity method (non-recycling)	<u>(21,938,666)</u>	(34,206,024)	<u>(21,938,666)</u>	(34,206,024)
Fair value changes of other equity instrument investments	<u>511,200</u>	3,108,270	<u>–</u>	<u>–</u>
(2) Items that may be reclassified subsequently to profit or loss:				
Including:				
Share of other comprehensive income of investees accounted for under the equity method (recycling)	<u>28,617,842</u>	980,765	<u>28,617,842</u>	980,765
Effective portion of cash flow hedges	<u>70,541,949</u>	607,865,342	<u>–</u>	<u>–</u>
Translation differences of the financial statements of foreign operations	<u>84,905,222</u>	(308,870,510)	<u>–</u>	<u>–</u>
Other comprehensive (loss)/income attributable to non-controlling interests, net of tax	<u>(213,784,260)</u>	<u>21,303,460</u>	<u>–</u>	<u>–</u>
Total comprehensive (loss)/income	<u><u>(3,954,497,903)</u></u>	<u><u>5,634,705,932</u></u>	<u><u>2,094,996,291</u></u>	<u><u>650,502,112</u></u>

For the six months ended 30 June

	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	Consolidated	Consolidated (Restated)	Company	Company (Restated)
Attributable to:				
– Equity holders of the Company	(2,846,049,729)	4,719,335,162	2,094,996,291	650,502,112
– Non-controlling interests	(1,108,448,174)	915,370,770	<u>–</u>	<u>–</u>
(Losses)/earnings per share				
Basic (losses)/earnings per share	<u>(0.26)</u>	<u>0.22</u>	<u>–</u>	<u>–</u>
Diluted (losses)/earnings per share	<u>(0.26)</u>	<u>0.22</u>	<u>–</u>	<u>–</u>

FINANCIAL STATEMENTS RECONCILIATION BETWEEN PRC GAAP AND IFRSS

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

	Consolidated net profit attributable to equity holders of the Company	
	For the six months ended 30 June	
	2022	2021
		(Restated)
Consolidated net profit attributable to equity holders of the Company under PRC GAAP	(3,008,687)	4,450,457
Impact of IFRS 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)	(360,300)	(405,574)
Difference on depreciation related to borrowing costs capitalised in previous years (B)	(12,862)	(13,508)
Others	14,226	(36,871)
Applicable deferred income tax impact of the GAAP differences above (C)	87,031	98,069
Profit attributable to non-controlling interests on the adjustments above	60,389	94,288
Consolidated net profit attributable to equity holders of the Company under IFRSs	<u>(3,220,203)</u>	<u>4,186,861</u>

(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 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) DEFERRED INCOME TAX IMPACT ON GAAP DIFFERENCES

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