China Power International Development Limited
中國電力國際發展有限公司

(incorporated in Hong Kong with limited liability)

(Stock Code : 2380)

2021
ANNUAL REPORT

Lower Carbon
Empower Better Life


Wind Power
Hydropower
Photovoltaic Power
CLEAN ENERGY
INSTALLED CAPACITY
EXCEEDS 50%
Energy Storage
NO.001
Green Power Transportation
Hydrogen Energy

CONTENTS

2021 Performance Highlights

(LOSS)/PROFIT ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY

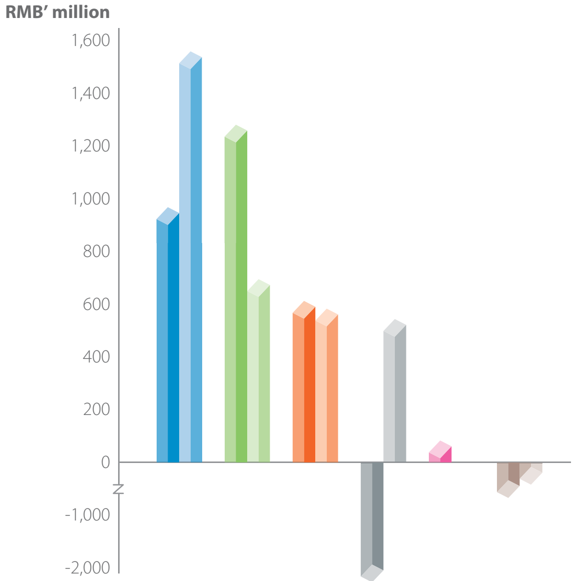
for the year ended 31 December

2021
(515,693)
RMB'000

2020
1,708,305
RMB'000

NET PROFIT

for the year ended 31 December



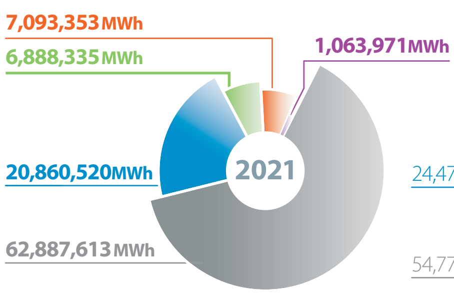
	2021 /RMB'000	2020 /RMB'000
HYDROPOWER	945,715	1,544,442
WIND POWER	1,257,661	675,730
PHOTOVOLTAIC POWER	574,095	540,543
COAL-FIRED POWER	(2,083,793)	522,769
ENERGY STORAGE	42,093	–
UNALLOCATED	(564,552)	(357,933)
TOTAL	171,219	2,925,551

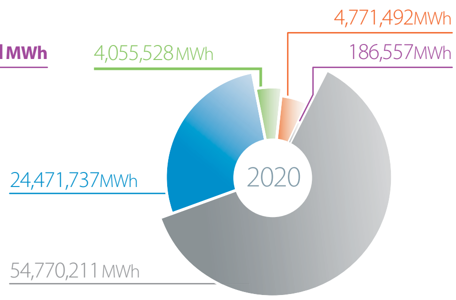
TOTAL ELECTRICITY SOLD

2021
98,793,792
MWh

2020
88,255,525
MWh

CHANGE
11.94%





Hydropower
14.76%

Wind Power
69.85%

Photovoltaic Power
48.66%

Coal-fired Power
14.82%

Natural Gas Power
470.32%

2021 Performance Highlights

Revenue

2021
34,734,288
RMB'000

↑ 22.18 %

2020
28,427,721
RMB'000

Operating Profit

2021
4,600,867
RMB'000

↓ 27.79 %

2020
6,371,860
RMB'000

Basic (Loss)/Earnings Per Share

2021
(0.07)
RMB

2020
0.17
RMB

Dividend Per Ordinary Share

2021
0.05
RMB

↓ 61.54 %

2020
0.13
RMB

Equity Attributable To Equity Holders Of The Company

2021
35,806,906
RMB'000

↑ 7.21 %

2020
33,397,807
RMB'000

Net Assets

2021
51,884,797
RMB'000

↑ 13.31 %

2020
45,789,917
RMB'000

Total Assets

2021
174,754,102
RMB'000

↑ 12.06 %

2020
155,948,671
RMB'000

Cash And Cash Equivalents

2021
1,766,632
RMB'000

↑ 34.21 %

2020
1,316,351
RMB'000

Total Debts

2021
105,921,101
RMB'000

↑ 15.85 %

2020
91,431,935
RMB'000

Consolidated Installed Capacity

2021
28,931.9
MW

↑ 7.77 %

2020
26,845.8
MW

Corporate Information

BOARD OF DIRECTORS

Executive Directors

HE Xi *(Chairman of the Board)*
GAO Ping *(President of the Company)*

Non-executive Directors

ZHOU Jie
XU Zuyong

Independent Non-executive Directors

LI Fang
YAU Ka Chi
HUI Hon Chung, Stanley

AUDIT COMMITTEE

YAU Ka Chi *(Chairman)*
LI Fang
HUI Hon Chung, Stanley

RISK MANAGEMENT COMMITTEE

HE Xi *(Chairman)*
GAO Ping
LI Fang
YAU Ka Chi
HUI Hon Chung, Stanley

REMUNERATION AND NOMINATION COMMITTEE

LI Fang *(Chairman)*
YAU Ka Chi
HUI Hon Chung, Stanley

EXECUTIVE COMMITTEE

HE Xi *(Chairman)*
GAO Ping
All vice presidents of the Company

REGISTERED OFFICE AND PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Suite 6301, 63/F., Central Plaza
18 Harbour Road
Wanchai, Hong Kong

BEIJING OFFICE

East Building, Hui Huang Shi Dai Plaza
56 North West Fourth Ring Road, Haidian District
Beijing, China

COMPANY WEBSITE

www.chinapower.hk

LISTING INFORMATION

Shares of the Company are:

- listed on The Stock Exchange of Hong Kong Limited (Stock Code: 2380/Bloomberg: 2380:HK/Reuters: 2380.HK); and
- eligible for Southbound trading through Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect.

SHARE REGISTRAR AND TRANSFER OFFICE

Computershare Hong Kong Investor Services Limited
Shops 1712–1716
17th Floor, Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong

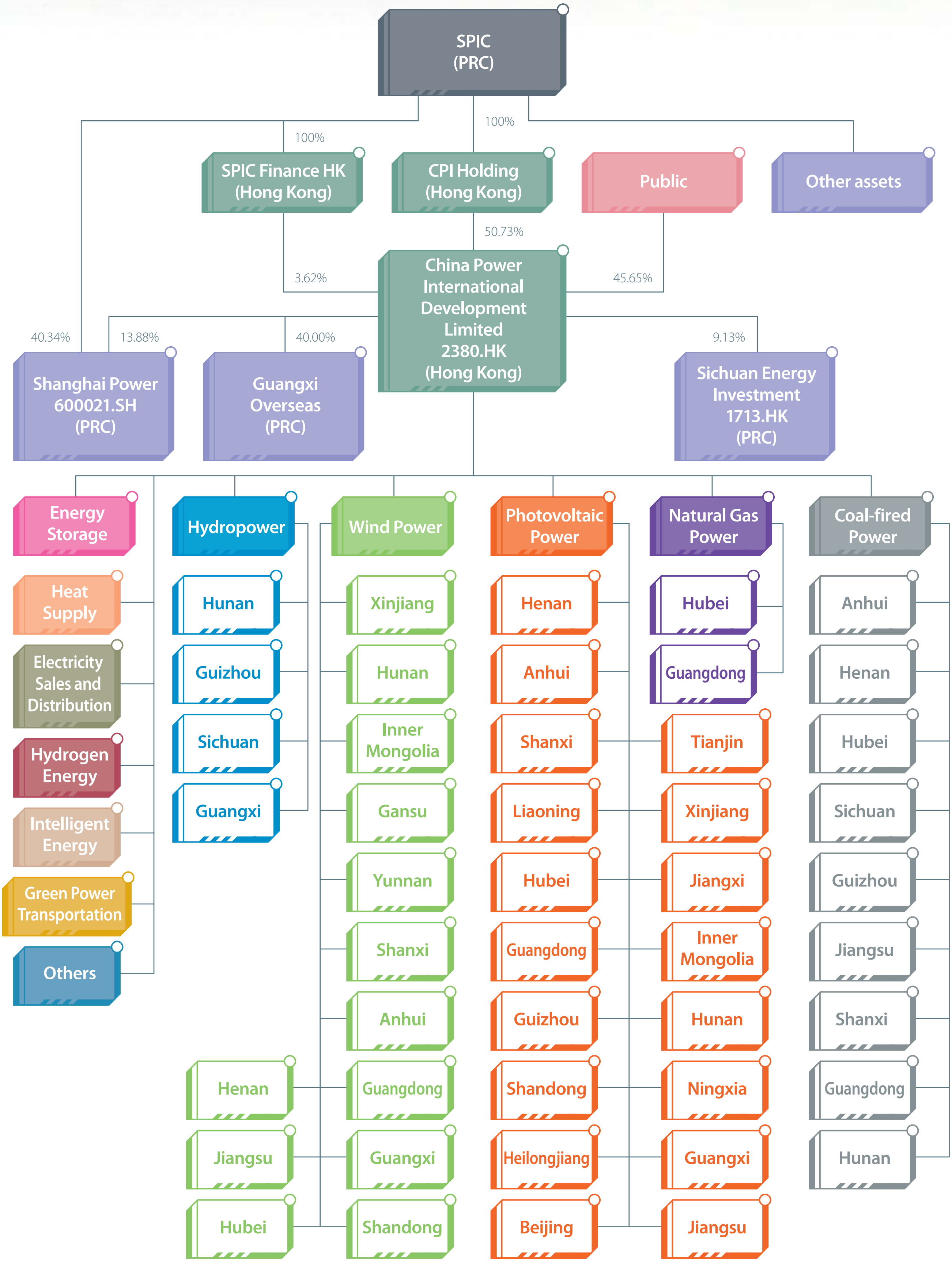
COMPANY SECRETARY

CHEUNG Siu Lan

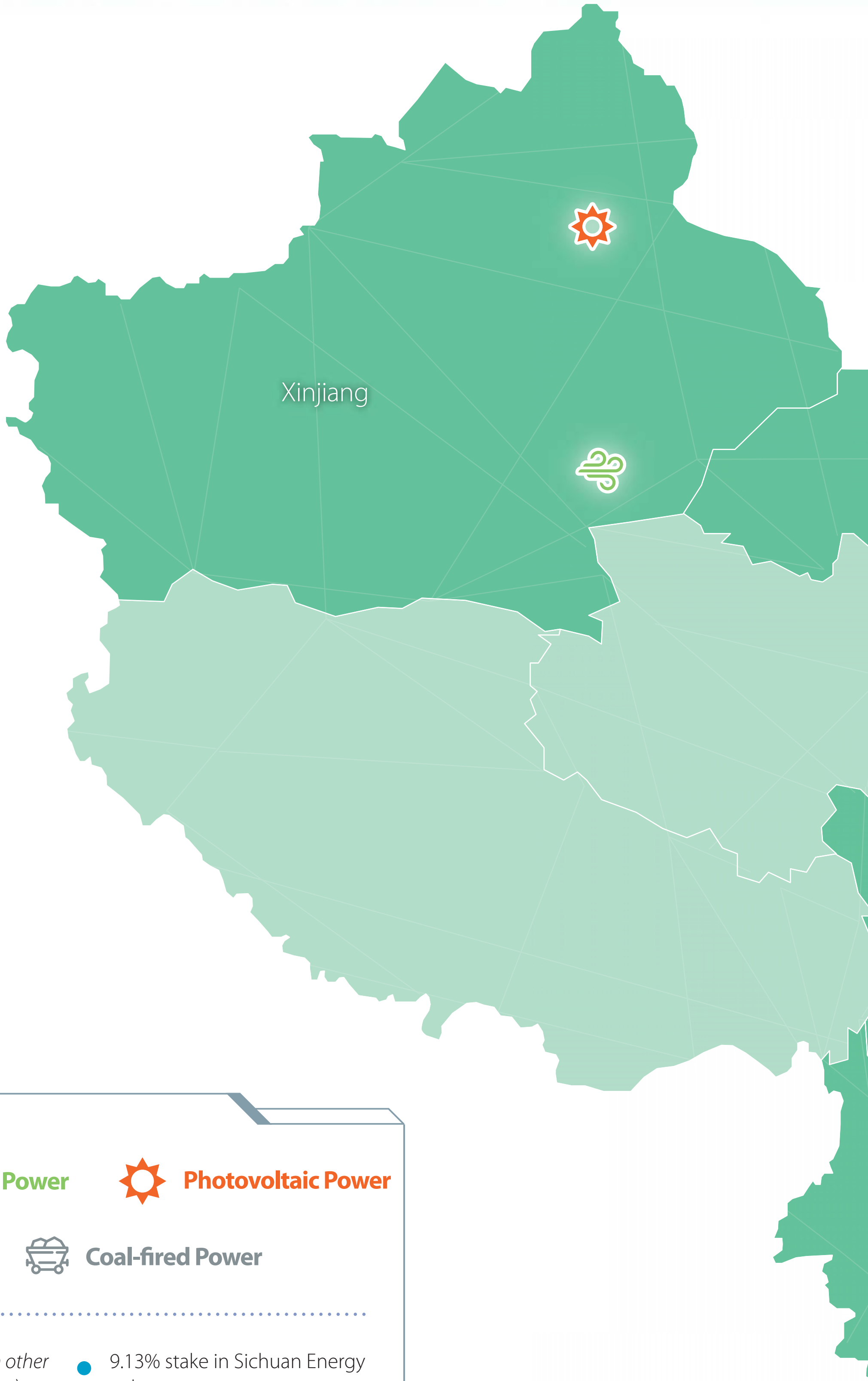
AUDITOR

Ernst & Young

Group Structure



Note: The above group structure is recorded as at the date of this annual report.

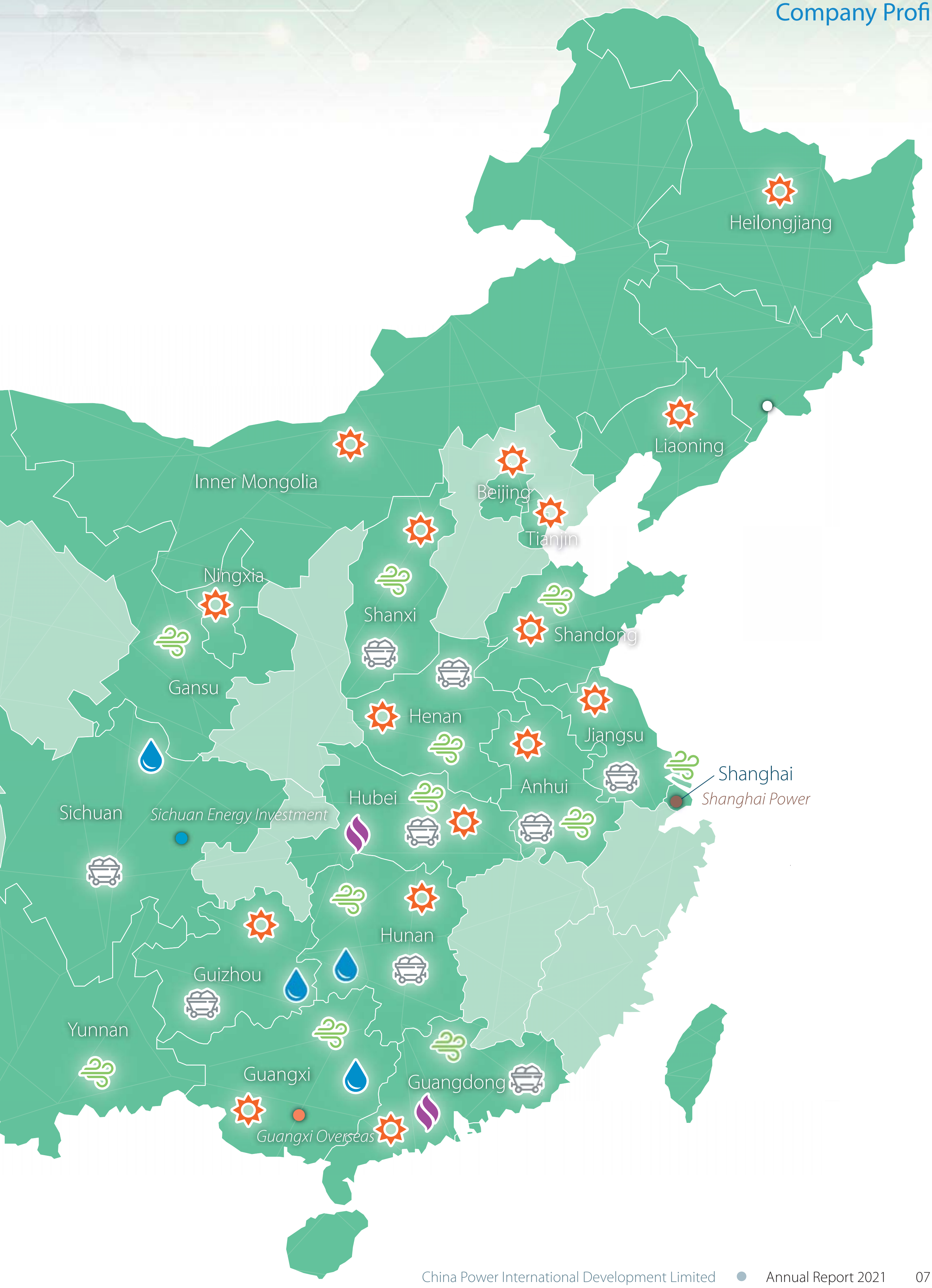


DIRECTIVE

Hydropower Wind Power Photovoltaic Power

Natural Gas Power Coal-fired Power

- 40.00% stake in Guangxi Overseas *(with other investments located in the ASEAN region)*
- 9.13% stake in Sichuan Energy Investment
- 13.88% stake in Shanghai Power


Heilongjiang
Liaoning
Inner Mongolia
Beijing
Tianjin
Ningxia
Shanxi
Shandong
Gansu
Henan
Jiangsu
Shanghai
Shanghai Power
Anhui
Hubei
Sichuan
Sichuan Energy Investment
Hunan
Guizhou
Yunnan
Guangxi
Guangdong
Guangxi Overseas

China Power was incorporated in Hong Kong with limited liability under the Hong Kong Companies Ordinance on 24 March 2004 and is a core subsidiary of SPIC, an integrated energy group which simultaneously owns coal-fired power, hydropower, nuclear power and renewable energy resources in the PRC.

The shares of the Company were listed on The Main Board of the Hong Kong Stock Exchange on 15 October 2004 with the stock code 2380. From the beginning of solely engaging in generation and electricity sales of coal-fired power, the Company has expanded its business into the areas of, among others, hydropower, wind power, photovoltaic power, natural gas power, energy storage, green power transportation and integrated energy services through continuous development. Various business segments have been kept growing along with the constant expansion of the Group.

As at 31 December 2021, the Group's total consolidated installed capacity was 28,931.9MW, of which consolidated installed capacity of clean energy was 15,091.9MW, accounting for 52.16% of all consolidated installed capacity.

EXISTING POWER PLANTS

As at 31 December 2021, the Group's total consolidated installed capacity presented by type of power plants is as follows:

		Installed Capacity	Interest	Attributable Installed Capacity	Consolidated Installed Capacity
		MW	%	MW	MW
Type of Power Plants	**Hydropower**	**5,810.4**	~9.13–64.93	3,497.1	5,451.1
	Wind Power	**7,978.5**	~9.75–100	3,364.6	4,143.3
	Photovoltaic Power	**8,339.8**	~12.6–100	4,290.2	5,222.3
	Natural Gas Power	**3,391.4**	~13.88–100	692.3	275.2
	Coal-fired Power	**29,992.7**	~9.5–100	13,116.6	13,840
	Total			24,960.8	28,931.9

As at 31 December 2021, the total consolidated installed capacity of the Group's wholly-owned and controlled power plants presented by region is as follows:

	Region	Consolidated Installed Capacity	Interest	Attributable Installed Capacity
		MW	%	MW
Hydropower Power Plant	Hunan	**3,109.7**	63	1,959.2
	Guizhou	**1,570**	59.85	939.7
	Sichuan	**141.4**	~44.1–63	88.1
	Guangxi	**630**	64.93	409.1
	Total	**5,451.1**		3,396.1

	Region	Consolidated Installed Capacity MW	Interest %	Attributable Installed Capacity MW
Wind Power Plant	Xinjiang	**198**	63	124.8
	Hunan	**709.9**	~32.13–63	381
	Inner Mongolia	**203.6**	63	128.3
	Gansu	**100**	44.1	44.1
	Yunnan	**97.5**	44.1	37.1
	Shanxi	**734.7**	~32.13–56.7	312.4
	Anhui	**49.5**	44.1	15.9
	Guangdong	**196**	~32.13–44.1	74.4
	Guangxi	**696.4**	95	661.6
	Shandong	**671**	~51–100	454.6
	Henan	**246.1**	63	227.5
	Jiangsu	**52.5**	70	36.8
	Hubei	**188.1**	~90–100	174.4
	Total	**4,143.3**		2,672.9

	Region	Consolidated Installed Capacity MW	Interest %	Attributable Installed Capacity MW
Photovoltaic Power Station	Henan	**206**	~34.65–100	77.2
	Anhui	**390.5**	~35.7–100	360.2
	Shanxi	**1,030**	~70–100	925
	Liaoning	**525**	100	525
	Hubei	**849.4**	~34.65–100	665.6
	Guangdong	**41.5**	~54.65–100	32
	Guizhou	**100**	100	100
	Shandong	**290.8**	~49–100	263
	Heilongjiang	**200**	~70–100	152
	Beijing	**2.3**	~51–100	1.4
	Tianjin	**11.5**	~35.7–70	4.7
	Xinjiang	**40**	~63–100	32.6
	Jiangxi	**11.8**	95	11.2
	Inner Mongolia	**190**	63	119.7
	Hunan	**69**	~32.13–63	37.3
	Ningxia	**1,190**	~32.13–44.1	454.8
	Guangxi	**70**	~64.93–100	63
	Jiangsu	**4.5**	100	4.5
	Total	**5,222.3**		3,829.2

	Region	Consolidated Installed Capacity MW	Interest %	Attributable Installed Capacity MW
Natural Gas Power Plant	Hubei	**155.2**	~90–100	139.8
	Guangdong	**120**	100	120
	Total	**275.2**		259.8

Coal-fired Power Plant	Anhui	**5,860**	~20–60	2,988
	Henan	**2,860**	100	2,860
	Hubei	**2,600**	51	1,326
	Sichuan	**1,200**	51	612
	Guizhou	**1,320**	95	1,254
	Total	**13,840**		9,040

As at 31 December 2021, the total attributable installed capacity of the Group's main associates, joint ventures and investment holding companies' power plants are as follows:

		Installed Capacity MW	Interest %	Attributable Installed Capacity MW
Power Plant	Changshu Power Plant	**3,320**	50	1,660
	CP Shentou	**1,200**	54	648
	Xintang Power Plant	**600**	50	300
	Li Yu Jiang Power Plant	**600**	25.2	151.2
	Shanghai Power	**16,374.3**	13.88	2,272.8
	Sujin Energy	**2,983.2**	9.50	283.4
	Guangxi Overseas	**800**	40	320
	Sichuan Energy Investment	**138.4**	9.13	12.6
	Jinzishan Wind Power	**329**	15.22	50.1
	Fushan Power Station	**75**	50	37.5
	Liefeng Energy	**50**	30	15
	Guigang Wind Power	**60.9**	9.75	5.9
	Hunan Nuclear Power	**50.1**	12.6	6.3
	Total			5,762.8

PROJECTS UNDER CONSTRUCTION

As at 31 December 2021, the Group's projects under construction presented by type of power plants is as follows:

		Installed Capacity MW	Interest %	Attributable Installed Capacity MW
Type of Power Plants	**Hydropower**	**500**	63	315
	Wind Power	**1,058.8**	~32.1–100	792.1
	Photovoltaic Power	**2,722.7**	~20–100	2,226.9
	Natural Gas Power	**350.4**	100	350.4
	Coal-fired Power	**2,000**	100	2,000
	Total	**6,631.9**		5,684.4

NEW DEVELOPMENT PROJECTS

As at the date of this annual report, the total installed capacity of new projects in a preliminary development stage (including projects which the approvals from government of the PRC have been applied for) is approximately 13,900MW. The categories are distributed as follows:

		Installed Capacity MW
Type of Power Plants	Renewable energy (wind power, photovoltaic power and natural gas power)	**12,000**
	Integrated intelligent energy	**1,900**
	Total, approximately	**13,900**

ULTIMATE CONTROLLING SHAREHOLDER — SPIC

The Company is ultimately owned by SPIC, a wholly State-owned enterprise established by the approval of the State Council of the PRC. The business of SPIC covers the power, coal, aluminum, logistics, finance, environmental protection and high-tech industries with a total installed capacity of approximately 195GW, of which installed capacity of clean energy was approximately 120GW, accounting for 61.54% of total installed capacity.

Major Events in 2021

JANUARY

Changshu Power Plant was accredited the honorary title of "5A Power Enterprise with Good Standardization Practices" by China Electricity Council. The award was promoted by the National Energy Administration of China in recognition of power enterprises for their comprehensive management capability in improving work efficiency, saving production costs, and supporting realization of corporate strategic goals through effective operations and standardized systems. The assessment covered the fields of power generation, power supply, power construction, power research and development, etc.

MARCH

CP Hua Chuang won two innovation awards at the 11th Power Industry Chemical Engineering Technical Exchange Forum held in Ningbo, Zhejiang Province, the PRC. The two technological innovation achievements, namely the *"Research and Application of New Process of Outage Protection for Heating Equipment of Large Coal-fired Power Generating Units"* and the *"R&D and Initial Application of Oxygenation Process for Full-liquid Oxygen-free Water-feeding Boiler"* have been successfully applied to Pu'an Power Plant and Fuxi Power Plant. Among which, the first achievement is a new technology which has prominent advantages in terms of investment cost, operational simplicity, energy consumption and use of hazardous chemicals.

APRIL

Wu Ling Power's "Integrated Intelligent Energy Demonstration Project for Office Park" located in Changsha was put into operation, which is the first full-chain zero-carbon integrated intelligent energy demonstration project in Hunan Province, the PRC, covering power source, grid, load, storage and utilization. Leveraging its technical advantages, the Project deeply explores the potential of shallow geothermal energy, and innovatively builds prefabricated energy modules to realize zero-carbon energy supply and enhance the level of resources utilization.

China Power commenced the construction of Phase 2 of the Yanqing Garden Hydrogen Refueling Station Project in Zhongguancun in Beijing, the PRC, which was an ancillary facility for the Beijing Winter Olympics. Through this entrusted management project, China Power contributed to delivering green Winter Olympics by providing hydrogen-powered clean and zero-carbon transportation services.

MAY

CP Hua Chuang was granted the first invention patent of "An Evaluation Method for the Duration of Epoxy Mica Insulation of Generator Stator Bars" by China National Intellectual Property Administration, marking a groundbreaking progress in respect of invention patent. The research results are of great application value to the manufacturing of steam turbine generators for coal-fired and nuclear power plants in terms of improving the skill level of insulation, the assessment of aging conditions and life-cycle management.

The China Electric Power Construction Association announced the review results of the 2021 China Electric Power Quality Projects. Jingmen Power Station's "Jingmen High-tech Zone Natural Gas Co-generation Energy Supply Project" won the "2021 China Electric Power Quality Project Award" and was recommended to apply for "China Installation Quality Project", which is the highest honorary award for engineering quality in the electric power construction industry. The project is located in Jingmen High-tech Industrial Park, Hubei Province, the PRC, and is a key construction project in Hubei Province.

JUNE

China Power issued the inaugural "2020 China Power Environmental Protection White Paper", which summarized its environmental management practices during the "13th Five-Year Plan" period and highlighted the establishment of its comprehensive environmental management system.


荣获2021电力行业设备管理与技术创新成果，特颁发此证书。

成果名称：发电副产品销售运营管理系统

完成单位：中电国瑞物流有限公司

成果等级：一等

成果类别：管理

设备管理与技术创新成果

证书

证书编号：ZSCX-2021-DL-G-1-47

CP Guorui was awarded the First Prize of "2021 Power Industry's Plant Management and Technology Innovation Achievement Award" by China Association of Plant Engineering for its "Operation Management System for Sales of Power Generation By-products". Being the first of its kind, the system developed the concept of "Internet + Sales" for platform building, based on which it has realized the whole process monitoring and management of the sales of power generation by-products and two-way communication with customers.

The four connected transactions in relation to the EPC contracting of the Shandong Offshore Wind Power Project were approved at the general meeting of the Company by a substantial majority of votes. This demonstrated the independent shareholders' immense support for the Group's decision to embark on its first offshore wind power project. The project is of strategic significance to the future business development of the Group in Shandong Province, the PRC. In late 2021, it was connected to the power grid at full capacity, marking our first step in marine energy development.

JULY

The Group entered the energy storage industry by establishing Xinyuan Smart Storage (a joint venture owned as to 51% by the Company) with Beijing Hyper Strong Technology Co., Ltd., the No.1 company in terms of the scale of energy storage capacity in China. With the provision of energy storage solutions as its core business, the joint venture generated a net profit of more than RMB40 million over the half-year period since its inception.

Chaoyang Power Station's Chaoyang 500MW Photovoltaic Grid Parity Demonstration Project completed the first parity green certificate transaction in China during the "International Dialog on Energy Reform 2021" hosted by the National Energy Administration in Suzhou, the PRC. The green certificate represents the confirmation and proof of power generation through non-hydro renewable energy, and the green certificate transaction will provide a strong support for the development of new energy in the grid parity era. The 60 parity green certificates sold are equivalent to providing 60MWh of green electricity and reducing CO_2 emissions by 52,314 kg, SO_2 emissions by 28.2 kg and NOx emissions by 25.8 kg. The project promotes green consumption across the country and encourages the consumption and use of clean energy.


编号:121000000101 日期: 2021-06-25

绿色电力购买证明

GREEN ELECTRICITY CERTIFICATE

兹此证明

2021年国际能源变革对话

通过全国绿色电力证书自愿认购平台，购买国家电投辽宁省中电朝阳500兆瓦光伏发电平价上网示范项目(项目代码WPC1811211321001)绿色电力

60,000千瓦时

相当于减排二氧化碳 52,314.00 千克，二氧化硫 28.20 千克，氮氧化物 25.80 千克。

感谢2021年国际能源变革对话对支持中国绿色电力发展所作出的贡献！

国家可再生能源信息管理中心

JULY

The Company acquired 36% of the equity interest in Qiyuanxin Power and became its largest shareholder. The acquisition marked our exploration into the green power transportation sector, and the support for our strategic transformation and development towards integrated intelligent energy and the "Three New Businesses (三新業務)" through engaging in the provision of battery charging and swapping infrastructure services for green power transportation.

Xiaogang Energy's Xiaogang Village Project was awarded the "Excellent Demonstration Project of Integrated Intelligent Energy" at the 2021 Integrated Intelligent Energy Conference held in Xiong'an, Hebei Province, the PRC. The project was recognized as a typical demonstration project in promoting integrated intelligent energy and driving energy revolution and digital development in rural areas, through providing clean energy, smart infrastructures, and green industries and hence building an eco-friendly, convenient and healthy village.

AUGUST

In context of achieving "30 • 60 Carbon Emission Peak and Carbon Neutrality" and facilitating rural revitalization, the Company entered into a strategic cooperation agreement with New Life Town Group to jointly push ahead with modernized, low-carbon and intelligent agricultural development for realization of common prosperity in rural areas.

The Company acquired 55% of the equity interest in CP Huayuan to tap into the nuclear power maintenance and repair service sector. CP Huayuan possesses the first-class qualification for nuclear project contracting, which is conducive to the Group's expansion into the high-end nuclear power service market and diversify its industrial layout.

SEPTEMBER

The "Hydropower Smart Remote Operation and Maintenance System" self-developed by Wu Ling Power was selected as a showcase of technical achievements by the Innovations Hub of the International Water Association (IWA) and was promoted through social media before and during the World Hydropower Congress.

OCTOBER

The Company organized the "Building World-class Low-carbon Enterprise Development Forum cum New Strategy Press Conference" in Beijing and Hong Kong both on-site and online simultaneously, where it explored comprehensively the topics such as low-carbon and zero-carbon technology innovation and industry ecosystem establishment. During the event, it also announced officially the outline of the Group's new strategy.

OCTOBER

CP Zhihui's "USTB Industrial Park Integrated Intelligent Energy Project" won the "National Energy Digitalization Demonstration Project Award" at the "2021 National Energy Internet Conference" jointly organized by the Energy Digitalization Committee under National Energy Internet Alliance and Tsinghua University. It is an integrated energy supply system that combines the cooling, heating and power supply system, distributed rooftop photovoltaic system, photovoltaic carports, distributed low-speed wind turbines, micro-grids for energy storage and integrated energy management system.

Datong CP's Chenguang Power Station in Datong City and Shanxi Shentou's Hongtao Power Station in Shuozhou City, Shanxi Province, the PRC were accredited the title of "2020 Outstanding 5A-Grade Photovoltaic Power Station — Production and Operation Statistic Indicators Among Solar and Photovoltaic Power Stations in China" and "2020 Outstanding 5A-Grade Photovoltaic Power Station — Photovoltaic Power Generation and Operation Indicators in the Power Industry" respectively by China Electricity Council.

The Company entered into strategic cooperation with Tencent Cloud to join hands in advancing the green, low-carbon and intelligent upgrade of the energy sector. Leveraging new technology and business model, the cooperation with Tencent Cloud will accelerate the transition of integrated energy consumption towards electric, zero-carbon and intelligent energy use, which will in turn promote clean, low-carbon, safe and intelligent energy production and consumption.

NOVEMBER

The Company was elected as one of the Excellent ESG Enterprises of 2020–2021 by Hong Kong Economic Times, a major financial newspaper in Hong Kong, in recognition of its outstanding performance and ability to create a positive impact in respect of environmental, social and corporate governance.

The Company completed the initial establishment of "China Power Energy Infrastructure Investment and Anhui's Asset-backed Special Program (similar to REITS)" and issued the asset-backed securities in the form of similar REITS products to the qualified investors for a total amount of RMB2.576 billion. The success in securitizing the traditional coal-fired power generating assets opened up a new business channel for asset securitization, at the same time improving cash flows, asset quality and debt structure of the Group.

DECEMBER

At the "Best Corporate Governance and ESG Awards 2021" organized by the Hong Kong Institute of Certified Public Accountants (HKICPA), the Company won the Prize of "Special Mention Corporate Governance" under the H-share Companies and Other Mainland Enterprises Category for the second consecutive year. It affirmed the public recognition in Hong Kong for our high level of sustainability, transparency and corporate governance capability.

Haiyang Power Storage's Haiyang 101MW/202MWh Energy Storage and Power Station built by Xinyuan Smart Storage was connected to the power grid for power generation. It is the first on-grid large-scale shared energy storage and power station with a capacity exceeding 100MW and is set to lead the development of the Group's energy storage business.

The CGMA Annual Awards and CFO Summit Forum 2021 organized by The Chartered Institute of Management Accountants (CIMA) was held in Shanghai, China. After winning the awards of "CIMA Best Practice of Shared Service Center of the Year" in 2019 and the "CIMA Best Practice of Robotic Process Automation of the Year" in 2020, Suzhou Shared Service Company once again won the award of "CGMA Best Practice of Management Accounting of the Year" in 2021, which is the third award the Company obtained in the past three years.

Jingmen Power Station's gas turbines realized 15% hydrogen-mixed combustion transformation and operation, which marked the world's first combined cycle and heating and power co-generation demonstration project for hydrogen-mixed combustion in natural gas power generating units under commercial operation.

Letter to Shareholders

The year 2021 was crucial to the transformation and in-depth reform of China's power industry. This was also a year marked by challenging, extraordinary and difficult moments. In response to the national goals of "carbon emission peak by 2030 and carbon neutrality by 2060" and the requirements for developing innovative power system, the Group actively tapped into the new phase of growth and the new market landscape to reshape the new corporate development strategy. During the year, we vigorously developed clean energy and at the same time actively explored and expanded new energy industries, new business forms and new business models ("Three New"), which unfolded a new chapter of strategic transformation and leapfrog development.

REVIEW OF 2021

Launch of New Strategy – Press Conference in October 2021

Reshaping new strategy to provide clear direction for strategic transformation in the era of "carbon emission peak and carbon neutrality". Following thorough research, deliberation and planning, we formulated the new development strategy and held the strategy press conference in October last year to establish our new position as a "Green and Low-carbon Energy Provider". We set our mission of "Lower Carbon Empower Better Life" and adopted the core principle of "Green-empowerment, Intelligent Innovation and Mutual Achievement". By proposing the strategic goals and paths for the three phases up to 2025, 2030 and 2035 respectively, we defined our vision to become a "World-class Green and Low-carbon Energy Provider".

At the press conference, we announced our commitment and direction of the strategic transformation to our shareholders, business partners, investors and the public. The event was attended by representatives from the Central Government and various local governments, and was supported by renowned enterprises, financial institutions and mainstream media at home and abroad, which greatly enhanced the Group's brand recognition, market influence and discourse right in the industry.

Strategic Positioning

- Transform from a traditional power generation enterprise into a green and low-carbon energy provider.
- "Three-in-one" Business Positioning: An enterprise that integrates the role of "clean and low-carbon energy producer, green energy technology service provider and dual-carbon ecosystem integrator".
- "Double-leading Enterprise" Growth Positioning: Progressing from a leading enterprise in China towards a leading enterprise in the world.

Mr. He Xi, the Chairman of the Board, delivered a keynote speech at the press conference

Strategic Pathway

- Becoming a leading green and low-carbon energy provider in China by 2025.
- Progressing towards a world-class green and low-carbon energy provider by 2030.
- Becoming a world-class green and low-carbon energy provider by 2035.

Shandong Offshore Wind Power Project — connected to the power grid at full capacity at the end of 2021

Accelerating development on all fronts with the installed capacity of clean energy exceeding 50%. With strenuous efforts in exploring clean energy resources, the installed capacity of clean energy projects of the Group achieved in 2021 includes: projects commenced operation of approximately 3,300MW, projects under construction of approximately 4,600MW, and projects obtained approval of over 10,000MW, thereby forming the positive loop of "launching a batch, securing a batch and reserving a batch". As at the end of 2021, the consolidated installed capacity of clean energy of the Group was 15,091.9MW, accounting for approximately 52.16% of the total consolidated installed capacity and representing an increase of 8.18 percentage points as compared with 2020.

Capturing market opportunities and actively exploring new business development in the emerging green energy industry. The Group has developed more than 100 integrated intelligent energy projects last year. Leveraging the power generation business, it has opened a new chapter for the emerging green and low-carbon energy service industry.

Xinyuan Smart Storage – energy storage site

Firstly, seizing the significant opportunities in the development of new energy distribution and storage technology for innovative power systems, the Group established Xinyuan Smart Storage, an energy storage solution provider, which built an energy storage capacity of nearly 700MWh in half a year and ranked first in the industry in terms of capacity growth.

Secondly, given the robust demand for the substitution of fossil fuel-powered heavy trucks in ports, mines and factories, the Group invested in the equity interests of Qiyuanxin Power to provide battery charging and swapping heavy trucks at the above venues and pioneered a new model of green power transportation. At present, it manages nearly 100 battery charging and swapping stations and has a leading market share in the industry.

Qiyuanxin Power – battery charging and swapping center for heavy trucks

Xiaogang Village Project – floating photovoltaic power region

Thirdly, the Group established local subsidiaries to actively participate in the construction of "low-carbon and zero-carbon beautiful villages" and accelerated the development of geothermal energy and other new energy businesses.

Maintaining stable operation and growth with a focus on value creation. Confronted with the constant wave of the COVID-19 pandemic, upsurging commodity prices, and the severe, complex and ever-changing global environment, the Group made concerted and all-out efforts to enhance its business performance. During the year, we strenuously launched various marketing activities to increase the sales of electricity in the market through direct power supply, cross-province power transmission and power sales agency contracts, which resulted in a year-on-year growth of 11.94% in total electricity sales and a year-on-year increase of 22.18% in revenue. Last year, the clean energy segment continued to benefit from economies of scale and contributed a profit of approximately RMB2.8 billion, which offered strong support to the growth of total revenue. The Group also put emphasis on the value creation capability of emerging industries. The new energy storage segment contributed revenue of approximately RMB580 million and a profit of approximately RMB42 million last year and formed a new drive for revenue growth gradually.

Meanwhile, we implemented multiple measures for fund-raising and deleveraging, such as the issue of the first domestic infrastructure REITS with coal-fired power generation business as the underlying assets. The product raised an equity financing of RMB2.576 billion. Through "top-up placing" of the Company's shares, it also raised an equity financing of approximately HK$3.9 billion, which provided solid capital support for its transformational development.

Promoting more in-depth reform and innovation continuously to boost organic vitality and momentum. Leveraging its position as a "Double-Hundred Enterprise" and the opportunities presented by the "Three-Year Action" for the reform of state-owned enterprises, the Group established the mechanism of "comprehensive development for all employees" to motivate their passion for better results. The Group encouraged project co-investment in the "Three New" industries, including the integrated intelligent energy sector and the battery-swapping heavy truck sector. Through which, it linked decision-makers, entrepreneurs and strivers with strategic transformation. It was also committed to the promotion of market-oriented selection of young cadres with preference given to talents with global vision, market development experience and technological innovation ability, thereby supporting transformation and development with high caliber employees.

Streamlining offshore asset management and control to lay a solid foundation for becoming a world-class enterprise. The Group was entrusted the management of the offshore branches of CPI Holding and the overseas divisions of SPIC in eight countries including Australia, Brazil, Chile and Mexico. These projects had a total installed capacity of 5,800MW. In the past year, we adopted different management approaches for two distinctive groups of offshore assets, namely assets that were acquired from self-development and assets that were acquired from investments through mergers and acquisitions. We also optimized the authorization process of overseas companies to keep upgrading their governance standards. By assigning dedicated personnel to key positions, we further standardized the operations and decision-making management of offshore assets acquired from mergers and acquisitions. Through internal selection and promotion and external recruitment, we took an extra step to strengthen our overseas management teams.

In 2021, we duly performed our social responsibilities and acted our part as a central enterprise by maintaining "zero-infection" and containing the pandemic with concrete and effective measures. Our coal-fired power generating units played an important role in safeguarding domestic power and heat supply at critical moments. Caring both domestic and overseas employees, we provided a larger platform for them to participate in the transformation and development of the Group.

OUTLOOK FOR 2022

From a macro perspective, COVID-19 pandemic and inflation still coexist globally in 2022. Given the combined effects of tightened global supply chain and uncertainties in the global financial market, and coupled with the pressure from insufficient momentum for demand faced by China's economy, it is of paramount importance to stabilize growth. As the Group increases infrastructure investment, its development scale and business results are expected to grow steadily. In particular, "Green Infrastructure" and "New Infrastructure" such as new energy, innovative power systems, rural revitalization and digital industries are likely to be among the first to gain momentum.

From the perspective of industry trend, striking a balance between energy safety and energy transformation will be increasingly important. Mitigation measures for the dilemma between guaranteed electricity supply and stable tariff of coal-fired power are expected to be implemented continuously. The transformation towards clean, market-oriented and digital intelligent energy and power supply will be an irreversible trend. The market-oriented reform of power generation will enter the fast lane and the innovation of energy business forms will start to unfold, with integrated power source, grid, load and storage, multi-energy synergy, new energy+, new energy storage and hydrogen energy breeding new markets and opportunities.

In view of the opportunities and challenges presented by the external environment, the Group will focus on the following tasks this year:

Consolidating and improving the leading edges in the principal clean energy business. Capitalizing on the opportunities arising from the leap-forward development of wind power and photovoltaic power generation under the "14th Five-Year" plan, the Group will focus on large-scale energy base projects and promote market development projects in the county areas. It will also consummate cooperation with major customers and continue to expand the installed capacity of clean energy. By further optimizing the development mode and mechanism, we will streamline and categorize project resources in a scientific manner to ensure project quality. In line with the national policy orientation for "New Energy+" development, we will endeavor to explore the new development mode of photovoltaic power to integrate with the agriculture, forestry, husbandry and fishery industries.

Strengthening and enhancing the first-mover advantages in the emerging "Three New" tracks. Regarding the new energy industries, new business forms and new business models, we will put high emphasis on technological innovation, market development and value creation capability. While pushing forward the development of technological innovation ability, we will stay committed to innovating core technologies, building up the reserve of intellectual property rights, and introducing and nurturing key talents. With a focus on new business models, we will strengthen market development and speed up the cultivation of new business forms and markets, so as to highlight the competitiveness and unique value of our differentiated management. Meanwhile, we will further enhance the value creation capability, concentrate on the innovation of profit-making models, and contribute to enhancing revenue and profit, market share and brand influence.

Seizing the market-oriented development trend of electricity sales for better operating results. We will continue to optimize production and operation, increase power generation, and ensure the commencement of production of clean and new energy projects successfully. We will also secure the on-grid power consumption of renewable energy to boost the revenue from power sales. Capitalizing on the latest development trends of various energy markets including, among others, the trading of market-power, carbon, green power and green certificates, we will continue to enhance the market trading volume of electricity sales and our operating income.

Pressing ahead for reform and breakthroughs to drive transformation and development with sustainable momentum. Based on the Group's strategic transformation and development goals, we will push forward the internal reform and adjustment proactively and motivate our organic momentum and vitality. On one hand, we will adopt strong and effective measures to facilitate the market-oriented selection of young professionals in the building of our cadre talent team. On the other hand, more efforts will be devoted to introducing, recruiting and offering professional training to talents based on market needs in areas such as technological innovation, market development, marketing and global operation. We will continue to promote the reform of remuneration allocation and the medium to long-term incentive mechanism so as to enhance employees' sense of achievement by creating a platform for them to grow and fulfil their dreams.

In 2022, the Group will continue its efforts in achieving the strategic goal of green, low-carbon and innovation-driven transformation. Upholding the spirit of transformation and innovation, we will make every effort to take clean energy development to the next level and unfold a new chapter of the "Three New" businesses, thereby rewarding our shareholders and the society with more brilliant results!

HE Xi
Chairman

17 March 2022

DIRECTORS

HE XI

- Chairman of the Board
- Executive Director
- Chairman of the Risk Management Committee
- Chairman of the Executive Committee

HE Xi, born in 1965, is a senior engineer at professor level and has a master degree in engineering from North China Electric Power University. Mr. HE is currently the chief engineer of new energy of SPIC. He previously served as an executive director and the general manager of CPI Guangxi Nuclear Power Co., Ltd., the deputy general manager and the chief engineer of CPI Power Engineering Co., Ltd., and the chief engineer of Macun Power Plant of Hainan Zhonghai Energy Co., Ltd. He joined the Group in 2020.

GAO Ping

- Executive Director
- President
- Member of the Risk Management Committee
- Member of the Executive Committee

GAO Ping, born in 1971, is a qualified accountant and has a bachelor degree in economics (major in accounting) from Changsha Institute of Electric Power (now known as the Changsha University of Science and Technology). Mr. GAO previously served as a director and the general manager of Jilin Electric (a company listed on the Shenzhen Stock Exchange), a deputy director of Planning and Finance Department and a deputy general manager of Analysis and Evaluation Department, a director of Accounting and Tax Management Division of SPIC, a deputy general manager and the chief financial officer of SPIC Yunnan International Power Investment Co., Ltd., and the chief of finance and tax related divisions of Wu Ling Power. He joined the Group in 2021.

ZHOU Jie

• Non-executive Director

ZHOU Jie, born in 1969, is a senior accountant and has a bachelor degree in economics majoring in accountancy from Changsha Water Conservancy and Electric Power Normal College (now known as Changsha University of Science & Technology). Mr. ZHOU is currently a director of CPI Holding and SPIC Guangdong Power Company Limited. He previously served as a director and the general manager of Wu Ling Power, the deputy general manager of the Hunan Branch of SPIC and Yellow River Upstream Hydropower Development Co., Ltd., and the financial controller of CPI Xinjiang Energy and Chemical Group Co., Ltd. He joined the Group in 2021.

XU Zuyong

• Non-executive Director

XU Zuyong, born in 1964, has a bachelor degree in hydraulic engineering from Wuhan Institute of Hydraulic and Electrical Engineering (now formed as part of Wuhan University), a bachelor degree in journalism and a master degree in economics from Renmin University of China. Mr. XU is an editor-in-chief and is currently a special duty director of SPIC. He previously served as the commissioner of the General Division of the International Department of State Power Corporation, the chief officer of the Policy and Legal Department and the deputy chief officer of the Labour Union Working Committee of China Power Investment Corporation (the former name of SPIC), and an executive director and the chairman of SPIC Information Technology Company Limited. He joined the Group in 2022.

LI Fang

- Independent Non-executive Director
- Chairman of the Remuneration and Nomination Committee
- Member of the Audit Committee
- Member of the Risk Management Committee

LI Fang, born in 1962, has a bachelor degree in mechanical engineering from University of Science and Technology Beijing and a juris doctoral degree from the College of Law of Arizona State University in the United States. Mr. LI has intensive experience in legal, corporate governance and corporate finance. Mr. LI previously served as an executive director of Goldman Sachs (Asia) L.L.C. and a lawyer with Davis Polk and Wardwell LLP in the United States. He joined the Group in 2004.

YAU Ka Chi

- Independent Non-executive Director
- Chairman of the Audit Committee
- Member of the Remuneration and Nomination Committee
- Member of the Risk Management Committee

YAU Ka Chi, born in 1958, holds a professional diploma in company secretaryship and administration from the Hong Kong Polytechnic (now known as the Hong Kong Polytechnic University) and is a member of the American Institute of Certified Public Accountants and the Hong Kong Institute of Certified Public Accountants. Mr. YAU has over 30 years of professional accounting services experience including 20 years in serving PRC-based enterprises. He had worked for Ernst & Young in its Hong Kong, Toronto and Beijing offices, with a primary focus in providing professional services in accounting and audit, initial public offering, and corporate restructuring, before retiring in September 2015. During the tenure with Ernst & Young, Mr. YAU was appointed, among others, as the professional practice director of Greater China and the assurance leader for China North Region. He joined the Group in 2016.

Mr. YAU is currently an independent non-executive director of Yihai International Holding Ltd., HBM Holdings Limited and BetterLife Holding Limited, all three companies are listed on the Main Board of the Hong Kong Stock Exchange.

HUI Hon Chung, Stanley

- Independent Non-executive Director
- Member of the Audit Committee
- Member of the Remuneration and Nomination Committee
- Member of the Risk Management Committee

HUI Hon Chung, Stanley, JP, born in 1950, has a bachelor degree in science from The Chinese University of Hong Kong. Mr. HUI has more than 40 years of management experience in the aviation industry, including holding various senior management positions in Cathay Pacific Airways Limited, AHK Air Hong Kong Limited, Hong Kong Dragon Airlines Limited and the Hong Kong Airport Authority. He joined the Group in 2021.

Mr. HUI is currently an independent non-executive director of a number of companies listed in Hong Kong and Shanghai, including Air China Limited, Beijing Capital International Airport Co., Ltd. and Guangzhou Baiyun International Airport Co., Ltd. At present, he is also a member of the 13th session of National Committee of the Chinese People's Political Consultative Conference, the President of the Hong Kong Aircraft Leasing and Aviation Finance Association and a member of the General Committee of the Hong Kong General Chamber of Commerce.

Mr. HUI was previously appointed by the HKSAR Government as a member of the Greater Pearl River Delta Business Council (for two terms), a member of the Commission on Strategic Development, a member of Aviation Development Advisory Committee, a council member of Vocational Training Council and a member of the Hong Kong Tourism Board. In July 2006, Mr. HUI was appointed as a Justice of the Peace by the Chief Executive of the HKSAR Government.

SENIOR MANAGEMENT

FU Jinsong

- Vice president
- Chairman of the Sustainability Working Committee

FU Jinsong, born in 1974, is an economist and holds a master degree in administration and management from Sun Yat-Sen University and a certified enterprise legal adviser qualification in China. Mr. FU previously served as the policy research manager of Policy Planning and Legal Department of State Nuclear Technology Corporation, a seconded research consultant of Bureau of Enterprise Reform of State-owned Assets Supervision and Administration Commission of the State Council, the deputy general manager of Policy Planning and Intellectual Property Department of SPIC and CPI Holding. He joined the Group in 2018.

SUN Guigen

- Vice president

SUN Guigen, born in 1966, is a senior engineer and has an executive master of business administration degree from Shanghai University of Finance and Economics. Mr. SUN previously served as the general manager of Dabieshan Power Plant, the chairman of Fuxi Power Plant, the deputy chairman of Changshu Power Plant, the chief engineer of the Company and CPI Holding, and the deputy general manager of CPI Holding. He participated in management of the Group's power plants prior to the Company's listing in 2004 and has been staying with the Group since then.

XU Wei

- Vice president
- Chief legal adviser

XU Wei, born in 1973, has a bachelor degree in law from China University of Political Science and Law and a master degree in law from Peking University, and holds a lawyer qualification in China. Ms. XU previously served as the head of the General Office of the Board of Directors and the general manager of Legal Affairs Department of the Company and CPI Holding, the deputy general manager and chief legal advisor of CPI Holding. She joined the Group in 2004.

SHOU Rufeng
• Vice president

SHOU Rufeng, born in 1974, is a certified public accountant and has a bachelor degree in economics from Renmin University of China and a master degree in business administration from Cranfield University in the United Kingdom. Mr. SHOU is currently the chairman of the Supervisory Board of Shanghai Power. He previously served as the capital operations director and the general manager of Capital Markets & Investor Relations Department of the Company and CPI Holding, and the deputy general manager of CPI Holding. He participated in capital planning of the Group prior to the Company's listing in 2004 and has been staying with the Group until 2019. He re-joined the Group in 2021.

JU Shucheng
• Vice president

JU Shucheng, born in 1969, is a senior political officer and has a master degree in business administration from Beijing Institute of Technology. Mr. JU previously served as the deputy director of Discipline Inspection and Supervision Department of Jilin Petroleum Corporation, the director-level supervisor and deputy director of Party Work Style Construction Office of Discipline Inspection and Supervision Department of China National Petroleum Corporation, the deputy director of Discipline Inspection and Supervision Department of State Nuclear Power Technology Corporation, the deputy director of Discipline Inspection and Supervision Department and the deputy leader of Discipline Inspection and Supervision Team of SPIC. He joined the Group in 2020.

XUE Xinchun
• Vice president

XUE Xinchun, born in 1966, is a senior engineer and has a master degree in electrical engineering from Southeast University. Mr. XUE previously served as the general manager of Liaoning Qinghe Electric Power Company Limited, Wuhu Power Plant and CP Hua Chuang and Beijing China Power Huizhi Technology Company Limited, the general manager of Technology and Information Department and the chief engineer of the Company and CPI Holding. He participated in management of the Group's power plants prior to the Company's listing in 2004 and has been staying with the Group since then.

ZHAO Yonggang

• Vice president

ZHAO Yonggang, born in 1972, is a senior engineer and has a master degree in Engineering Project Management from Changsha University of Science & Technology. Mr. ZHAO previously served as the deputy general manager of Materials and Fuel Department and the general manager of International Business Department of the Company and CPI Holding, the deputy director of Guangzhou Representative Office of CPI Holding and the general manager of China Power Hub Generation Company (Private) Limited. He participated in management of the Group's power plants prior to the Company's listing in 2004 and has been staying with the Group since then.

XU Ji

• Chief Accountant

XU Ji, born in 1978, has a master degree in accounting from Tsinghua University and a senior accountant qualification in China, and is a member of the Association of Chartered Certified Accountants. Mr. XU is currently a director of Shanghai Power. He previously served as the head of finance of the Serbia office of China Road & Bridge Corporation, the deputy manager of the finance department of Overseas Business of China Communications Construction Company Limited, the assistant to the general manager and the financial controller of CCCC Industrial Investment Holding Limited, and the financial controller and deputy general manager of Beijing OriginWater Technology Co., Ltd. He joined the Group in 2020.

COMPANY SECRETARY

CHEUNG Siu Lan is a fellow member of The Hong Kong Chartered Governance Institute (formerly known as The Hong Kong Institute of Chartered Secretaries) and The Chartered Governance Institute (formerly known as The Institute of Chartered Secretaries and Administrators in the United Kingdom), who holds the dual designations of Chartered Secretary and Chartered Governance Professional, and is also a fellow member of Hong Kong Institute of Certified Public Accountants and CPA Australia. Ms. CHEUNG has a bachelor degree in commerce from The University of Queensland, Australia and obtained a master degree in professional accounting and a postgraduate diploma in corporate administration from The Hong Kong Polytechnic University. She previously served as the company secretary and the group financial controller of a listed group in Hong Kong. She has extensive experience in the fields of corporate governance, corporate finance and mergers and acquisitions.

Management's Discussion and Analysis

BUSINESS REVIEW

The Group is principally engaged in generation and sales of electricity in Mainland China, including investment, development, operation and management of hydropower, wind power, photovoltaic power and coal-fired power plants, and the provision of energy storage, green power transportation and integrated intelligent energy services. Its businesses are located in various major power grid regions of China.

NATIONAL TOTAL ELECTRICITY CONSUMPTION IN CHINA

10.3 %

NATIONAL POWER GENERATION

8.1 %

2021 is the first year of the Chinese Government's "14th Five-Year" plan. In face of the complex global and domestic environment, the Chinese economy continued to maintain steady growth. Driven by policies such as the expansion of domestic demand and other initiatives, the gross domestic product recorded a year-on-year increase of 8.1% last year. The higher-than-expected data reflected that the Chinese economy sustained its recovery and development amid the ongoing pandemic.

In 2021, the national total electricity consumption in China rose by 10.3% year-on-year and the national power generation recorded a year-on-year increase of 8.1%, among which, wind power, photovoltaic power and coal-fired power increased by 40.5%, 25.2% and 8.4% respectively, while hydropower decreased by 2.5%.

With the Group's strenuous efforts in developing clean energy, the return on investment of the new energy projects has risen gradually and the proportion of profits contributed by the new energy projects continued to increase. The aggregate electricity sales of wind power and photovoltaic power in terms of MWh increased year-on-year by 58.40%, and the aggregate profit for the year increased year-on-year by 50.60%.

LOSS ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY

515,693 RMB'000

However, despite the growth in power demand as stimulated by the strong rebound of the domestic economy, fuel prices soared drastically. Coal prices skyrocketed and hit record highs repeatedly during the second half of last year, which has affected the results performance of the coal-fired power enterprises. The results of the Group's coal-fired power segment turned from profit to loss making, dragging on the overall performance of the Company.

BASIC LOSS PER SHARE

0.07 RMB

For the year ended 31 December 2021, the loss attributable to equity holders of the Company amounted to RMB515,693,000 (2020: profit of RMB1,708,305,000). Basic loss per share was approximately RMB0.07 (2020: earnings of RMB0.17). As at 31 December 2021, net assets per share (excluding non-controlling interests and other equity instruments) was approximately RMB3.03.

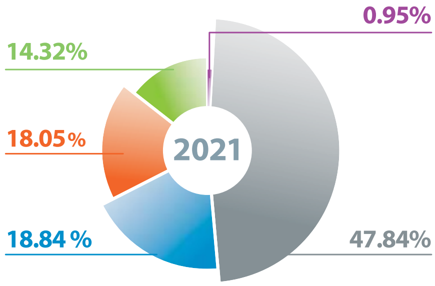
NET ASSETS PER SHARE
(excluding non-controlling interests and other equity instruments)

3.03 RMB

During the year under review, the development and performance of the Group's principal businesses were as follows:

Installed Capacity

The details of consolidated installed capacity of the Group as at 31 December 2021 are set out as follows:



	MW
Hydropower	5,451.1
Wind Power	4,143.3
Photovoltaic Power	5,222.3
Coal-fired Power	13,840.0
Natural Gas Power	275.2
	28,931.9

As at 31 December 2021, the consolidated installed capacity of the Group's power plants was 28,931.9MW, representing a year-on-year increase of 2,086.1MW. Among them, the consolidated installed capacity of clean energy including hydropower, wind power, photovoltaic power and natural gas power was 15,091.9MW in total, accounting for approximately 52.16% of the total consolidated installed capacity and representing an increase of 8.18 percentage points as compared with last year. All of the additional installed capacity were derived from clean energy projects.

During the year under review, the Group successfully disposed part of its equity interests in a coal-fired power subsidiary, marking a major step forward in the gradual and orderly divestment of its coal-fired power business in a bid to achieve the targets of "30•60 Carbon Emission Peak and Carbon Neutrality" (the dual targets of achieving carbon emission peak by 2030 and carbon neutrality by 2060, or the dual carbon targets of 30•60) as soon as possible.

The Group's power generating units that commenced commercial operation during the year are presented by type as follows:

Type of Power Plants	Consolidated Installed Capacity MW
Wind Power	1,971.7
Photovoltaic Power	1,217.2
Natural Gas Power	121.2
Total	3,310.1

Note: Apart from the above new power generating units, as compared with the previous year, the Group recorded a net increase in consolidated installed capacity of 2,086.1MW after taking into account the decrease in consolidated installed capacity of 1,224.0MW due to the disposals of certain power plants.

Project Development

With the national goals of "30•60 Carbon Emission Peak and Carbon Neutrality", the comprehensive transition of the power industry towards clean energy is an inevitable trend. Following the new round of integrated development of technological and industrial reforms, new industries and new modes of energy use such as big data, cloud computing, energy storage technology and intelligent energy emerged one after another, while sectors such as integrated intelligent energy and energy storage have become the new drivers of the energy revolution.

During the year under review, the Group also entered into several cooperation agreements with various municipal governments, including Heilongjiang Province and Liaoning Province, and different organizations in relation to investment and development of green and low-carbon intelligent assets and clean energy projects, which will further accelerate the green-and-clean transformation of the Group.

Offshore Wind Power Projects

With the release of "The 14th Five-Year Plan for National Economic and Social Development and the Outline of Long-term Goals for 2035 of the PRC (《中國國民經濟和社會發展第十四個五年規劃和2035年遠景目標綱要》)", the national plan specified the strategy to scale up the development of Shandong Peninsula and implement quality and green development, which has provided certainty on the prospects of development of the local wind power industry. During the year under review, Haiyang Wind Power, a subsidiary of the Company located in Shandong Province, seized the opportunity to develop the first offshore wind power demonstration project in the province, which is also the first offshore wind power project of the Group. Phase 1 of the wind power generation project with an installed capacity of 300MW was connected to the power grid at full capacity by the end of 2021, and commenced commercial operation in early 2022.

Shandong Offshore Wind Power Project

In response to the "Three-year Action Plan for Accelerating the Development of Seaward Economy and Promoting the Construction of a Powerful Region of Marine Economy in Guangxi (2020–2022) (《廣西加快發展向海經濟推動海洋強區建設三年行動計劃(2020–2022年)》)", Changzhou Hydropower, a subsidiary of the Company, entered into a joint venture agreement in June 2021 to jointly develop offshore wind power projects in Guangxi Zhuang Autonomous Region of the PRC. Currently, the Group is actively engaging in the investment of relevant competitive projects whilst promoting the development of offshore wind power projects in Guangxi region. It is expected that this will further enhance the Group's local market position by expanding its scale of operation and the layout of its clean energy bases in the region.

Green and Intelligent Projects for Revitalization of Rural Areas

The Xiaogang Village Project in Anhui Province, the PRC is an integrated intelligent energy demonstration project of photovoltaic power generation for transformational and digital development of the rural area that combines ecological energy, smart facilities and green industries. Phase 1 of the project, which included ecological energy projects of agricultural-photovoltaic complementary power generation, has successfully commenced production during the year under review. The feasibility study for the development of Phase 2 of the project is also underway with a target to commence construction in 2022.

The integrated intelligent energy demonstration project of photovoltaic power generation in Xiaogang Village

The agricultural-photovoltaic complementary power generation project in Zhuwa Town, Xishui County, Hubei Province of the PRC is one of the key projects of the Group with an objective to actively implement the new national strategies for energy security and the dual carbon targets of "30•60". Having commenced operation at full capacity during the year, the project not only enables the reduction of carbon emissions, but also facilitates the revitalization of rural areas and boosts local employment through our low-carbon and zero-carbon solutions.

Xishui Photovoltaic Power Generation Project

Energy Storage Projects

During the year under review, the Group actively developed its energy storage business and cooperated with Beijing Hyper Strong Technology Co., Ltd., the No. 1 company in terms of energy capacity in the energy storage sector in the PRC, to establish Xinyuan Smart Storage, which is a company principally engaged in project development and investment of energy storage and power stations, and the research and development, assembling integration, subcontracting and operation of the facilities of the entire power station. The Haiyang 101MW/202MWh Energy Storage and Power Station, the first contracted project undertaken by Xinyuan Smart Storage, has been connected to the power grid successfully during the year and will be able to consume new energy power of 100,000MWh annually. The contracted construction of Golmud 100MW/200MWh Energy Storage and Power Station, the single largest energy storage sharing project in Qinghai Province in terms of capacity, is also in progress and undertaken by Xinyuan Smart Storage. It is expected that the revenue from power grid ancillary services of Xinyuan Smart Storage will become a strong profit growth driver of the Group in the coming future.

Haiyang Energy Storage and Power Generation Station

Overseas Development Projects

Sao Simao Hydropower Station in Brazil

Punta Sierra Wind Farm in Chile

During the year, Cox's Bazar 66MW Project, the first overseas wind power project of the Group, was officially launched in Bangladesh and commenced construction. The Group will push ahead with the commencement of production of the project in a safe, high quality and efficient manner, at the same time intensely expanding its presence in the local market to accelerate the implementation of subsequent projects in Bangladesh.

Zhanatas 100MW Wind Power Project, an entrusted management project of the Group, has also completed connection to the power grid during the year, becoming the largest wind power project in Central Asian region. The day-to-day entrusted management services and the agreed pre-emptive rights have laid a solid foundation for smooth expansion into the local markets of the region in the future.

Projects under Construction

As at 31 December 2021, the consolidated installed capacity of the projects under construction was 6,631.9MW, among which, the consolidated installed capacity of coal-fired power and clean energy segments were 2,000.0MW and 4,631.9MW respectively. The clean energy projects under construction accounted for 69.84% in aggregate (excluding clean energy projects of which the acquisitions have not yet been completed during the year).

While the pandemic remained volatile during the year, the Group effectively implemented pandemic prevention and control measures and undertook various tasks in advance to avoid any obstacles that may arise in the course of normal operation. As a result, its construction works were carried out in an orderly manner and its projects commenced operation as scheduled, including various wind power and photovoltaic power generation projects in Shandong Province, Ningxia Hui Autonomous Region, Guangdong Province and Shanxi Province, etc.

New Development Projects

During the year under review, the Group continued to establish various new energy and integrated intelligent energy projects in collaboration with the Chaoyang Municipal Government. These projects will carry out regional energy planning based on the characteristics of energy supply and demand in the development zone, realize the economic, efficient and intelligent supply and use of multiple energy sources such as heat, cold, water, gas and electricity, and set up battery charging and swapping stations that integrated photovoltaic power, energy storage and charging. Through the development of a carbon-neutral smart industrial park, these projects will reduce the energy cost of enterprises settled in the park, facilitate the high-quality development of the development zone, and foster a stronger economic growth point for the county, thereby becoming national zero-carbon demonstration projects.

As of now, the Macheng Multi-energy Complementary 1,000MW New Energy Base Project in Hubei Province has obtained the first batch of quota and commenced construction. The Integrated Power Source, Grid, Load and Storage Project in the Lubei Integrated Intelligent Industrial Park has also been enlisted in the second batch of key infrastructure construction projects in Shandong Province. We will continue to stay in line with the national developmental direction and promote intelligent energy and integrated power source, grid, load and storage projects.

Currently, the total installed capacity of new projects of the Group at a preliminary development stage (including projects with applications submitted to the PRC government for approval) is approximately 13,892.1MW, which are all clean energy projects (including natural gas power projects) primarily located in areas with development potential, including Guangxi, Shanxi, Hebei and Shandong.

Power Generation and Electricity Sales

In 2021, the details of power generation and electricity sold by the Group are set out as follows:

POWER GENERATION

GROSS POWER GENERATION

103,048,687 MWh

Compared with 2020

↑ **12.13** %

	2021 / MWh	2020 / MWh	Changes / %
Hydropower	21,072,395	24,714,306	–14.74
Wind Power	7,020,878	4,145,978	69.34
Photovoltaic Power	7,225,835	4,851,827	48.93
Coal-fired Power	66,630,939	57,999,478	14.88
Natural Gas Power	1,098,640	190,921	475.44

ELECTRICITY SALES

TOTAL ELECTRICITY SOLD

98,793,792 MWh

Compared with 2020

↑ **11.94** %

	2021 / MWh	2020 / MWh	Changes / %
Hydropower	20,860,520	24,471,737	–14.76
Wind Power	6,888,335	4,055,528	69.85
Photovoltaic Power	7,093,353	4,771,492	48.66
Coal-fired Power	62,887,613	54,770,211	14.82
Natural Gas Power	1,063,971	186,557	470.32

In 2021, the total electricity sold by the Group amounted to 98,793,792MWh, representing an increase of 11.94% as compared with the previous year. The changes in electricity sold by each power segment as compared with the previous year were as follows:

Hydropower ↓ 14.76%	Hydropower — A decrease of 14.76% in electricity sold due to a year-on-year decrease in rainfall in the river basins where the Group's hydropower plants are located during the year.
Wind Power ↑ 69.85% Photovoltaic Power ↑ 48.66%	Wind Power and Photovoltaic Power — Benefiting from a large number of new power generating units of the Group that were put into commercial operation during the year, the electricity sales of wind power and photovoltaic power recorded a year-on-year increase of 69.85% and 48.66%, respectively.
Coal-fired Power ↑ 14.82%	Coal-fired Power — Driven by the year-on-year increase in electricity demand during the year and the commencement of commercial operation of new coal-fired power generating units since late 2020, the electricity sold increased by 14.82% year-on-year.
Natural Gas Power ↑ 470.32%	Natural Gas Power — The electricity sold increased by 470.32% year-on-year due to the commencement of operation of new projects during the year.

In 2021, the majority of the Group's power plants increased in terms of incentive electricity gained for the fulfilment of certain specific targets required by the local governments in respect of environmental protection, heat supply capacity and productivity of certain coal-fired power generating units.

In 2021, the details of electricity sold by the Group's main associates and joint ventures are set out as follows:

ASSOCIATES

	2021 / MWh	2020 / MWh	Changes / %
Photovoltaic Power	107,597	101,132	6.39
Coal-fired Power	18,440,493	14,447,574	27.64

JOINT VENTURES

	2021 / MWh	2020 / MWh	Changes / %
Wind Power	1,374,815	450,613	205.10
Coal-fired Power	3,527,257	3,395,313	3.89
Total	23,450,162	18,394,632	27.48

Sales of Heat

In order to strongly support the existing environmental policies promulgated by the Chinese Government, the Group has carried out in-depth exploration of the heat supply potentials in various regions, strengthened the development of heat market and promoted the construction of centralized heating pipe networks and developed heat and electricity co-generation projects, thereby achieving positive results in various areas such as energy efficiency upgrade and development of heat supply market. In 2021, the total heat sold by the Group (including an associate and a joint venture) was 28,206,686GJ, representing an increase of 6,055,639GJ or 27.34% as compared with the previous year.

TOTAL HEAT SOLD

28,206,686 GJ

Compared with 2020

27.34 %

During the year under review, a total of eight coal-fired power generating units of four subsidiaries of the Group completed the upgrade of heat supply facilities.

Direct Power Supply

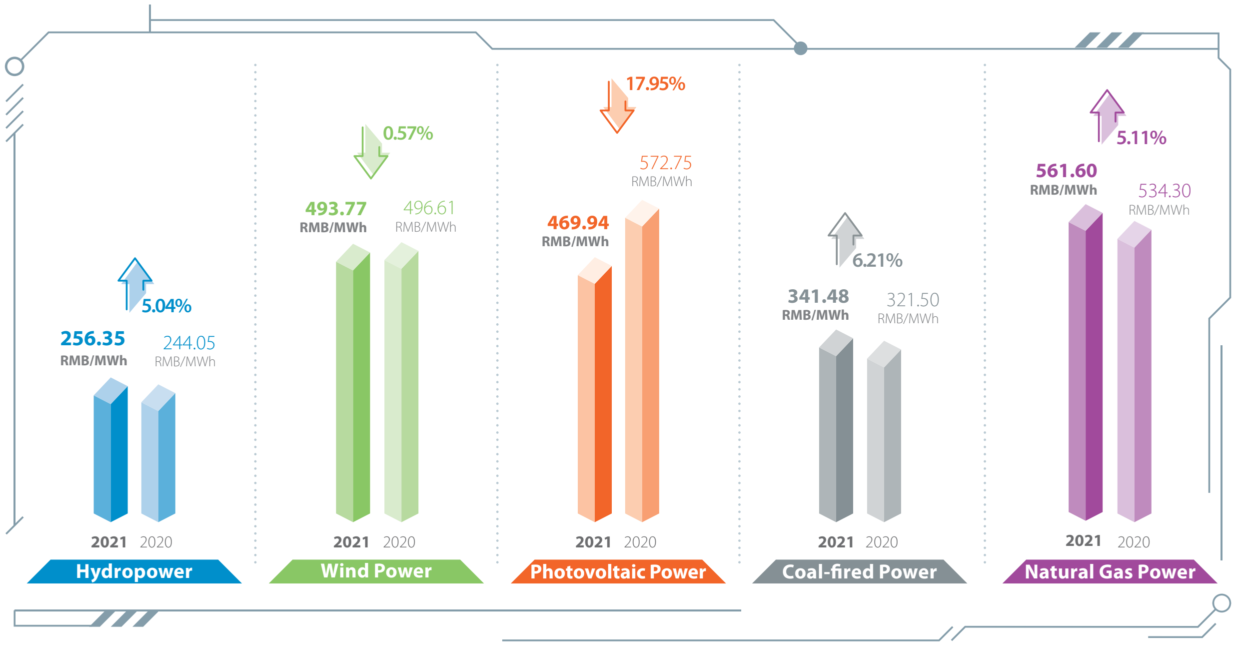
The Group has actively participated in the market-oriented reform of the national power industry and enhanced the research on electricity market policies, particularly the trading of spot electricity, green certificate/green energy, carbon emission quotas and related market policies and regulations. Keeping abreast of the reform, it maximized power sales and market share through increased participation in direct power supply transactions (including competitive bidding for on-grid electricity sales). Subsidiaries in various provinces have also established their power sales centers to attract more target customers by provision of quality services.

In 2021, for those coal-fired power plants and hydropower plants of the Group which participated in direct power supply transactions, their electricity sold through direct power supply transactions amounted to 40,059,220MWh and 5,952,780MWh respectively, together accounting for approximately 46.57% (2020: 48.24%) of the Group's total electricity sold.

In 2021, for those coal-fired power and hydropower plants of the Group which participated in direct power supply transactions, their average on-grid tariffs were at a discount of approximately 0.70% and 6.53% (2020: 7.80% and 6.50%) respectively compared with the respective average on-grid tariffs officially approved by the Chinese Government. The tariff discount of direct power supply for coal-fired power was significantly lowered than that of the previous year, mainly due to the increase in coal price and the tense demand-supply relationship of coal-fired power during the year, which led to improved bargaining power of coal-fired power enterprises in the market transactions.

Average On-Grid Tariff

In 2021, the Group's average on-grid tariffs of each power generation segment as compared with the previous year were as follows:



As compared with 2020, the changes in the average on-grid tariff of each power segment of the Group were mainly due to the following factors:

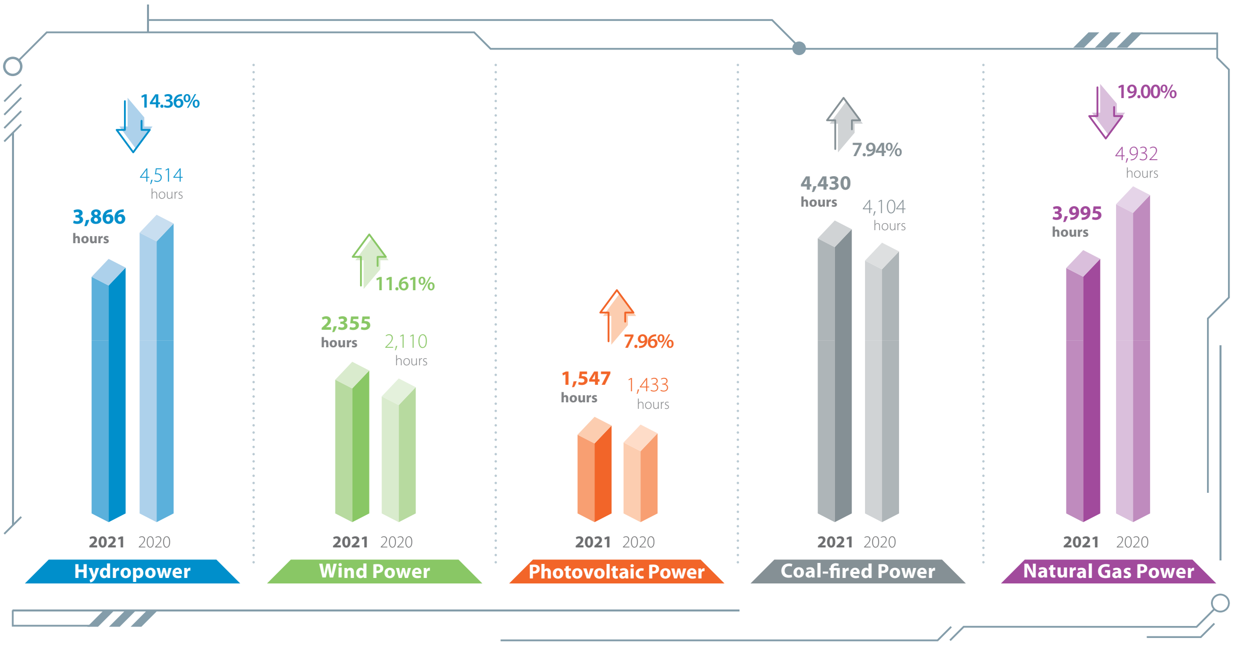
Hydropower	The fact that the Group's hydropower plant in Hunan Province bore less share of the electricity subsidies to the ancillary service markets for the local government during the year as compared with the previous year.
Photovoltaic Power	The impact of the government's subsidies reduction policy for photovoltaic power tariff and the commencement of operation of the Group's photovoltaic power generation grid parity and competitive-bidding projects successively during the year, which resulted in a significantly lower average tariff of photovoltaic power.
Coal-fired Power	The suspension for power curtailment of certain enterprises arising from soaring coal prices and various measures adopted by the government to safeguard power supply accordingly, such as relaxing the price cap for electricity in the market, which resulted in the significant decline in tariff discounts for direct power supply as compared with the previous year.
Natural Gas Power	The higher average tariff of the power generating units newly putting into commercial operation during the year.

In October 2021, the National Development and Reform Commission issued the Notice on Further Deepening the Market-oriented Reform of On-Grid Tariff for Coal-fired Power Generation (《關於進一步深化燃煤發電上網電價市場化改革的通知》). Subsequently, the coal-fired power plants of the Group actively liaised with customers with large demands. Given pressure arising from the soaring coal prices, the Group strived to adjust the prices of existing contracts and increased the prices of newly signed contracts, while successfully securing various tariff adjustments.

In principle, all coal-fired power generation will be traded via market-power transactions in 2022. As the development of the power spot market picks up speed, the proportion of new energy traded in the market will increase gradually. The Group will continue to closely monitor and enhance the research on policies in relation to market-power trading. It will spare no efforts to comply with regional market policies and maintain a sound market environment to outperform its peers in terms of market indicators under the same conditions.

Average Utilization Hours of Power Generating Units

In 2021, the average utilization hours of power generating units of each power segment of the Group as compared with the previous year were as follows:



As compared with 2020, the changes in the average utilization hours of power generating units of each power segment were mainly due to the following factors:

Hydropower	The decrease in power generation as a result of the decrease in rainfall in the river basins where most of the Group's hydropower plants are located during the year.
Wind Power	The higher average utilization hours of the newly operating generating units.
Photovoltaic Power	The results achieved from effective facility management and maintenance.
Coal-fired Power	The recovery of power consumption driven by the year-on-year increase in electricity demand during the year.
Natural Gas Power	The lower average utilization hours of the newly operating generating units.

OPERATING RESULTS OF 2021

In 2021, the net profit of the Group amounted to RMB171,219,000, representing a decrease of RMB2,754,332,000 or 94.15% as compared with the previous year.

In 2021, the net profit (loss) of each operating segment and their respective changes over the previous year were as follows:

Hydropower
945,715 RMB'000
Compared with 2020
↓ 38.77 %

Wind Power
1,257,661 RMB'000
Compared with 2020
↑ 86.12 %

Photovoltaic Power
574,095 RMB'000
Compared with 2020
↑ 6.21 %

Coal-fired Power
(2,083,793) RMB'000
Compared with 2020
↓ 498.61 %

Energy Storage
42,093 RMB'000

Unallocated
(564,552) RMB'000
Compared with 2020
↑ 57.73 %

As compared with 2020, the changes in net profit were mainly due to the following factors:

Revenue

The revenue of the Group was mainly derived from the sales of electricity to regional and provincial power grid companies, and the provision of power generation and subcontracting services for energy storage projects. In 2021, the Group recorded a revenue of RMB34,734,288,000, representing an increase of 22.18% as compared with RMB28,427,721,000 of the previous year.

In 2021, the details of revenue of each operating segment are set out as follows:

Hydropower
5,347,552 RMB'000
Compared with 2020
↓ 10.46 %

Wind Power
3,401,228 RMB'000
Compared with 2020
↑ 68.88 %

Photovoltaic Power
3,333,448 RMB'000
Compared with 2020
↑ 21.98 %

Coal-fired Power
22,072,456 RMB'000
Compared with 2020
↑ 24.64 %

Energy Storage
579,604 RMB'000

- Revenue from hydropower decreased by RMB624,882,000, which was attributable to the decrease in electricity sales of hydropower during the year.

- Revenue from wind power and photovoltaic power increased by RMB1,987,819,000 in aggregate due to the commencement of commercial operation of various projects.

- Revenue from coal-fired power increased by RMB4,364,026,000, which was attributable to the increase in electricity sales of coal-fired power as compared with the previous year, benefitted from the year-on-year growth in power demand.

- Revenue of RMB579,604,000 represents the Group's revenue generated from the provision of subcontracting services for development and assembling integration of energy storage power stations.

Operating Costs

Operating costs of the Group mainly consist of fuel costs for coal-fired power generation, repairs and maintenance expenses for power generating units and facilities, depreciation and amortization, staff costs, subcontracting costs, consumables and other operating expenses. In 2021, the operating costs of the Group amounted to RMB31,601,265,000, representing an increase of 41.12% as compared with RMB22,393,465,000 of the previous year. The increase in operating costs was mainly due to the significant increase in fuel costs, and the increase in both depreciation and other operating expenses as further explained below.

Total Fuel Costs

The total fuel costs increased by RMB7,061,819,000 as a result of the year-on-year surge in coal prices and the corresponding increase in fuel consumption in tandem with the increase in electricity sales of coal-fired power.

Unit Fuel Cost

The average unit fuel cost of the Group's coal-fired power business was RMB277.80/MWh, representing a significant increase of 40.94% from that of RMB197.10/MWh for the previous year. This was mainly attributable to the rising and record-breaking coal prices resulting from the tight supply and demand in the thermal coal market under the combined effect of strong power demand and coal supply shortage since the second half of last year. In response to the new trend of "fast-growing, highly fluctuating and rapidly evolving" coal market at the moment, the Group adopted the strategy of "optimizing long-term contract, increasing import and establishing coal reserve at staggered peaks" to exercise control over coal prices and fulfilled over 90% of long-term coal contracts. The Group also took advantage of favorable policies to procure more imported coal and develop new coal import channels for its onshore power plants. As such, the year-on-year increase in the integrated unit cost of standard coal was lower than the average increase of the major coal market indexes.

Depreciation and Staff Costs

Depreciation of property, plant and equipment and the right-of-use assets and staff costs increased by RMB1,162,218,000 in aggregate as a result of business expansion and the large number of new power generating units that commenced commercial operation during the year.

Subcontracting Costs

The Group newly added an energy storage business segment during the year, which is principally engaged in the provision of subcontracting services for the project development and assembling integration of new energy storage power stations. The subcontracting cost, being the operating cost of this new business segment, for the year was RMB510,748,000.

Other Operating Expenses

Other operating expenses increased by RMB307,467,000 year-on-year, mainly due to the increase in administrative and selling related expenses and research and development expenses.

Other Gains and Losses

The net gains from other gains and losses increased by RMB900,570,000 year-on-year, mainly due to the decrease in asset impairment losses as compared with the previous year and the increase in gains on disposal of assets held for sale as compared with previous year.

Operating Profit

In 2021, the Group's operating profit was RMB4,600,867,000, representing a decrease of 27.79% as compared with the operating profit of RMB6,371,860,000 of the previous year.

Finance Costs

In 2021, the finance costs of the Group amounted to RMB3,861,500,000 (2020: RMB3,203,698,000), representing an increase of RMB657,802,000 or 20.53% as compared with the previous year. The increase in interest expense was in line with the rise of debts level due to the expansion of scale of assets.

Share of Results of Associates

In 2021, the share of results of associates was a loss of RMB213,524,000, representing a decrease in profit of RMB497,476,000 as compared with the profit of RMB283,952,000 of the previous year. The decrease in profits was mainly due to the decrease in net profits of the associates engaging in coal-fired power-related business as a result of the increase in coal prices as compared with the previous year.

Share of Results of Joint Ventures

In 2021, the share of results of joint ventures was a loss of RMB119,280,000, representing a decrease in profit of RMB162,941,000 as compared with the profit of RMB43,661,000 of the previous year. The decrease in profits was mainly due to the decrease in net profits of the joint ventures engaging in coal-fired power-related business as a result of the increase in coal prices as compared with the previous year.

Income Tax Expense

In 2021, income tax expense of the Group was RMB361,947,000, representing a decrease of RMB538,629,000 as compared with RMB900,576,000 of the previous year. The decrease was mainly due to the decrease in profits of the hydropower and coal-fired power segments as compared with the previous year.

Final Dividend

At the Board meeting held on 17 March 2022, the Board recommended the payment of a final dividend for the year ended 31 December 2021 of RMB0.05 (equivalent to HK$0.0616 at the exchange rate announced by the People's Bank of China on 17 March 2022) per ordinary share (2020: RMB0.13 (equivalent to HK$0.1556) per ordinary share), totaling RMB541,669,000 (equivalent to HK$667,337,000) (2020: RMB1,274,895,000 (equivalent to HK$1,525,952,000)), which is based on 10,833,386,321 shares (2020: 9,806,886,321 shares) in issue on 17 March 2022 (2020: 18 March 2021).

EQUITY INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME ("FVTOCI")

As at 31 December 2021, the carrying amount of equity instruments at FVTOCI was RMB5,235,995,000, accounting for 3.00% of total assets, including listed equity securities of RMB4,657,406,000 and unlisted equity investments of RMB578,589,000.

Listed equity securities represent the equity interests in Shanghai Power held by the Group. As at 31 December 2021, the Group held 13.88% of the issued share capital of Shanghai Power, the A shares of which are listed on Shanghai Stock Exchange. It was categorized into the level 1 financial assets of fair value measurements, and its fair value increased by 80.06% as compared with RMB2,586,640,000 as at 31 December 2020.

Unlisted equity investments represent the Group's investment in equity of some unlisted companies principally engaged in financial services, coal production and electricity trading services respectively. They were categorized into the level 3 financial assets of fair value measurements. As at 31 December 2021, the aggregate fair value of unlisted equity investments owned by the Group was RMB578,589,000 (including an unlisted equity investment in the PRC as part of disposal groups classified as held for sale), representing an increase of 17.32% from RMB493,189,000 as at 31 December 2020.

The valuation technique and key inputs used for measuring the fair value of the above level 3 financial assets were market approach, i.e. fair value of such equity instruments is estimated by calculating the appropriate value ratio based on market multiples derived from a set of comparable listed companies in the same or similar industries. Key inputs were (i) the market value of the said equity interests, (ii) price-to-book ratio of the comparable companies (0.87-2.06), and (iii) the marketability discount (12.83%-31.77%).

The fair value gain on equity instruments at FVTOCI for the year ended 31 December 2021 of RMB1,608,081,000 (net of tax) (2020: loss of RMB240,003,000) was recognized in the consolidated statement of comprehensive income.

MATERIAL ACQUISITIONS AND DISPOSALS

In July 2021, Wu Ling Power (a 63%-owned subsidiary of the Company) entered into three equity transfer agreements with Mingyang New Energy to acquire the entire equity interests and to assume the shareholder's loans of three wind power project companies at the adjusted aggregated consideration of RMB1,696,067,000. For details, please refer to the announcements of the Company dated 12 July 2021, 19 July 2021 and 28 September 2021.

In July 2021, the Company entered into an equity transfer agreement with CPI Holding to acquire 36% of the equity interest of Qiyuanxin Power (an investment holding company for the development of green power transportation, including, among others, electric vehicle battery charging and swapping infrastructure services) at the consideration of RMB18,010,000. For details, please refer to the announcements of the Company dated 30 July 2021 and 28 September 2021.

In August 2021, the Company entered into an equity transfer agreement with CPI Holding to acquire 55% of the equity interest of CP Huayuan (a company engaging in nuclear engineering contracting) at the adjusted consideration of RMB60,716,370. For details, please refer to the announcements of the Company dated 31 August 2021 and 10 December 2021.

In November 2021, the Company entered into a partnership agreement with SPIC Asset Management and two independent third parties to form a limited partnership. As a limited partner, the Company will make a capital contribution of RMB268,202,522, representing approximately 35% of the equity interest in the limited partnership. The purpose of forming the limited partnership is to acquire 40% of the equity interest (at a consideration of RMB206,292,920) and to assume part of the shareholder's loan (at a consideration of RMB560,000,000) of CP Shentou, an indirect 80%-owned subsidiary of the Company. For details, please refer to the announcements of the Company dated 26 November 2021 and 23 December 2021.

Save as disclosed above, the Group did not have any other material acquisitions and disposals during the year under review.

LIQUIDITY, CASH FLOWS AND FINANCIAL RESOURCES

CASH AND CASH EQUIVALENTS

1,766,632 RMB'000

Compared with 2020

34.21 %

As at 31 December 2021, cash and cash equivalents of the Group were RMB1,766,632,000 (31 December 2020: RMB1,316,351,000). Current assets amounted to RMB18,570,390,000 (31 December 2020: RMB14,121,267,000), current liabilities amounted to RMB45,535,822,000 (31 December 2020: RMB40,556,194,000) and current ratio was 0.41 (31 December 2020: 0.35).

In April 2019, the Company renewed the Financial Services Framework Agreement with SPIC Financial for a term of three years, pursuant to which SPIC Financial has provided the Group with deposit services, settlement services, loan services and other financial services approved by the CBIRC on a non-exclusive basis. The Annual Cap in respect of the maximum daily balance of deposit (including accrued interests) placed by the Group with SPIC Financial shall not exceed RMB4.2 billion during the term of this Framework Agreement.

For the year ended 31 December 2021, the maximum daily balance of deposit (including accrued interests) placed by the Group with SPIC Financial was approximately RMB3.27 billion (31 December 2020: RMB4.18 billion).

Pursuant to the Financial Services Framework Agreement, SPIC Financial provides an internal treasury management platform, a cross-border fund allocation platform and other financial services to the Group through its own financial resources, such as the business information system and cross-border fund allocation channels. Such platforms enable the real-time monitoring of account balances as well as income and expenditure, thereby safeguarding against funding risks. At the same time, they facilitate flexible and efficient fund allocation across borders, which give rise to more flexible capital flow at home and abroad, broaden financing channels for domestic subsidiaries and reduce uncertainties in inbound and outbound capital flows due to changes in foreign exchange regulatory policies.

During the year under review, the Group recorded a net increase in cash and cash equivalents (including cash and cash equivalents as part of the disposal groups classified as held for sale) of RMB435,245,000 (2020: a net increase of RMB80,276,000). For the year ended 31 December 2021:

- net cash generated from operating activities amounted to RMB1,342,374,000 (2020: RMB5,501,876,000). Significant decrease in cash inflow was mainly attributable to the substantial decline in operating profit resulted from the increase in coal prices and thus the increase in fuel costs for coal-fired power generation.

- net cash used in investing activities amounted to RMB18,515,585,000 (2020: RMB15,768,455,000), which mainly represented the cash outflow of capital expenditure on the Group's payments for property, plant and equipment and prepayments for construction of power plants.

- net cash generated from financing activities amounted to RMB17,608,456,000 (2020: RMB10,346,855,000). The increase in net cash inflow, as compared with the previous year, was mainly attributable to the increase in cash inflow from drawdown of bank borrowings, proceeds from disposal of interests in a subsidiary and net proceeds from placing of ordinary shares.

The financial resources of the Group were mainly derived from cash inflow generated from operating activities, borrowings from banks and related parties, and project financing.

DEBTS

As at 31 December 2021, total debts of the Group amounted to RMB105,921,101,000 (31 December 2020: RMB91,431,935,000). All debts of the Group are denominated in RMB or Japanese Yen ("JPY").

As at 31 December 2021, the Group's gearing ratio, calculated as net debt (being total debts less cash and cash equivalents) divided by total capital (being total equity plus net debt), was approximately 67% (31 December 2020: approximately 66%). The Group's gearing ratio remained stable.

DEBTS

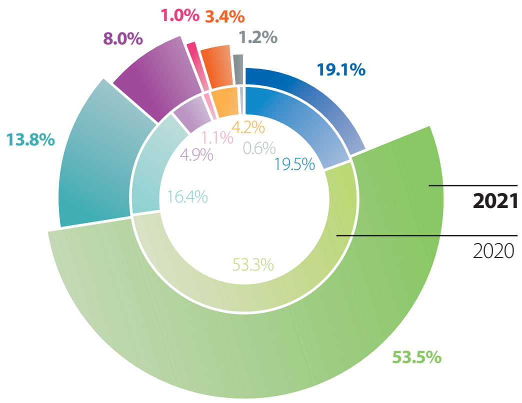
105,921,101 RMB'000

Compared with 2020

15.85%

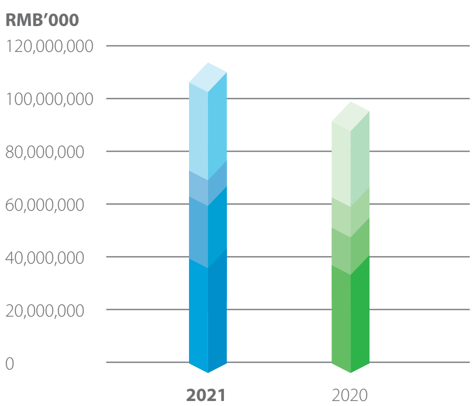
As at 31 December 2021, the amount of borrowings granted by SPIC Financial was approximately RMB4.93 billion (31 December 2020: approximately RMB4.06 billion).

The details of the Group's debt as at 31 December 2021 and 2020 are set out as follows:



	2021 RMB'000	2020 RMB'000
Bank borrowings, secured	**20,222,644**	17,857,058
Bank borrowings, unsecured	**56,619,460**	48,714,478
Borrowings from related parties	**14,666,286**	14,949,670
Medium-term notes and super & short-term commercial papers issued by the Company	**8,500,000**	4,500,000
Super & short-term commercial papers issued by Wu Ling Power	**1,020,000**	1,000,000
Lease liabilities	**3,592,386**	3,880,729
Other borrowings	**1,300,325**	530,000
	105,921,101	91,431,935

The above debts are repayable as follows:



	2021 RMB'000	2020 RMB'000
Within one year	**33,258,234**	28,580,938
Between one and two years	**9,636,677**	12,012,110
Between two and five years	**23,644,202**	14,014,980
Over five years	**39,381,988**	36,823,907
	105,921,101	91,431,935

Among the above debts, approximately RMB39,092,805,000 (31 December 2020: approximately RMB41,237,926,000) are subject to fixed interest rates, and the remaining debts denominated in RMB are subject to adjustment based on the relevant rules of the People's Bank of China and bearing interest rates ranged from 1.30% to 5.30% (2020: ranged from 1.65% to 5.55%) per annum.

ASSET IMPAIRMENT

When there is any indication of impairment, the Group will conduct an impairment test on assets such as property, plant and equipment and right-of-use assets to assess whether an impairment has occurred. During the year, the Company has no material asset impairment.

SIGNIFICANT FINANCING ACTIVITIES

Issue of commercial papers and notes

In February and August 2021, the Company issued the third and fourth tranche of super & short-term commercial papers in the PRC in a principal amount of RMB500 million each at the interest rate of 3.20% and 2.63% per annum and a maturity period of 179 days and 210 days, respectively. Such super & short-term commercial papers can be issued in tranches on a revolving basis with an aggregate principal amount up to RMB1 billion within the effective term of two years commencing from August 2019.

In April 2021, the Company issued the second tranche of medium-term notes in the PRC in a principal amount of RMB2 billion at the interest rate of 3.54% per annum and a maturity period of three years. Such medium-term notes can be issued in tranches with an aggregate principal amount up to RMB4 billion within the effective term of two years commencing from August 2019.

In May and November 2021, Wu Ling Power issued the second and third tranche of super & short-term commercial papers in the PRC in a principal amount of RMB1 billion each at the interest rate of 3.00% and 2.57% per annum and a maturity period of 260 days and 55 days, respectively. In December 2021, Wu Ling Power further issued green super & short-term commercial papers in a principal amount of RMB20 million at the interest rate of 2.90% per annum and a maturity period of 180 days. Such super & short-term commercial papers can be issued in tranches on a revolving basis with an aggregate principal amount up to RMB2 billion within the effective term of two years commencing from July 2020.

Issue of debt financing instruments

In August 2021, the Company obtained approval for its application for issuing debt financing instruments ("DFI") in the interbank bond market in the PRC with an effective registration period of two years commencing from August 2021. Within the effective registration period, the Company is permitted to issue multi-type of DFI, including but not limited to super & short-term commercial papers, short-term commercial papers, medium-term notes, perpetual notes, asset-backed notes and green debt financing instruments in one or multiple tranches.

Under the DFI registration, the Company issued (i) in October 2021, the first tranche of medium-term notes in a principal amount of RMB2 billion at the interest rate of 3.47% per annum and a maturity period of three years, and (ii) the first tranche of green medium-term notes (carbon-neutral bond) in a principal amount of RMB1 billion at the interest rate of 3.39% per annum and a maturity period of three years; and (iii) in November 2021, the first tranche of super & short-term commercial papers in a principal amount of RMB1 billion at the interest rate of 2.88% per annum and a maturity period of 269 days.

The proceeds from all of the above debt issues have been fully applied towards the repayment of existing borrowings and/or replenishment of the working capital of the Group.

Issue of asset-backed securities

In November 2021, the Company established the "China Power Energy Infrastructure Investment and Anhui's Asset-backed Special Program (similar to REITS)"* (中國電力能源基礎設施投資和皖資產支持專項計劃(類 REITS) with CSC Financial Co., Ltd. ("CSCFC") acted as the manager. CSCFC shall issue the asset-backed securities in the form of similar REITS products to the qualified investors for a total amount of RMB2.576 billion. The asset-backed securities are classified into three tranches, namely senior type A, senior type B and subordinated, with a principal amount of RMB2,150 million, RMB425 million and RMB1 million respectively. The period of financing of the asset-backed securities is 18 years, and the coupon rate will be adjusted at the end of every three years based on the then prevailing market conditions. The proceeds were fully used for the replenishment of working capital and repayment of debts of the Group.

Placing of shares

In December 2021, the Company completed the top-up placing of 1,026,500,000 existing shares and allotted and issued the same number of subscription shares at a subscription price of HK$3.80 per share under the general mandate. The net proceeds from the subscription amounted to approximately HK$3,868,000,000 (equivalent to approximately RMB3,149,800,000). The proceeds have been fully applied towards the development and expansion of clean energy business and the replenishment of the working capital of the Group.

CAPITAL EXPENDITURE

In 2021, the capital expenditure of the Group was RMB17,725,070,000 (2020: RMB18,269,260,000). In particular, the capital expenditure for clean energy segments (hydropower, wind power, photovoltaic power and energy storage) was RMB14,940,384,000 (2020: RMB14,136,015,000), which was mainly applied for the project construction of new power plants and power stations, and the asset purchases related to the energy storage business; whereas the capital expenditure for coal-fired power segment was RMB2,465,256,000 (2020: RMB3,902,112,000), which was mainly applied for the project construction of new coal-fired power generating units and technological upgrade for the existing power generating units. These expenditures were mainly funded by project financing, funds generated from business operations and borrowings from related parties.

PLEDGE OF ASSETS

As at 31 December 2021, the Group pledged certain property, plant and equipment with a net book value of RMB386,243,000 (31 December 2020: RMB262,915,000) to certain banks to secure bank borrowings in the amount of RMB114,620,000 (31 December 2020: RMB129,620,000). In addition, certain bank borrowings, borrowings from related parties and lease liabilities totaling RMB21,242,398,000 (31 December 2020: RMB19,546,007,000 (including bank borrowings as part of disposal groups classified as held for sale)) were secured by the rights on accounts receivable of the Group. The accounts receivable secured under these borrowings amounted to RMB2,568,225,000 (31 December 2020: RMB2,476,191,000 (including accounts receivable as part of disposal groups classified as held for sale)).

CONTINGENT LIABILITIES

As at 31 December 2021, the Group had no material contingent liabilities.

RISK MANAGEMENT

The Group has implemented all-rounded risk management and has established a systematic and comprehensive risk management mechanism and internal control system. It also has a Risk Management Committee which is accountable to the Board and assists the Board in providing leadership, direction and oversight with regard to the overall risk management and sustainable development strategy, risk appetite and tolerance and risk management framework of the Group, including risk policies, processes and controls. The Group also has an internal audit department in place for the execution and implementation of risk management measures.

Foreign Exchange Risks

The Group principally operates its businesses in Mainland China with most of its transactions settled in RMB. Apart from certain bank borrowings as well as cash and cash equivalents, the Group's assets and liabilities are mainly denominated in RMB. The Group held borrowings denominated in JPY and USD during the year. Volatility of RMB exchange rate against JPY and USD may increase the exchange risks of the Group, thus affecting its financial position and operating results. As at 31 December 2021, the Group's borrowings denominated in foreign currencies amounted to RMB281,747,000 (31 December 2020: RMB3,038,381,000).

In order to prevent the risk of exchange rate fluctuations, the Company entered into a USD forward contract at the beginning of the year. Pursuant to the contract, the Company purchased an amount of USD410 million at the agreed price of RMB6.53 for USD1 on 26 July 2021 to repay the Company's bank borrowings of USD410 million due on the same date. No fees were charged in any form under the contract. Subsequent to that, the Group had no borrowing denominated in USD as at 31 December 2021.

The Group will continue to keep track on the movements of exchange rate and, if necessary, take responsive measures to avoid excessive foreign exchange rate risks.

Funding Risks

With the Group's stepped-up efforts in developing various new power projects, funding adequacy will have an increasing impact on the Group's operations and development. The financing market is affected by a number of factors such as the liquidity of the lending market and the economic environment, which in turn may also affect the effectiveness and costs of the Group's borrowings. The Group has been leveraging its ability in the access to the markets at home and abroad to optimize the sources of fund, increase credit facilities and reduce financing costs.

Various cost-saving and efficiency enhancement initiatives have also been adopted in the Group's business management to reduce administrative and operating expenses. Moreover, the financial services framework agreement with SPIC Financial also facilitates the mitigation of funding risks.

As at 31 December 2021, the Group had sufficient available undrawn financing facilities amounting to RMB34,385,836,000, and will refinance and restructure existing loan terms when appropriate to safeguard against funding risks.

At the beginning of each year, the management reports to the Board on the working capital budget for the year and estimates the credit facilities and facilities reserves required for the year to ensure the Group has adequate financial resources to support the continued operation and development of projects in the foreseeable future. The management will also review the situation regularly to take contingency measures.

Risks of Policy Changes

Based on the Administrative Measures for Carbon Emission Rights Trading (Trial) (《碳排放權交易管理辦法（試行）》), the Ministry of Ecology and Environment of the PRC formulated relevant systems and measures to further regulate the registration, trading and settlement of carbon emission rights across the country and protect the legal rights of participants of the national carbon emission rights trading market during the year, including the Rules for the Administration of Carbon Emission Rights Registration (Trial) (《碳排放權登記管理規則（試行）》), the Rules for the Administration of Carbon Emission Rights Trading (Trial) (《碳排放權交易管理規則（試行）》) and the Rules for the Administration of Carbon Emission Rights Settlement (Trial) (《碳排放權結算管理規則（試行）》). Moreover, the General Office of the CPC Central Committee and the General Office of the State Council also issued the Opinion on Deepening the Reform of the Ecological Protection Compensation System (《關於深化生態保護補償制度改革的意見》), which aimed to accelerate the development of the national trading market for energy consumption right and carbon emission right by establishing preliminary allocation system for the rights of water consumption, sewage discharge and carbon emission and optimizing the market trading mechanism under the premise of reasonable and scientific control of the total amount.

In response to the carbon trading market, the Group made various targeted efforts to plan ahead for carbon trading. It established the carbon assets and carbon trading special study group, specified the functions of all departments, estimated and measured the carbon emission indicators of different units in a scientific manner, explored future carbon trading strategy, and conducted research on the development of carbon assets management policies, carbon assets management practices, the performance of carbon trading contracts and experience on the pilot carbon market, etc. Keeping abreast of the latest carbon trading policies and changes in market conditions, the Group ensured works in relation to carbon trading to be carried out in an orderly manner. In 2021, all key emission enterprises of the Group have fully settled the payment and fulfilled the contracts for quota in the national carbon trading market.

During the year, the General Office of the National Energy Administration issued the Notice on Advancing the Power Source, Grid, Load and Storage Integration and Multi-energy Complementary Development in 2021 (《關於推進2021年度電力源網荷儲一體化和多能互補發展工作的通知》). The Notice required the local governments to facilitate power source, grid, load and storage integration and multi-energy complementary projects in an orderly manner. At the same time, they would need to coordinate management of the planning, construction and operation of such projects at all stages, give full play to the moderating role of virtual power plants, and actively support integrated intelligent joint control, and the integrated management of systems and business models.

In recent years, the Group has been actively pressing ahead with integrated power source, grid, load and storage projects. Its first energy storage project, which is the Haiyang 101MW/202MWh Energy Storage and Power Station located in the Haiyang Nuclear Power Industrial Park in Yantai, achieved grid connection during the year under review. It is expected that more energy storage projects will commence operation and production. The energy storage business will continue to expand orderly and become a new growth driver of the Group.

In October 2021, the National Development and Reform Commission published the Notice on Further Deepening the Market-oriented Reform of On-Grid Tariff for Coal-fired Power Generation (《關於進一步深化燃煤發電上網電價市場化改革的通知》). The Notice proposed to remove all restrictions on on-grid tariffs of coal-fired power generation in an orderly manner. The floating band for the market trading prices of electricity was expanded to not more than 20%. However, the market trading prices of electricity for enterprises with high energy consumption could increase by more than 20%, which allowed the Group to improve the profit margin and operating results of the coal-fired power segment.

SOCIAL AND ENVIRONMENTAL GOVERNANCE

Operational Safety

The Group sets the goal of "Zero death, Zero accident" and strives to enhance the production safety management capability of the management personnel. During the year under review, the Company continued to organize training courses for environmental management and quality control officers, and held production safety meetings on a regular basis. It offered training to the person-in-charge of the safety, production and engineering departments, the chief safety officers and division managers of all units, so as to strengthen safety management and curb major risks and potential safety threats at an early stage.

During the year under review, the Group continued to improve the conditions for operation in strict compliance with the Production Safety Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and other laws and regulations relating to safety and hygiene. It equipped employees with work equipment and labor protective gears in line with the safety standards, and organized various training on safety knowledge and safety skills, as well as emergency training and drills.

The Group paid close attention to the latest development of the pandemic and timely adjusted the disease containment strategy to maintain zero infection rates in its domestic units. Adhering to the principle of "one strategy for one country and different strategies for different countries", it tightened the pandemic prevention and control measures for overseas employees to ensure their health and stable production and operation.

The Quality, Occupational Health and Safety, and Environment (QHSE) "three standards" management system established by the Group maintained a stable operation. In order to further enhance its core competitiveness and promote sustainable development, the Group has carried out annual supervision and review, which ensured compliance with international standards and played an important role in enhancing management level and implementing transformational development.

In 2021, no material accident in the aspects of employees, facilities and environmental protection occurred in the Group.

During the year under review, all operating power plants over which the Group has operational control complied with the relevant PRC production safety regulations. No fines or charges were imposed on the Group due to violation of regulations.

Human Resources

The Group has put great emphasis on the establishment of the performance appraisal, rewarding and punishment mechanism for all employees. It determines the emoluments of its directors and employees based on their respective performance, working experience, duties of the position, the remuneration system of the Company's parent companies and the prevailing market conditions. In addition, the Group has implemented an incentive policy that links emoluments with overall business performance.

The Group has also attached great importance to the learning and training of employees and to the communication between employees in different positions. It has improved the professional and technical capabilities and overall competence of its employees on an ongoing basis, so as to satisfy the needs of its continuously expanding businesses.

As at 31 December 2021, the Group had a total of 10,724 (2020: 10,520) full-time employees.

During the year under review, all business units over which the Group has operational control complied with the local labor laws. No fines or charges were imposed on the Group due to violation of regulations.

Stakeholder Engagement

The Group has been actively responding to the local policy requirements of the places where it operates by supporting local communities in terms of green development and environmental protection, providing reliable electricity to cope with challenges arising from extreme weather such as flooding, typhoon and cold wave, establishing sound cooperation with the governments, universities and enterprises in areas including energy, technology and talents development, and making concerted efforts with local governments for pandemic prevention and control, etc.

Climate Change

The Group recognizes the real and present danger of climate change and assumes the mission of accelerating the transformation of the power and energy industries and the development of clean energy. In recent years, the Group pressed ahead with clean energy development, optimized the operation of various power plants, actively carried out optimization for carbon reduction and efficiency enhancement, and continuously eliminated traditional coal-fired power generating units with backward production capacity or carried out energy-saving upgrades and transformation.

We adopted and followed the procedures recommended by the Task Force on Climate-related Financial Disclosures (TCFD), so as to determine the suitable governance structure, formulate climate scenarios, identify and prioritize climate-related risks, match business with material risks, devise the climate action list and assess financial impact. Supplemented by the adoption of the "Climate-related Risks, Opportunities and Financial Impacts" framework, we studied the risks and opportunities posed by climate change on the Group.

The Company published its latest Sustainability Report in May 2021. The report identified and analyzed corporate climate risks in line with the framework of "Climate-related Risks, Opportunities and Financial Impacts" put forward by the TCFD and highlighted the Group's efforts in maintaining sustainable growth.

Energy Saving and Emission Reduction

The Group has always been placing a great emphasis on environmental protection from the perspective of sustainable corporate development, vigorously promoting energy saving and emission reduction, conscientiously fulfilling its social responsibilities and actively responding to global climate change.

In 2021, the net coal consumption rate of the Group was 301.16g/kWh, representing a decrease of 2.15g/kWh as compared with the previous year. It was mainly due to the successive commencement of operation of natural gas power projects, which optimized the power generation structure, and hence lowered the average net coal consumption rate.

In 2021, the operational ratio of desulphurization facilities for the coal-fired power generating units of the Group was 100% (2020: 100%), and the efficiency ratio of desulphurization reached 99.35% (2020: 99.23%); while the operational ratio of denitration facilities was 100% (2020: 100%) and the efficiency ratio of denitration reached 89.13% (2020: 88.39%).

During the year under review, the environmental protection indicators for coal-fired power generating units were as follows:

Emission rate of sulphur dioxide

0.076 g/kWh

Compared with 2020

SO_2

↓**0.011 g/kWh**

Emission rate of nitrogen oxide

0.139 g/kWh

Compared with 2020

NO_x

↓**0.016 g/kWh**

Emission rate of flue gas and dusts

0.008 g/kWh

Same level as 2020

The environmental indicators improved significantly as compared to the previous year, which was mainly due to the completion of the ultra-low emission upgrade of two 660MW generating units in Pu'an Power Plant during the year. As of now, the Group has completed the ultra-low emission upgrade for all coal-fired power generating units and established a clean and efficient coal-fired power generation system in all respects.

During the year under review, all the power plants over which the Group has operational control complied with the relevant PRC environmental protection regulations. No fines or charges were imposed on the Group due to violation of regulations.

RELATIONSHIPS WITH CUSTOMERS AND SUPPLIERS

We regard customers and suppliers as very important stakeholders and recognize the importance of our business relationship which is built on trust. The Group has been maintaining good communication to understand their expectation of us more fully. We aim at building a trusting, effective and enduring cooperation relationship and joining hands to achieve our sustainability goals, which lay the foundation for our long-term success. During the year ended 31 December 2021, there were no significant disputes with customers and suppliers.

Relationship with customers

The Group is an independent power producer. Because of the special nature of electricity production and sales, its major customers are regional and provincial power grid companies, power users and electricity sales companies. The Group has been maintaining long-term and good customer relationships with the power grid companies in various places where the power plants are located. During the year under review, the aggregate turnover attributable to the Group's five largest customers (regional power grid companies) accounted for 62.91% of the Group's total turnover.

The pace of market-oriented reform in the power industry has continued to accelerate in 2021. Adhering to the customer-centered principle and leveraging opportunities brought by the reform, the Group has established direct connections with power users, raised market awareness with a focus on users, understood their needs, and developed and provided them with value-added services. It has also enhanced service standards for users to respond to their needs effectively. At the same time, the Group has actively participated in market-oriented direct electricity transactions, established and invested in electricity sales and distribution companies and electricity trading centers, expanded the user base through electricity sales companies as the platform to reach market users, and developed integrated intelligent energy and other projects.

Relationship with suppliers

The Group's major suppliers are coal production and sales enterprises, while its coal-fired power plants purchase the majority of coal from neighboring coal production enterprises primarily under long-term contracts. The Group has been maintaining long-term and good relationships with major suppliers in order to ensure efficient coal procurement. During the year under review, the aggregate purchases from the Group's five largest suppliers (for production materials like coal and consumables) accounted for approximately 60.22% of the Group's total purchases. The Group will continue to explore different procurement channels to ensure the stability of coal supply and prices.

The Group strives to establish fair, just and stable mid-to-long-term cooperation with suppliers, strictly fulfills the contractual agreements, respects and treats each supplier equally. It has formulated a stringent and standardized supplier selection and management system, established a supplier review team and conducted strict reviews according to the integrity, quality assurance, punctuality of supply, price reasonableness, etc., so as to select more competent and reputable suppliers to jointly maintain a healthy and orderly market environment.

In recent years, the Group has given full play to its scale advantages of centralized procurement with the production equipment and other relevant materials procured centrally by a subsidiary, which will help to establish a stable supply chain.

The Group also incorporates concepts and requirements of social responsibilities in supplier management, and clearly stipulates that the materials must meet the relevant national environmental protection laws and standards while signing purchase contracts, in order to prevent pollutants from exceeding the emission standards at source.

OUTLOOK FOR 2022

In anticipation of the ongoing impact of uncertainties amid the development of the COVID-19 variants, coupled with factors such as strained supply chain and inflation, the year 2022 will be another challenging year for the Group. In terms of energy policy, the Chinese government will adhere to the keynote of making progress while maintaining stability with a focus on advancing towards the targets of "Carbon Emission Peak" and "Carbon Neutrality", which is crucial to the development of the energy sector. It is expected that the investment in the power industry will be scaled up and will hence become one of the drivers of steady growth this year. The related investment will include, among others, projects in respect of new energy, innovative power systems such as electrochemical energy storage, rural revitalization and digital industries.

From an industry perspective, the transition of energy towards a clean, market-oriented, diversified and digital direction is the general trend. As new renewable energy will not be included in the control targets for total energy consumption, there will be more room for the development of renewable energy. While the market-oriented reform of the power industry will be forged ahead at full steam, electricity trading will enter a new era which echoes with the trading of carbon, green power and green certificates. New industrial forms such as power source, grid, load and storage, multi-energy synergy, new energy storage, hydrogen power, micro grid and virtual power plants are breeding new markets and new opportunities.

2022 is a critical year for the implementation of the Chinese Government's "14th Five-Year" plan. The Group will adapt to changes on time and embrace innovation in development philosophy, mechanisms and systems and strategic transformation. In pursuit of the vision of becoming a world-class green and low-carbon energy provider, the Group will prioritize the following tasks:

Optimizing the industrial structure comprehensively. Capitalizing on the opportunities arising from the leap-forward development of wind power and photovoltaic power generation under the "14th Five-year" plan, the Group will focus on the large base projects regarding "Three Types and One Area (三類一區)" in regions with abundant resources to promote market development in the county areas. It will also consummate cooperation with major customers, innovate development models and expedite the launch of additional production capacity of new energy. The Group will vigorously promote strategic transformation and accelerate the divestment of coal-fired power assets with low efficiency so as to further enhance the quality of assets and optimize the structure of existing assets.

Accelerating the development of the "Three New Businesses (三新業務)". Catering to the demand for construction of innovative power systems precisely, the Group will develop demonstration projects for new energy storage, green power transportation, integrated intelligent energy, etc. It will actively explore various scenarios for the application of energy storage and continue to intensely develop areas such as power generation, power grids and the user's end. Moreover, it will implement the smart city and rural vitalization initiatives with a view to building an investment and development model that combines the local characteristics of the rural areas with integrated green and intelligent energy. The Group will advocate electric energy substitution projects for green power transportation, and accomplish the commencement of operation of part of the electric public vehicles and the deployment of facilities such as charging piles and intelligent platforms in certain regions, while formulating future plans for innovative green energy by leveraging the professional development platform for geothermal power.

Enhancing the management of production and operation on a continuous basis. The Group will strengthen its marketing efforts in the power market and closely monitor the market changes to secure quality customers with its best endeavors. Tracking the market trends of green certificates and carbon trading, the Group will give play to the benefits from the features of each power source category and combine such strengths to take part in market competition. Strengthened efforts will be made to ensure the quality and control the price of fuels in order to further optimize the structure of supply sources and enhance procurement efficiency. The Group will also gear up the digital transformation and upgrade of coal-fired power generating units to enhance their market adaptability. We will ensure proper management and control over the entire process of maintenance, repairs and technological upgrade of the generating units, and further promote the refined management on their operations, thereby eliminating and rectifying the potential threats involved in the equipment through multiple measures.

Promoting high-quality development through in-depth reform. The Group will make the final sprint for the Three-year Action Plan of the reform of State-owned enterprises with a view to making breakthroughs in areas where high-quality development such as technological innovation and capital operation are restricted. By summarizing the experience in operating advanced management tools such as "Strategic-Planning-Initiative" (SPI), "Plan-Budget-Assessment-Incentive" (JYKJ) and "Dual Benchmark and Dual Incentive" (SDSJ), the Group will make detailed analysis on the planned objectives in a scientific manner and formulate proposal for the implementation of its annual plan to ensure planning with effective guidance and rigid constraints on the plan. We will also strengthen our ESG management system in order to enhance the Company's brand and image at the international level.

Being committed to green, innovative and high-quality development, the Group will vigorously promote sustainable and rapid development of clean and low-carbon energy in a bid to accomplish the "dual drive" for the development of the emerging clean and low-carbon energy and green energy industries, thereby developing a new ecology of low-carbon energy and making contributions to the transition of the economy and the society towards green and low-carbon energy in full swing.

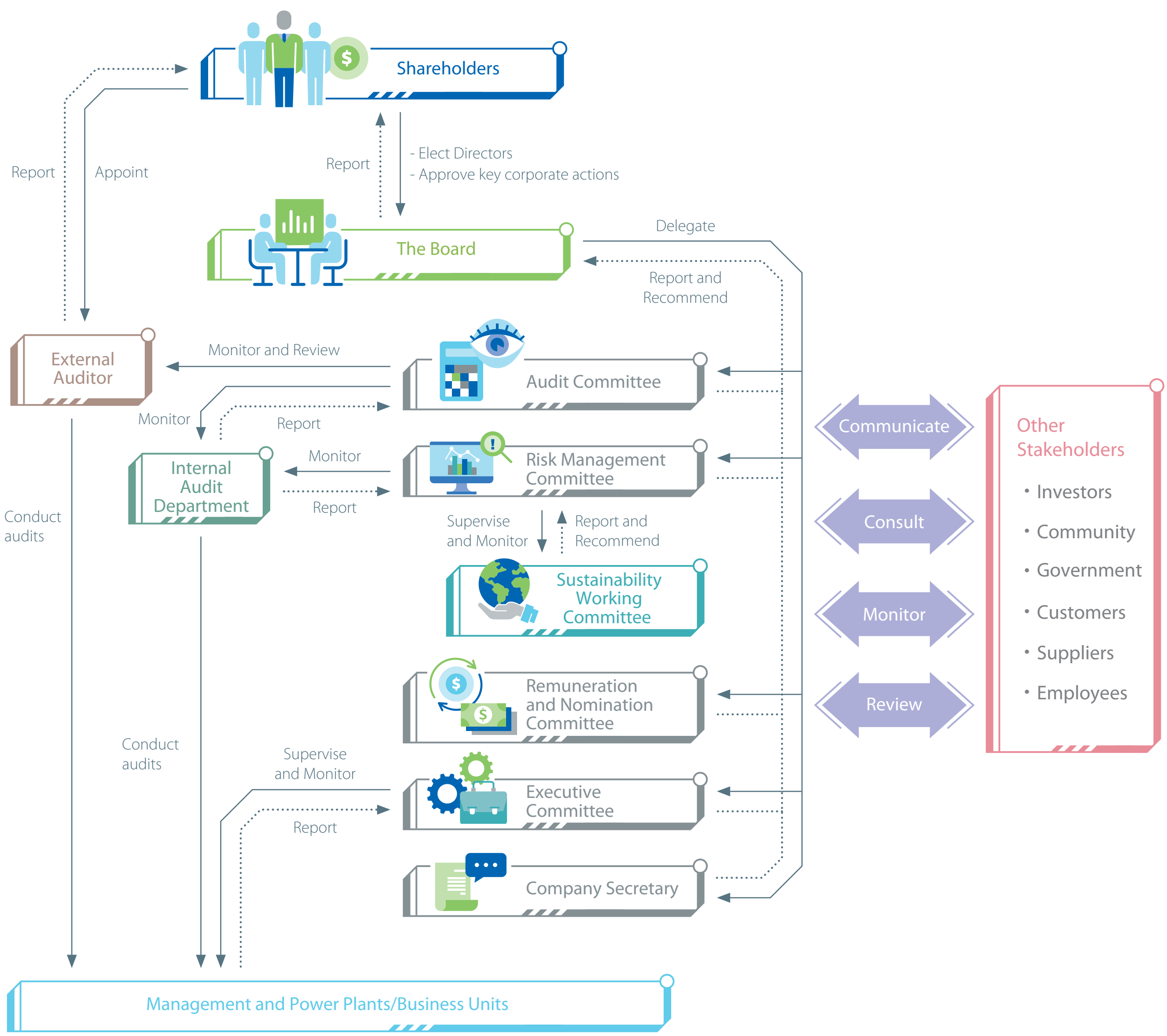
CORPORATE GOVERNANCE PRACTICES

The Board recognizes that good corporate governance is vital to the healthy and sustainable development of the Group. Through continuing exploration and practice, the Company has formed a standardized governance structure and established an effective internal control system. The Board and the management always follow good governance principles to manage the Group's business effectively, treat all shareholders fairly and strive for the long-term, stable and growing return for the shareholders.

The Company has strictly complied with all the code provisions of Corporate Governance Code and Corporate Governance Report as set out in the Appendix 14 to the Listing Rules (the "CG Code") throughout the year ended 31 December 2021, save for the CG Code provision of A.2.1 (explained in the section headed "Chairman and Chief Executive" below).

In December 2021, the Hong Kong Stock Exchange published its Consultation Conclusions on Review of CG Code and Related Listing Rules. Most of the amendments are applicable for financial year commencing on or after 1 January 2022. The Company has been substantially adopted the new requirements under the amended CG Code as our corporate governance practices over the years.

GOVERNANCE FRAMEWORK



CORPORATE STRATEGY AND CULTURE

The Company's vision is to be a world-class green and low carbon energy provider. To implement our mission of "Lower Carbon Empower Better Life", the Board formulated the strategic plans and goals during the year under review for the Company's future development based on the current situation and development trends of the energy industry. The outline of the new development strategy is as follows:

The Company will stay committed to green, innovative and high-quality development with a focus on promoting sustainable and rapid development of clean and low-carbon energy such as photovoltaic power, wind power, hydropower, geothermal energy and biomass energy. Proactive efforts will be made to nurture emerging industries of green energy, including energy storage, hydrogen energy, green power transportation and integrated intelligent energy, optimize and adjust existing coal-fired power assets comprehensively, as well as increase the proportion of clean energy installed capacity at a faster pace. By the "dual-wheel drive" development of promoting clean and low-carbon energy and nurturing emerging industries of green energy, we thereby build a new ecology of low-carbon energy to fully serve the economy and the society in green and low-carbon transformation.

We advocate a corporate culture of harmony, honesty and integrity. We operate our businesses lawfully, ethically and responsibly while actively undertake of social responsibilities, and promote coordinated and sustainable development of the economy, society, and environment. We pursue the core sustainable development philosophy of "Green-empowerment, Intelligent Innovation, Mutual Achievement."

THE BOARD

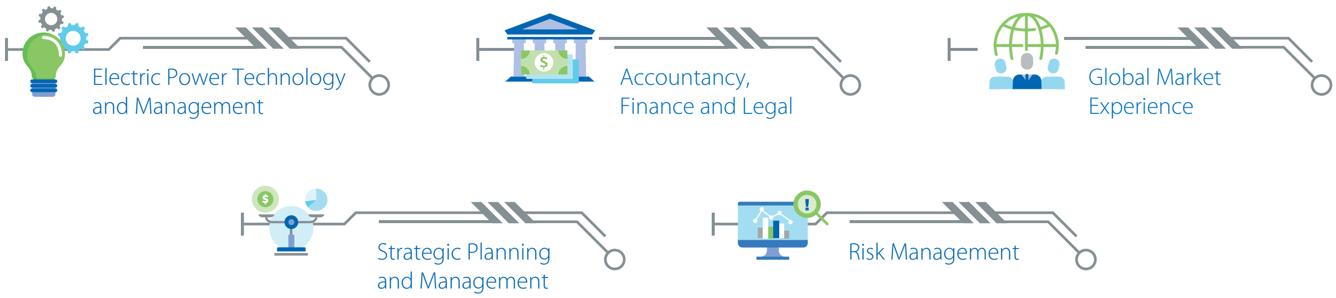
Board Composition

As at the date of this annual report, the Board comprises a total of seven Directors as follows:

Executive Directors	Non-executive Directors	Independent non-executive Directors
Mr. HE Xi *(Chairman of the Board)*	Mr. ZHOU Jie	Mr. LI Fang
Mr. GAO Ping *(President)*	Mr. XU Zuyong	Mr. YAU Ka Chi
		Mr. HUI Hon Chung, Stanley

Profiles, roles and functions of the Directors are set out in the section headed "Directors and Senior Management Profiles" of this annual report, and the latest list of directors and their respective role and function are also published on the websites of the Company and the Hong Kong Stock Exchange.

The Board adopted a "Board Diversity Policy" in August 2013 and reviews the implementation and effectiveness of the policy annually. All Directors are well experienced and having progressive thinking in leading the Group. The current Board composition reflects diverse mix of various experience, capabilities, skills and expertise in the following fields that are suitable for and relevant to the Company's businesses.



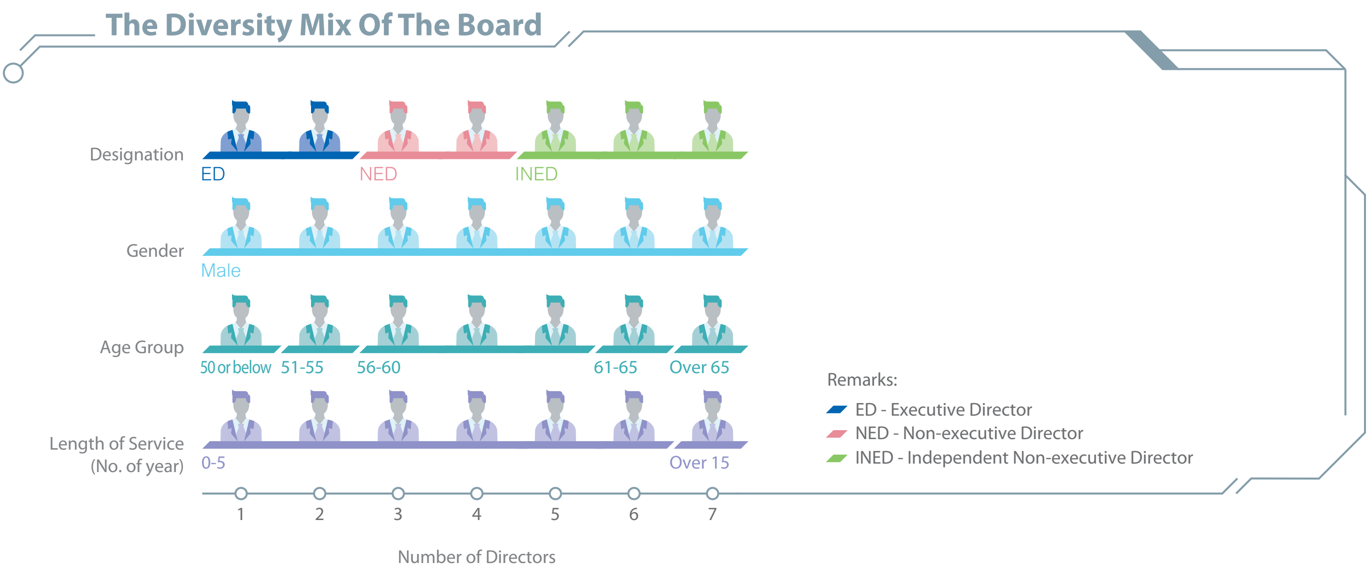
Board Diversity

The Board Diversity Policy of the Company is summarized as follows:

- for identifying suitably qualified candidates to become Board members, it should be based on a number of diverse aspects, including Board members with different background, skills, regional and industry experience, gender and other qualities, that are in balanced and complementary with each other, creating synergy, and enabling the Board to function effectively as a whole.

- when reviewing and assessing the composition of the Board, it should be based on the Company's own business position and management needs from time to time, considering a number of factors including but not limited to the above mentioned background, skills, regional and industry experience, and other factors in order to achieve the Board with a reasonable structure that runs efficiently.

The diversity mix of the Board is summarized in the following chart:



All members currently in the Board are male. The Company will appoint at least one female director no later than 31 December 2024 with reference to the "Board Diversity Policy". The Human Resources Department of the Company is working on the numerical targets, timeline and necessary measures to achieve the gender diversity on the Board as well as our workforce. We will report on this in the Company's coming annual reports.

Board Independence

For the year ended 31 December 2021, the non-executive Directors (including the independent non-executive Directors) form the majority of the Board. More than one-third of our Board members are independent non-executive directors who can help the Board to make more effective independent judgment. They are able to make decisions in an objective and professional manner, and to assist the management in formulating the Company's development strategies. They ensure that the preparation of financial and other mandatory reports by the Board are compiled in strict accordance with relevant regulations and standards in order to protect the interests of the shareholders and the Company as a whole.

The Board has received annual written confirmation of independence from each of the independent non-executive Directors pursuant to Rule 3.13 of the Listing Rules and believed that, as at the date of this annual report, they were independent of the Company in accordance with the relevant requirements of the Listing Rules.

There is no relationship (including financial, business, family or other material/relevant relationship) between the board members, or between the Chairman of the Board and the President (being the chief executive) of the Company.

The Board has put in place a mechanism for directors to seek additional independent professional advice in the discharge of their duties to ensure that independent views and input are available to the Board.

Performance Evaluation of Board

The Company acknowledges that a regular board evaluation can help to build a high-performing Board, which is equipped to anticipate and overcome future challenges and to ensure alignment with the Company's long-term strategy. The Board will take the following approach for evaluation of its effectiveness with effect from the year 2022.

The performance evaluation takes the form of questionnaire and supplemented by individual interviews with each Director by the Chairman of the Board, if necessary. The content of questionnaire is refined each time as appropriate to focus on the progress made in addressing the key issues raised in the previous evaluation process.

At the same time, all independent Directors shall review the performance of the Chairman of the Board. The evaluation report will be presented to the Board which will collectively discuss the results and the action plan for improvement, if appropriate.

Appointment and Re-election of Directors

In accordance with the Company's articles of association, one-third of the Directors (including non-executive Directors with fixed term of three years) shall retire from office by rotation and be re-elected by shareholders at the annual general meetings. In addition, any new appointment to the Board is subject to re-appointment by shareholders at the upcoming general meeting. Every Director (including non-executive Directors), whether or not appointed for a specific term, should be subject to retirement by rotation at least once every three years.

If an independent non-executive Director serves more than nine years, his/her further appointment should be subject to a separate resolution to be approved by shareholders. The documents attached to shareholders accompanying that resolution should include the process used for identifying the individual and why the Board believes the individual should be elected and the reasons why it considers the individual to be independent; if the proposed independent non-executive director will be holding their seventh (or more) listed company directorship, why the board believes the individual would still be able to devote sufficient time to the Board; the perspectives, skills and experience that the individual can bring the Board; and how the individual contributes to diversity of the Board.

The Company has in place a Nomination Policy setting out the selection and recommendation criteria and the appropriate procedures to be adopted when considering nomination and appointment of suitable candidates for directorship to the Board. Please refer to the section headed "Nomination Policy" of this Corporate Governance Report for its details.

DIRECTORS' RESPONSIBILITIES, DELEGATION AND BOARD PROCEEDINGS

Chairman and Chief Executive

The Chairman provides leadership for the Board and is responsible for ensuring that all Directors receive adequate information, which must be complete and reliable, in a timely manner and that Directors are properly briefed on issues arising at the Board meetings. He affirms the Board is working effectively and discharging its responsibilities. He also ensures good corporate governance practices and procedures are established, and appropriate steps are taken to provide effective communication with shareholders and those views of shareholders are communicated to the Board.

The Chairman encourages all Directors to make a full and active contribution to the Board's affairs and take the lead to ensure that it acts in the best interests of the Company. He encourages Directors with different views to voice their concerns, allow sufficient time for discussion of issues and ensure that Board decisions fairly reflect Board consensus. He promotes a culture of openness and debate by facilitating the effective contribution of non-executive Directors in particular and ensuring constructive relations between executive and non-executive Directors.

Under the CG Code provision A.2.1 (now C.2.1 of the amended CG Code), the role of both the chairman and chief executive should be separated and should not be performed by the same individual. The Company briefly deviated from the said provision when Mr. HE Xi concurrently served as both the Chairman of the Board and the President (being the chief executive) of the Company from 12 April 2021 to 23 July 2021.

Upon appointment of Mr. GAO Ping as an executive Director and the President of the Company with effect from 23 July 2021, Mr. HE ceased to hold the role of the President of the Company while still remains as the Chairman of the Board.

Subsequent to that, the Company has been in compliance with the CG Code provision of A.2.1 (now C.2.1 of the amended CG Code).

Newly Appointed Directors

Every newly appointed Directors will receive a comprehensive, formal and tailored induction on the first occasion of his/her appointment, so as to ensure that he/she has a proper understanding of the operations and business of the Company, and he/she is fully aware of his/her responsibilities under Statutes and Common Law, the Listing Rules, applicable rules and other regulatory requirements, and especially the governance policies of the Company.

All Directors are required to disclose to the Company their offices held in public companies or organizations and other significant commitments. Every Director should ensure that he can give sufficient time and attention to the Company's affairs, and make contributions to the Company that commensurate with their role and responsibilities.

All Directors have been given the "Guidelines on Directors' Duties" and "Working Guidelines for the Board" of the Company and various guides for directors published by the Hong Kong Stock Exchange and Securities and Futures Commission. The Company Secretary continuously updates and refreshes the Directors on the latest laws, rules and regulations regarding their duties and responsibilities.

On-going Trainings

Directors' training is an ongoing process, in order to ensure that their contribution to the Board remains informed and relevant. The Company encourages all Directors to participate in appropriate training programs to develop and refresh their knowledge and skills. During the year under review, all members of the Board have provided their records of training to the Company Secretary for record. Their trainings included attending seminars, webinars and discussion forums, reading briefings and updated materials on current rules and regulations.

Directors' Securities Transactions

The Company has adopted a set of Code of Conduct for Securities Transactions by Directors ("Code of Conduct"), the terms of which are not less exacting than the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules. Having made specific inquiries to all Directors, all Directors confirmed that they have complied with the Code of Conduct throughout the year 2021.

Insurance

The Company has arranged appropriate insurance cover on Directors' and officers' liabilities in respect of legal actions against its Directors and senior management arising out of corporate activities.

Power of and Delegation by the Board

The Board is the highest decision-making and managing body of the Company. Having regard to the best interests of the Company and its shareholders, the Board provides leadership and guidance to the Group's activities. It reviews and approves major matters such as business strategies, policies, business plans, financial budgets, major investments as well as mergers and acquisitions.

The Directors have acknowledged that the principal responsibilities of the Board also include overseeing risk management and internal control systems, corporate governance, environmental and social responsibilities governance, supervising and administrating the operation and financial position of the Company, approving the result announcements and other disclosures as required in accordance with applicable laws and regulatory rules, optimizing corporate governance structure and promoting the communication with our shareholders.

There are currently four committees under the Board, namely (i) Audit Committee, (ii) Risk Management Committee, (iii) Remuneration and Nomination Committee and (iv) Executive Committee to implement internal supervision and control on each relevant aspects of the Group. In addition, there is a Sustainability Working Committee under the Risk Management Committee which specifically formed to assist the Risk Management Committee with regard to policies formulation and practices implementation of sustainability-related matters of the Group.

The Board delegates certain management and operational functions to the Executive Committee and the management, and reviews such arrangements periodically to ensure that they remain appropriate to the Group's needs.

The management has overall responsibility for the Group's daily operations. The Board establishes clear responsibilities and authorities for management to ensure the daily operational efficiency. It acts within the authority approved by the Board to fulfill the day-to-day management responsibilities and makes timely decisions. With regard to matters beyond its authority, the management will report to the Executive Committee or the Board in a timely manner in accordance with the relevant working guidelines.

Conduct of Board Proceedings and Supply of and Access to Information

Throughout the year under review, arrangements were in place to ensure all Directors were given an opportunity to include matters in the agenda for regular Board meetings. Notice of at least fourteen days was given of a regular Board meeting to give all Directors an opportunity to attend. For all other Board meetings, reasonable notice was also given.

Full Board or committee papers were sent to all Directors at least three days before the intended date of a Board meeting or a committee meeting. Management had supplied the Board and its committees with adequate information and explanations so as to enable them to make an informed assessment of the financial and other information put before the Board and its committees for approval. Management was also invited to join the Board or committee meetings where appropriate.

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

During the year under review, minutes of the Board meetings and meetings of Board Committees were recorded in detail the matters considered and decisions reached at the meetings. Draft and final versions of minutes were sent to all Directors for their comments within a reasonable time after the Board or committee meetings were held. Minutes of the meetings are always kept by our Company Secretary, and the Board and committee members may inspect the documents and minutes of the Board and Board Committees at any reasonable time by giving reasonable notice.

At all time, where necessary, the Directors can seek separate independent professional advice at the Company's expenses so as to discharge his/her duties to the Company. All the Directors are also entitled to have access to timely information in relation to our business and make further enquiries where necessary, and they have separate and independent access to senior management of the Company.

AUDIT COMMITTEE

The Company established the Audit Committee on 24 August 2004 with written terms of reference in compliance with the Listing Rules and the CG Code provisions. The primary duties and functions of the Audit Committee set out in its terms of reference, inter alia, include the following:

- To communicate with internal auditor and determine annual internal audit plans, discuss internal audit procedures with the internal auditor at least once every six months, review and monitor the internal control system, internal audit functions and effects of annual internal audit plans.
- To make proposals to the Board on the appointment, re-appointment and removal of the external auditor, review and monitor the independence, objectivity and audit effectiveness of the external auditor in accordance with the relevant standards issued by the Hong Kong Institute of Certified Public Accountants, formulate and implement the engagement policy on the provision of non-audit services by the external auditor.
- To review financial information of the Company.
- To supervise the financial reporting system and internal control system including the adequacy of resources, qualifications and experience of staff of the Company's accounting and financial reporting function, and their training programs and budget.
- To conduct any inspection authorized by the Board based on its terms of reference, in that case, the committee is entitled to solicit any necessary information from any employees while who have been instructed to assist the committee to satisfy any of its requirements.

The Audit Committee comprises of three members, namely Mr. YAU Ka Chi, Mr. LI Fang and Mr. HUI Hon Chung, Stanley, all of whom are independent non-executive Directors. After the retirement of Mr. KWONG Che Keung, Gordon, the ex-chairman of the Audit Committee on 3 June 2021, Mr. YAU Ka Chi was appointed as the chairman of the Audit Committee. The secretary of the Audit Committee is served by the Company Secretary of the Company. For the purpose of reinforcing their independence, all members of the Audit Committee have appropriate professional qualifications, accounting or related financial management experience referred to in the Listing Rules.

The details of the terms of reference of the Audit Committee have been posted on the websites of the Company and the Hong Kong Stock Exchange.

The Audit Committee held two meetings during 2021 (average attendance was 100%). The work performed by the committee during the year including:

- reviewed the annual financial statements and "Corporate Governance Report" for the year ended 31 December 2020 and the interim financial statements for the six months ended 30 June 2021, including the major accounting issues raised by the external auditor;
- reviewed and approved the audit plan and audit strategy submitted by the external auditor for the year ended 31 December 2021;
- reviewed the internal control reports prepared by the Company's Internal Audit Department relating to the Company's internal audit plan, internal control system and risk management procedures;
- reviewed the continuing connected transactions of the Company;
- considered and approved the terms of engagement and remuneration of external auditor for its provision of audit and permitted non-audit related services; and
- reviewed the internal and independent audit results and discussed matters relating to audit, internal control system and financial reporting, including the adequacy of resources, staff qualifications and experience of the Company's accounting, internal audit and financial reporting functions, together with the senior management, internal and external auditors of the Company.

RISK MANAGEMENT COMMITTEE

The Company established the Risk Management Committee on 23 March 2016 with written terms of reference in compliance with the Listing Rules and the CG Code provisions. The primary duties and functions of the Risk Management Committee set out in its terms of reference, inter alia, include the following:

- To review and recommend for the Board's approval the Group's overall risk management strategies and risk appetite/tolerance which shall take into account of the strategic, sustainable development, financial, operational, compliance and all the relevant risks faced by the Group and the prevailing and prospective market and economic conditions at least annually.
- To review and recommend for the Board's approval the Group's sustainable development strategies, objectives, and standards at least annually.
- To review and recommend for the Board's approval the Group's risk management framework, risk management system and corporate governance framework including their appropriateness, effectiveness and independence of risk management functions at least annually.
- To review reports from the management and to make recommendations to the Board on the Group's risk management and sustainable development policies which govern the identification, assessment, monitoring and reporting of the major risks faced by the Group.
- To supervise the Sustainability Working Committee and monitor its works.
- To oversee the implementation of risk management and sustainable development policies and the compliance with the respective statutory rules and regulations.
- To report any significant risk management issues to the Board and suggest solutions.

The Risk Management Committee comprises of five members, namely the three independent non-executive Directors, Mr. LI Fang, Mr. YAU Ka Chi and HUI Hon Chung, Stanley, and the two executive Directors, Mr. HE Xi and Mr. GAO Ping. The chairman and the secretary of the Risk Management Committee are served by Mr. HE Xi and the Company Secretary of the Company respectively.

The details of the terms of reference of the Risk Management Committee have been posted on the websites of the Company and the Hong Kong Stock Exchange.

The Risk Management Committee held two meetings during 2021 (average attendance was 100%). The work performed by the committee during the year including:

- reviewed and approved the "Risk Management Report" for the year 2020 and the first half of 2021, and the risk management plan for the year 2021 prepared by the Company's Internal Audit Department relating to the Group's risk management framework, effectiveness of the risk management system, the circumstances of specific risk management and the measures adopted for risk control, and risk management policies which govern the identification, assessment, monitoring and reporting of the major risks faced by the Group;
- reviewed and approved the adequacy of resources, qualifications and experience of the staff of the Company's risk management function; and
- reviewed and approved the "Sustainability Report" for the year 2020.

The management's annual confirmation on the effectiveness of the Group's risk management and internal control systems was reviewed and endorsed by the Risk Management Committee and the Audit Committee respectively and was reported to the Board.

The "Risk Management Report" and the "Summary of Sustainability Report" for the year 2021 have been presented separately in this annual report.

SUSTAINABILITY WORKING COMMITTEE

The Company established a Sustainability Working Committee on 27 August 2020, being a sub-committee of Risk Management Committee under the Board with written terms of reference and with effect from 1 September 2020. The Sustainability Working Committee shall report directly to the Risk Management Committee and shall assist the Risk Management Committee in providing leadership, direction and oversight with regard to policies formulation and practices implementation of sustainability-related matters of the Group. The primary duties and functions of the Sustainability Working Committee set out in its terms of reference, inter alia, include the following:

- To lead and maintain sustainable growth and manage the sustainability risks and opportunities of the Group. To review and identify the sustainable and sustainability elements affecting or relevant to the Group's business or operations and make recommendations to the Board through the Risk Management Committee for approval.
- To assist formulating the Group's sustainable development strategies, objectives and standards and provide them to the Board through the Risk Management Committee for approval.
- To oversee the Group's implementation of policies, measures, duties and activities on sustainability matters to attain those goals and standards and to review and evaluate their effectiveness at least annually and provide the Board through the Risk Management Committee with confirmations and recommendations for improvement.
- To ensure the adequacy of resources, staff qualifications and experience, training programs and budget for internal implementation of sustainable development function.

The chairman and members of the Sustainability Working Committee shall be appointed by the Board in which the chairman shall be a vice president of the Company and the members shall include but not limited to the general managers or the heads of all the business and functional departments of the Company. The chairman of the Sustainability Working Committee is currently served by Mr. FU Jinsong, the vice president of the Company.

The details of the terms of reference of the Sustainability Working Committee have been posted on the websites of the Company and the Hong Kong Stock Exchange.

A "Summary of Sustainability Report" for the year 2021 has been presented separately in this annual report. The full version of the "Sustainability Report 2021" will be published on the websites of the Company and the Hong Kong Stock Exchange.

REMUNERATION AND NOMINATION COMMITTEE

The Company established the Remuneration and Nomination Committee on 24 August 2004 with written terms of reference in compliance with the Listing Rules and the CG Code provisions. The primary duties and functions of the Remuneration and Nomination Committee set out in its terms of reference, inter alia, include the following:

Remuneration

- To make recommendations to the Board on the remuneration policy and structure for all Directors and senior management of the Company, and to make recommendations on the establishment of a formal and transparent procedure for formulating remuneration policy.
- To review and approve the management's remuneration proposals with reference to the Board's corporate goals and objectives.
- To make recommendations to the Board on the remuneration packages of individual executive Directors and senior management of the Company with reference to their experience, performance, duties and market conditions. This should include benefits in kind, pension rights and compensation payments, including any compensation payable for loss or termination of their office or appointment.
- To make recommendations to the Board on the remuneration of non-executive Directors.

Nomination

- To review the structure, size and composition (including the skills, knowledge and experience) of the Board at least annually and make recommendations on any proposed changes to the Board to complement the Company's corporate strategy.
- To identify individuals suitably qualified to become Board members based on a range of diverse perspectives and select or make recommendations to the Board on the selection of individuals nominated for directorships.
- To make recommendations to the Board on the appointment or re-appointment of Directors and succession planning for Directors, in particular the chairman and the chief executive.
- To assess the independence of independent non-executive Directors.

Nomination Policy

A. Selection Criteria

In evaluating and selecting any candidate for directorship, the following criteria should be considered:

(a) Character and integrity.

(b) Qualifications including professional qualifications, skills, knowledge, expertise and experience that are relevant to the Company's business and corporate strategy.

(c) Good records of accomplishments in present and prior positions.

(d) Potential contributions the candidate can bring to the Board in terms of diversity in its all aspects under the Company's Board diversity policy.

(e) Commitment of the candidate to devote sufficient time to effectively carry out his/her duties.

(f) Potential or actual conflicts of interest that may arise if the candidate is selected.

(g) Independence of the candidate.

B. Nomination Procedures and Process

1. *Appointment of new Director*
   (a) Upon receipt of the proposal on appointment of new Director, the Committee identifies or selects candidates, with or without assistance from external agencies or the Company, and evaluate such candidate based on the criteria as set out in this Policy to determine whether such candidate is qualified for directorship.
   (b) The Committee may use any process it deems appropriate to evaluate the candidates, which may include personal interviews, background checks, presentations or written submissions by the candidates and third party references.
   (c) The Committee should then recommend to the Board to appoint the appropriate candidate for directorship, as applicable, and provide to the Board with all the information required including information set out in the Listing Rules in relation to the candidates.
   (d) The Board should deliberate and decide on the appointment based upon the recommendations of the Committee.

2. *Re-election of Director*
   (a) The Committee should review the overall contribution and service to the Company of the retiring Director and the level of participation and performance on the Board. In the case of a proposed re-appointment of a retiring independent non-executive Director, also consider the number of years he/she has already served.
   (b) The Committee should also review and determine whether the retiring Director continues to meet the criteria as set out in this Policy.
   (c) The Committee and/or the Board should then make recommendations to shareholders in respect of the proposed re-election of Director at the general meeting.

The Remuneration and Nomination Committee has three members, namely Mr. LI Fang, Mr. YAU Ka Chi and HUI Hon Chung, Stanley, all of whom are independent non-executive Directors. The chairman and the secretary of the Remuneration and Nomination Committee are served by Mr. LI Fang and the Company Secretary of the Company respectively.

The details of the terms of reference of the Remuneration and Nomination Committee have been posted on the websites of the Company and the Hong Kong Stock Exchange.

The Remuneration and Nomination Committee held three meetings during 2021 (average attendance was 100%). The work performed by the committee during the year including:

- considered and approved the overall remuneration package of the Directors and senior management of the Company in 2020 with reference to the remuneration system of the parent companies;
- reviewed the Company's matters relating to remuneration in 2021 and made recommendations to the Board;
- considered the profile of the Directors who would retire from office by rotation and stand for re-election at the annual general meeting in accordance with the Company's articles of association and made recommendations to the Board;
- reviewed, considered and confirmed the appointment of Mr. HE Xi as the Chairman of the Board, Risk Management Committee and Executive Committee under the Board, and the appointment of Mr. ZHOU Jie as the non-executive Director, and made recommendations to the Board;
- reviewed, considered and confirmed the appointment of Mr. HUI Hon Chung, Stanley as the independent non-executive Director, the member of the Audit Committee, Risk Management Committee and Remuneration and Nomination Committee under the Board, and the appointment of Mr. YAU Ka Chi as the Chairman of the Audit Committee, and made recommendations to the Board;
- reviewed, considered and confirmed the appointment of Mr. GAO Ping as the executive Director, the President of the Company and the member of the Risk Management Committee and Executive Committee under the Board, and made recommendations to the Board; and
- reviewed and considered the proposed employee's equity incentive plan.

Remuneration of Senior Management

The remuneration of the members of the senior management (defined as the same persons whose biographical details are disclosed in the "Directors and Senior Management Profiles" section of this annual report) by remuneration band for the year ended 31 December 2021 is set out below:

Remuneration band (HK$)	Number of individuals 2021	2020
Nil to 1,000,000	**5**	4
1,000,001 to 1,500,000	**7**	6
1,500,001 to 2,000,000	**–**	1

EXECUTIVE COMMITTEE

The Company established the Executive Committee in 2008. As a committee under the Board, the Executive Committee conducts its work under the guidance of the Board and reports to the Board pursuant to the "Working Guidelines for the Executive Committee" approved by the Board. The chairman of the Executive Committee is served by Mr. HE Xi, the executive Director and the Chairman of the Board. The members of the committee include the executive Directors and all the vice presidents of the Company. It has been delegated with the responsibilities to ensure the effective direction and control of the business and to deliver the Group's long-term strategies and goals. It advises the Board in formulating policies in relation to the Group's business operations, monitors the performance and compliance of the business, and supervises the management to implement the Board resolutions.

The Executive Committee acts as a bridge for communication and connection between the Board and the management, and plays a crucial role in enhancing the quality of corporate governance as well as strengthening the management efficiency of the Company. It ensures that the Board can timely hear the voices of the operation and management staff and acts timely in respect of material operation affairs of the Company. It meets on a regular basis to review the Group's activities and discuss management and operational issues.

The Executive Committee held twenty-four meetings during 2021. The executive Directors, the vice presidents and the senior management of the Company attended the meetings.

COMPANY SECRETARY

Ms. CHEUNG Siu Lan, secretary of the company, is an employee of the Company, appointed by the Board, and responsible to the Board. The Company Secretary is responsible for ensuring that the activities of the Board conducted efficiently and effectively, and the procedures and all applicable laws and regulations are followed. She also supports and facilitates the training and professional development of Directors.

The Company Secretary reports to the Chairman and the Board, provides advice on corporate governance and corporate transactions, and assists the Board in discharging its obligations to shareholders pursuant to the Listing Rules. All Directors may call upon her for advice and assistance at any time in respect to their duties and the effective operation of the Board and the Board Committees.

During the year under review, Ms. CHEUNG has attended relevant professional seminars/webinars to update her skills and knowledge. She has complied with the Listing Rules to take no less than 15 hours of relevant professional training in a financial year.

DIRECTORS' ATTENDANCE RECORD

In the year 2021, the Company held eight Board meetings, one of which was a non-executive directors meeting.

The attendance records of the Directors at Board meetings, Audit Committee meetings, Risk Management Committee meetings, Remuneration and Nomination Committee meetings, the annual general meeting and the general meeting are as follows:

Directors	Board	Audit Committee	Risk Management Committee	Remuneration and Nomination Committee	Annual General Meeting	General Meeting
Executive Directors:						
HE Xi *(Chairman of the Board and the Risk Management Committee)*(1)	7/7	–	1/1	–	1/1	1/1
GAO Ping *(President of the Company)*(2)	4/4	–	1/1	–	–	–
TIAN Jun(3)	2/2	–	1/1	–	–	–
Non-executive Directors:						
WANG Xianchun	8/8	–	–	–	1/1	1/1
ZHOU Jie(4)	6/6	–	–	–	1/1	1/1
GUAN Qihong(5)	2/2	–	–	–	–	–
Independent Non-executive Directors:						
LI Fang *(Chairman of the Remuneration and Nomination Committee)*	8/8	2/2	2/2	3/3	1/1	1/1
YAU Ka Chi *(Chairman of the Audit Committee)*(6)	8/8	2/2	2/2	3/3	1/1	1/1
HUI Hon Chung, Stanley(7)	6/6	1/1	1/1	2/2	–	–
KWONG Che Keung, Gordon(8)	2/2	1/1	1/1	1/1	1/1	1/1

Notes:

(1) Mr. HE Xi was appointed as a Chairman of the Board, the Risk Management Committee and the Executive Committee under the Board with effect from 12 April 2021, and ceased to hold the position of the President of the Company with effect from 23 July 2021.

(2) Mr. GAO Ping was appointed as an executive Director and the President of the Company with effect from 23 July 2021.

(3) Mr. TIAN Jun resigned as an executive Director, the Chairman of the Board, the Risk Management Committee and the Executive Committee under the Board with effect from 12 April 2021.

(4) Mr. ZHOU Jie was appointed as a non-executive Director with effect from 12 April 2021.

(5) Mr. GUAN Qihong resigned as a non-executive Director with effect from 12 April 2021.

(6) Mr. YAU Ka Chi was appointed as a chairman of the Audit Committee with effect from 3 June 2021.

(7) Mr. HUI Hon Chung, Stanley was appointed as an independent non-executive Director, a member of the Audit Committee, the Risk Management Committee and the Remuneration and Nomination Committee with effect from 3 June 2021.

(8) Mr. KWONG Che Kwong, Gordon retired as an independent non-executive Director at the conclusion of the annual general meeting on 3 June 2021.

AUDIT, INTERNAL CONTROL AND RISK MANAGEMENT

Financial Reporting

Directors acknowledge their responsibility for preparing the financial statements on a going concern basis, with supporting assumptions or qualifications as necessary. The Company's financial statements are prepared in accordance with the Listing Rules, Hong Kong Companies Ordinance and also the accounting principles and practices generally accepted in Hong Kong. Appropriate accounting policies are selected and applied consistently; judgments and estimates made are prudent and reasonable.

During the year 2021, all Directors have been given on a monthly basis the latest information and briefings about the financial position, changes in the business and the development of the Group. "Letter to the Shareholders" from the Chairman of the Board contained a summary of the Company's performance in this annual report and how the Company will preserve value over the long term and our strategies for delivering the Company's objectives. The Directors ensured a balanced, clear and understandable assessment of the Company's performance, position and prospects in annual reports, interim reports, inside information announcements and other disclosures required under the Listing Rules and other statutory requirements.

Risk Management and Internal Control Systems

The Board puts particular emphasis on risk management and strengthening internal control system. In respect of organizational structure, the Company has set up the Audit Committee, the Risk Management Committee, the Remuneration and Nomination Committee and the Executive Committee, and there is also a Sustainability Working Committee under the Risk Management Committee. The principles of the internal control framework of the Company are to strengthen the Company's internal monitoring and control in accordance with the requirements of the Hong Kong Stock Exchange, continuously improve the Company's corporate governance structure, build up corporate integrity culture, establish an effective control system, continuously assess the competence of the internal control system and the efficiency of the management through auditing, risk assessments and internal assessments, review identified risk exposures and ensure the effective running of the control system.

The Company has an Internal Audit Department in place and has been ensuring the independence of its organization, staffing and work, which is crucial to the Company's internal controls. In order to actively create a sound internal control environment, the Internal Audit Department provides internal control assessment reports to the management on a regular as well as ad hoc basis. It also reports to the Audit Committee, the Risk Management Committee and the Board at least twice a year on internal control and risk management matters. To minimize risks faced by the Company, the department evaluates and reviews the Company's internal control processes to avoid risks and provide a solid foundation for building up an effective internal control system.

The Company has also established an Audit Center with the objectives of standardizing and information-digitalizing internal audit and risk management, the Audit Center provides systematic support to the internal audit and control team, and provides relevant personnel training to cope with the development of the Group.

The Company has a comprehensive internal control criterion which includes seven parts, namely "basic framework of the internal control system", "management authorization manual", "staff disciplinary code", "code on conflicts of interests", "operational standards for internal control activities", "assessment standards for internal control system", and "implementation standards for internal audit", details of which are contained in our "Risk Management and Internal Control Specifications".

The Board acknowledges that it is responsible for the risk management systems and reviewing their effectiveness. Details of the Risk Management Framework are set out in the "Risk Management Report" of this annual report.

While taking into full account the risk management framework requirements of The Committee of Sponsoring Organizations of the Treadway Commission ((the "COSO"), the promoter of the National Commission on Fraudulent Financial Reporting), the ISO31000 Risk Management Guidelines issued by International Organization for Standardization and risk management guidelines set out by the Hong Kong Institute of Certified Public Accountants, the internal control system of the Company also learns from the experience of outstanding management companies and takes into consideration our actual situation and business characteristics in formulating the control framework for assessing the efficiency and competence of the internal control system, which provide a reasonable assurance to ensure the effectiveness of the Company's operating activities, reliability of its financial reports and compliance of laws and regulations.

Effectiveness of Risk Management and Internal Control Systems

The Board through the Audit Committee and Risk Management Committee has reviewed the efficiency of internal control system of the Group in aspects such as financial controls, operational controls, regulatory compliance and risk management. The head of the Internal Audit Department provides an annual confirmation of the effectiveness of the risk management and internal control systems, which is counter-signed by the Risk Management Committee, to the Board. The Directors believe that the risk management and internal control systems are efficient and adequate, and controls effectively the risks that might have impacts on the Company in achieving its goals.

During the year under review, the Company has strictly complied with the relevant provisions of the CG Code regarding risk management and internal control. Leveraging the internal information sharing platform of the Company and the management effectiveness of the Enterprise Resource Planning ("ERP") system, the Company has driven the transformation and upgrade from traditional auditing to information-digitalized auditing, thereby advancing auditing works aided with big data in full swing. During the year, the key tasks conducted by the Internal Audit Department include the following:

- **Risk management for investment projects to facilitate the Company's high-quality transformational development towards clean energy.** We have formulated the Implementation Rules of Risk Assessment on Investment Projects (《投資項目風險評估實施細則》) to establish standardized risk assessment procedures for investment projects and all-round risk assessment and monitoring mechanisms for such projects, with a view to promoting highly effective implementation of the Company's risk assessment on investment projects. During 2021, we have completed the comprehensive risk assessment for 126 projects and established the dynamic risk management ledgers for the relevant investment decision-making projects. We have also proposed a total of 10 types of rectification requirements and 35 regulatory measures. Meanwhile, we regularly analyzed and tracked the responsive measures against risks and their implementation throughout the entire life cycle of each project on a continuous basis. Risk alerts or necessary reminders were issued in due course and closed-loop risk management was implemented for the investment projects.

- **Post-evaluation for investment projects to enhance the investment standards.** By formulating the Administrative Measures for Post-evaluation of Investment Projects (《投資項目後評價管理辦法》), we have standardized the procedures and manners of the post-evaluation works to increase the quality of post-evaluation of investment projects. We continued to strengthen the management over on-site evaluation conducted by external consultancy institutions and introduced on-site daily reporting mechanism for post-evaluations in order to further inspect and review the existing problems of the projects and assure quality of the reports. Coordinating the progress of projects and making detailed preparation for the annual post-evaluation plan, we have completed the post-evaluation of 5 large-scale photovoltaic investment projects with high quality. Having concluded our overall studies, we prepared the risk alert letters and annual post-investment evaluation reports, which were also circulated among the subsidiaries so as to consolidate the application of the results of the post-investment evaluations. We carried out special training programs on post-investment evaluation for various departments and subsidiaries. Detailed analyses were conducted on the key issues regarding the investment projects' reviews and the main concerns over their post-evaluations in order to continuously enhance the awareness of various business units for high-quality development.

- **Informatization of self-examination and self-correction tasks to enhance the audit quality.** According to the requirements of special audit for high-risk businesses, the Group requested each business unit to carry out investigations, promoting the identification and rectification of problems through self-examination. Having organized self-examination and self-correction tasks for audit issues, we adopted online management of "historical rectification ledgers" by inputting the rectification ledgers of various business units in recent years into the system, thereby tracking the progress and implementing closed-loop management through informatization.

- **Strengthening the internal control and supervision over tendering process for procurement and external services.** We commenced investigation and study on the risk control of the "Three New Businesses" (i.e. new industries, new business forms and new business models). Based on the results of the investigation and study, the Evaluation Standards of Internal Control (《內控評價標準》) was formulated, which is in line with the new development strategy of the Company. We standardized the supervision of centralized tendering, while strengthening the supervision of processes such as quotation inquiries and competitive negotiations. We organized special training on the supervision of tendering, standardized the conduct of management and supervision of the tender supervisors, and developed a talent pool of these personnel. In addition, we standardized the admissibility of complaints and issues of objection in relation to tendering and realized closed-loop management of the complaint ledgers.

- **Reviewing and inspecting continuing connected transactions.** The Internal Audit Department took appropriate measures to review and inspect quarterly the implementation of the Group's existing continuing connected transactions. During the year under review, each of the relevant company of the Group had strictly monitored the respective continuing connected transactions based on the agreed prices and terms during the actual course of business operation and none of the transactions exceeded the relevant annual caps disclosed.

Whistleblowing Policy and Anti-corruption

For good corporate governance practice, the Board approved launching a "Whistleblowing Policy" in April 2012, for employees and those who deal with the Group (e.g. customers and suppliers) to raise concerns, in a secure and confidential manner, with the Internal Audit Department about possible improprieties in any matter related to the Group, and through the Internal Audit Department reports directly to the Audit Committee.

The Company has formulated a series of anti-corruption policies since 2005 which are in compliance with the prevailing anti-corruption laws and regulations where our business operations and units are located. Anti-corruption seminars are mandatorily organized in regular basis each year to educate our management and staff across the Group of the relevant laws and regulations and the measures the Company adopted to fight against corruption so as to foster our corporate culture of honesty and integrity.

Inside Information

The Company adopted its own "Inside Information Management Policy" setting out the procedures and internal controls for handling and dissemination of inside information in August 2013 with reference to the "Guidelines on Disclosure of Inside Information" issued by the Securities and Futures Commission in June 2012.

The Company incorporated the topic on inside information into its annual internal training to its senior management regarding the continuing disclosure obligations under the Securities and Futures Ordinance and the Listing Rules.

External Auditor's Remuneration and its Related Matters

The Company appointed Ernst & Young as the Company's auditor (the "Auditor"). The Audit Committee is responsible for making recommendations to the Board on the appointment, reappointment and removal of the Auditor, and to approve the remuneration and terms of engagement of the Auditor, and any questions of its resignation or dismissal.

For the year ended 31 December 2021, the Audit Committee reviewed and monitored the Auditor's independence and objectivity and the effectiveness of the audit process in accordance with applicable standards.

For the year ended 31 December 2021, the fees payable by the Company to the Auditor in respect of audit and non-audit services provided were as follows:

	RMB'000
Audit services	5,840
Non-audit services:	
• Interim review	1,320
• Continuing connected transactions	200
• Issuance of super & short-term commercial paper and medium-term notes	700
• Tax services	47
• Others*	3,147

* They were primarily the provision of advisory services relating to internal audit system, big-data audit support, international accounting manual benchmarking, potential financial implications of contemplated transactions and risk assessment.

SHAREHOLDERS ENGAGEMENT

Apart from reporting to the shareholders and investors on its operations and financial conditions semi-annually and annually, the Company also discloses relevant information such as electricity sold by the Group quarterly so that the investors have a better understanding about the operation of the Company. The Company maintains a corporate website at www.chinapower.hk where important and updated information about the Group's activities and corporate matters such as annual and interim reports, announcements, business development and operations, corporate governance practices and other information are available for review by shareholders and other stakeholders. When announcements are made through the Hong Kong Stock Exchange, the same information is made available on the Company's website simultaneously.

Investor Relations

The Company also holds regular press conferences and meetings with financial analysts and investors, during which the Company's management will directly provide relevant information and data to the media, financial analysts, fund managers and investors, as well as answer their enquiries in a prompt, complete and accurate manner. The Company's website is updated continuously, providing up-to-date information regarding every aspect of the Company to investors and the public.

The Company has a Capital Markets & Investor Relations Department, which takes charge of the Company's relationship with investors and shareholders by providing information and services to them, promptly replying to their enquiries, and maintaining channels of active and timely communication with them.

Shareholders Communication Policy

In March 2012, the Board adopted a "Shareholders Communication Policy" of the Company which aims to set out the provisions with the objective of ensuring that the shareholders and potential investors are provided with ready, equal and timely access to balanced and understandable information about the Company, so as to enable shareholders to exercise their rights in an informed manner, and to allow shareholders and potential investors to engage actively with the Company. Summary of the general policy is as follows:

- The Board shall maintain an on-going dialogue with shareholders and the investment community, and will regularly review this Policy to ensure its effectiveness.

- Information shall be communicated to shareholders and the investment community mainly through the Company's financial reports (interim and annual reports), briefings for results and significant matters, annual general meetings and other general meetings, maintenance of communication with investment market and media as well as making available all the Company's disclosures, corporate communications and other corporate publications in a timely manner.

The channels for shareholders to communicate their views to the Board are set out in the section headed "SHAREHOLDERS' RIGHTS" below. The "Shareholders Communication Policy" of the Company is posted on the Company's website under the "Corporate Governance" section.

The Chairman of the Board attended and chaired the Company's annual general meeting and general meeting held on 3 June 2021. Other Directors, including three independent non-executive Directors, being the chairman/members of Audit Committee, Risk Management Committee and Remuneration and Nomination Committee together with the external independent auditor attended those general meetings and answered questions from the attending shareholders and investors. All resolutions proposed were duly passed by shareholders' voting at the meetings.

Based on the Company's shareholders engagement works carried out during the year (Details are set out in the separate report headed "Investor Relations and Frequently Asked Questions" of this annual report), the Directors believe that the implementation of the Shareholders Communication Policy is effective and adequate.

Dividend Policy

In January 2019, the Company has adopted a new "Dividend Policy" which aims to set out the provisions for providing stable dividends to shareholders.

The Company may declare and distribute annual cash dividends to its shareholders in an amount representing not less than 50% of the profit attributable to ordinary shareholders of the Company in any financial year, subject to the criteria set out in the Dividend Policy. In addition to cash, the dividends may be paid up in the form of the Company's shares, by the distribution of specific assets of any kind or by distribution of any form.

A decision to declare or to pay any dividends, and the amount of dividends, will be based on the recommendation of the Board after taking into consideration of, inter alia, the following factors:

(i) The financial results and financial condition of the Group;

(ii) The Group's actual and future operations and liquidity position;

(iii) The Group's expected working capital requirements, capital expenditure requirements and future expansion plans;

(iv) The Group's debt-to-equity ratio, return on equity and committed financial covenants;

(v) The retained earnings and distributable reserves of the Company and each of the members of the Group;

(vi) The general economic conditions, the national policies for energy and related industries, and other internal or external factors that may have an impact on the business or financial performance and position of the Company;

(vii) The shareholders' and the investors' expectation and industry's norm; and

(viii) Any other factors that the Board deems appropriate.

The Company shall prioritize payment of cash dividends to its shareholders. Such declaration and payment of dividends shall be determined at the sole discretion of the Board and subject to all applicable requirements under the Company Ordinance (Chapter 622 of the Laws of Hong Kong) and the articles of association of the Company.

SHAREHOLDERS' RIGHTS

Procedures for Shareholders to Convene General Meeting

Shareholders are entitled to have right to request the Company to convene a general meeting pursuant to Part 12 of the Hong Kong Companies Ordinance. The procedures are as follows:

1. The Directors are required to call a general meeting if the Company has received requests to do so from the Shareholders representing at least 5% of the total voting rights of all the members having a right to vote at general meetings.

2. A request –

    (a) must state the general nature of the business to be dealt with at the general meeting; and

    (b) may include the text of a resolution that may properly be moved and is intended to be moved at the general meeting.

3. Requests may consist of several documents in like form that –

    (a) may be sent to the Company in hard copy form or in electronic form; and

    (b) must be authenticated by the person or persons making it.

4. Directors must call a general meeting with 21 days after the date on which they become subject to the requirement, and must be held on a date not more than 28 days after the date of the notice convening the general meeting.

5. If the requests received by the Company identify a resolution that may properly be moved and is intended to be moved at the general meeting, the notice of the general meeting must include notice of the resolution.

6. If the resolution is to be proposed as a special resolution, the Directors are to be regarded as not having duly called the general meeting unless the notice of the general meeting includes the text of the resolution and specifies the intention to propose the resolution as a special resolution.

Notice and Voting of General Meetings

Sufficient notice of shareholders' meeting and the procedures for voting conduction will be given to shareholders prior to every general meeting. Save as provided under the Listing Rules, resolutions put to vote at the general meetings of the Company (other than procedural matters) are taken by poll. Procedures regarding the conduct of the poll are explained to shareholders at the commencement of each general meeting, and questions from shareholders regarding the voting procedures are answered. The poll results are posted on the respective websites of the Company and the Hong Kong Stock Exchange on the same day of the poll.

Procedures for Shareholders Sending Enquiries to the Board

Shareholders should direct their questions about their shareholdings to the Company's registrar and whose details are as follows:

Computershare Hong Kong Investor Services Limited
Shops 1712–1716, 17/F., Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong
Tel: (852) 2862 8628
Fax: (852) 2865 0990

The Company Secretary and the Capital Markets & Investor Relations Department of the Company also handle both telephone and written enquiries from shareholders from time to time. Shareholders' enquiries and concerns will be forwarded to the Board and/or relevant Board Committees of the Company, where appropriate, to answer shareholders' questions. For shareholders and investors' enquiries, the contact information is set out in the "Useful Information for Investors" section of this annual report.

Other Procedures for Shareholders' Proposals

The details of the following procedures are available at the Company's website www.chinapower.hk under the "Corporate Governance" section for review.

- Procedures for shareholders making proposals at general meetings

- Procedures for shareholders to nominate a person to stand for election as a Director

Constitutional Documents

The Company's constitutional documents have been posted on the Company's website www.chinapower.hk under the "Corporate Governance" section. During the year under review, there was no change in the Company's articles of association.

Important Shareholders Dates

The important shareholders dates in the coming financial year are set out in the "Useful Information for Investors" at the end of this annual report.

RISK MANAGEMENT PHILOSOPHY

The Board acknowledges that risk management provides strong support and basic guarantee for the high-quality and sustainable development of the Group. The Board regards risk management as proactive measures for creating corporate efficiencies, and thus it vigorously promotes risk management responsibilities of the Board, the management and all staff members as well as its entire business system.

The Board has established a risk management framework by adopting the "Three Lines Model" for the Group which was published and updated by the Institute of Internal Auditors (the "IIA"), under which the Group has integrated risk management with its strategic goals and has formed its risk management practice to be "Comprehensive, Focused, Dynamic and Continuous".

At strategic level, the Board regularly studies and clarifies the comprehensive risk indicator system in monitoring material risks associated with the Group's businesses through the Risk Management Committee. At operational level, the Group has also taken a dynamic approach to set up key risk checkpoints based on the internal and external changes of the Group, implemented major risk prevention in all aspects and ensured the management bearing their responsibilities in relation to dynamic monitoring of ongoing risk management and control during daily operating activities. The Board plays a leading role for building a "Prudent, Progressive and Responsible" risk management culture of the Group.

RISK MANAGEMENT COMMITTEE

The Risk Management Committee is delegated by the Board with responsibilities to oversee the Group's overall risk management framework and to advise the Board on the Group's risk-related issues. The Risk Management Committee is also responsible for approving the Group's risk management policies and assessing the effectiveness of the Group's risk controls. The details of the terms of reference of the Risk Management Committee have been posted on the websites of the Company and the Hong Kong Stock Exchange.

The Risk Management Committee held two meetings during 2021 and focused on the following matters:

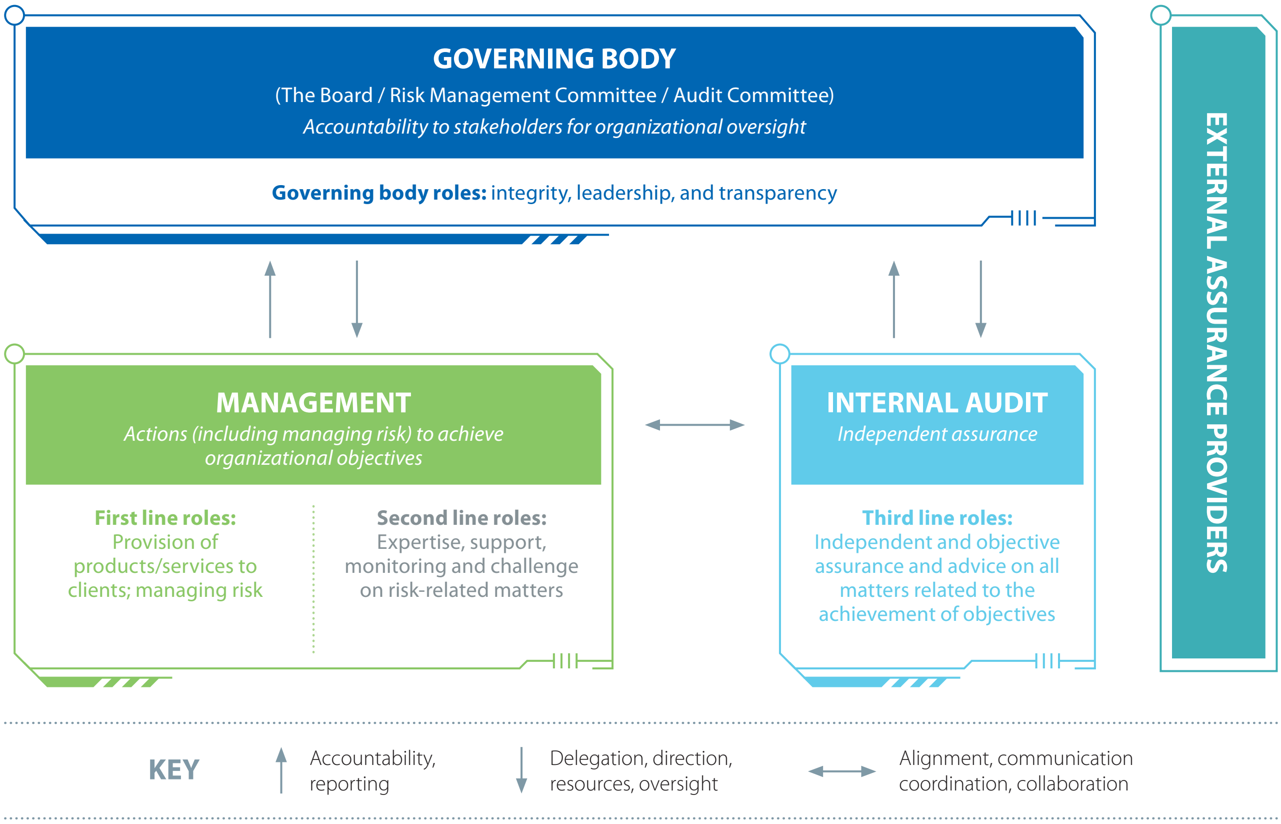
- reviewed and approved the "Risk Management Report" for the year 2020 and the first half of 2021 and the risk management plan for the year 2021 prepared by the Company's Internal Audit Department in relation to the Group's risk management framework, the effectiveness of the risk management system, the circumstances of specific risk management and the measures adopted for risk control, and risk management policies which govern the identification, assessment, monitoring and reporting of the major risks faced by the Group;

- reviewed and approved the adequacy of resources, qualifications and experience of the staff of the Company's risk management functions; and

- reviewed and approved the "Sustainability Report" for the year 2020.

RISK MANAGEMENT FRAMEWORK

Based on the standards regarding the risk management framework of the Committee of Sponsoring Organizations of the Treadway Commission (including standards being updated on an ongoing basis) and the latest ISO31000 Risk Management Guidelines for internal control and risk management, the Group has established a risk management framework closely following the "Three Lines Model" published and updated by the IIA.



Source: *The IIA's Three Lines Model — An update of the Three Lines of Defense (July 2020)*

An important feature of the updated new Three Lines Model is the shift of the emphasis from value protection and risk-reduction to value creation and contribution to the achievement of strategic objectives. This perspective suggests a more proactive role for risk management in identifying opportunities in emerging risks to be seized and exploited for potential future growth and for business decision-making. The Board believes the updated model will better facilitate the Group's strategic development in attaining its corporate goals.

The Three Lines Model is more principle-based with greater focus on the importance and role of governance and clarity of roles and responsibilities. It is supported through three components:

1. Governing body which is responsible and accountable for the stakeholders

2. Management (the first and second line roles) which is responsible for actions to manage risk and achieve organizational objectives

3. Internal audit (the third line roles) which provides independent assurance

The roles of three lines are as follows:

First line	Business risk management — This group provides control self-assessment during the course of business activities. Each of the operational departments and business units, as well as personnel holding the respective business position, shall be the first response unit for handling matters within their terms of reference for risk identification and management.
Second line	Supervision and support for risk management — This group provides the policies, framework, tools, techniques, and support to enable risk management and compliance in the first line. They include the departments responsible for the functions of internal audit, legal affairs, compliance, finance, human resources, information technology, safety and environmental protection monitoring, shall assist the front-line business departments to assume joint responsibilities for overseeing, inspecting and evaluating the effectiveness of those works relating to the implementation of risk management.
Third line	Independent assurance — The internal audit function that sits outside the risk management processes of the first two lines. Its main roles are to ensure that the first two lines are operating effectively and to advise on all matters relating to the achievement of objectives. The Group's Internal Audit Department and Supervision Department shall be responsible for auditing the results of the risk management works and issuing an independent audit report and supervisory report.

In 2021, the Group incorporated pandemic risk management, each business unit and department continued to carry out scheduled annual major risks prevention and mitigation works and risk assessment and prevention for major decision-making, so as to ensure the management of major risks were done through coordination of joint management and joint prevention. In addition, the Audit Center of the Group made full use of big data to promote the standardized development of audit, risk and internal control procedures, thereby further optimizing its risk management network.

Fully utilizing big data to promote the standardized development of audit, risk and internal control procedures

RISK MANAGEMENT MECHANISMS AND PROCEDURES

Having concluded from the practical experience for a long period, the Group has developed a set of risk management mechanisms and procedures that operates steadily and mainly comprises (i) comprehensive risk management, (ii) risk management targeting major investment projects, and (iii) specific risk management targeting key risk areas.

(i) The procedures of comprehensive risk management are as follows:

Phase 1	Formulating risk management policies, strategies and risk assessment standards — The Board shall determine risk policies in respect of the Group's governance, culture and development strategies, and shall take these policies into consideration when determining its business targets. The Risk Management Committee shall be entrusted by the Board to determine the risk management strategy of the Group, while the Group's Internal Audit Department shall establish common risk assessment standards and set up the risk score sheet for the Group.
Phase 2	Comprehensively collecting first-hand information for risk management and risk identification — Each department/business unit shall extensively and continuously collect internal and external information in relation to the risks of the Group and the risk management thereof and identify potential risks that may have an impact on the key processes of their operations.
Phase 3	Conducting risk assessment and establishing comprehensive risk management ledger — Each department/business unit shall assess and score the risks identified along with their impact on the business and the likelihood of their occurrence. All risks of the Group and its subordinated units shall be recorded in the risk management ledger.
Phase 4	Risk follow up treatment as well as tracking and update of risk management ledger on a quarterly basis — Based on the assessment, each department/business unit shall propose measures for monitoring and treatment of risk identified and determine the responsible person for the risk. All this information shall be fully recorded in the risk management ledger and updated on a quarterly basis to ensure the risks are controllable.
Phase 5	Risk reporting and monitoring — Each department/business unit shall monitor their own risk mitigating works and summarize and report the comprehensive risk management condition to the Risk Management Committee bi-annually, so that the Committee can keep abreast of the distribution and changes of comprehensive risks on a continuous basis, evaluate the effectiveness of the risk management works and recommend measures for improvement. The Risk Management Committee submits the "Risk Management Report" and the "Sustainability Report" to the Board annually.

(ii) The risk management procedures targeting major investment projects are as follows:

Project Initiation and Feasibility Study Stage	Business departments and all supporting departments for risk management shall conduct work such as feasibility study and due diligence for their investment projects, so as to fully identify and assess the risks of the investment projects and the risk cost thereof, and put forward strategies and measures against material risks.
Investment Decision Stage	Before making investment decisions, the relevant departments shall prepare the risk assessment report for specific projects based on the feasibility study and the due diligence report with a view to disclosing the risks of the investment project and the impact of the risk factors, and recommend preventive measures.
Construction Stage	The relevant departments shall conduct risk analysis on the conditions for commencement of construction, including analysis on compliance risks relating to aspects such as land, environment and energy conservation, technical risks relating to the construction design plan and risks relating to construction management, etc. Construction work will only be commenced after establishing feasible responsive measures and passing the compliance evaluations.
Management through closed-loop tracking	A closed-loop tracking mechanism will be implemented for the risk analysis and evaluation conclusion for each of the above stages to ensure all risks are controllable and under control.

(iii) The specific risk management procedures targeting key risk areas are as follows:

Identification and selection of key risk areas	The management shall hold regular meetings to identify new, non-traditional and typical risks arising in the course of strategic development of the Company, and commence specific risk assessment on such area.
Commencement of specific risk investigation, research and assessment	Prior to the assessment, the functional departments shall collect data, determine risk checkpoints, verify and identify risks on-site and discuss with the business management departments (brainstorming). The identified risks shall be quantified and a risk management ledger shall be established according to risk level. Responsive measures shall be formulated against such risks based on the risk strategy.
Compilation of risk assessment report and put forward management advice	The risks assessed and responsive measures thereof shall be submitted to the relevant business management department for consideration and review. The relevant business management department shall put forward management advice for responsive measures relating to high-and mid-level risks, formulate risk assessment and management report upon discussion with the functional departments, and provide guidance to the responsible business unit to commence its risk management works.
Management through closed-loop tracking	Risk checkpoints identified through the specific risk assessment shall be included in the risk management ledger. Through the integration of specific monitoring and dynamic monitoring, comprehensive tracking and prevention of risks shall be in place, and various requirements relating to risk management and control shall be incorporated into corporate management and corporate procedures.

Other regular risk management procedures

Information system security	The Group shall conduct specific risk assessments in such areas as network security, financial sharing system, and information confidentiality on an ongoing basis and put forward detailed management advice from time to time, thereby ensuring the risks are controllable and under control. Meanwhile, it shall continue to develop the information platform for compliance management. Information technology shall be used to manage the compliance review and assurance procedures for decision-making, contract execution, procurement and capital management.
Risk management responsibility appraisal	The Group shall require all business units to establish a comprehensive risk management responsibility system and fulfill their risk prevention and mitigation responsibilities. The Group shall incorporate all risk control requirements into its management and operation procedures while including risk management responsibilities as a factor in annual performance appraisal, with the aim of raising the risk prevention awareness of all business units and encouraging them to plan for and implement risk prevention measures proactively.

Pursuant to the risk assessment for 2021, the major risks of the Group are set out as follows:

No. 1 — Risks relating to Caron Target and Carbon Emission Policies

Description of Risks	Risk Trend in 2021	Key Response Measures
• The Administrative Measures for Carbon Emission Rights Trading (Trial) (《碳排放權交易管理辦法（試行）》) published by the Ministry of Ecology and Environment officially came into effect in February 2021. As trading in the carbon market are still at the initial stage, the specific requirements covering the mechanism of those trades are yet to be confirmed. The uncertainties would cause risks to the participants of the relevant trades.	↑	• Strengthen the communication with the local government authorities, keep abreast of and study intensively the development trend of the carbon trading policies. Learn from the experience of the well-developed markets, conduct targeted market research and get prepared to seize opportunities arising from the subsequent further opening up of the carbon trading market.
• Under the national carbon targets of achieving "30•60 Carbon Emission Peak and Carbon Neutrality", the coal-fired power generation subsidiaries of the Group imposed higher requirements for efficient, eco-friendly and clean development. Risks of peak shaving and power plant shutdown exist accordingly.		• Carry out technical upgrade for saving energy, reducing carbon emission and improving production flexibility for the existing coal-fired power generating units to enhance their market adaptability. • Accelerate divestment of coal-fired power assets with low efficiency.

No. 1 — Risks relating to Caron Target and Carbon Emission Policies (continued)

Description of Risks	Risk Trend in 2021	Key Response Measures
• During the year, the Central Government imposed higher requirements for protection of the ecological environment. At present, the ability of certain subsidiaries of the Group to effectively identify and control risks relating to the ecological environment such as protection of cultural heritage needs to be improved; and their control over exhaust gas, wastewater, carbon emission and waste pollution needs to be strengthen.	↑	• Make plans for the rectification measures in advance and form expert teams to conduct special inspection on key subsidiaries that are exposed to relatively higher risks relating to the ecological environment; and to strengthen the efforts in damage-prevention and protection of cultural heritage prior to all project construction and avoid costly disruption of construction progress. • Make regular arrangements in accordance with the relevant government's monitoring and inspection requirements for protection of the ecological environment, and to carry out special monitoring and inspection measures for protection of the ecological environment on a continuous basis.

No. 2 — Risks relating to Innovative Development

Description of Risks	Risk Trend in 2021	Key Response Measures
• To cope with the new energy, integrated intelligent energy and transnational project development trend, the old-fashioned management mindset of traditional energy needs to be changed and adapt to the new production and operational management mode.		• Conduct relevant management trainings and experience feedback actively, speed up the formulation of regulations and systems for production and operational management to standardize and control the risks relating to safety and quality of new energy, integrated intelligent energy and transnational projects, and nurture qualified production and operational management strengths.
• Coal-fired power generating units need to expedite the application of advanced peak shaving technology to accommodate the demands of the power grid companies for the transition from planned to market-oriented economic development of the power industry, in particular the power ancillary service market.	↑	• Push forward the technical upgrade in respect of the production flexibility of the coal-fired power generating units of the Group. • Conduct an earnest study and review on the situation based on the relevant local government policies and carry out a comprehensive assessment and energy saving technical upgrade focusing on those power generating units that have reached their designed useful life. • Explore business opportunities for already upgraded coal-fired generation plants in the power ancillary service market to meet the surging electricity demand during the peak power consumption period, in supplementary to new energy power generation.
• Under the national goal of transformational development towards clean energy, the trend of replacing traditional power sources with new energy has been established and the development of clean energy has entered the fast lane. While the Group further pushes forward the development of clean energy, the financial sources, capital operation capability and management innovation capability need to be enhanced diligently in pursuit of the Company's goal of building a world-class clean energy enterprise.		• Actively promote the Group's strategic transformation with precise deployment in emerging industries such as energy storage, rural revitalization and geothermal energy. We have been striving to accelerate the development of the "Three New Businesses (三新業務)" (i.e. development of new industries, new business forms and new business models by using new technologies and applications), which included increasing resources to enhance the market competitiveness of those specialized subsidiaries engaging in emerging industries while speeding up the transformation of other subsidiaries from traditional power generation companies to green and low-carbon energy suppliers simultaneously. • Introduce new business partners and/or investment funds as and when appropriate to jointly develop the Group's existing and future new clean energy projects.

No. 3 — Risks relating to Market Competition		
Description of Risks	**Risk Trend in 2021**	**Key Response Measures**
• As the marketization of electricity trading continues, the market trading price of electricity tariff continues to decline under keen competition. • With the expedited launch of the subsidies reduction policy for new energy tariffs and the increasing number of large-scale grid parity power generation projects that enters into the market in certain regions of China, the pressure on electricity consumption and peak shaving has increased, and thus increased the competitive pressure significantly. • The establishment of, among others, advance electricity sales system structure and information platform are urgently required to fully satisfy the demand in the competitive market.		• Strengthen efforts in electricity sales to attract large-scale quality users. Reinforce trainings for marketing personnel of affiliated business units; at the same time, commence the construction of spot auxiliary service system to enhance the ability to respond to the electricity spot market. • Increase the number of medium and long-term contracts of electricity sales transaction to reduce spot market exposure, lock in returns and reduce risks. • Continue to develop diverse and integrated energy services that can provide multiple energy services including electricity, heating, cooling and water for industrial use to end-users simultaneously, and push forward the development of integrated energy applications such as new energy storage for different types of power generation. • Accelerate the establishment of electricity sales information systems and development of technological platforms to provide effective support for electricity sales and thus satisfy the demand in the competitive market.

No. 4 — Risks relating to Cash Flows		
Description of Risks	**Risk Trend in 2021**	**Key Response Measures**
• Cash flow position continues to be strained as project investment has expanded continuously in recent years. • Profitability of individual coal-fired power generation subsidiaries is limited under the impact of high coal price and low regional electricity tariffs.		• Explore appropriate debt and equity financing solutions. • In 2021, the Company issued super & short term commercial papers in a principal amount of RMB2 billion and medium-term notes in a principal amount of RMB5 billion; and Wu Ling Power, a principal subsidiary of the Company, also issued super & short term commercial papers in a principal amount of RMB2.02 billion in the interbank bond market in China. • In November 2021, the Company established its first asset-backed special program for a subsidiary engaging in traditional coal-fired power generation. Through the special program, it raised capital of RMB2.576 billion by issuance of asset-backed securities in the form of similar REITS products. • In December 2021, the Company issued 1,026,500,000 ordinary shares at the price of HK$3.80 per share by means of top-up placing of existing shares and subscription of new shares under general mandate to further improve its cash flows.

No. 4 — Risks relating to Cash Flows (continued)		
Description of Risks	**Risk Trend in 2021**	**Key Response Measures**
• While the Group continues to scale up its investment in new energy projects, the power generation that are entitled to the tariff subsidies for renewable energy from the relevant government authorities increased significantly in recent years. However, the delayed in granting of those government subsidies for renewable energy sales has resulted in greater pressure on the operating cash flow position.		• Continue to closely monitor the status of collection of tariff subsidies for renewable energy; strive to be included in the government's list of subsidy projects as soon as possible and keep abreast of the progress of subsidy fund allocation through active communication with local power grid companies. • Make good use of asset securitization tools to realize low liquidity assets. • In 2021, the Group entered into an accounts receivable transfer agreement with SPIC for certain renewable energy projects at a consideration of approximately RMB1.18 billion by transferring their entitlements to renewable energy tariff subsidies to SPIC for participating in its issuance of asset-backed notes.

No. 5 — Risks relating to Pandemic Prevention and Control		
Description of Risks	**Risk Trend in 2021**	**Key Response Measures**
• The global pandemic control situation remains critical, prevention of imported cases and regular pandemic containment continue to be the focus of our related control efforts. The contagious risk of the coronavirus may continue to affect our production and operation.		• Strive for effective implementation of regular pandemic containment measures in compliance with the national requirements. Proactively coordinate speedy arrangements to make sure pandemic prevention materials are in place and organize group vaccination of employees to ensure workplace safety. • Leverage the internal and external technological monitoring platforms to provide remote technological support, thereby facilitating steady operation and production across the Group.

NEW MISSION AND NEW POSITIONING

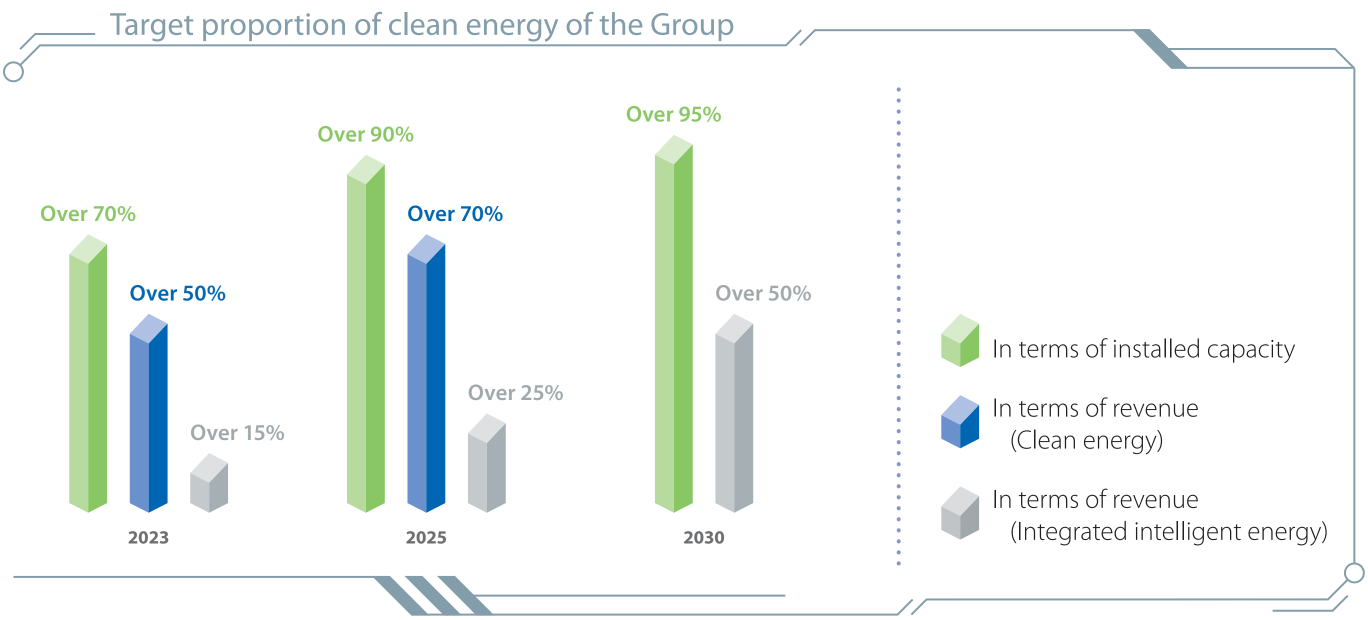
Under the national goal of "30 • 60 Carbon Emission Peak and Carbon Neutrality", China Power released its own Outline of the New Development Strategy in October 2021. With the new mission of "Lower Carbon Empower Better Life", we will adhere to the core sustainable development philosophy of "Green-empowerment, Intelligent Innovation and Mutual Achievement", details of which are as follows:

Green-empowerment: Empowering global customers with green energy and fully serve the low-carbon transformation of the power and energy industries, the economy and the society in making low-carbon production and zero-carbon living an accessible reality.

Intelligent Innovation: Continuous pursuit of innovation and breakthrough in technologies, business models, management and services for establishing an intelligent energy ecosystem that eliminates boundaries and drives values.

Mutual Achievement: Joining hands for mutual benefits and sharing of achievements in green development with partners, providing customers with more valuable low-carbon products and services, creating the best investment value for the shareholders, and establishing a platform for staff to grow and succeed and realize their aspirations.

The Group has been committed to maintaining high-quality development, making steady progress and forging ahead towards our corporate vision of becoming a "World-class Green and Low-carbon Energy Provider". To this end, we have formulated strategy pathway as follows:

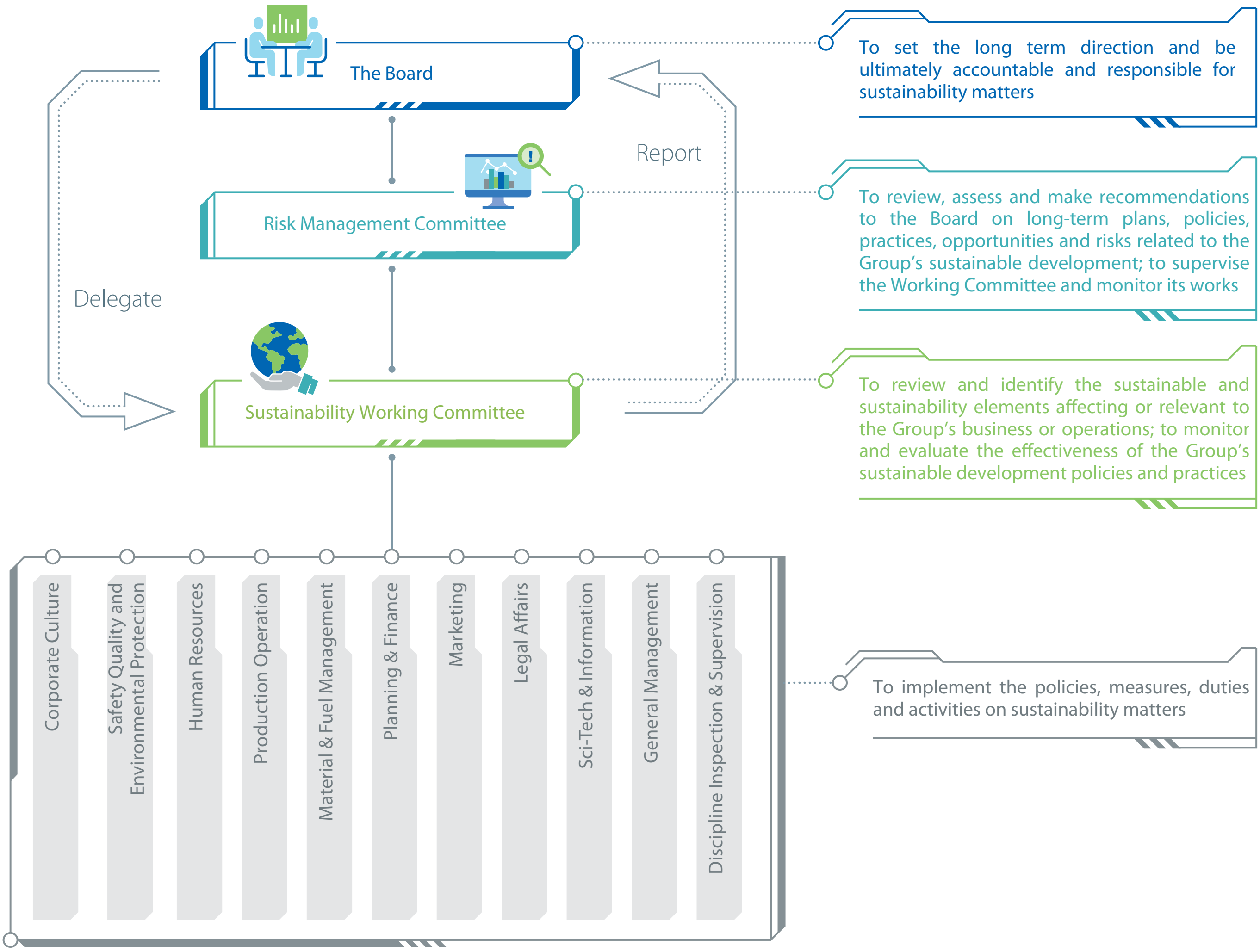


SUSTAINABILITY GOVERNANCE

The Company has established a Sustainability Working Committee as a sub-committee of Risk Management Committee under the Board, which is fully responsible for the sustainability-related matters of the Group.

The Board firmly believes that a clear and definite sustainability governance structure will help the Company to transform from a traditional power generation enterprise into a green and low-carbon energy provider.

Sustainability Governance Structure



Strategic Positioning

"Three in one" Business Positioning: An enterprise that integrates the role of "clean and low carbon energy producer, green energy technology service provider and dual-carbon ecosystem integrator".

"Double-leading Enterprise" Growth Positioning: Progressing from a leading enterprise in China towards a leading enterprise in the world.

In order to achieve our corporate mission and clean energy targets, the Group's overall strategy and implementation path are as follows:

Overall strategy	Methods of promotion	Specific measures
Business expansion	Clean energy upgrade of traditional coal-fired power generation	• No further expansion of coal-fired power generating units to lower the proportion of coal-fired power and reduce the Group's reliance on such energy form • Performing clean energy upgrade of existing coal-fired power generating units to improve their performance, save energy and reduce emission
	Expansion of new energy bases	• Focusing on the development of clean and low-carbon energy, such as photovoltaic power, wind power, hydropower, geothermal power, biomass power, etc. • Tapping into resources for new energy development and building new energy bases across the country to facilitate large-scale development of new energy
	Plan for development of the "Three New Businesses"	• Actively cultivating emerging green energy industries including energy storage, hydrogen power, green power transportation and integrated intelligent energy
Regional synergy	Urban intelligent energy	• Assisting in the construction of smart cities and advancing the applications of intelligent energy to boost green and circular economic development
	Development of county resources	• Establishing the county development system and intensely exploring county resources to develop integrated intelligent energy in counties with greater efforts
	Building of low-carbon villages	• Promoting the building of urban infrastructure in rural villages, the development of new green energy system and the agricultural modernization in rural villages under the "green energy + modern efficient agriculture" model, so as to achieve rural revitalization, the dual carbon targets and common prosperity
Industry integration	Transportation	• Supporting the development and application of intelligent clean energy in the transportation sector and establishing the green transportation system to change the way of energy consumption for commute by combining "green energy + transportation"
	Construction	• Building smart buildings and promoting green architecture by combining "green energy + construction"
	Agriculture	• Establishing the development model that integrates new energy and agriculture for intense agriculture and energy development by combining "green energy + agriculture"

(A) ENVIRONMENTAL ASPECTS

1. Climate Change

The Group recognizes the real and present danger of climate change and assumes the mission of accelerating the transformation of the power and energy industry and the development of clean energy. The Board is well aware of the importance of understanding climate risks and the impact of such understanding on promoting the long-term strategies of the Group.

1.1 Strategies and Actions

The Group's strategies in coping with climate change have been incorporated into the Group's directions for development and overall business layout as set out in the section headed "Strategic Positioning" above.

The actions carried out by the Group for various tasks are based on:

(a) Policy guidance: the national goal of "30 • 60 Carbon Emission Peak and Carbon Neutrality", among other policies, promulgated by the central government of the PRC.

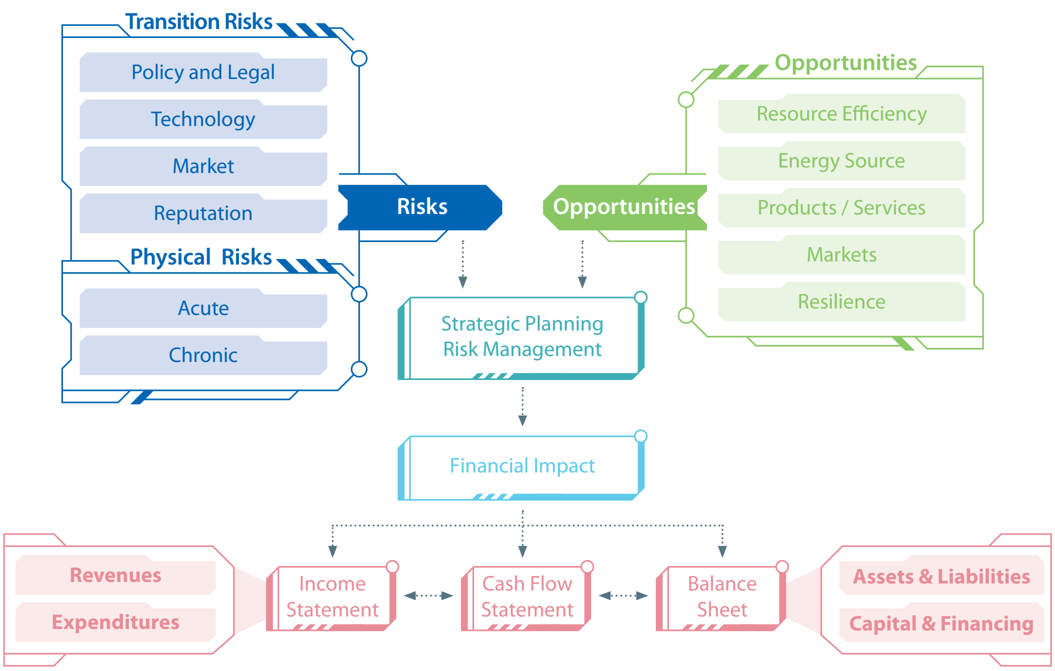
(b) Regulatory standards: "Environmental Protection Law of the People's Republic of China (《中華人民共和國環境保護法》)", "Air Pollution Prevention and Control Law of the People's Republic of China (《中華人民共和國大氣污染防治法》)", "Emission Standard of Air Pollutants for Coal-fired Power Plants (《火電廠大氣污染物排放標準》)", "Ambient Air Quality Standards (《環境空氣質量標準》)" and other regulatory standards on environmental protection issued by the central and local governments.

(c) Working guidelines: "Action Plan for Enhancing the Protection of Ecological Environment (《生態環境保護提升行動方案》)" and working guidelines regarding the protection of ecological environment issued by other business units.

1.2 Identification and Analysis

We have identified and analyzed climate risks faced by the Group based on the "Climate-related Risks, Opportunities and Financial Impacts" framework proposed by the Task Force on Climate-related Financial Disclosures (TCFD).

Climate-related Risks, Opportunities, and Financial Impact



1.3 Analysis on Climate Risks

Type of climate risks		Descriptions	Classification of financial impact	Impacts	Responses
Transition Risks	Policy and Legal	• The State Council issued the "2030 Carbon Emission Peak Action Plan", in which the "Actions for Green and Low-Carbon Transformation of Energy" is the top priority among the "Top Ten Actions for Carbon Emission Peak" • The Ministry of Ecology and Environment of China issued the "Administrative Measures for Carbon Emission Rights Trading (Trial)"	• Revenues • Expenditures • Assets	• Affect the effectiveness of business operations • Increase in operational and management cost	• Formulating the Group's Outline of the New Development Strategy; making proactive efforts to nurture emerging green energy industries, including energy storage, hydrogen energy, green power transportation and integrated intelligent energy
	Technology	• High level of technical requirements for the construction of new energy development projects and stability of power grid connection and consumption	• Revenues • Expenditures • Assets	• Increase in cost of technology R&D and cost of professional personnel training • Enhance asset values through R&D	• Establishing a cooperative research model of resource sharing and technology sharing with enterprises within and outside the Group
	Market	• Changes in electricity spot market trading rules • Higher requirements posed on carbon trading	• Expenditures • Assets	• Increase in research costs in relation to policies, rules and procedures for trading in the spot market and carbon market • Increase in cost of fulfilling contracts for electricity market transactions	• Providing training on environmental protection and related topics; and enhancing employees' professional management capabilities and awareness • Establishing standardized carbon trading compliance procedures and control measures
Physical Risks	Acute	• Extreme weather events such as floods, typhoons, droughts, etc.	• Assets and liabilities • Expenditures	• Asset impairment • Increase in costs of operation, maintenance and supply chain management	• Strengthening climate risks identification and management • Strengthening emergency plans and crisis management
	Chronic	• Global warming • Rising sea level	• Assets and liabilities • Expenditures	• Increase in infrastructure costs • Increase in operating costs of power plants	• Promoting the transformational development towards clean energy • Strengthening internal control management and improving the "anti-fragile" ability of the Group

1.4 Our Works

Policies implemented

Following the "Interim Measures for the Administration of Voluntary Greenhouse Gas Emission Reduction Trading (Fa Gai Climate [2012] No. 1668) (《溫室氣體自願減排交易管理暫行辦法》(發改氣候〔2012〕1668號)), we actively responded to the emission reduction requirements of the government. Moreover, we established the "Carbon Emission Management Measures" at the Group's level, which clarified the management responsibilities of carbon emission management at all levels.

Reduced coal consumption

In 2021, China Power compiled the "Analysis on Energy Consumption of Coal-fired Power Generating Units and Three-Year Action Plan for Energy Conservation and Efficiency Improvement" through CP Hua Chuang with actively adapting to the adjustment of energy structure and the development needs of the electricity market as the overall requirement, and reducing coal consumption for power supply as the main goal. We conducted a systematic analysis on the energy consumption of the power generating units from the perspective of production management, operation optimization, energy-saving technical upgrade, new technology application and digitalization.

Reduced emissions

We have strengthened the governance of existing coal-fired power generating units and promoted their energy-saving renovation. In addition, we strengthened the monitoring and control of energy consumption in the production process of power generating units, fulfilled our responsibilities for environmental protection supervision in production to ensure that each of the production site complies with the regulations, and comprehensively improved the efficiency of coal-fired power production.

In 2021, the Group completed the ultra-low emission transformation for all domestic coal-fired power generating units, and we received incentive electricity in respect of environmental protection of approximately 473,000MWh, while the investment in environmental protection technical upgrade amounted to approximately RMB623 million.

During the year, Pingwei Power Plant carried out the transformation of the whole plant's domestic sewage treatment system, and the water quality after treatment reached the standard of "open loop cooling water system replenishment water" in "Water Quality of Urban Sewage Recycling and Utilization for Industrial Use" (GB/T19923), and reused it to replenish the water of the cooling tower, thereby ultimately achieving the goal of comprehensive utilization and emission reduction of wastewater in the whole plant.

Cooling tower — Pingwei Power Plant carried out the transformation of its domestic sewage treatment system

In 2021, the Group's clean energy power generation amounted to 36,417,748MWh, representing a reduction in carbon dioxide emission of 29,006,736 tonnes.

Increased green electricity sales

Seizing the opportunities arising from the opening up of the electricity market directed by the PRC government, we executed green power market transactions to a greater extent. We earnestly studied, researched and planned the business layout of carbon market trading to enhance the ability to respond to the power market.

In 2021, China Power's hydropower generating units participating in the electricity market obtained a total power production quota of approximately 5,953,000MWh with an average price of RMB291.8/MWh.

(B) SOCIAL ASPECTS

The Group adheres to the quality, safe, healthy and environmental management principle of "Quality Products and Services, People-oriented, Risk Control, Green Operations", pursuing high standards of operations and striving to minimize the adverse impact on the society and the environment. We have raised the proportion of clean production on a continuous basis so as to provide safe, economical and clean products and services to the society and customers. The Group has also strengthened the communication and cooperation with various stakeholders with a view to fostering a win-win society.

1. Employment and Labor Practices — A People-Oriented Approach

Our employees are the driving force behind our sustainable development. We have always been committed to the provision of a sound workplace for employees and the protection of employees' lawful rights. Health and safety of the employees are our concern and a wide-ranging platform has been in place for career development of the staff so as to create a corporate culture of loyalty and cohesiveness, promoting the mutual growth of the staff and the corporation.

2. Operational Practices — Safeguarding Stable Development

The Group works diligently to provide safe and reliable power supply for economic and social development and persists in value-sharing with the industry chain, seeking to drive economic development at the places where it operates and share with the community the results of its development. Taking into account the features of the power industry and its own characteristics, the Group incorporates the philosophy of social responsibilities in its management and operation and makes contribution to the sustainable development of the society and the environment, in a bid to constantly enhance its commitment to social responsibilities.

2.1 Supply chain management

The Group persists in developing fair and impartial working relationship with suppliers. Bulk purchases of fuel and other materials are subject to a management regime that separates the three functions of purchase, delivery inspection and acceptance, and supervision with a view to eliminating corruption at source. The Group strives to establish fair, just and stable mid-to-long-term cooperation with its suppliers. Contracts and agreements are performed in stringent compliance with contractual requirements and each supplier is equally treated with respect.

The Group has formulated a stringent and standardized system for the selection and management of suppliers. It has also established a supplier review team, which will conduct strict reviews according to the integrity, quality assurance, punctuality of supply and price reasonableness, etc., to select more competent and reputable suppliers so as to jointly maintain a healthy and orderly marketplace in accordance with the "Implementation Measures for the Management and Evaluation of Fuel Suppliers (《燃料供應商管理與評價實施細則》)", "Management System for Material Suppliers (《物資供應商管理制度》)", "Administrative Measures for Recording the Misconduct of Suppliers (《供應商不良行為記錄管理辦法》)" and other pertinent regulations.

While fulfilling its own social responsibility, the Group also incorporates concepts and requirements of social responsibilities into the management of suppliers, and clearly stipulates that materials must meet the relevant national environmental protection laws and standards when signing purchase contracts, so as to prevent pollutants from exceeding the emission standards at source. The Group also verifies suppliers' qualifications on, among others, safety work and staff training, in an effort to raise suppliers' awareness of social responsibility management. In 2021, the Group assessed a total of 4,403 (2020: 4,435) suppliers of fuels and other materials, and identified 163 unsatisfactory suppliers, 135 of which were blacklisted.

2.2 Safe production

Regarding safe production as the pre-requisite for maintaining stable power supply and ensuring sustainable development of the Group, the Group firmly adheres to the safety philosophy that "no risks are uncontrollable, no breaches are unpreventable and no accidents are unavoidable" and the safe production directives of "safety as priority, prevention rather than cure, and comprehensive management". No material safety incident related to our employees, facilities or environmental protection occurred in 2021.

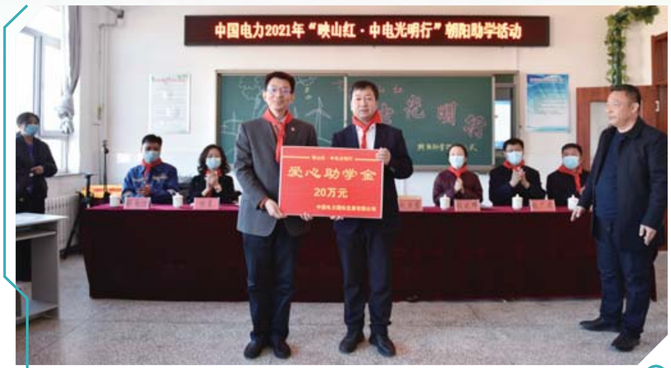
Regular maintenance and repair

2.3 Anti-corruption

The Group has established the "Whistleblowing Policy" in April 2012, which is applicable to employees and those who deal with the Group (e.g. customers and suppliers) for raising concerns in a secure and confidential manner. The concepts of "dual responsibilities" and "two-way investigation" are stringently implemented so that whenever significant disciplinary and legal violations occur at a department or unit, both the culprit and the relevant supervisor should be held responsible. Supervision and checks over the exercise of power have been strengthened and all regulatory requirements have been stringently implemented during the reporting period.

3. Community Investment — Promoting Harmony and Development

The Group actively engages in community building and conducts its business in a responsible manner in the places where it operates, with the aim of driving local economic and social development. In order to effectively fulfil its social responsibilities and contribute to the sustainable development of the communities, the Group, by leveraging its own advantages, actively encourages its employees to participate in volunteering services, supports rescue and relief efforts, donates anti-epidemic supplies, organizes social charity events, science and technology education and other campaigns that contribute to the well-being of local communities based on their practical needs.



"Yingshanhong — CP Act of Light" education support activity

Beautiful Village Integrated Intelligent Energy Project in Xiaogang Village

Fish hatchery activity

Shentou Power Plant established a village-based poverty alleviation team and stationed in Nuanquan Village, Lidayao Township, Youyu County, Shanxi

Full version of the Sustainability Report:

- Reporting period: From 1 January 2021 to 31 December 2021, part of the content, as appropriate, traces back to the previous years.
- Reporting scope: The Group as a whole.
- Application of reporting principles: Materiality, quantitative, consistency, and balance.
- Board statement: The Board declares that: (i) material matters related to environmental, social and governance of the Group ("ESG matters") has been reviewed; (ii) a top-down approach has been adopted to identify, evaluate, manage and supervise the ESG matters on a continuous basis; and (iii) ESG matters have been incorporated in formulating the strategies of the Group.
- **The full version of the Sustainability Report will be published on the websites of the Company and the Hong Kong Stock Exchange.**

Investor Relations and Frequently Asked Questions

INVESTOR RELATIONS

The Company, the Board and the management always prioritize investor relation activities and well acknowledge that investor relations is one of the key strategic management activities which could enhance understanding between investors and the Company, upgrade the level of corporate governance, transparency and strategic credibility and create values for shareholders. Since the listing of the Company, we have been putting efforts in investor relation work, maintaining sufficient communications with the investors. We are also convinced that reporting to shareholders and establishing good investor relations are important responsibilities of the Board and the management.

The Company has been proactively organizing and participating in various types of investor relation activities so as to communicate with investors regularly and share with them the strategic plans of the Company. By engaging investors in-depth communications with regard to public information, investors can comprehensively understand the Company's production operations of various business segments, corporate governance, dedication towards environmental protection and fulfillment of social responsibilities. The Chairman of the Board, the Directors and the senior management have participated in a variety of investor relation activities to maintain direct communication with the investors.

In addition, the Company places great emphasis on the feedbacks from the investors, and ensure their feedbacks can reach the Board and the management through effective channels. By this, we continuously improve our operations and management while creating greater value for the shareholders.

Press Conferences for Annual and Interim Results

In March and August 2021, the Company organized online press conferences right after the publications of its 2020 annual results and 2021 interim results respectively. A total number of more than 150 investors and securities analysts attended the press conferences. The Directors and the senior management actively communicated with the participants to interpret the operations conditions and the development strategies of the Company in details and actively sought investors' support for the future development plans of the Company.

General Meetings

Last year, a general meeting and the annual general meeting of the Company were held on the same day of 3 June 2021 at Meeting Room S421, Hong Kong Convention and Exhibition Centre, 1 Expo Drive, Wanchai, Hong Kong. In light of the COVID-19 pandemic, the Company simultaneously arranged live webcast of the above general meetings and online inquiry session for all its registered shareholders. The Directors and the senior management together with the external independent auditor attended the annual general meeting and answered enquiries from the shareholders and the investors attending the meeting either in person or online. All ordinary resolutions proposed at the meetings were voted and passed by the shareholders.

The annual general meeting for this year has been proposed to be held on 2 June 2022.

Roadshows

In 2021, in compliance with the pandemic prevention and control requirements of various regions, we launched a number of on-site roadshows in Beijing, Shanghai and Shenzhen as well as multiple online roadshows through video or telephone conference to coordinate with the announcing of the results of the Company and to promote strategies and operating results of the Company. The senior management and investor relations team of the Company participated in the roadshows to communicate and exchange opinions effectively with the investors, thereby enhancing the good interactive relationship between the Company and the investors.

In 2021, the Company met with a total number of more than 500 securities analysts and fund managers through roadshows, representing an increase of two times as compared to last year, which effectively promoted communications between the Company and the investors.

Investor Forums

In 2021, the investor relations team was invited to participate in investment summits held by domestic and overseas investment institutions, at which the Company held a thematic presentation and communicated with more than 100 investors, revealing the our strategic planning, financial performance and corporate governance capabilities to the market, which received high recognition from the participants.

On 23 October 2021, the Company hosted the "Building World-class Low-carbon Enterprise Development Forum cum New Strategy Press Conference" which was held on-site and online in Beijing and Hong Kong simultaneously. At the conference, the Company officially released its new development strategy. Mr. HE, the Chairman of the Board delivered a speech themed "New Mission & New Positioning, New Racetrack & New Values, and Great Ecosystem for Common Benefits", and shared with all participants the significant strategic direction and implementation path of the Company in the new era in the context of "30 • 60" target for achieving "Carbon Emission Peak" and "Carbon Neutrality" promulgated by the Central Government of the PRC.

Regular Meetings with Investors

The Company is pleased to communicate with every investor. Apart from attending major investor activities regularly, the management will make their best efforts to meet with individual investors or investor groups from time to time, and will arrange meetings earnestly while carefully implementing its pandemic prevention and control measures.

Prizes

In November 2021, the Company was awarded as one of the Excellent ESG Enterprises of 2020-2021 by Hong Kong Economic Times (《香港經濟日報》, a major financial newspaper in Hong Kong) in recognition of its outstanding performance and ability to create a positive impact in terms of environmental, social and corporate governance factors.

In December 2021, the Hong Kong Institute of Certified Public Accountants (HKICPA) released the Judges' Report of the Best Corporate Governance and ESG Awards 2021. The Company was shortlisted and received the Prize of "Special Mention Corporate Governance" under the category of H-share Companies and Other Mainland Enterprises Category. The judging panel affirmed and recognized China Power's high level of transparency, corporate governance capability and information disclosure standard.

Shareholders and Investors Enquiries

The contact information for shareholders and investors enquiries are set out in the section headed "Useful Information for Investors" at the end of this annual report.

FREQUENTLY ASKED QUESTIONS

1. What's the Company's Development Strategy?

According to the Outline of the New Development Strategy of the Company, the Company has taken "Lower Carbon Empower Better Life" as its mission, aiming to achieve the vision of becoming the world-class green and low-carbon energy provider. The Company will stay committed to green, innovative and high quality development with a focus on promoting sustainable and rapid development of clean and low carbon energy such as photovoltaic power, wind power, hydropower, geothermal energy and biomass energy. Proactive efforts have been made to nurture emerging industries of green energy, including energy storage, hydrogen energy, green power transportation and integrated intelligent energy, optimize and adjust existing coal-fired power assets comprehensively, as well as increase the proportion of clean energy installed capacity at a faster pace so as to realize the "dual wheel drive" of clean and low carbon energy and emerging industries of green energy, thereby building a new ecology of low carbon energy to fully serve the green and low carbon transformation of the economy and the society.

2. Does the Company have any Plans to Acquire the Assets from its Parent Companies?

The Company will capitalize on the supports from its parent companies and create more values for its shareholders. The Company will continue acquire clean energy assets and projects from independent parties or the parent companies, as and when appropriate, if they align with the Company's new development strategy.

3. What is the Company's Dividend Plan?

The Company announced its revised dividend policy in January 2019, which increased the amount of dividends from not less than 25% of the profit attributable to ordinary shareholders of the Company to not less than 50% of the profit attributable to ordinary shareholders of the Company. The Company will strictly implement the dividend policy, and determine the amount of dividends to be distributed based on the actual operating conditions of the year.

4. What is the Company's Opinion on Electricity Supply and Demand in 2022?

In 2022, the China Electricity Council anticipated that the growth of the national total electricity consumption will remain balance in overall with a year-on-year increase growth of 5% to 6%. In order to achieve the goals of carbon emission peaking and carbon neutrality, the construction of new power systems will be accelerated and the growth rate of installed capacity of new energy and the power generation will be further increased, while coal-fired electricity will be facing a major transition from traditional baseload power source to regulated power source.

5. What is the Company's View on the Development of the Energy Storage Industry?

Under the goals of carbon emission peaking and carbon neutrality, energy storage technology is an important support for the construction of a new power system which mainly composed of new energy and can be applied to all aspects of power generation, transmission and distribution. In 2021, the relevant policies of the National Development and Reform Commission and the National Energy Administration were introduced successively, which have played an important role in supporting and guiding the development of the industry. It is expected that energy storage industry in our country is about to enter a new era of rapid development.

In July 2021, China Power took the lead in entering the energy storage market, and established a joint venture with one of the leading enterprises to rapidly deploy potential businesses in energy storage, and completed the first EPC project of the energy storage power station by the end of 2021. The Company's energy storage business is developing steadily and at a fast pace.

The Board hereby presents to the shareholders its report together with the audited consolidated financial statements of the Group for the year ended 31 December 2021 (the "Consolidated Financial Statements").

PRINCIPAL ACTIVITIES

The Group is principally engaged in generation and sale of electricity in Mainland China, including investment, development, operation and management of hydropower, wind power, photovoltaic power and coal-fired power plants; and provision of energy storage, green power transportation, and integrated intelligent energy services. Particulars of the Company's principal subsidiaries are set out in Note 50 to the Consolidated Financial Statements.

RESULTS AND DISTRIBUTION

The results of the Group for the year ended 31 December 2021 are set out in the Consolidated Income Statement on page 116. The Board has recommended the payment of a final dividend of RMB0.05 (equivalent to HK$0.0616) per ordinary share for the year ended 31 December 2021, with a total amount of RMB541,669,000 (equivalent to HK$667,337,000).

BUSINESS REVIEW AND PERFORMANCE

Review of the Group's business and performance for the year ended 31 December 2021 are set out in this annual report as follows:

Aspects	In the section headed	Page
A fair review of the Group's business and analysis of financial position	• Management's Discussion and Analysis	30–46
A description of the principal risks and uncertainties facing the Group	• Risk Management Report • Note 46 to the Consolidated Financial Statements	74–82 205–213
The outlook of the Group's business	• Letter to Shareholders • Management's Discussion and Analysis	21–22 51–52
The Group's environmental policies and performance and compliance with the relevant laws and regulations that have a significant impact on the Group	• Summary of Sustainability Report • Management's Discussion and Analysis	83–91 48–50
An account of the Group's key relationships with its stakeholders that have a significant impact on the Group	• Management's Discussion and Analysis • Summary of Sustainability Report • Investor Relations and Frequently Asked Questions	50–51 89–91 92–93

CORPORATE GOVERNANCE

The principles and practices of the Group's corporate governance are set out in the section headed "Corporate Governance Report" of this annual report.

SUMMARY OF FINANCIAL INFORMATION

A summary of the published results, assets and liabilities of the Group for the last five financial years is set out in the section headed "Five-Year Financial and Operations Summary" of this annual report.

PROPERTY, PLANT AND EQUIPMENT

During the year, the additions and transfer from prepayment for property, plant and equipment of the Group amounted to RMB17,821,755,000, mainly representing general power assets. Details of the movements in property, plant and equipment of the Group and the Company during the year are set out in Note 15 to the Consolidated Financial Statements.

SHARE CAPITAL

In December 2021, the Company issued 1,026,500,000 ordinary shares at the price of HK$3.80 per share by means of top-up placing of existing shares and subscription of new shares under general mandate. Details of which were set out in the Company's announcements dated 6 December and 9 December 2021.

The net proceeds of approximately HK$3,868,000,000 raised from the aforesaid placing and subscription of new shares have been fully applied to develop and expand the Group's clean energy business and supplement working capital.

Details of movements in the share capital of the Company during the year are set out in Note 33 to the Consolidated Financial Statements.

PURCHASE, SALE OR REDEMPTION OF LISTED SECURITIES OF THE COMPANY

Save as disclosed above, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the listed securities of the Company during the year ended 31 December 2021.

DEBT ISSUES, BANK LOANS AND OTHER BORROWINGS

For the year ended 31 December 2021, the Company and Wu Ling Power (a 63%-owned subsidiary of the Company) issued the following debt financing instruments in the interbank bond market of the PRC with the approvals from the National Association of Financial Market Institutional Investors (中國銀行間市場交易商協會).

The Company

Date	Type	Principal amount (RMB)	Maturity period
February 2021	Super & short-term commercial paper	500 million	179 days
April 2021	Medium-term note	2 billion	3 years
August 2021	Super & short-term commercial paper	500 million	210 days
October 2021	Medium-term note	2 billion	3 years
October 2021	Green medium-term note (carbon neutral bond)	1 billion	3 years
November 2021	Super & short-term commercial paper	1 billion	269 days

Wu Ling Power

Date	Type	Principal amount (RMB)	Maturity period
May 2021	Super & short-term commercial paper	1 billion	260 days
November 2021	Super & short-term commercial paper	1 billion	55 days
December 2021	Green super & short-term commercial paper	20 million	180 days

The proceeds from all of the above debt issues have been used to repay and/or refinance the existing indebtedness of the Group.

Details of the bank loans and other borrowings (including the above commercial papers and notes) of the Group and the Company during the year are set out in Note 38 to the Consolidated Financial Statements.

EQUITY-LINKED AGREEMENT

For the year ended 31 December 2021, the Company did not enter into any equity-linked agreement.

DISTRIBUTABLE RESERVES

As calculated in accordance with Sections 297 and 298 of the Hong Kong Companies Ordinance, as at 31 December 2021, the distributable reserve of the Company amounted to RMB2,981,968,000 (2020: RMB4,504,190,000).

Details of movements in the reserves of the Group and the Company during the year are set out in Notes 35 and 52 to the Consolidated Financial Statements respectively.

DIRECTORS

(A) Directors of the Company

The Directors during the year 2021 and up to the date of this annual report were:

Executive Directors

TIAN Jun	(ex-Chairman of the Board, resigned on 12 April 2021)
HE Xi	(succeeded the role of Chairman of the Board on 12 April 2021)
GAO Ping	(President of the Company, appointed on 23 July 2021)

Non-executive Directors

GUAN Qihong	(resigned on 12 April 2021)
WANG Xianchun	(resigned on 25 February 2022)
ZHOU Jie	(appointed on 12 April 2021)
XU Zuyong	(appointed on 25 February 2022)

Independent Non-executive Directors

KWONG Che Keung, Gordon	(retired on 3 June 2021)
LI Fang	
YAU Ka Chi	
HUI Hon Chung, Stanley	(appointed on 3 June 2021)

Mr. TIAN Jun, Mr. GUAN Qihong and Mr. WANG Xianchun, all resigned due to other work arrangements. They have confirmed that they have no disagreement with the Board and nothing relating to the affairs of the Company needed to be brought to the attention of the shareholders of the Company.

In accordance with Articles 81 and 82 of the Company's articles of association and the Listing Rules, Mr. GAO Ping, Mr. XU Zuyong and Mr. YAU Ka Chi will retire by rotation and, being eligible, offer themselves for re-election at the forthcoming annual general meeting. If the above Directors are re-elected, they will not enter into service contracts with the Company or any of its subsidiaries which are not determinable by the employing company within one year without payment of compensation other than statutory compensation.

As at 31 December 2021, none of the Directors had a service contract with the Company or any of its subsidiaries which was not determinable by the employing company within one year without payment of compensation other than statutory compensation.

The Company has received from each of its independent non-executive Directors an annual confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Company considers all of its independent non-executive Directors independent.

Biographical details of each of the present Directors are set out in the section headed "Directors and Senior Management Profiles" of this annual report, and details of Directors' emoluments are set out in Note 14 to the Consolidated Financial Statements.

(B) Directors of subsidiaries

The names of all directors who have served on the boards of the subsidiaries of the Company during the year ended 31 December 2021 or during the period from 1 January 2022 to the date of this annual report are available on the Company's website at www.chinapower.hk.

PERMITTED INDEMNITY

Pursuant to the Company's articles of association, subject to the Statutes, every Director of the Company shall be indemnified against any liability incurred by him in the execution and discharge of his duties or in relation thereto. The Company has taken out insurance against the liability and costs associated with defending any proceedings which may be brought against directors of the Group.

SHARE OPTION SCHEME

At present, the Company has no share option scheme.

DIRECTORS' INTERESTS IN CONTRACTS

During the year ended 31 December 2021, there was no transaction, arrangement or contract of significance in which the Company, its subsidiaries, its holding companies, fellow subsidiaries, associates and joint ventures was a party, and in which the Director had any material interest.

DIRECTORS' INTERESTS IN COMPETING BUSINESS

During the year, save as disclosed below, none of the Directors and their associates had any interests in a business which competes or is likely to compete, either directly or indirectly, with the business of the Group:

Name of the Director	Position(s) within the Company	Other Interests
HE Xi	Chairman of the Board and Executive Director	Chief engineer of new energy of SPIC
WANG Xianchun(1)	Non-executive Director	Special duty director of SPIC, director of CPI Holding, director of Shanghai Power and chief supervisor of Jilin Electric
ZHOU Jie(2)	Non-executive Director	Director of CPI Holding and SPIC Guangdong Power Company Limited

Notes:

(1) Mr. WANG was appointed as a as a director of CPI Holding on 6 April 2021 and resigned as a director of Shanghai Power on 19 August 2021.

(2) Mr. ZHOU was appointed as a director of SPIC Guangdong Power Company Limited on 26 August 2021.

DIRECTORS' INTERESTS IN SHARES, UNDERLYING SHARES OR DEBENTURES

As at 31 December 2021, none of the Directors or the chief executive of the Company had any interest or short positions in the shares, underlying shares or debentures of the Company or any of its associated corporations within the meaning of Part XV of the Securities and Futures Ordinance, Cap. 571 of the Laws of Hong Kong (the "SFO") which would have to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which would be required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or which would be required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

SUBSTANTIAL SHAREHOLDERS' INTERESTS IN SECURITIES

As at 31 December 2021, save as disclosed below, no person, not being a Director nor chief executive of the Company, had an interest or short position in the shares or underlying shares of the Company which should be recorded in the register kept under Section 336 of the SFO.

Name	Capacity	Number of shares in which interested other than under equity derivatives[3]	Percentage of issued share capital of the Company (%)	Long/ Short position
SPIC Finance HK	Beneficial owner	392,275,453	3.62	Long
CPDL	Beneficial owner	2,662,000,000	24.57	Long
CPI Holding[1]	Interest of a controlled corporation	2,662,000,000	24.57	Long
	Beneficial owner	2,833,518,060	26.16	Long
SPIC[2]	Interest of controlled corporations	5,887,793,513	54.35	Long

Notes:

(1) CPI Holding is the beneficial owner of CPDL and therefore CPI Holding is deemed to be interested in the shares of the Company owned by CPDL for the purposes of the SFO.

(2) SPIC is the beneficial owner of CPI Holding and SPIC Finance HK and therefore SPIC is deemed to be interested in the shares of the Company owned by CPI Holding and SPIC Finance HK for the purposes of the SFO.

(3) Save as disclosed above, SPIC, CPI Holding, CPDL and SPIC Finance HK do not have any interest in the equity derivatives of the Company.

CONNECTED TRANSACTIONS ENTERED BY THE GROUP

Connected Transactions

Transaction Date (2021)	Party within the Group	Connected Party of the Group	The Agreement/ Transaction	Consideration (RMB)
(A) Contracting Agreements				
13 April	Haiyang Wind Power (as the Employer)	Shandong Institute (as the Contractor, an indirect subsidiary of SPIC)	(i) Offshore Construction EPC Agreement	3,281,158,702
			(ii) Onshore Construction EPC Agreement	115,183,428
			(iii) Preliminary Development and Technical Consultancy Agreement	49,900,000
			(iv) Construction Engineering Survey Agreement	26,620,000
25 May	Xiaogang Energy (as the Employer)	State Nuclear Institute (as the Contractor, an indirect subsidiary of SPIC)	(i) Technical Services Agreement I	5,363,900
			(ii) Technical Services Agreement II	22,749,200
27 July	Pu'an Power Plant (as the Employer)	Yuanda EP Engineering (as the Contractor, an indirect subsidiary of SPIC)	(i) Retrofit of Ultra-Low Emission Desulfurization Device EPC Contracting Agreement	61,000,000
			(ii) Retrofit of SNCR Denitration Device EPC Contracting Agreement	23,400,000
	Pu'an Power Plant (as the Employer)	Yuanda EP Catalyst (as the Contractor, an indirect subsidiary of SPIC)	(iii) Retrofit of Ultra-Low Emission New Layer Catalyst for Denitrification EP Contracting Agreement	10,711,600
16 August	Yaomeng Power Plant (as the Employer)	SPER Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	30,484,000
22 December	Haiyang Power Storage (as the Employer)	Shandong Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	83,290,400

All of the above contracting agreements have been entered into following either an open market tendering process or by tender invitation. All of the above contracting fees are payable by installments.

Nature, Purpose and Description of the Transaction

The Project involves the development and construction of an offshore wind power plant with an installed capacity of 300MW in Shandong Province, the PRC.

The Contractor provides the following services for the Project:
(i) designing, procurement, construction and installation, and technical support services for the offshore constructions (including but not limited to the power plant);
(ii) designing, procurement, construction and installation, and technical support services for the onshore constructions (including but not limited to the onshore control centre);
(iii) technical consultancy services in respect of the preliminary development; and
(iv) engineering surveying services in respect of the offshore areas.

The Xiaogang Village Project involves the development of an agriculture-and-photovoltaic integrated intelligent energy demonstration project in Anhui Province, the PRC.

The Contractor provides the following services for the Project:
(i) feasibility study, project survey and design, system building, and related management, control and technical support services; and
(ii) material procurement, facilities construction and installation, and technical consultancy services for a floating photovoltaic power infrastructure and certain related public facilities.

Pu'an Power Plant, a coal-fired power plant conducts an upgrading of the desulfurization and denitrification systems of its two 660MW supercritical power generating units in pursuit of clean and efficient power generation.

The Contractors provide the following services for the system upgrade:
(i) engineering, procurement, construction and installation and commissioning and training services for retrofit of ultra-low emission desulfurization device;
(ii) engineering design, construction, equipment and material procurement, transportation, storage, commissioning, technical services and guidance and technical data for retrofit of SNCR denitration device; and
(iii) engineering design, equipment and material procurement, transportation, storage, commissioning, technical services and guidance and technical data for retrofit of ultra-low emission new layer catalyst for denitrification.

Yaomeng Power Plant, a coal-fired power plant carries out the flexibility retrofitting works to its two 630MW power generating units in order to improve their operational flexibility and power peak shaving capability.

The Contractor provides the engineering, procurement, construction and installation, and commissioning and training services for the retrofitting works.

The Project involves the development and construction of an energy storage power station of energy storage capacity of 100MW/200MWh in Shandong Province, the PRC.

The Contractor provides the designing, procurement, construction and installation of, and technical support services for the Project.

Transaction Date (2021)	Party within the Group	Connected Party of the Group	The Agreement/ Transaction	Consideration (RMB)
(B) Acquisitions				
30 July	The Company (as the Transferee)	CPI Holding (as the Transferor, the controlling shareholder of the Company and a wholly-owned subsidiary of SPIC)	Acquisition of 36% Equity Interest in Qiyuanxin Power	18,010,000
31 August	The Company (as the Transferee)	CPI Holding (as the Transferor, the controlling shareholder of the Company and a wholly-owned subsidiary of SPIC)	Acquisition of 55% Equity Interest in CP Huayuan	60,716,370
(C) Formation of a Joint Venture				
30 June	Changzhou Hydropower (as a joint venture partner)	Weining Energy (as a joint venture partner, an associate of SPIC)	Joint Venture Agreement	60,000,000
(D) Formation of a Limited Partnership and Partial Disposal of a Subsidiary				
26 November	The Company (as the Limited Partner)	SPIC Asset Management (as the Limited Partner, a wholly-owned subsidiary of SPIC)	Partnership Agreement	268,202,522
14 December	Shanxi Shentou (as the Seller)	The Limited Partnership (as the Purchaser)	Disposal of 40% Equity Interest of CP Shentou (the Target Equity Interest)	206,292,920
15 December	Shanxi Shentou (as the Transferor)	The Limited Partnership (as the Transferee)	Assignment of part of the existing shareholder's loan owed by CP Shentou (the Target Debt)	560,000,000

Nature, Purpose and Description of the Transaction

The Company has conditionally agreed to acquire, and CPI Holding has conditionally agreed to sell, 36% of the equity interest of Qiyuanxin Power. The Acquisition enables the Company to foster a new profit source for the Group as promoting new energy transportation can expand electricity consumption channels and increase electricity sales.

The consideration of the Acquisition was arrived between the parties with reference to the net asset value, the assessed value, the financial position and future business prospect of Qiyuanxin Power, which shall be payable within 20 working days after the conditions precedent of the Equity Transfer Agreement have been fulfilled or waived.

The Company has conditionally agreed to acquire, and CPI Holding has conditionally agreed to sell, 55% of the equity interest of CP Huayuan. The Acquisition allows the Company to directly obtain the high-technical qualification of inspection and maintenance for nuclear power plants and to establish a high-end electricity services market.

The consideration of the Acquisition was arrived between the parties with reference to the net asset value, the assessed value, the financial position and future business prospect of CP Huayuan, which shall be payable within 20 working days after the conditions precedent of the Equity Transfer Agreement have been fulfilled or waived.

The Joint Venture is formed to jointly develop offshore wind power projects in the Guangxi Zhuang Autonomous Region, the PRC.

The registered capital of the Joint Venture is RMB100,000,000 which shall be contributed in cash by Changzhou Hydropower and Weining Energy respectively, representing 60% and 40% of their respective equity interest in the Joint Venture.

The Company entered into the Partnership Agreement with SPIC Asset Management and two independent third parties to form a Limited Partnership with equity interest in the proportion of approximately 35%, 10% and 55% respectively. The purpose of forming the Limited Partnership is to acquire 40% equity interest and shareholder's loan of CP Shentou (an indirect 80%-owned subsidiary of the Company engaged in coal-fired power generation).

The total capital contribution of the Limited Partnership is RMB766,302,902 which shall be made in cash by each of the Partners according to their respective interest in the partnership.

Shanxi Shentou shall agree to sell and the Limited Partnership shall agree to purchase 40% equity interest of CP Shentou. The Disposal enables the Group to gradually divest its investment in the traditional coal-fired power business.

The consideration of the Target Equity Interest was arrived at with reference to the assessed market value of CP Shentou.

Shanxi Shentou shall conditionally agree to assign and the Limited Partnership shall conditionally agree to assume the Target Debt owed by CP Shentou to Shanxi Shentou, which is the all the rights, interest, title, claims and benefits of the Transferor in the Target Debt, free of all encumbrances.

The consideration for the Target Debt represents the carrying value of part of the shareholder's loan owed by CP Shentou to Shanxi Shentou to be assigned to the Transferee.

Transaction Date (2021)	Party within the Group	Connected Party of the Group	The Agreement/ Transaction	Consideration (RMB)
(E) Transfer of Renewable Energy Accounts Receivable				
16 November	Project Companies (as the Transferor, subsidiaries of the Company)	SPIC (as the Transferee, the ultimate controlling shareholder of the Company)	AR Transfer Agreement	1,305,962,295
(F) Property Leasing				
31 August	The Company (as the Lessee)	CPI Holding (as the Lessor, the controlling shareholder of the Company and a wholly-owned subsidiary of SPIC)	Lease Agreement	76,013,400 (the estimated value of a right-of-use asset pursuant to HKFRS 16)

Details of the above transactions are set out in the Company's announcements of their respective dates.

Continuing Connected Transactions

Date and Name of the Agreement	Party within the Group	Connected Party of the Group	Term	Annual Cap for 2021 (RMB)
(A) Purchase Agreement				
24 December 2020 Material Purchase Framework Agreement	The Company (representing its subsidiaries, individually the "Purchaser" or collectively the "Purchasers"	CPI Holding (representing its subsidiaries, individually the "Supplier" or collectively the "Suppliers")	1 January 2021to 31 December 2022	51,900,000

Nature, Purpose and Description of the Transaction

The Project Companies will transfer their respective entitlement rights (but not the obligations) of receiving the renewable energy tariff subsidies that are receivable from the relevant government authorities to SPIC at their respective carrying values for participating in the ABN Transaction initiated by SPIC. It will help to accelerate the collection of the funds in relation to the accounts receivable of renewable energy subsidies of the Project Companies and therefore improve the operating cash flow of the Group.

The consideration shall be payable to the Project Companies from the funds raised by issuing the Asset-Backed Notes in the inter-bank bond market in the PRC.

The Premises: The 6th to 8th and 11th Floors, East Building, Hui Huang Shi Dai Plaza, located at 56 North West Fourth Ring Road, Haidian District, Beijing, the PRC (used by the Company as its office in Beijing).

Lease Term: 3 years from 1 September 2021 to 31 August 2024.

Rent: RMB26,830,000 per year or RMB11.4 per square meter per day (inclusive of management fees and other outgoings).

Nature, Purpose and Description of the Transaction

The Purchasers will purchase from the Suppliers the limestone powder for desulphurization (the "Materials") of the Company's coal-fired power plants.

The purchase prices of the Materials shall be determined by reference to, among others, the prevailing local market transactions of similar Materials from the other independent suppliers in the nearby locations where our power plants are located (not less than three latest comparable transactions).

Date and Name of the Agreement	Party within the Group	Connected Party of the Group	Term	Annual Cap for 2021 (RMB)
(B) Service Agreements				
30 April 2019 Financial Services Framework Agreement	The Company (as the Service Recipient, representing its subsidiaries)	SPIC Financial (as the Service Provider, a subsidiary of SPIC)	7 June 2019 to 6 June 2022	4,200,000,000 (the maximum daily balance of deposit (including accrued interest) placed by the Group with SPIC Financial)
31 March 2020 Entrusted Management Agreement	The Company (as the Managing Party)	CPI Holding and SPICOI (as the Entrusting Parties, subsidiaries of SPIC)	1 April 2020 to 31 March 2023	142,580,000
31 December 2020 Turnkey Service Framework Agreement	The Company (representing its subsidiaries, individually the "Purchaser" or collectively the "Purchasers")	SPIC (Materials) (as the Service Provider, a branch company of SPIC)	1 January 2021 to 31 December 2023	600,000,000
4 January 2021 Composite Services Framework Agreement	The Company (representing its subsidiaries, individually the "Employer" or collectively the "Employers")	SPIC (representing its subsidiaries, individually the "Service Provider" or collectively the "Service Providers")	1 January 2021 to 31 December 2023	280,000,000
10 January 2020 Maintenance Services Agreement (Pursuant to 14A.60 of the Listing Rule after completion of the Acquisition of 55% Equity Interest in CP Huayuan in December 2021)	CP Huayuan (as the Service Provider)	Shandong Nuclear Power (as the Employer, an indirect subsidiary of SPIC)	1 January 2020 to 31 December 2022	84,000,000

Nature, Purpose and Description of the Transaction

SPIC Financial will provide the Group with deposit services on a non-exclusive basis. The interest rate applicable to the Group for its deposits with SPIC Financial during the same period shall not be lower than (i) the benchmark interest rate specified by the PBOC of the same type of deposits; (ii) the interest rate of same type of deposits obtained from other major commercial banks in the PRC to the Group (at least two quotes obtained); and (iii) the interest rate of same type of deposits provided to other members of the SPIC Group with SPIC Financial.

In addition, the applicable interest rate for the amount of the Group's deposit in current account(s) that exceeds RMB100,000, the applicable interest rate to the Group will be 20% higher than, and adjusted according to, the benchmark interest rate for agreements deposits (協定存款基準利率) as published by the PBOC from time to time.

The Company will provide planning, operating and managing services according to the different circumstances of each Entrusted Company under CPI Holding and SPICOI.

The management fees payable by Entrusting Parties to the Managing Party consist of (i) the management costs covering the maximum amount of staff and operational costs and other recurrent expenses to be incurred by the Company; (ii) a fixed premium to cover the estimated risks for onshore and offshore of the PRC respectively, depending on the location of the Entrusted Companies; and (iii) an assessment bonus.

SPIC (Materials) will provide the Purchasers with the facilities and equipment, materials, power cables, spare parts and components, and the related supporting services required for power plants or stations and heat supply system for the development, construction and continuing operation of the Group's existing and new renewable energy power plants or stations.

The total consideration payable shall be determined, among others, with reference to the relevant tendering and bidding laws and regulations of the PRC and internal tendering policies of the Purchasers (not less than two quotations from independent third parties).

The Service Providers will provide the Employers various services with respect to technical repair and maintenance and management for the power generating units and related power generation facilities, as well as daily operational supports for power plants and offices.

The service fee payable shall be agreed by mutual agreement between the relevant Service Provider and Employer, among others, with reference to the latest market quotations or tenders (at least two comparable transactions) for provision of the similar services from independent third parties with similar experience and service quality akin to that of the Service Providers in the same region.

The Service Provider will provide the daily maintenance and repair work and technical support to the Employer for the nuclear island facilities of its two nuclear power generating units.

The total consideration was based on the pre-determined fixed staff cost required for the daily maintenance, technical and overhaul support of the nuclear island facilities per month as mutually agreed between the parties.

Date and Name of the Agreement	Party within the Group	Connected Party of the Group	Term	Annual Cap for 2021 (RMB)
(C) Coal Supply Framework Agreements				
30 April 2021 SPIC Aluminum Framework Agreement	CP Guorui (as the Purchaser)	SPIC Aluminum (as the Dealer, an indirect subsidiary of SPIC)	1 May 2021 to 31 December 2023	464,000,000
30 April 2021 CPI Xianrong Framework Agreement	CP Guorui (as the Purchaser)	CPI Xianrong (as the Dealer, an indirect subsidiary of SPIC)	1 May 2021 to 31 December 2023	174,000,000
26 November 2021 Coal Supply Supplemental Agreement	The Company (representing its subsidiaries, collectively the "Purchasers")	Huainan Mining (as the Supplier, a substantial shareholder of certain subsidiaries of the Company)	1 January 2021 to 31 December 2022	7,639,000,000

As SPIC is the ultimate controlling shareholder of the Company and CPI Holding is the holding company of the Company and a wholly owned subsidiary of SPIC, both SPIC and CPI Holding and their respective subsidiaries and associates are connected persons of the Company within the meaning of the Listing Rules. In addition, Huainan Mining is a substantial shareholder of certain subsidiaries of the Company, Huainan Mining is a connected person at the subsidiary level of the Company as defined in the Listing Rules. Therefore, all the above transactions constitute continuing connected transactions of the Company under Chapter 14A of the Listing Rules.

The Company confirmed that all the above continuing connected transactions have been conducted in accordance with the specific pricing policies and guidelines of the aforesaid agreements as disclosed during the year under review.

RELATED PARTIES TRANSACTIONS

During the year 2021, those related party transactions listed under Note 49 to the Consolidated Financial Statements which were connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules include:

- (a)(iii) Income from provision of other services (entrusted management services) to CPI Holding and companies controlled by SPIC
- (b)(i) Purchase of coal, coal by-products and spare parts from companies controlled by SPIC, fellow subsidiaries and non-controlling shareholders
- (b)(ii) Construction costs and other services fees to companies controlled by SPIC, fellow subsidiaries and non-controlling shareholders

In the opinion of the Directors, the Company has complied with the disclosure requirements in accordance with the relevant Listing Rules.

Nature, Purpose and Description of the Transaction

SPIC Aluminum and CPI Xianrong will supply coal through spot contracts to the Purchaser for the Group's coal-fired power plants.

The purchase price of coal shall be determined with reference to (i) the current transacted coal prices of the local coal exchange or market in the PRC (two or more latest comparable transactions of independent third parties for provision of similar type of coal in the same region); (ii) the available data published at the websites of 中國煤炭市場網 (China Coal Market*) at www.cctd.com.cn or 中國煤炭資源網 (China Coal Resources*) at www.sxcoal.com or any public websites for the coal industry; (iii) the quality of the coal; and (iv) the quantity of coal.

Huainan Mining will supply coal to the Purchasers for the Group's coal-fired power plants.

The purchase price of coal shall be determined with reference to (i) the current transacted coal prices of the local coal exchange or market in the PRC (two or more latest comparable transactions of independent third parties); (ii) the available data published at the website of 中國煤炭市場網 (China Coal Market*) at www.cctd.com.cn; (iii) the quality of the coal; and (iv) the quantity of coal.

REVIEW BY AUDIT COMMITTEE MEMBERS AND AUDITOR

The independent non-executive Directors have reviewed the above continuing connected transactions during the year and confirmed that the transactions have been entered into:

(1) in the ordinary and usual course of business of the Company;

(2) on normal commercial terms and no less favourable than those available to or from independent third parties; and

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

The Company's auditor was engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued his unqualified letter containing his findings and conclusions in respect of the continuing connected transactions disclosed above in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to Hong Kong Stock Exchange.

The Company has complied with the requirements set out in Chapter 14A of the Listing Rules.

Save as disclosed above, no contracts of significance to which the Company, its subsidiaries, its holding companies, associates or joint ventures was a party subsisted at any time during the year or at the end of the year.

MAJOR CUSTOMERS AND SUPPLIERS

For the year ended 31 December 2021, the aggregate amount of purchases attributable to the Group's five largest suppliers accounted for approximately 60.22% of the Group's total purchases and purchases attributable to the Group's largest supplier accounted for approximately 38.53% of the Group's total purchases.

For the year ended 31 December 2021, the aggregate amount of turnover attributable to the Group's five largest customers accounted for approximately 62.91% of the Group's total turnover and turnover attributable to the Group's largest customer accounted for approximately 16.22% of the Group's total turnover.

At no time during the year did a Director, an associate of a Director and a shareholder of the Company (which to the knowledge of the Directors owned more than 5% of the Company's share capital) have an interest in any of the Group's five largest suppliers or customers.

PUBLIC FLOAT

As at the date of this annual report, based on public information available to the Company and to the best knowledge of the Directors, the Company maintained sufficient public float, being no less than 25% of the issued share capital of the Company as required under the Listing Rules.

AUDITOR

The Consolidated Financial Statements have been audited by Ernst & Young who will retire and, being eligible, offered themselves for re-appointment.

On behalf of the Board
China Power International Development Limited

HE Xi
Chairman

Hong Kong, 17 March 2022

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To the members of China Power International Development Limited
(Incorporated in Hong Kong with limited liability)

OPINION

We have audited the consolidated financial statements of China Power International Development Limited (the "Company") and its subsidiaries (the "Group") set out on pages 116 to 233, which comprise the consolidated statement of financial position as at 31 December 2021, and the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

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

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

KEY AUDIT MATTERS (CONTINUED)

Key audit matter	How our audit addressed the key audit matter
Impairment considerations of property, plant and equipment and goodwill	
As at 31 December 2021, the Group's property, plant and equipment ("PPE") and goodwill amounted to RMB128,695 million, and RMB1,083 million, respectively. As disclosed in Notes 2.11, 3(i), 15 and 18 to the consolidated financial statements, the Group reviews PPE for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable, while goodwill impairment assessments are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. As a result of current year impairment testing, impairment losses of RMB1 million were recognized in respect of PPE and goodwill. Management performed the impairment testing by comparing the recoverable amount of the cash generating units ("CGUs") or group of CGUs that the PPE and goodwill are allocated to the carrying amount of the CGUs or group of CGUs. Estimation of recoverable amounts of CGUs involves estimation of the future cash flows which required significant management judgement and estimates. Auditing management's impairment assessment was complex due to the significant estimates and judgements involved in the projection of future cash flows, including the future sales volumes, expected tariff rates, fuel costs (if applicable), staff costs, growth rates and discount rates applied to these forecasted future cash flows. These estimates and judgements may be affected by unexpected changes in the future market or economic conditions.	Among other audit procedures performed, we compared the methodology used by the Group, that is, recoverable amount calculation based on future discounted cash flows, to industry practice and tested the underlying data used in the projections. We have evaluated the appropriateness of the classification of CGUs or group of CGUs. We also assessed the significant assumptions used in the calculations, which included, among others, the future sales volumes, expected tariff rates, fuel costs (if applicable), staff costs, growth rates and discount rates applied to these forecasted future cash flows, by comparing them to external industry outlook reports and analyzing the historical accuracy of management's estimates. We have also assessed the competence and objectivity of management's expert. In addition, we involved our valuation specialists to assist us with the assessment of the valuation methodologies and the discount rates adopted. We evaluated the sensitivity of the significant assumptions described above by assessing the changes to the recoverable amounts of the CGUs resulting from changes in these assumptions, both individually and in aggregate. In addition, we also assessed the adequacy of the Group's disclosures included in Notes 2.11, 3(i), 15 and 18 to the consolidated financial statements regarding the impairment and recoverable amount.

KEY AUDIT MATTERS (CONTINUED)

Key audit matter	How our audit addressed the key audit matter
Valuation of the provisions for compensation for inundation	
As at 31 December 2021, the Group recognized provisions for compensation for inundation caused by the construction of certain hydropower plants amounting to RMB1,973 million, with interest expense related to the provisions amounting to RMB104 million for the year then ended. As disclosed in Notes 2.19, 3(ii) and 40 to the consolidated financial statements, provisions for inundation compensation is measured at the present value of the expenditure expected to be required to settle the compensation using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the compensation. Management adopts highly subjective assumptions and judgements in the calculation of such provision. Auditing management's assessment of provisions for inundation compensation was complex due to the significant estimates and judgements involved in the calculation of such provision, including estimating the timing and duration of the compensation payments, the compensation per unit of area and growth rate of compensation, the expected useful lives of hydropower plants, as well as discount rate applied to account for time value of money and the risks specific to the compensation. These estimates and judgements may be affected by unexpected changes in economic conditions.	Among other audit procedures performed, we compared the calculation method used by the Group, that is, calculating present value of the expenditure expected to be required to settle the compensation, to industry practice and tested the underlying data used in the calculation. We also assessed the significant assumptions used in the calculations, which included, the timing and duration of the compensation payments, the compensation per unit of area and growth rate of compensation, the expected useful lives of hydropower plants, as well as discount rate applied to account for time value of money and the risks specific to the compensation, by comparing forecasts prepared by management in prior years with actual payment, comparing growth rate assumptions with external macro-economic outlook, and checking compensation per unit of area to latest local regulations. In addition, we involved our valuation specialists to assist us with the assessment of the calculation method and the discount rates adopted. We evaluated the sensitivity of the significant assumptions described above by assessing the changes to the provision to be recognized resulting from changes in these assumptions, both individually and in aggregate. We also assessed the adequacy of the Group's disclosures included in Notes 2.19, 3(ii) and 40 to the consolidated financial statements regarding calculation of provisions for inundation compensation.

OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

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

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

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

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

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

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Our report is made solely to you, as a body, in accordance with section 405 of the Hong Kong Companies Ordinance, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

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

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

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

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

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

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

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

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

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

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Bennett S.H. Wai.

Ernst & Young
Certified Public Accountants
Hong Kong
17 March 2022

Consolidated Income Statement

For the year ended 31 December 2021

	Notes	2021 RMB'000	2020 RMB'000
		Year ended 31 December	
Revenue	4	**34,734,288**	28,427,721
Other income	5	**513,772**	284,102
Fuel costs		**(17,937,891)**	(10,876,072)
Depreciation		**(6,092,620)**	(5,321,494)
Staff costs	6	**(3,334,389)**	(2,943,297)
Repairs and maintenance		**(867,430)**	(777,669)
Subcontracting costs		**(510,748)**	–
Consumables		**(423,064)**	(347,277)
Other gains and losses, net	7	**954,072**	53,502
Other operating expenses	8	**(2,435,123)**	(2,127,656)
Operating profit	9	**4,600,867**	6,371,860
Finance income	10	**126,603**	330,352
Finance costs	10	**(3,861,500)**	(3,203,698)
Share of results of associates		**(213,524)**	283,952
Share of results of joint ventures		**(119,280)**	43,661
Profit before taxation		**533,166**	3,826,127
Income tax expense	11	**(361,947)**	(900,576)
Profit for the year		**171,219**	2,925,551
Attributable to:			
Equity holders of the Company		**(515,693)**	1,708,305
Non-controlling interests		**686,912**	1,217,246
		171,219	2,925,551
(Loss)/earnings per share for (loss)/profit attributable to ordinary shareholders of the Company (expressed in RMB per share)			
— Basic and diluted	12	**(0.07)**	0.17

Details of the dividends to ordinary shareholders of the Company attributable to the profit for the year are set out in Note 13.

The notes on pages 123 to 233 are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

For the year ended 31 December 2021

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Profit for the year	**171,219**	2,925,551
Other comprehensive income:		
Items that will not be reclassified to profit or loss:		
Fair value gain/(loss) on equity instruments at fair value through other comprehensive income ("FVTOCI"), net of tax	**1,608,081**	(240,003)
Items that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of foreign operations	**44**	–
Fair value gain/(loss) on debt instruments at FVTOCI, net of tax	**6,149**	(5,090)
Other comprehensive income/(expense) for the year, net of tax	**1,614,274**	(245,093)
Total comprehensive income for the year	**1,785,493**	2,680,458
Attributable to:		
Equity holders of the Company	**1,072,165**	1,461,954
Non-controlling interests	**713,328**	1,218,504
Total comprehensive income for the year	**1,785,493**	2,680,458

The notes on pages 123 to 233 are an integral part of these consolidated financial statements.

Consolidated Statement of Financial Position

As at 31 December 2021

	Notes	As at 31 December 2021 RMB'000	As at 31 December 2020 RMB'000
ASSETS			
Non-current assets			
Property, plant and equipment	15	**128,695,251**	112,954,766
Right-of-use assets	16	**6,152,184**	6,260,964
Prepayments for construction of power plants	17	**2,488,827**	3,373,851
Goodwill	18	**1,083,293**	1,102,615
Other intangible assets	19	**934,800**	989,673
Interests in associates	20	**3,526,555**	3,205,222
Interests in joint ventures	21	**1,428,944**	1,027,782
Equity instruments at FVTOCI	22	**5,235,995**	3,061,952
Deferred income tax assets	23	**714,348**	874,210
Restricted deposits	30	**9,566**	9,257
Other non-current assets	24	**5,913,949**	4,982,454
		156,183,712	137,842,746
Current assets			
Inventories	25	**1,468,558**	697,615
Accounts receivable	26	**8,362,882**	7,285,981
Prepayments, deposits and other receivables	27	**4,108,766**	2,562,193
Amounts due from related parties	28	**2,535,159**	1,739,484
Tax recoverable		**103,931**	64,651
Debt instruments at FVTOCI	29	**213,660**	428,856
Restricted deposits	30	**10,802**	26,136
Cash and cash equivalents	31	**1,766,632**	1,316,351
		18,570,390	14,121,267
Assets associated with disposal groups classified as held for sale	32	**–**	3,984,658
Total assets		**174,754,102**	155,948,671
EQUITY			
Equity attributable to equity holders of the Company			
Share capital	33	**20,418,001**	17,268,192
Other equity instruments	34	**2,997,600**	3,015,740
Reserves	35	**12,391,305**	13,113,875
		35,806,906	33,397,807
Non-controlling interests	50	**16,077,891**	12,392,110
Total equity		**51,884,797**	45,789,917

Consolidated Statement of Financial Position

As at 31 December 2021

	Notes	As at 31 December 2021 RMB'000	2020 RMB'000
LIABILITIES			
Non-current liabilities			
Deferred income		**33,386**	64,586
Bank borrowings	36	**54,930,413**	45,359,108
Borrowings from related parties	37	**8,557,660**	12,122,460
Other borrowings	38	**6,200,325**	2,100,000
Lease liabilities	39	**3,174,469**	3,337,342
Deferred income tax liabilities	23	**2,380,195**	1,916,206
Provisions for other long-term liabilities	40	**1,868,232**	1,868,610
Other non-current liabilities	41	**188,803**	112,575
		77,333,483	66,880,887
Current liabilities			
Accounts and bills payables	42	**1,836,022**	993,897
Construction costs payable		**6,815,277**	6,777,670
Other payables and accrued charges	43	**2,253,467**	2,109,049
Amounts due to related parties	28	**1,349,792**	1,874,152
Bank borrowings	36	**21,911,691**	21,212,428
Borrowings from related parties	37	**6,108,626**	2,827,210
Other borrowings	38	**4,620,000**	3,930,000
Lease liabilities	39	**417,917**	543,387
Tax payable		**223,030**	288,401
		45,535,822	40,556,194
Liabilities associated with disposal groups classified as held for sale	32	**–**	2,721,673
Total liabilities		**122,869,305**	110,158,754
Total equity and liabilities		**174,754,102**	155,948,671
Net current liabilities		**26,965,432**	25,171,942
Total assets less current liabilities		**129,218,280**	112,670,804

The consolidated financial statements on pages 116 to 233 were approved and authorized for issue by the Board on 17 March 2022 and are signed on its behalf by:

HE Xi
Director

GAO Ping
Director

The notes on pages 123 to 233 are an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2021

	Attributable to equity holders of the Company						
	Share capital (Note 33) RMB'000	Other reserves (Note 35) RMB'000	Other equity instruments (Note 34) RMB'000	Retained earnings (Note 35) RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 1 January 2021	17,268,192	5,503,806	3,015,740	7,610,069	33,397,807	12,392,110	45,789,917
(Loss)/profit for the year	–	–	–	(515,693)	(515,693)	686,912	171,219
Profit attributable to holders of other equity instruments	–	–	134,250	(134,250)	–	–	–
Other comprehensive income for the year:							
Fair value gain on equity instruments at FVTOCI, net of tax	–	1,582,582	–	–	1,582,582	25,499	1,608,081
Fair value loss on debt instruments at FVTOCI, net of tax	–	(599)	–	–	(599)	(262)	(861)
Release on derecognition of debt instruments at FVTOCI, net of tax	–	5,847	–	–	5,847	1,163	7,010
Exchange differences on translation of foreign operations	–	28	–	–	28	16	44
Total comprehensive income/(expense) for the year	–	1,587,858	134,250	(649,943)	1,072,165	713,328	1,785,493
Placement of new shares	3,149,809	–	–	–	3,149,809	–	3,149,809
Transfer to statutory reserves	–	368,394	–	(368,394)	–	–	–
Capital injections from non-controlling shareholders of subsidiaries	–	–	–	–	–	479,747	479,747
Acquisitions of subsidiaries (Note 48)	–	–	–	–	–	47,904	47,904
Acquisition of non-controlling interests	–	11,544	–	–	11,544	(14,808)	(3,264)
Disposal of interests in subsidiaries (Note 47(b))	–	–	–	–	–	63,326	63,326
Disposal of interests in a subsidiary without loss of control (Note 47(a))	–	(393,746)	–	–	(393,746)	2,969,746	2,576,000
Disposal of equity interests in a subsidiary (Note 32)	–	(3,388)	–	–	(3,388)	(151,732)	(155,120)
Dividends paid to non-controlling interests	–	–	–	–	–	(421,730)	(421,730)
Distributions to holders of other equity instruments	–	–	(152,390)	–	(152,390)	–	(152,390)
2020 final dividend (Note 13)	–	–	–	(1,274,895)	(1,274,895)	–	(1,274,895)
Total transactions recognized directly in equity	3,149,809	(17,196)	(152,390)	(1,643,289)	1,336,934	2,972,453	4,309,387
At 31 December 2021	20,418,001	7,074,468	2,997,600	5,316,837	35,806,906	16,077,891	51,884,797

Consolidated Statement of Changes in Equity

For the year ended 31 December 2021

	Attributable to equity holders of the Company						
	Share capital (Note 33) RMB'000	Other reserves (Note 35) RMB'000	Other equity instruments (Note 34) RMB'000	Retained earnings (Note 35) RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 1 January 2020	17,268,192	5,562,012	–	7,489,871	30,320,075	14,813,134	45,133,209
Profit for the year	–	–	–	1,708,305	1,708,305	1,217,246	2,925,551
Profit attributable to holders of other equity instruments	–	–	18,140	(18,140)	–	–	–
Other comprehensive income for the year:							
Fair value (loss)/gain on equity instruments at FVTOCI, net of tax	–	(242,127)	–	–	(242,127)	2,124	(240,003)
Fair value loss on debt instruments at FVTOCI, net of tax	–	(5,847)	–	–	(5,847)	(1,163)	(7,010)
Release on derecognition of debt instruments at FVTOCI, net of tax	–	1,623	–	–	1,623	297	1,920
Total comprehensive (expense)/income for the year	–	(246,351)	18,140	1,690,165	1,461,954	1,218,504	2,680,458
Transfer to statutory reserves	–	295,072	–	(295,072)	–	–	–
Issuance of perpetual medium-term notes (Note 34)	–	–	2,997,600	–	2,997,600	–	2,997,600
Capital injections from non-controlling shareholders of subsidiaries	–	–	–	–	–	491,680	491,680
Acquisitions of subsidiaries	–	–	–	–	–	95,615	95,615
Acquisition of non-controlling interests	–	(106,927)	–	–	(106,927)	(2,969,866)	(3,076,793)
Disposal of interests in subsidiaries	–	–	–	–	–	(303,728)	(303,728)
Dividends paid to non-controlling interests	–	–	–	–	–	(953,229)	(953,229)
2019 final dividend (Note 13)	–	–	–	(1,274,895)	(1,274,895)	–	(1,274,895)
Total transactions recognized directly in equity	–	188,145	2,997,600	(1,569,967)	1,615,778	(3,639,528)	(2,023,750)
At 31 December 2020	17,268,192	5,503,806	3,015,740	7,610,069	33,397,807	12,392,110	45,789,917

The notes on pages 123 to 233 are an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows

For the year ended 31 December 2021

	Notes	Year ended 31 December 2021 RMB'000	2020 RMB'000
Cash flows from operating activities			
Net cash generated from operating activities	44(a)	**1,342,374**	5,501,876
Cash flows from investing activities			
Payments for property, plant and equipment and prepayments for construction of power plants		**(16,959,847)**	(16,168,221)
Payments for right-of-use assets		**(478,414)**	(90,072)
Proceeds from disposal of property, plant and equipment and right-of-use assets		**23,737**	285,794
Net cash (outflow)/inflow on acquisitions of subsidiaries	48	**(441,274)**	146,941
Net cash (outflow)/inflow on disposal of subsidiaries	47(b)	**(23,999)**	5,653
Net cash inflow on disposal of assets and liabilities associated with a disposal group classified as held for sale	32	**9,659**	–
Net cash inflow on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate	32	**204,051**	–
Proceeds from disposal of a joint venture		**–**	8,013
Acquisition of associates		**(414,617)**	(38,456)
Acquisition of joint ventures		**(270,453)**	(32,246)
Capital injections to associates, joint ventures and equity instruments at FVTOCI		**(501,052)**	(199,710)
Dividends received		**272,550**	272,204
Interests received		**49,049**	47,988
Decrease/(increase) in restricted deposits		**15,025**	(6,343)
Net cash used in investing activities		**(18,515,585)**	(15,768,455)
Cash flows from financing activities			
Drawdown of bank borrowings	44(b)	**63,393,033**	23,950,312
Drawdown of borrowings from related parties	44(b)	**7,943,406**	26,023,327
Drawdown of other borrowings	44(b)	**9,800,325**	2,030,000
Capital injections from non-controlling shareholders of subsidiaries		**479,747**	491,680
Proceeds from disposal of equity interest in a subsidiary without loss of control	47(a)	**2,576,000**	–
Acquisition of non-controlling interests		**(3,264)**	(3,000,000)
Issuance of perpetual medium-term notes		**–**	3,000,000
Net proceeds from issuance of ordinary shares	33	**3,149,809**	–
Repayment of bank borrowings	44(b)	**(53,123,829)**	(18,111,858)
Repayment of borrowings from related parties	44(b)	**(8,696,090)**	(19,386,788)
Repayment of other borrowings	44(b)	**(5,010,000)**	(528,000)
Payments for lease liabilities	44(b)	**(1,058,158)**	(1,962,727)
Dividend paid		**(1,286,543)**	(1,271,921)
Distributions to holders of other equity instruments		**(134,250)**	–
Dividends paid to non-controlling interests		**(421,730)**	(887,170)
Net cash generated from financing activities		**17,608,456**	10,346,855
Net increase in cash and cash equivalents		**435,245**	80,276
Cash and cash equivalents at 1 January		**1,318,331**	1,239,057
Exchange gain/(loss), net		**13,056**	(1,002)
Cash and cash equivalents at 31 December	31	**1,766,632**	1,318,331

The notes on pages 123 to 233 are an integral part of these consolidated financial statements.

1. GENERAL INFORMATION

China Power International Development Limited (the "Company") was incorporated in Hong Kong on 24 March 2004 as a limited liability company under the Hong Kong Companies Ordinance. The Company's shares are listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

The Company and its subsidiaries (together referred to as the "Group") are principally engaged in investment holdings, generation and sales of electricity, provision of energy storage and the development of power plants in the People's Republic of China (the "PRC").

The Group is controlled by China Power International Holding Limited ("CPI Holding"), an intermediate holding company which directly holds the Company's shares and also indirectly holds through China Power Development Limited ("CPDL"), a wholly-owned subsidiary of CPI Holding.

The directors of the Company (the "Directors") regarded State Power Investment Corporation Limited (國家電力投資集團有限公司) ("SPIC"), a wholly state-owned enterprise established in the PRC which is the beneficial owner of CPI Holding, as the ultimate holding company.

The consolidated financial statements are presented in thousands of Renminbi ("RMB'000"), unless otherwise stated, and have been approved by the board of Directors (the "Board") on 17 March 2022.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies applied in the preparation of these consolidated financial statements are set out as below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements of the Company have been prepared in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") and the Hong Kong Companies Ordinance. In addition, the consolidated financial statements include the applicable disclosures required by the Rules Governing the Listing of Securities on the Stock Exchange ("Listing Rules"). The consolidated financial statements have been prepared under the historical cost convention except that equity instruments and debt instruments are measured at fair value. Disposal groups held for sale are measured at the lower of their carrying amounts and fair value less costs to sell as further explained in Note 2.6.

The preparation of consolidated financial statements in conformity with HKFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in Note 3.

The consolidated financial statements are prepared on a going concern basis, details of which are set out in Note 46.2(e).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures

The Group has adopted the following revised HKFRSs for the first time for the current year's consolidated financial statements.

Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16	*Interest Rate Benchmark Reform — Phase 2*
Amendment to HKFRS 16	*COVID-19-Related Rent Concessions*

The nature and impact of the amendments to HKFRSs are described below:

Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16

Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16 address issues not dealt with in the previous amendments which affect financial reporting when an existing interest rate benchmark is replaced with an alternative risk-free rate ("RFR"). The phase 2 amendments provide a practical expedient to allow the effective interest rate to be updated without adjusting the carrying amount of financial assets and liabilities when accounting for changes in the basis for determining the contractual cash flows of financial assets and liabilities, if the change is a direct consequence of the interest rate benchmark reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis immediately preceding the change. In addition, the amendments permit changes required by the interest rate benchmark reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued. Any gains or losses that could arise on transition are dealt with through the normal requirements of HKFRS 9 to measure and recognize hedge ineffectiveness. The amendments also provide a temporary relief to entities from having to meet the separately identifiable requirement when an RFR is designated as a risk component. The relief allows an entity, upon designation of the hedge, to assume that the separately identifiable requirement is met, provided the entity reasonably expects the RFR risk component to become separately identifiable within the next 24 months. Furthermore, the amendments require an entity to disclose additional information to enable users of financial statements to understand the effect of interest rate benchmark reform on an entity's financial instruments and risk management strategy.

As at 31 December 2021, the Group had certain interest-bearing bank and other borrowings denominated in RMB and foreign currencies based on various Interbank Offered Rates or the Loan Prime Rate announced by the People's Bank of China ("PBOC"). Since the interest rates of these borrowings were not replaced by RFRs during the current year, these amendments did not have any impact on the financial position and performance of the Group. If the interest rates of these borrowings are replaced by RFRs in a future period, the Group will apply this practical expedient upon the modification of these borrowings provided that the "economically equivalent" criterion is met and does not expect the changes and the application of the amendments will result in significant gains or losses.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures *(Continued)*

Amendment to HKFRS 16

Amendment to HKFRS 16 issued in April 2021 extends the availability of the practical expedient for lessees to elect not to apply lease modification accounting for rent concessions arising as a direct consequence of the COVID-19 pandemic by 12 months. Accordingly, the practical expedient applies to rent concessions for which any reduction in lease payments affects only payments originally due on or before 30 June 2022, provided the other conditions for applying the practical expedient are met. The amendment is effective retrospectively for annual periods beginning on or after 1 April 2021 with any cumulative effect of initially applying the amendment recognized as an adjustment to the opening balance of retained earnings at the beginning of the current accounting period. Earlier application is permitted.

The Group has early adopted the amendment on 1 January 2021 and the amendment did not have any impact on the financial position and performance of the Group as there were no lease payments reduced or waived by the lessors as a result of the COVID-19 pandemic during the current year.

2.3 Issued but not yet effective HKFRSs

The Group has not early applied the following new and revised HKFRSs, that have been issued but are not yet effective, in these consolidated financial statements.

Amendments to HKFRS 3	*Reference to the Conceptual Framework*[1]
Amendments to HKFRS 10 and HKAS 28 (2011)	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
HKFRS 17	*Insurance Contracts*[2]
Amendments to HKFRS 17	*Insurance Contracts*[2, 5]
Amendments to HKAS 1	*Classification of Liabilities as Current or Non-current*[2, 4]
Amendments to HKAS 1 and HKFRS Practice Statement 2	*Disclosure of Accounting Policies*[2]
Amendments to HKAS 8	*Definition of Accounting Estimates*[2]
Amendments to HKAS 12	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*[2]
Amendments to HKAS 16	*Property, Plant and Equipment: Proceeds before Intended Use*[1]
Amendments to HKAS 37	*Onerous Contracts — Cost of Fulfilling a Contract*[1]
Annual Improvements to HKFRSs 2018–2020	*Amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16 and HKAS 41*[1]

1 Effective for annual periods beginning on or after 1 January 2022
2 Effective for annual periods beginning on or after 1 January 2023
3 No mandatory effective date yet determined but available for adoption
4 As a consequence of the amendments to HKAS 1, Hong Kong Interpretation 5 Presentation of Financial Statements — Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause was revised in October 2020 to align the corresponding wording with no change in conclusion
5 As a consequence of the amendments to HKFRS 17 issued in October 2020, HKFRS 4 was amended to extend the temporary exemption that permits insurers to apply HKAS 39 rather than HKFRS 9 for annual periods beginning before 1 January 2023

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Issued but not yet effective HKFRSs *(Continued)*

Further information about those HKFRSs that are expected to be applicable to the Group is described below.

Amendments to HKFRS 3 *Reference to the Conceptual Framework* are intended to 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 June 2018 without significantly changing its requirements. The amendments also add to HKFRS 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 HKAS 37 or Hong Kong (International Financial Reporting Interpretations Committee) Interpretation ("HK(IFRIC)-Int") 21 if they were incurred separately rather than assumed in a business combination, an entity applying HKFRS 3 should refer to HKAS 37 or HK(IFRIC)-Int 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 expects to adopt the amendments prospectively from 1 January 2022. Since the amendments apply prospectively to business combinations for which the acquisition date is on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

Amendments to HKFRS 10 and HKAS 28 (2011) *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture* address an inconsistency between the requirements in HKFRS 10 and in HKAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss resulting from a downstream transaction when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognized in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The previous mandatory effective date of amendments to HKFRS 10 and HKAS 28 (2011) was removed by the HKICPA in January 2016 and a new mandatory effective date will be determined after the completion of a broader review of accounting for associates and joint ventures. However, the amendments are available for adoption now.

Amendments to HKAS 1 *Classification of Liabilities as Current or Non-current* clarify the requirements for classifying liabilities as current or non-current. The amendments specify that if an entity's right to defer settlement of a liability is subject to the entity complying with specified conditions, the entity has a right to defer settlement of the liability at the end of the reporting period if it complies with those conditions at that date. Classification of a liability is unaffected by the likelihood that the entity will exercise its right to defer settlement of the liability. The amendments also clarify the situations that are considered a settlement of a liability. The amendments are effective for annual periods beginning on or after 1 January 2023 and shall be applied retrospectively. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 1 *Disclosure of Accounting Policies* require entities to disclose their material accounting policy information rather than their significant accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. Amendments to HKFRS Practice Statement 2 provide non-mandatory guidance on how to apply the concept of materiality to accounting policy disclosures. Amendments to HKAS 1 are effective for annual periods beginning on or after 1 January 2023 and earlier application is permitted. Since the guidance provided in the amendments to HKFRS Practice Statement 2 is non-mandatory, an effective date for these amendments is not necessary. The Group is currently assessing the impact of the amendments on the Group's accounting policy disclosures.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Issued but not yet effective HKFRSs *(Continued)*

Amendments to HKAS 8 *Definition of Accounting Estimates* clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 12 *Deferred Tax related to Assets and Liabilities arising from a Single Transaction* narrow the scope of the initial recognition exception so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognize a deferred tax asset and a deferred tax liability for temporary differences arising from these transactions. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and shall be applied to transactions related to leases and decommissioning obligations at the beginning of the earliest comparative period presented, with any cumulative effect recognized as an adjustment to the opening balance of retained profits or other component of equity as appropriate at that date. In addition, the amendments shall be applied prospectively to transactions other than leases and decommissioning obligations. Earlier application is permitted.

The Group has applied the initial recognition exception and did not recognize a deferred tax asset and a deferred tax liability for temporary differences for transactions related to leases. Upon initial application of these amendments, the Group will recognize a deferred tax asset and a deferred tax liability for deductible and taxable temporary differences associated with right-of-use assets and lease liabilities, and recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained profits at the beginning of the earliest comparative period presented.

Amendments to HKAS 16 *Property, Plant and Equipment: Proceeds before Intended Use* 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 recognizes the proceeds from selling any such items, and the cost of those items, in profit or loss. The amendments are effective for annual periods beginning on or after 1 January 2022 and shall be applied retrospectively only to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 37 *Onerous Contracts — Cost of Fulfilling a Contract* clarify that for the purpose of assessing whether a contract is onerous under HKAS 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 amendments are effective for annual periods beginning on or after 1 January 2022 and shall be applied to contracts for which an entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments. Earlier application is permitted. Any cumulative effect of initially applying the amendments shall be recognized as an adjustment to the opening equity at the date of initial application without restating the comparative information. The amendments are not expected to have any significant impact on the Group's financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Issued but not yet effective HKFRSs *(Continued)*

Annual Improvements to HKFRSs 2018–2020 sets out amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16 and HKAS 41. Details of the amendments that are expected to be applicable to the Group are as follows:

- HKFRS 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. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendment is effective for annual periods beginning on or after 1 January 2022. Earlier application is permitted. The amendment is not expected to have a significant impact on the Group's financial statements.

- HKFRS 16 *Leases*: removes the illustration of payments from the lessor relating to leasehold improvements in Illustrative Example 13 accompanying HKFRS 16. This removes potential confusion regarding the treatment of lease incentives when applying HKFRS 16.

2.4 Consolidation

(a) Subsidiaries

A subsidiary is an entity (including a structured entity) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

(i) Business combinations

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair value at acquisition date, except that:

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

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Consolidation *(Continued)*

(a) Subsidiaries *(Continued)*

(i) Business combinations (Continued)

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

The Group recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis. Non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are measured at either fair value or the present ownership interests' proportionate share in the recognized amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis All other components of non-controlling interests are measured at their fair values at acquisition date, unless another measurement basis is required by HKFRS.

Acquisition-related costs are expensed as incurred.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measurement are recognized in profit or loss or other comprehensive income, as appropriate.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value at acquisition date of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognized and previously held interest measured at fair value is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognized directly in the consolidated income statement.

Intra-group transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized losses are also eliminated. When necessary, amounts reported by subsidiaries have been adjusted to conform with the Group's accounting policies.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Consolidation *(Continued)*

(a) Subsidiaries *(Continued)*

(ii) Changes in ownership interests in existing subsidiaries

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to equity holders of the Company.

(iii) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value at the date when control is lost. The fair value is the initial carrying amount for the purposes of subsequent accounting for the retained interest as associates, joint ventures or financial assets. A gain or loss is recognized in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the equity holders of the Company. All amounts previously recognized in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

(iv) Acquisition of a subsidiary not constituting a business

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

(b) Associates

Associates are entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognized at cost, and the carrying amount is increased or decreased to recognize the investor's share of the profit or loss and other comprehensive income of the investee after the date of acquisition. Upon the acquisition of the ownership interest in an associate, any difference between the cost of the associate and the Group's share of the net fair value of the associate's identifiable assets and liabilities is accounted for as goodwill.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognized in other comprehensive income is reclassified to profit or loss.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Consolidation *(Continued)*

(b) Associates *(Continued)*

The Group's share of post-acquisition profit or loss is recognized in the consolidated income statement, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, the Group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount in the consolidated income statement. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

Profits and losses resulting from upstream and downstream transactions between the Group and its associates are recognized in the Group's consolidated financial statements only to the extent of unrelated investor's interests in the associates. Unrealized losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

Gains or losses on dilution of equity interests in associates are recognized in the consolidated income statement.

(c) Joint ventures

The Group has applied HKFRS 11 to all joint arrangements. Under HKFRS 11, investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. Upon the acquisition of the ownership interest in a joint venture, any difference between the cost of the joint venture and the Group's share of the net fair value of the joint venture's identifiable assets and liabilities is accounted for as goodwill. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint ventures), the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealized gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.5 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The principal activities of the Group are mainly transacted in RMB and accordingly the consolidated financial statements are presented in RMB, which is the Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the consolidated income statement.

Exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the consolidated income statement within "finance costs". All other exchange gains and losses are presented in the consolidated income statement within "other gains and losses, net".

Translation differences on non-monetary financial assets such as equity instruments are included in the FVTOCI reserve in equity.

(c) Group companies

The results and financial position of all the group entities (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of that reporting period;

(ii) income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and

(iii) all resulting exchange differences are recognized in other comprehensive income.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.6 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset (or disposal group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in the relevant subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell, except for financial assets within the scope of HKFRS 9, which continue to be measured in accordance with the accounting policies as set out in respective sections.

2.7 Property, plant and equipment

Property, plant and equipment other than construction in progress are stated at cost less subsequent accumulated depreciation and subsequent impairment losses. Cost includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalized in accordance with the Group's accounting policy. Depreciation of these assets commences when the assets are ready for their intended use.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the consolidated income statement during the period in which they are incurred.

Depreciation of property, plant and equipment (other than construction in progress) is calculated using the straight-line method to allocate their costs less accumulated impairment losses over their estimated useful lives to their residual values.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at end of each reporting period. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.11(a)). Such impairment losses are recognized in the consolidated income statement.

Gains or losses on disposals are determined by comparing the net sales proceeds with the carrying amount of the relevant assets and are recognized in the consolidated income statement.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.8 Construction in progress and prepayments for construction of power plants

Construction in progress represents property, plant and equipment under construction and pending installation and is stated at cost less accumulated impairment losses, if any. Cost includes the costs of construction of buildings, the costs of plant and machinery, direct labour costs and overheads and, for qualifying assets, borrowing costs capitalized in accordance with the Group's accounting policy. No provision for depreciation is made on construction in progress until such time as the relevant assets are completed and are available for the intended use. When the assets concerned are brought into use, the costs are transferred to the appropriate categories of property, plant and equipment and depreciated in accordance with the policy as stated in Note 2.7 above.

Prepayments for construction of power plants represent advance payments made to contractors in connection with the construction of the Group's power plants including payments for equipment and machineries pending delivery to the relevant power plants for installation. Such prepayments are stated at cost less accumulated impairment losses, if any.

2.9 Intangible assets

Intangible assets acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair values at the acquisition date (which is regarded as their costs). Subsequent to initial recognition, intangible assets acquired in a business combination with finite useful lives are reported at costs less accumulated amortization and any accumulated impairment losses, being their fair values at the date of the revaluation less subsequent accumulated amortization and any accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

Amortization for intangible assets with finite useful lives is recognized on a straight-line basis over expected beneficial period. The expected beneficial period and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

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

The Group's other intangible assets represent favourable tariff contracts as disclosed in Note 19.

2.10 Leases

Definition of a lease

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 Leases *(Continued)*

The Group as a lessee

Allocation of consideration to components of a contract

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

Non-lease components are separated from lease component on the basis of their relative stand-alone prices.

As a practical expedient, leases with similar characteristics are accounted on a portfolio basis when the Group reasonably expects that the effects on the consolidated financial statements would not differ materially from individual leases within the portfolio.

Short-term leases and leases of low-value assets

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

Right-of-use assets

The cost of right-of-use assets includes:

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

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

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

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 Leases *(Continued)*

The Group as a lessee *(Continued)*

Lease liabilities

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

The lease payments include:

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

Variable lease payments that reflect changes in market rental rates are initially measured using the market rental rates as at the commencement date. Variable lease payments that do not depend on an index or a rate are not included in the measurement of lease liabilities and right-of-use assets, and are recognized as expense in the period in which the event or condition that triggers the payment occurs.

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

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in market rental rates following a market rent review/expected payment under a guaranteed residual value, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 Leases *(Continued)*

The Group as a lessee *(Continued)*

Lease modifications

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

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and

- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional leases or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

Sale and leaseback transactions

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

The Group as a seller-lessee

For a transfer that satisfies the requirements as a sale, the Group as a seller-lessee measures the right-of-use asset arising from the leaseback at the proportion of the previous carrying amount of the asset and recognizes any gain or loss that relates to the rights transferred to the buyer-lessor only. For a transfer that does not satisfy the requirements as a sale, the Group as a seller-lessee accounts for the transfer proceeds as borrowings within the scope of HKFRS 9.

2.11 Impairment of non-financial assets

(a) Non-financial assets other than goodwill

Assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

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

In addition, the Group assesses whether there is indication that corporate assets may be impaired. If such indication exists, corporate assets are also allocated to individual CGU, when a reasonable and consistent basis of allocation can be identified, or otherwise they are allocated to the smallest group of CGU for which a reasonable and consistent allocation basis can be identified.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Impairment of non-financial assets *(Continued)*

(a) Non-financial assets other than goodwill *(Continued)*

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

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

Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

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

(b) Goodwill

Goodwill arises on the acquisition of subsidiaries, associates and joint ventures and represents the excess of the consideration transferred over the Group's interest in net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree.

For the purpose of impairment assessment, goodwill acquired in a business combination is allocated to each of the CGUs or groups of CGUs, that is expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at CGU level or groups of CGUs level within the operating segment.

Goodwill impairment assessments are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognized immediately as an expense and is not subsequently reversed.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 Financial assets

Classification and subsequent measurement of financial assets

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

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

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

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

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

A financial asset is held for trading if:

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

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

(a) *Amortized cost and interest income*

Interest income is recognized using the effective interest method for financial assets measured subsequently at amortized cost. For financial instruments other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset from the next reporting period. If the credit risk on the credit impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 Financial assets *(Continued)*

Classification and subsequent measurement of financial assets *(Continued)*

(b) *Debt instruments classified as at FVTOCI*

Subsequent changes in the carrying amounts for debt instruments classified as at FVTOCI are recognized in other comprehensive income and accumulated under the heading of FVTOCI reserve. Impairment allowance are recognized in profit or loss with corresponding adjustment to other comprehensive income without reducing the carrying amounts of these debt instruments. When these debt instruments are derecognized, the cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss.

(c) *Equity instruments designated as at FVTOCI*

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in the FVTOCI reserve, and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to retained earnings.

Dividends from these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in "other income" in the consolidated income statement.

Impairment of financial assets

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including accounts receivable, note receivables, other receivables, deposits, amounts due from related parties, debt instruments at FVTOCI, restricted deposits and cash and cash equivalents) which are subject to impairment under HKFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ("12m") ECL represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognizes lifetime ECL for accounts receivable other than accounts receivable with significant financing components which is included in other non-current assets. The ECL on these assets are assessed individually.

For accounts receivable with significant financing component and all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition or the financial instrument is not determined to have low credit risk at the reporting date, the Group recognizes lifetime ECL. The assessment of whether lifetime ECL should be recognized is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instruments external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor; or
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a debt instrument has not increased significantly since initial recognition if the debt instrument is determined to have low credit risk at the reporting date. A debt instrument is determined to have low credit risk if (i) it has a low risk of default, (ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and (iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Group considers a debt instrument to have low credit risk when it has an internal or external credit rating of "investment grade" as per globally understood definitions.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due (except for clean energy power price premium) unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events of default that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganization;
- the disappearance of an active market for that financial asset because of financial difficulties; or
- the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognized in profit or loss.

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

Measurement and recognition of ECL (Continued)

Where ECL is measured on a collective basis or cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments (i.e. the Group's other receivables are assessed as a separate group. Amounts due from related parties are assessed for expected credit losses on an individual basis);

- Past-due status;

- Nature, size and industry of debtors; and

- External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortized cost of the financial asset.

Except for debt instruments that are measured at FVTOCI, the Group recognizes an impairment loss or reversal in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of accounts receivable where the corresponding adjustment is recognized through a loss allowance account. For debt instruments that are measured at FVTOCI, the loss allowance is recognized in other comprehensive income and accumulated in the FVTOCI reserve without reducing the carrying amounts of these debt instruments. Such amount represents the changes in the FVTOCI reserve in relation to accumulated loss allowance.

Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

On derecognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the FVTOCI reserve is reclassified to profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the FVTOCI reserve is not reclassified to profit or loss, but is transferred to retained earnings.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.13 Financial liabilities and equity

Classification as debt or equity

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

Equity instruments

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

Perpetual securities

Perpetual securities are classified as equity if they are non-redeemable, or redeemable only at the issuer's option, and any interest and distributions are discretionary. Interest and distributions on perpetual securities classified as equity are recognized as distributions within equity.

The perpetual notes issued by the Company are recognized as "Other equity instruments".

Financial liabilities

All financial liabilities including bank borrowings, borrowings from related parties, other borrowings, lease liabilities, amounts due to related parties, accounts and bills payables, construction costs payable and other payables and accrued charge are subsequently measured at amortized cost using the effective interest method.

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

2.14 Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks and with other financial institutions and other short-term highly liquid investments with original maturities of three months or less. Restricted deposits are separately disclosed from cash and cash equivalents.

2.15 Inventories

Inventories comprise coal, oil, consumable supplies and spare parts held for consumption and usage and are stated at the lower of cost and net realizable value after provision for obsolete items, and are expensed to fuel costs or repairs and maintenance expense when used/consumed, or capitalized to property, plant and equipment when installed, as appropriate using weighted average method. Cost comprises purchase price and other costs incurred in bringing the inventories to their present location and condition and excludes borrowing costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.16 Borrowings and borrowing costs

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the consolidated income statement over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

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

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

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

2.17 Current and deferred income tax

The tax expense for the year comprises current and deferred income tax. Tax is recognized in the consolidated income statement, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

(a) Current income tax

The current income tax is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period in the places where the Company and its subsidiaries, associates and joint ventures operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Current and deferred income tax *(Continued)*

(b) Deferred income tax

Deferred income tax is recognized, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax liabilities are not recognized if they arise from the initial recognition of goodwill, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profits or losses. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized.

Deferred income tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, associates and joint ventures, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Generally the Group is unable to control the reversal of the temporary difference for associates. Only where there is an agreement in place that gives the Group the ability to control the reversal of the temporary difference that deferred income tax liability is not recognized.

Deferred income tax assets are recognized on deductible temporary differences arising from investments in subsidiaries, associates and joint ventures only to the extent that it is probable the temporary difference will reverse in the future and there is sufficient taxable profits available against which the temporary difference can be utilized.

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

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 *Income Taxes* requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities results in net deductible temporary differences.

(c) Offsetting

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 Employee benefits

(a) Pension obligations

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Group's contributions to the Mandatory Provident Fund Scheme established under the Hong Kong Mandatory Provident Fund Schemes Ordinance are expensed as incurred. Both the Group and its employees in Hong Kong are required to contribute 5% of each individual's relevant income with a maximum amount of Hong Kong dollars ("HK$") 1,500 per month as a mandatory contribution. Employees may also elect to contribute more than the minimum as a voluntary contribution. The assets of the scheme are held separately from those of the Group and managed by independent professional fund managers. The Group has no future payment obligation once the contributions have been paid.

For employees in Mainland China, the Group contributes on a monthly basis to various defined contribution plans organized by the relevant municipal and provincial governments in the PRC based on certain percentage of the relevant employees' monthly salaries. The municipal and provincial governments undertake to assume the retirement benefit obligations payable to all existing and future retired employees under these plans and the Group has no further constructive obligation for any post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred.

All contributions to pension plans are fully and immediately vested and the Group had no unvested benefits available to reduce its future contributions.

(b) Bonus entitlements

The expected cost of bonus payments is recognized as a liability when the Group has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made. Liabilities of bonus plan are expected to be settled within 12 months and are measured at the amounts expected to be paid when they are settled.

2.19 Provisions

Provisions (including provisions for inundation compensation) are recognized when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognized for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligations using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognized as interest expense.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision shall be reversed.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.20 Government grants

Grants and subsidies from the government are recognized at their fair values for monetary asset where there is a reasonable assurance that the grant or subsidy will be received and the Group will comply with all attached conditions.

Government grants and subsidies relating to costs are deferred and recognized in the consolidated income statement over the period necessary to match them with the costs that they are intended to compensate.

Government grants and subsidies relating to property, plant and equipment and other environmental improvement projects are included in non-current liabilities as deferred income and are credited to the consolidated income statement on a straight-line basis over the expected lives of the related assets and projects.

Non-monetary assets transferred from the government are recognized at nominal amount.

2.21 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-makers. The chief operating decision-makers, who are responsible for allocating resources and assessing performance of the operating segments, have been identified as the executive Directors and certain senior managements who make strategic decisions.

2.22 Revenue from contracts with customers

The Group recognizes revenue from sales of electricity to regional and provincial power grid companies, provision of power generation and subcontracting services.

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

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

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

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates and enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.22 Revenue from contracts with customers *(Continued)*

Existence of significant financing component

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

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

For contracts where the Group transferred the associated goods or services before payments from customers in which the Group adjusts for the promised amount of consideration for significant financing components, the Group applies a discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. The Group recognizes interest income during the period between the payment from customers and the transfer of the associated goods or services.

Principal versus agent

When another party is involved in providing goods or services to a customer, the Group determines whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the Group is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the Group is an agent).

The Group is a principal if it controls the specified good or service before that good or service is transferred to a customer.

The Group is an agent if its performance obligation is to arrange for the provision of the specified good or service by another party. In this case, the Group does not control the specified good or service provided by another party before that good or service is transferred to the customer. When the Group acts as an agent, it recognizes revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party.

Further details of revenue and income recognition policies are as follows:

(i) *Sales of electricity to regional and provincial power grid companies, and provision of power generation*

Revenue is recognized upon transmission of electricity to the power grid when the control of the electricity is transferred at the same time.

(ii) *Subcontracting services for energy storage projects*

A contract with a customer is classified by the Group as a construction contract when the contract relates to work on an asset under the control of the customer and therefore the Group's construction activities create or enhance an asset under the customer's control.

When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognized progressively over time using the cost-to-cost method, i.e. based on the proportion of the actual costs incurred relative to the estimated total costs. When the outcome of the contract cannot be reasonably measured, revenue is recognized only to the extent of contract costs incurred that are expected to be recovered.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.23 Revenue from other sources

Rental income is recognized on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognized as income in the accounting period in which they are incurred.

Dividend income is recognized when the shareholders' right to receive payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

Revenue from the sales of unused power production quota, heat, trading of coal, coal by-products, spare parts and others are recognized when the control is transferred to the customers.

2.24 Dividend distribution

Dividend distribution to the Company's equity holders is recognized as a liability in the period in which the dividends are approved by the Company's shareholders or Directors as appropriate.

2.25 Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person:

(i) has control or joint control over the Group;

(ii) has a significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

(b) the party is an entity where any of the following conditions applies:

(i) the entity and the Group are members of the same group;

(ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);

(iii) the entity and the Group are joint ventures of the same third party;

(iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

(v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group; (If the Group is itself a plan) and the sponsoring employers of the post-employment benefit plan;

(vi) the entity is controlled or jointly controlled by a person identified in (a);

(vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and

(viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

Estimates and judgements used in preparing the consolidated financial statements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(i) Impairment of non-financial assets

The Group tests annually whether goodwill has suffered any impairment. Property, plant and equipment, right-of-use assets and other intangible assets (favourable tariff contracts) are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Group also re-measures the assets and disposal groups classified as held for sale annually to see if impairment provision is needed. The recoverable amounts of property, plant and equipment and right-of-use assets have been determined based on higher of value in use calculations, which is measured at the net present value of future cash flows which are estimated based upon the continued use of the asset in the business, and fair value less costs of disposal. The recoverable amounts of other intangible assets (favourable tariff contracts) have been determined based on the discounted cash flow of tariff difference (Note 19) during the expected beneficial period. Assets and disposal groups classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to disposal. These calculations require the use of judgements and estimates.

Management judgement is required in the area of asset impairment and fair value assessment particularly in assessing: (i) whether an event has occurred that may indicate that the related asset values may not be recoverable; (ii) whether the carrying value of an asset can be supported by the recoverable amount; and (iii) the appropriate key assumptions to be applied in preparing cash flow projections including whether these cash flow projections are discounted using an appropriate rate. When it is not possible to estimate the recoverable amount of an individual asset (including right-of-use assets), the Group estimates the recoverable amount of the CGU or group of CGUs to which the asset belongs. Changing the assumptions selected by management in assessing impairment, including the discount rates, growth rate or the beneficial period for the favourable tariff contracts assumptions in the cash flow projections, could materially affect the net present value used in the impairment assessment and as a result affect the Group's financial condition and results of operations. If there is a significant adverse change in the projected performance and resulting future cash flow projections, it may be necessary to take an impairment charge to the consolidated income statement.

For the year ended 31 December 2021, management has performed impairment assessments based on value in use calculation by measuring the recoverable amount of certain CGUs or group of CGUs associated with goodwill and certain property, plant and equipment, included in "Coal-fired electricity" segment , "Hydropower electricity" segment, and "Photovoltaic power electricity" segment. The Group has also re-measured assets classified as held for sale to their fair value less costs to sell.

As at 31 December 2021, the carrying amounts of property, plant and equipment, right-of-use assets, goodwill and other intangible assets (favourable tariff contracts) were RMB128,695,251,000, RMB6,152,184,000, RMB1,083,293,000 and RMB934,800,000 (2020: RMB112,954,766,000, RMB6,260,964,000, RMB1,102,615,000 and RMB989,673,000) respectively, of which the impairment of property, plant and equipment of RMB1,004,000 (2020: RMB31,350,000) and impairment of goodwill of nil (2020: RMB84,599,000) were recognized for the year then ended. Details of the impairment of property, plant and equipment and goodwill are disclosed in Notes 15(e) and 32, and Note 18 respectively.

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

(ii) Valuation of the provisions for compensation for inundation

The Group made provisions in relation to compensations for inundation caused by the construction of certain hydropower plants of the Group ("Inundation Compensation"). The provisions are measured at the present value of the expenditure expected to be required to settle the compensation using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the compensation.

In determining the best estimate of the provisions for the Inundation Compensation, management is required to make subjective assumptions and judgements, including estimating the timing and duration of the compensation payments, the compensation per unit of area and growth rate of compensation as well as the pre-tax discount rate applied to account for time value of money and the risks specific to the compensation. Any change in assumptions or judgements applied would result in different provision amounts that would potentially affect the profit or loss and financial position of the Group significantly.

As at 31 December 2021, the provisions for Inundation Compensation were RMB1,972,664,000 (2020: RMB1,971,834,000). For the year ended 31 December 2021, management has reviewed and performed assessment on such provisions to reflect the current best estimate and an additional provisions of nil (2020: RMB775,305,000) was added to the cost of property, plant and equipment in the consolidated statement of financial position (Notes 15(d) and 40).

(iii) Current and deferred income tax expenses

The Group is subject to income taxes in various locations within PRC. Judgement is required in determining the provision for income taxes in each of these locations. There are transactions and calculations during the ordinary course of business for which the ultimate tax determination is uncertain. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current income tax and deferred income tax provisions in the period in which such determination is made.

Deferred income tax assets relating to certain temporary differences and tax losses are recognized when management considers it is probable that future taxable profits will be available against which the temporary differences or tax losses can be utilized. When the expectation is different from the original estimate, such differences will impact the recognition of deferred tax assets and taxation amount in the period in which such estimate is changed.

(iv) Useful lives, residual values and depreciation charges of property, plant and equipment

The Group's management determines the estimated useful lives, residual values and related depreciation charges for the Group's property, plant and equipment, other than construction in progress. This estimate is based on the historical experience of the actual useful lives and residual values of property, plant and equipment of similar nature and functions. It could change significantly as a result of technological advancement and innovations in the power industry. Management will adjust the depreciation charge where useful lives or residual values vary with previously estimated, or it will write-off or write down technically obsolete. Actual economic lives may differ from estimated useful lives and actual residual values may differ from estimated residual values. Periodic review could result in a change in depreciable lives and residual values and therefore depreciation charges in the future periods. As at 31 December 2021, the carrying amount of property, plant and equipment, other than construction in progress, was RMB114,596,349,000 (2020: RMB97,753,246,000).

4. TURNOVER, REVENUE AND SEGMENT INFORMATION

Revenue, representing turnover net of sales related taxes, recognized during the year is as follows:

	2021 RMB'000	2020 RMB'000
Types of goods or services:		
Sales of electricity to regional and provincial power grid companies (note (a))	34,002,823	28,330,944
Provision of power generation (note (b))	151,861	96,777
Subcontracting services for energy storage projects (note (c))	579,604	–
	34,734,288	28,427,721
Timing of revenue recognition:		
Goods — at a point in time	34,154,684	28,427,721
Services — over time	579,604	–
	34,734,288	28,427,721

Notes:

(a) Pursuant to the power purchase agreements entered into between the Group and the respective regional and provincial power grid companies, the Group's sales of electricity were made to these power grid companies at the tariff rates agreed with the respective regional and provincial power grid companies as approved by the relevant government authorities in the PRC, and some of these tariff rates followed the market-oriented price mechanism.

(b) Provision of power generation represents income from the provision of power generation to other companies in the PRC which is calculated based on mutually agreed terms.

(c) Subcontracting services for energy storage projects represent income from the project development and integration of energy storage power stations.

Segment information

The chief operating decision maker has been identified as the executive Directors and certain senior management (collectively referred to as the "CODM") who make strategic decisions. The CODM reviews the internal reporting of the Company and its subsidiaries in order to assess performance and allocate resources. Management has determined the operating segments based on these reports.

The CODM assesses the performance of the operating segments based on a measure of profit/loss before taxation, excluding dividends from equity instruments at FVTOCI. Other information provided to the CODM is measured in a manner consistent with that in the consolidated financial statements.

Segment assets exclude equity instruments at FVTOCI, deferred income tax assets and corporate assets, which are managed on a central basis.

Segment liabilities exclude deferred income tax liabilities, tax payable and corporate liabilities, which are managed on a central basis.

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

	Year ended 31 December 2021							
	Coal-fired electricity RMB'000	Hydropower electricity RMB'000	Wind power electricity RMB'000	Photovoltaic power electricity RMB'000	Energy Storage RMB'000	Segment total RMB'000	Unallocated RMB'000	Total RMB'000
Segment revenue								
Sales of electricity	21,997,404	5,342,709	3,399,091	3,263,619	–	34,002,823	–	34,002,823
Provision of power generation	75,052	4,843	2,137	69,829	–	151,861	–	151,861
Subcontracting services for energy storage projects	–	–	–	–	579,604	579,604	–	579,604
	22,072,456	5,347,552	3,401,228	3,333,448	579,604	34,734,288	–	34,734,288
Segment results	(492,863)	1,982,626	2,016,047	1,592,481	63,413	5,161,704	–	5,161,704
Unallocated income	–	–	–	–	–	–	367,500	367,500
Unallocated expenses	–	–	–	–	–	–	(928,337)	(928,337)
Operating (loss)/profit	(492,863)	1,982,626	2,016,047	1,592,481	63,413	5,161,704	(560,837)	4,600,867
Finance income	2,235	12,402	9,250	82,888	126	106,901	19,702	126,603
Finance costs	(1,180,062)	(832,191)	(751,936)	(1,062,932)	(294)	(3,827,415)	(34,085)	(3,861,500)
Share of results of associates	(333,969)	11,283	19,084	30,003	–	(273,599)	60,075	(213,524)
Share of results of joint ventures	(171,377)	–	48,579	–	–	(122,798)	3,518	(119,280)
(Loss)/profit before taxation	(2,176,036)	1,174,120	1,341,024	642,440	63,245	1,044,793	(511,627)	533,166
Income tax credit/(expense)	92,243	(228,405)	(83,363)	(68,345)	(21,152)	(309,022)	(52,925)	(361,947)
(Loss)/profit for the year	(2,083,793)	945,715	1,257,661	574,095	42,093	735,771	(564,552)	171,219
Other segment information								
Amounts included in the measure of segment profit or loss or segment assets:								
Capital expenditure								
— Property, plant and equipment, right-of-use assets and prepayments for construction of power plants	2,465,256	732,314	8,669,996	5,241,549	296,525	17,405,640	319,430	17,725,070
Depreciation of property, plant and equipment	2,151,726	1,532,352	954,461	1,034,874	54	5,673,467	41,417	5,714,884
Depreciation of right-of-use assets	114,520	58,405	13,404	150,397	7	336,733	41,003	377,736
Amortization of other intangible assets	–	–	–	54,873	–	54,873	–	54,873
Loss/(gain) on disposal of property, plant and equipment, net	1,320	(5,865)	25	(1,295)	–	(5,815)	4,545	(1,270)
Impairment of property, plant and equipment	–	–	1,004	–	–	1,004	–	1,004
Loss/(gain) on disposal of subsidiaries (pre-tax)	12,256	(17,771)	204	–	–	(5,311)	118,540	113,229
Gain on disposal of assets and liabilities associated with a disposal group classified as held for sale	–	(80,109)	–	–	–	(80,109)	–	(80,109)
Gain on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate	(242,283)	–	–	–	–	(242,283)	–	(242,283)
Provision/(reversal) of impairment of other receivables	–	147	–	(1,843)	–	(1,696)	–	(1,696)

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

	As at 31 December 2021							
	Coal-fired electricity RMB'000	Hydropower electricity RMB'000	Wind power electricity RMB'000	Photovoltaic power electricity RMB'000	Energy storage RMB'000	Segment total RMB'000	Unallocated RMB'000	Total RMB'000
Segment assets								
Other segment assets	45,189,693	37,103,681	39,258,311	34,697,974	830,503	157,080,162	–	157,080,162
Goodwill	67,712	768,944	–	246,637	–	1,083,293	–	1,083,293
Interests in associates	1,901,966	20,259	481,585	196,381	–	2,600,191	926,364	3,526,555
Interests in joint ventures	248,414	–	827,708	–	–	1,076,122	352,822	1,428,944
	47,407,785	37,892,884	40,567,604	35,140,992	830,503	161,839,768	1,279,186	163,118,954
Equity instruments at FVTOCI	–	–	–	–	–	–	5,235,995	5,235,995
Deferred income tax assets	–	–	–	–	–	–	714,348	714,348
Other unallocated assets	–	–	–	–	–	–	5,684,805	5,684,805
Total assets per consolidated statement of financial position	47,407,785	37,892,884	40,567,604	35,140,992	830,503	161,839,768	12,914,334	174,754,102
Segment liabilities								
Other segment liabilities	(5,151,527)	(3,560,081)	(3,822,599)	(3,860,786)	(556,025)	(16,951,018)	–	(16,951,018)
Borrowings	(31,916,128)	(26,467,276)	(21,801,327)	(19,745,922)	–	(99,930,653)	(2,398,062)	(102,328,715)
	(37,067,655)	(30,027,357)	(25,623,926)	(23,606,708)	(556,025)	(116,881,671)	(2,398,062)	(119,279,733)
Deferred income tax liabilities	–	–	–	–	–	–	(2,380,195)	(2,380,195)
Tax payable	–	–	–	–	–	–	(223,030)	(223,030)
Other unallocated liabilities	–	–	–	–	–	–	(986,347)	(986,347)
Total liabilities per consolidated statement of financial position	(37,067,655)	(30,027,357)	(25,623,926)	(23,606,708)	(556,025)	(116,881,671)	(5,987,634)	(122,869,305)

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

	Year ended 31 December 2020						
	Coal-fired electricity RMB'000	Hydropower electricity RMB'000	Wind power electricity RMB'000	Photovoltaic power electricity RMB'000	Segment total RMB'000	Unallocated RMB'000	Total RMB'000
Segment revenue							
Sales of electricity	17,659,169	5,960,123	2,013,996	2,697,656	28,330,944	–	28,330,944
Provision of power generation	49,261	12,311	–	35,205	96,777	–	96,777
	17,708,430	5,972,434	2,013,996	2,732,861	28,427,721	–	28,427,721
Segment results	1,610,253	2,912,828	1,055,645	1,165,410	6,744,136	–	6,744,136
Unallocated income	–	–	–	–	–	196,864	196,864
Unallocated expenses	–	–	–	–	–	(569,140)	(569,140)
Operating profit/(loss)	1,610,253	2,912,828	1,055,645	1,165,410	6,744,136	(372,276)	6,371,860
Finance income	10,903	1,087	60,804	199,472	272,266	58,086	330,352
Finance costs	(1,055,942)	(901,032)	(406,044)	(783,676)	(3,146,694)	(57,004)	(3,203,698)
Share of results of associates	213,528	–	1,387	18,066	232,981	50,971	283,952
Share of results of joint ventures	38,111	–	7,169	(2,081)	43,199	462	43,661
Profit/(loss) before taxation	816,853	2,012,883	718,961	597,191	4,145,888	(319,761)	3,826,127
Income tax expense	(294,084)	(468,441)	(43,231)	(56,648)	(862,404)	(38,172)	(900,576)
Profit/(loss) for the year	522,769	1,544,442	675,730	540,543	3,283,484	(357,933)	2,925,551
Other segment information							
Amounts included in the measure of segment profit or loss or segment assets:							
Capital expenditure							
— Property, plant and equipment, right-of-use assets and prepayments for construction of power plants	3,902,112	1,747,182	6,902,048	5,486,785	18,038,127	231,133	18,269,260
Depreciation of property, plant and equipment	1,881,220	1,529,490	686,351	778,156	4,875,217	59,939	4,935,156
Depreciation of right-of-use assets	130,876	37,766	13,992	164,744	347,378	38,960	386,338
Amortization of other intangible assets	–	–	–	55,050	55,050	–	55,050
(Gain)/loss on disposal of property, plant and equipment, net	(1,716)	(596)	5,580	(10,695)	(7,427)	5,313	(2,114)
Impairment of property, plant and equipment	27,309	2,327	1,714	–	31,350	–	31,350
Impairment of goodwill	–	84,599	–	–	84,599	–	84,599
Impairment of a disposal group classified as held for sale	587,327	–	–	–	587,327	–	587,327
Reversal of impairment of other receivables	(3,243)	–	–	–	(3,243)	–	(3,243)

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

	As at 31 December 2020						
	Coal-fired electricity RMB'000	Hydropower electricity RMB'000	Wind power electricity RMB'000	Photovoltaic power electricity RMB'000	Segment total RMB'000	Unallocated RMB'000	Total RMB'000
Segment assets							
Other segment assets	41,898,139	38,246,694	28,572,751	30,650,832	139,368,416	–	139,368,416
Assets associated with disposal groups classified as held for sale	3,855,304	129,354	–	–	3,984,658	–	3,984,658
Goodwill	67,712	788,266	–	246,637	1,102,615	–	1,102,615
Interests in associates	2,271,342	12,000	97,889	160,124	2,541,355	663,867	3,205,222
Interests in joint ventures	421,766	–	527,169	–	948,935	78,847	1,027,782
	48,514,263	39,176,314	29,197,809	31,057,593	147,945,979	742,714	148,688,693
Equity instruments at FVTOCI	–	–	–	–	–	3,061,952	3,061,952
Deferred income tax assets	–	–	–	–	–	874,210	874,210
Other unallocated assets	–	–	–	–	–	3,323,816	3,323,816
Total assets per consolidated statement of financial position	48,514,263	39,176,314	29,197,809	31,057,593	147,945,979	8,002,692	155,948,671
Segment liabilities							
Other segment liabilities	(4,893,083)	(4,524,373)	(2,676,620)	(4,457,855)	(16,551,931)	–	(16,551,931)
Liabilities associated with disposal groups classified as held for sale	(2,717,787)	(3,886)	–	–	(2,721,673)	–	(2,721,673)
Borrowings	(25,054,902)	(29,442,542)	(14,425,168)	(11,366,615)	(80,289,227)	(7,261,979)	(87,551,206)
	(32,665,772)	(33,970,801)	(17,101,788)	(15,824,470)	(99,562,831)	(7,261,979)	(106,824,810)
Deferred income tax liabilities	–	–	–	–	–	(1,916,206)	(1,916,206)
Tax payable	–	–	–	–	–	(288,401)	(288,401)
Other unallocated liabilities	–	–	–	–	–	(1,129,337)	(1,129,337)
Total liabilities per consolidated statement of financial position	(32,665,772)	(33,970,801)	(17,101,788)	(15,824,470)	(99,562,831)	(10,595,923)	(110,158,754)

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

All revenue from external customers is generated from the PRC.

As at 31 December 2021, except for cash and bank balances equivalent to RMB284,818,000 (2020: RMB257,287,000), which were deposited with certain banks in Hong Kong, substantially all of the Group's assets, liabilities and capital expenditure were located or utilized in the PRC.

The Group's major customers are regional and provincial power grid companies. For the year ended 31 December 2021, the Group's external revenue amounting to RMB18,843,414,000 (2020: RMB14,764,865,000) was generated from four (2020: three) major customers, each of which accounted for 10% or more of the Group's external revenue.

For the year ended 31 December 2021, major customers who accounted for 10% or more of the Group's external revenue are as follows:

Major Customers	Proportion in approximate	Segments
Customer A	16%	Coal-fired electricity
Customer B	14%	Coal-fired electricity, Wind power electricity and Photovoltaic power electricity
Customer C	14%	Coal-fired electricity and Photovoltaic power electricity
Customer D	11%	Hydropower electricity, Wind power electricity and Photovoltaic power electricity

5. OTHER INCOME

	2021 RMB'000	2020 RMB'000
Rental income	**16,530**	5,528
Hotel operations income	**1,540**	4,864
Income from provision of repairs and maintenance services	**209,691**	91,133
Dividend income (Note 49 (a)(ii))	**39,962**	47,228
Income from provision of IT and other services	**246,049**	130,433
Others	**–**	4,916
	513,772	284,102

6. STAFF COSTS (INCLUDING DIRECTORS' EMOLUMENTS)

	2021 RMB'000	2020 RMB'000
Wages, salaries and bonuses	**2,220,129**	2,089,567
Staff welfare	**718,915**	644,735
Pension costs — defined contribution plans	**395,345**	208,995
	3,334,389	2,943,297

7. OTHER GAINS AND LOSSES, NET

	2021 RMB'000	2020 RMB'000
Amortization of deferred income	**34,092**	21,643
Government subsidies	**70,767**	18,546
Gain on disposal of property, plant and equipment, net	**1,270**	2,114
(Loss)/gain on disposal of subsidiaries (pre-tax) (Note 47(b))	**(113,229)**	29,343
Gain on disposal of assets and liabilities associated with a disposal group classified as held for sale (Note 32)	**80,109**	–
Gain on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate (Note 32)	**242,283**	–
Profits on sales of unused power production quota	**209,555**	202,279
Gain on disposal of a joint venture	**–**	1,192
Profits on sales of heat, trading of coal, coal by-products, spare parts and others	**345,297**	351,631
Gain on previously held equity interest remeasured at acquisition date fair value	**-**	17,227
Impairment of property, plant and equipment (Notes 15 and 32)	**(1,004)**	(31,350)
Impairment of a disposal group classified as held for sale (Note 32)	**–**	(587,327)
Profits on trading of electricity	**17,905**	36,817
Impairment of goodwill (Note 18)	**–**	(84,599)
Others	**67,027**	75,986
	954,072	53,502

8. OTHER OPERATING EXPENSES

	2021 RMB'000	2020 RMB'000
Amortization of other intangible assets (Note 19)	**54,873**	55,050
Research and development expenses	**209,991**	108,541
Lease expenses	**36,690**	37,343
Separation and transfer expenses on water/power/gas supply and property management (note)	**–**	67,200
Reversal of impairment of other receivables (Note 46.2(d)(iii))	**(1,696)**	(3,243)
Reservoir maintenance and usage fees	**70,596**	84,200
Power and heat generation costs	**801,907**	793,646
Cost of purchase of unused power production quota	**10,944**	13,594
Administrative and selling related expenses	**530,460**	414,919
Taxes and surcharges	**330,379**	345,252
Others	**390,979**	211,154
	2,435,123	2,127,656

8. OTHER OPERATING EXPENSES (CONTINUED)

Note:

In accordance with the Notice of the Office of the State Council on the State-owned Assets Supervision and Administration Commission of the State Council and the Ministry of Finance Regarding the Guidelines Related to the Separation and Transfer of "Water/Power/Gas Supply and Property Management" in the Employee Living Areas of the State-owned Enterprises (Guo Ban Fa [2016] No. 45) (《國務院辦公廳轉發國務院國資委、財政部關於國有企業職工家屬區「三供一業」分離移交工作指導意見的通知》(國辦發[2016] 45號)), the Group separated its functions of water, power and heat (gas) supply and property management in the employee living areas of the Group and transferred to professional enterprise or institution for socialized management. For the year ended 31 December 2021, the expense arising from the separation and transfer of "water/power/gas supply and property management" of the Group of nil (2020: RMB67,200,000) were charged to profit and loss.

9. OPERATING PROFIT

Operating profit is stated after charging/(crediting) the following:

	2021 RMB'000	2020 RMB'000
Amortization of other intangible assets	54,873	55,050
Auditor's remuneration	6,943	6,962
Research and development expenses	209,991	108,541
Depreciation:		
— property, plant and equipment (Note 15)	5,714,884	4,935,156
— right-of-use assets (Note 16)	377,736	386,338
Lease expenses:		
— equipment	23,141	12,049
— leasehold land and buildings	13,549	25,294
Separation and transfer expenses on water/power/gas supply and property management	–	67,200
Reversal of impairment of other receivables	(1,696)	(3,243)
Reservoir maintenance and usage fees	70,596	84,200
Cost of purchase of unused power production quota	10,944	13,594

10. FINANCE INCOME AND FINANCE COSTS

	2021 RMB'000	2020 RMB'000
Finance income		
Interest income from bank deposits	**23,406**	14,826
Interest income from related parties (Note 49(a)(i))	**26,861**	33,162
Interest income from discounting effect on clean energy power price premium receivable (Note 26(b))	**76,336**	282,364
	126,603	330,352
Finance costs		
Interest expense on		
— bank borrowings	**3,342,572**	1,810,077
— borrowings from related parties (Note 49(b)(iii))	**598,439**	1,648,610
— other borrowings	**250,114**	214,508
— amounts due to related parties (Note 49(b)(iii))	**16,948**	6,867
— lease liabilities	**172,266**	178,577
— provisions for other long-term liabilities (Note 40)	**104,054**	103,969
	4,484,393	3,962,608
Less: amounts capitalized to property, plant and equipment	**(579,651)**	(570,148)
	3,904,742	3,392,460
Exchange gain, net	**(43,242)**	(188,762)
	3,861,500	3,203,698

The weighted average interest rate on capitalized borrowings is approximately 3.82% (2020: 4.34%) per annum.

11. INCOME TAX EXPENSE

No Hong Kong profits tax has been provided for as the Group did not have any estimated assessable profits arising in Hong Kong for the year ended 31 December 2021 (2020: Nil).

The provision for PRC current income tax is calculated based on the statutory tax rate of 25% (2020: 25%) on the estimated assessable profits for the year except that certain subsidiaries were either exempted from PRC Enterprise Income Tax or entitled to the preferential tax rate of 7.5%,12.5% or 15% (2020: 7.5%, 12.5% or 15%).

11. INCOME TAX EXPENSE (CONTINUED)

The amount of income tax recognized in the consolidated income statement represents:

	2021 RMB'000	2020 RMB'000
PRC current income tax		
Charge for the year	**271,245**	736,179
Under/(over) provision in prior years	**5,192**	(32,401)
	276,437	703,778
Deferred income tax		
Charge for the year (Note 23)	**85,510**	196,798
	361,947	900,576

The income tax expense on the Group's profit before taxation differs from the theoretical amount that would arise using the income tax rate of the PRC as follows:

	2021 RMB'000	2020 RMB'000
Profit before taxation	**533,166**	3,826,127
Less: Share of results of associates	**213,524**	(283,952)
Share of results of joint ventures	**119,280**	(43,661)
	865,970	3,498,514
Calculated at the PRC statutory tax rate of 25% (2020: 25%)	**216,493**	874,629
Effect on tax concession	**(403,341)**	(252,626)
Income not subject to taxation	**(12,988)**	(15,131)
Expenses not deductible for taxation purpose	**8,247**	9,513
Tax losses with no deferred income tax assets recognized (Note 23)	**668,424**	202,799
Deductible temporary differences with no deferred income tax assets recognized (Note 23)	**103,090**	72,442
Utilization of tax losses previously not recognized (Note 23)	**(38,099)**	(15,160)
Utilization of deductible temporary differences previously not recognized (Note 23)	**(185,071)**	(3,031)
Recognition of deferred income tax assets on tax losses previously not recognized (Note 23)	**–**	59,542
Under/(over) provision in prior years	**5,192**	(32,401)
Income tax expense	**361,947**	900,576

Share of income tax credit attributable to associates and joint ventures for the year ended 31 December 2021 of RMB59,000,000 (2020: charge of RMB77,609,000) and RMB28,231,000 (2020: charge of RMB7,980,000) respectively were included in the Group's share of results of associates and joint ventures respectively.

12. (LOSS)/EARNINGS PER SHARE

Basic loss/earnings per share is calculated by dividing the loss/profit for the year attributable to ordinary shareholders of the Company by the weighted average number of shares in issue during the year.

	2021	2020
(Loss)/profit for the year attributable to equity holders of the Company (RMB'000)	**(515,693)**	1,708,305
Profit for the year attributable to holders of other equity instruments (RMB'000)	**(134,250)**	(18,140)
(Loss)/profit for the year attributable to ordinary shareholders of the Company, used in the basic (loss)/earnings per share calculation (RMB'000)	**(649,943)**	1,690,165
Weighted average number of shares in issue (shares in thousands)	**9,871,570**	9,806,886
Basic and diluted (loss)/earnings per share (RMB) (note)	**(0.07)**	0.17

Note:

The Group had no potentially dilutive ordinary shares outstanding during the years ended 31 December 2021 and 2020.

13. DIVIDENDS

	2021 RMB'000	2020 RMB'000
Final, proposed, dividend of RMB0.05 (2020: RMB0.13) per ordinary share	**541,669**	1,274,895
2020 final dividend paid — RMB0.13 (equivalent to HK$0.1556) per ordinary share	**1,274,895**	–
2019 final dividend paid — RMB0.13 (equivalent to HK$0.1426) per ordinary share	**–**	1,274,895
	1,274,895	1,274,895

At the Board meeting held on 17 March 2022, the Board recommended the payment of a final dividend for the year ended 31 December 2021 of RMB0.05 (equivalent to HK$0.0616 at the exchange rate announced by PBOC on 17 March 2022) per ordinary share (2020: RMB0.13 (equivalent to HK$0.1556) per ordinary share), totalling RMB541,669,000 (equivalent to HK$667,337,000) (2020: RMB1,274,895,000 (equivalent to HK$1,525,952,000)), which is based on 10,833,386,321 shares (2020: 9,806,886,321 shares) in issue on 17 March 2022 (2020: 18 March 2021).

This proposed dividend is not reflected as dividend payable in these consolidated financial statements, but will be reflected as an appropriation of retained earnings for the year ending 31 December 2022.

14. EMOLUMENTS FOR DIRECTORS, FIVE HIGHEST PAID INDIVIDUALS AND SENIOR MANAGEMENT REMUNERATION

(a) Directors' emoluments

Name of Director	Fees RMB'000	Basic salary, housing allowance, other allowances and benefits in kind RMB'000	Discretionary bonuses RMB'000	Employer's contribution to pension plans RMB'000	Total RMB'000
Year ended 31 December 2021					
Executive Directors					
Mr. HE Xi[(1)]	–	602	325	92	1,019
Mr. GAO Ping[(2)]	–	176	–	38	214
Mr. TIAN Jun[(3)]	–	462	577	32	1,071
Non-executive Directors					
Mr. WANG Xianchun[(4)]	–	–	–	–	–
Mr. ZHOU Jie[(5)]	–	–	–	–	–
Mr. GUAN Qihong[(6)]	–	–	–	–	–
Independent non-executive Directors					
Mr. LI Fang	164	156	–	–	320
Mr. YAU Ka Chi	164	156	–	–	320
Mr. HUI Hon Chung, Stanley[(7)]	82	98	–	–	180
Mr. KWONG Che Keung, Gordon[(8)]	82	58	–	–	140
	492	1,708	902	162	3,264

14. EMOLUMENTS FOR DIRECTORS, FIVE HIGHEST PAID INDIVIDUALS AND SENIOR MANAGEMENT REMUNERATION (CONTINUED)

(a) Directors' emoluments *(Continued)*

Name of Director	Fees RMB'000	Basic salary, housing allowance, other allowances and benefits in kind RMB'000	Discretionary bonuses RMB'000	Employer's contribution to pension plans RMB'000	Total RMB'000
Year ended 31 December 2020					
Executive Directors					
Mr. TIAN Jun	–	791	466	121	1,378
Mr. HE Xi	–	237	–	30	267
Non-executive Directors					
Mr. GUAN Qihong(6)	–	–	–	–	–
Mr. WANG Xianchun(4)	–	–	–	–	–
Independent non-executive Directors					
Mr. KWONG Che Keung,Gordon	177	89	–	–	266
Mr. LI Fang	177	89	–	–	266
Mr. YAU Ka Chi	177	89	–	–	266
	531	1,295	466	151	2,443

(1) Mr. HE Xi was appointed the Chairman of the Board with effect from 12 April 2021 and no longer served as the president of the Company concurrently from 23 July 2021.

(2) Mr. GAO Ping was appointed as an executive Director and the president of the Company with effect from 23 July 2021.

(3) Mr. TIAN Jun resigned as an executive Director and the Chairman of the Board with effect from 12 April 2021.

(4) Mr. WANG Xianchun had agreed to waive his director fees during his directorship with the Company.

(5) Mr. ZHOU Jie was appointed as a non-executive Director with effect from 12 April 2021. Mr. ZHOU had agreed to waive his director fees during his directorship with the Company.

(6) Mr. GUAN Qihong had agreed to waive his director fees during his directorship with the Company. Mr. GUAN resigned as a non-executive Director with effect from 12 April 2021.

(7) Mr. HUI Hon Chung, Stanley was appointed as an independent non-executive Director with effect from 3 June 2021.

(8) Mr. KWONG Che Keung, Gordon retired as an independent non-executive Director with effect from 3 June 2021.

The executive Directors' emoluments shown above were for their services in connection with the management of the affairs of the Group. The non-executive Directors' and independent non-executive Directors' emoluments shown above were for their services as directors of the Company.

14. EMOLUMENTS FOR DIRECTORS, FIVE HIGHEST PAID INDIVIDUALS AND SENIOR MANAGEMENT REMUNERATION (CONTINUED)

(b) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year included two (2020: one) directors. The emoluments payable to the remaining three (2020: four) individuals during the year are as follows:

	2021 RMB'000	2020 RMB'000
Basic salaries, housing allowance, other allowances and benefits in kind	**1,966**	2,831
Discretionary bonuses	**855**	966
Employer's contribution to pension plans	**220**	348
	3,041	4,145

Their emoluments fell within the following bands:

	Number of individuals	
	2021	2020
HK$1,000,000 to HK$1,500,000 (equivalent to RMB818,000 to RMB1,227,000 (2020: RMB842,000 to RMB1,262,000))	**3**	4

During both years, no emoluments have been paid by the Group to the Directors or any of the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office.

(c) Senior management remuneration by band

Senior management is defined as the same persons whose biographical details are disclosed in the "Directors and Senior Management Profiles" section in the annual report. Their emoluments fell within the following bands:

	Number of individuals	
	2021	2020
Nil to HK$1,000,000 (equivalent to RMB818,000 (2020: RMB842,000))	**5**	4
HK$1,000,001 to HK$1,500,000 (equivalent to RMB818,001 to RMB1,227,000 (2020: RMB842,001 to RMB1,262,000))	**7**	6
HK$1,500,001 to HK$2,000,000 (equivalent to RMB1,227,001 to RMB1,636,000 (2020: RMB1,262,001 to RMB1,683,000))	**–**	1

15. PROPERTY, PLANT AND EQUIPMENT

	Dam RMB'000	Buildings and leasehold improvements RMB'000	Power generators and equipment RMB'000	Electricity supply equipment RMB'000	Furniture and fixtures, tools and other equipment RMB'000	Transportation facilities RMB'000	Construction in progress RMB'000	Total RMB'000
Cost								
At 1 January 2021	26,403,174	27,906,392	62,740,055	9,777,518	6,779,039	509,946	15,295,494	149,411,618
Additions and transfer from prepayments	–	46,096	6,357	4,598	50,558	9,956	17,704,190	17,821,755
Acquired on acquisitions of subsidiaries (Note 48)	–	284,253	2,242,903	28,089	17,641	5,131	275,487	2,853,504
Disposals	–	(24,747)	(9,022)	(6,669)	(73,963)	(4,718)	–	(119,119)
Disposal of subsidiaries	(43,553)	(7,689)	(8,529)	(2,385)	(2,795)	(186)	(72,624)	(137,761)
Reclassified from right-of-use assets (Note 16)	–	–	864,210	3,589	–	906	–	868,705
Transfer between categories	2,785	1,155,465	16,399,787	673,220	789,824	3,407	(19,024,488)	–
At 31 December 2021	26,362,406	29,359,770	82,235,761	10,477,960	7,560,304	524,442	14,178,059	170,698,702
Accumulated depreciation and impairment losses								
At 1 January 2021	4,869,594	7,980,209	17,094,675	3,447,726	2,620,627	350,047	93,974	36,456,852
Depreciation charge for the year (Note 9)	820,647	925,169	3,100,055	436,455	383,727	48,831	–	5,714,884
Impairment loss recognized for the year (note (e))	–	–	–	–	–	–	1,004	1,004
Disposals (note (f))	–	(16,216)	(3,529)	(5,408)	(67,097)	(4,402)	–	(96,652)
Disposal of subsidiaries (note (f))	(43,553)	(7,676)	(1,378)	(2,198)	(1,887)	(124)	(15,821)	(72,637)
At 31 December 2021	5,646,688	8,881,486	20,189,823	3,876,575	2,935,370	394,352	79,157	42,003,451
Net book value								
At 31 December 2021	20,715,718	20,478,284	62,045,938	6,601,385	4,624,934	130,090	14,098,902	128,695,251

15. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

	Dam RMB'000	Buildings and leasehold improvements RMB'000	Power generators and equipment RMB'000	Electricity supply equipment RMB'000	Furniture and fixtures, tools and other equipment RMB'000	Transportation facilities RMB'000	Construction in progress RMB'000	Total RMB'000
Cost								
At 1 January 2020	25,882,962	24,454,409	54,930,331	8,562,914	5,538,390	543,438	11,865,353	131,777,797
Additions and transfer from prepayments (note (d))	775,305	125,169	18,022	15,690	58,183	13,791	18,744,547	19,750,707
Acquired on acquisitions of subsidiaries	–	–	–	–	312	249	779,551	780,112
Disposals	–	(47,933)	(865,857)	(49,621)	(158,268)	(51,632)	–	(1,173,311)
Disposal of subsidiaries	–	(128,547)	(1,228,602)	(61,394)	(15,756)	(8,137)	(1,741,524)	(3,183,960)
Reclassified from right-of-use assets (Note 16)	–	49,238	970,743	–	–	–	732,000	1,751,981
Transfer between categories	7,327	3,454,056	8,915,495	1,309,929	1,356,682	12,695	(15,056,184)	–
Reclassified to a disposal group classified as held for sale (Note 32)	(262,420)	–	(77)	–	(504)	(458)	(28,249)	(291,708)
At 31 December 2020	26,403,174	27,906,392	62,740,055	9,777,518	6,779,039	509,946	15,295,494	149,411,618
Accumulated depreciation and impairment losses								
At 1 January 2020	4,231,296	7,152,875	15,372,405	3,110,124	2,429,895	359,251	77,025	32,732,871
Depreciation charge for the year (Note 9)	819,229	853,600	2,543,664	376,011	299,471	43,181	–	4,935,156
Impairment loss recognized for the year	–	–	(366)	–	–	–	25,641	25,275
Disposals	–	(12,734)	(728,324)	(33,008)	(100,546)	(44,484)	–	(919,096)
Disposal of subsidiaries	–	(13,532)	(92,703)	(5,401)	(8,087)	(7,455)	(8,692)	(135,870)
Reclassified to a disposal group classified as held for sale (Note 32)	(180,931)	–	(1)	–	(106)	(446)	–	(181,484)
At 31 December 2020	4,869,594	7,980,209	17,094,675	3,447,726	2,620,627	350,047	93,974	36,456,852
Net book value								
At 31 December 2020	21,533,580	19,926,183	45,645,380	6,329,792	4,158,412	159,899	15,201,520	112,954,766

15. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Notes:

The comparative data in the analysis below includes those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) Depreciation of property, plant and equipment (other than construction in progress) is calculated using the straight-line method to allocate their costs less accumulated impairment losses over their estimated useful lives to their residual values, as follows:

Dam	30–50 years
Buildings	8–45 years
Leasehold improvements	Shorter of 5 years and over the lease term
Power generators and equipment	9–28 years
Electricity supply equipment	13–30 years
Furniture and fixtures	3–5 years
Tools and other equipment	3–18 years
Transportation facilities	2–12 years

(b) As at 31 December 2021, the legal titles of certain properties of the Group with a net book value of RMB2,707,254,000 (2020: RMB3,839,734,000) have not been transferred to the Group. However, the Directors are of the opinion that the risks and rewards of using these assets have been transferred to the Group.

In addition, certain of the Group's property, plant and equipment are situated on right-of-use assets (leasehold land) in the PRC which was granted, free of charge, for the use by the relevant government authorities to the relevant subsidiaries of the Group with no specific terms of usage.

(c) As at 31 December 2021, certain property, plant and equipment of the Group with a net book value of RMB386,243,000 (2020: RMB262,915,000) were pledged as security for certain long-term bank borrowings (Note 36(d)).

(d) For the year ended 31 December 2020, additions of dam represented a recognition of provisions for inundation compensation caused by the construction of certain hydropower plants of the Group. Management has reviewed and performed assessment on such provisions to reflect the current best estimate by reassessing the inputs used in the net present value model based on the current charges per unit of area and the growth rate of compensation, as well as the pre-tax discount rate applied to account for the time value of money and the risks specific to the compensations. As a result, an additional provision of RMB775,305,000 (Note 40) was made to the cost of dam for the year ended 31 December 2020. For the year ended 31 December 2021, no additional provision was made to the cost of dam arising from review and assessment conducted during the year.

(e) For the year ended 31 December 2021, management has performed impairment assessment on certain property, plant and equipment with impairment indication included in "Coal-fired electricity" segment.

The recoverable amounts of the associated CGUs had been determined based on value in use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management for the purposes of impairment assessment covering a five-year period. Annual cash flows beyond the five-year period are expected to be similar to that of the fifth year based on the current production capacity, taking into account of the expected remaining useful lives of the relevant underlying operating assets.

Management prepared the financial budgets taking into account of the actual and prior years' performance and market development expectations. For certain CGUs in "Coal-fired electricity" segment, the growth rates in electricity sold (including sales of power generation quota) and pre-tax discount rates used for value in use calculations range from 1% to 12% (2020: 1% to 12%) and from 8.72% to 10.4% (2020: 7.5% to 8.0%) respectively. Management estimates the growth rates in electricity sold by reference to the expected demand for electricity in the regions where the power plants are located. In addition, management estimates the discount rates using pre-tax rate that reflects market assessments of the time value of money and the specific risks relating to the CGUs. Other key assumptions applied in the impairment assessment include the expected tariff rates, fuel costs and staff costs. Based on the result of these assessments, there was no impairment provision required for the year ended 31 December 2021 (2020: Nil).

In addition, it was identified that the likelihood of the Group in obtaining necessary approval to continue construction in certain projects in "Wind power electricity" segment (2020: "Coal-fired electricity" segment, "Hydropower electricity" segment and "Wind power electricity" segment) was remote as at 31 December 2021, as a result, the carrying amounts of these constructions were fully provided for as impairment.

The above-mentioned impairments aggregated to RMB1,004,000 (2020: RMB25,275,000) (Note 7) was recognized for the year ended 31 December 2021.

(f) During the year ended 31 December 2021, disposals of the Group's property, plant and equipment did not include impairment losses (2020: RMB162,552,000), and disposal of subsidiaries included impairment losses of RMB70,916,000 (2020: RMB8,692,000), which were written back upon the disposal of corresponding property, plant and equipment. As at 31 December 2021, the accumulated impairment losses of property, plant and equipment amounted to RMB427,745,000 (2020: RMB497,657,000).

16. RIGHT-OF-USE ASSETS

	Leasehold land RMB'000	Buildings RMB'000	Equipment RMB'000	Construction in progress RMB'000	Total RMB'000
Cost					
At 1 January 2021	2,476,254	239,294	3,127,614	784,022	6,627,184
Additions	478,414	164,068	53,848	91,062	787,392
Acquired on acquisitions of subsidiaries (Note 48)	37,576	15,962	301,401	–	354,939
Reclassified to property, plant and equipment (Note 15)	–	–	(927,840)	–	(927,840)
Disposal of subsidiaries	(19,913)	–	–	–	(19,913)
Transfer between categories	–	–	630,653	(630,653)	–
At 31 December 2021	2,972,331	419,324	3,185,676	244,431	6,821,762
Accumulated depreciation					
At 1 January 2021	144,494	71,827	149,899	–	366,220
Depreciation charge for the year (Note 9)	76,459	55,408	245,869	–	377,736
Reclassified to property, plant and equipment (Note 15)	–	–	(59,135)	–	(59,135)
Disposal of subsidiaries	(15,243)	–	–	–	(15,243)
At 31 December 2021	205,710	127,235	336,633	–	669,578
Net book value					
At 31 December 2021	2,766,621	292,089	2,849,043	244,431	6,152,184
For the year ended 31 December 2021					
Expenses relating to short-term leases and other leases with lease terms end within 12 months from the date of initial application of HKFRS 16	–	13,044	22,871	–	35,915
Expenses relating to leases of low-value assets, excluding short-term leases of low value assets	–	505	270	–	775
Additions to right-of-use assets	515,990	180,030	355,249	91,062	1,142,331

16. RIGHT-OF-USE ASSETS (CONTINUED)

	Leasehold land RMB'000	Buildings RMB'000	Equipment RMB'000	Construction in progress RMB'000	Total RMB'000
Cost					
At 1 January 2020	2,413,552	267,558	2,828,107	1,326,235	6,835,452
Additions	87,586	33,638	173,782	634,887	929,893
Acquired on acquisitions of subsidiaries	–	–	813,751	–	813,751
Reclassified to property, plant and equipment (Note 15)	–	(58,603)	(1,122,975)	(732,000)	(1,913,578)
Disposal of subsidiaries	(24,884)	(3,299)	(10,151)	–	(38,334)
Transfer between categories	–	–	445,100	(445,100)	–
At 31 December 2020	2,476,254	239,294	3,127,614	784,022	6,627,184
Accumulated depreciation					
At 1 January 2020	73,796	44,386	32,166	–	150,348
Depreciation charge for the year (Note 9)	74,455	37,461	274,422	–	386,338
Reclassified to property, plant and equipment (Note 15)	–	(9,365)	(152,232)	–	(161,597)
Disposal of subsidiaries	(3,757)	(655)	(4,457)	–	(8,869)
At 31 December 2020	144,494	71,827	149,899	–	366,220
Net book value					
At 31 December 2020	2,331,760	167,467	2,977,715	784,022	6,260,964
For the year ended 31 December 2020					
Expenses relating to short-term leases and other leases with lease terms end within 12 months from the date of initial application of HKFRS 16	–	24,691	11,326	–	36,017
Expenses relating to leases of low-value assets, excluding short-term leases of low value assets	–	603	723	–	1,326
Additions to right-of-use assets	87,586	33,638	987,533	634,887	1,743,644

16. RIGHT-OF-USE ASSETS (CONTINUED)

Note:

For both years, the Group leases leasehold land, buildings, equipment and components of power generators included in construction in progress for its operations. Lease contracts are entered into for fixed term of 2 to 20 years, but may have extension options as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

The Group regularly entered into short-term leases for equipment. As at 31 December 2021, the portfolio of short-term leases was similar to the portfolio of short-term leases to which the short-term lease expense was recognized and as disclosed in Note 9.

The total cash outflow for leases is disclosed in Note 44(b).

Extension options

The Group has extension options in a number of leases for leasehold land. The majority of extension options held are exercisable only by the Group and not by the respective lessors.

The Group assesses at lease commencement date whether it is reasonably certain to exercise the extension options. Based on the assessment, the extension option of leasehold land lease was reasonably certain to be exercised so that the extension period was included in lease period.

In addition, the Group reassesses whether it is reasonably certain to exercise an extension option, upon the occurrence of either a significant event or a significant change in circumstances that is within the control of the lessee. During the years ended 31 December 2021 and 2020, there is no such triggering event.

Sale and leaseback transactions — seller-lessee

To better manage the Group's capital structure and financing needs, the Group sometimes enters into sale and leaseback arrangements in relation to machinery. These legal transfers do not satisfy the requirements of HKFRS 15 to be accounted for as sales of the machinery. During the years ended 31 December 2021 and 2020, the Group did not enter into any sale and leaseback transactions.

17. PREPAYMENTS FOR CONSTRUCTION OF POWER PLANTS

Prepayments for construction of power plants represent advance payments made to contractors in connection with the construction of the Group's power plants including payments for equipment and machinery pending delivery to the relevant power plants for installation.

On 31 December 2021, the balance of prepayments for construction of power plants includes an amount of RMB752,720,000 (2020: RMB72,464,000), which was prepayments to related parties (companies controlled by SPIC other than SPIC Financial Company Limited ("SPIC Financial") for construction of power plants.

18. GOODWILL

	2021 RMB'000	2020 RMB'000
Cost		
At 1 January	**1,354,153**	1,354,153
Attributable to disposal of a subsidiary	**(19,322)**	–
At 31 December	**1,334,831**	1,354,153
Accumulated impairment losses		
At 1 January	**251,538**	166,939
Impairment loss recognized for the year (Note 7)	**–**	84,599
At 31 December	**251,538**	251,538
Net book value		
At 1 January	**1,102,615**	1,187,214
At 31 December	**1,083,293**	1,102,615

Goodwill is allocated to the Group's CGU or groups of CGUs identified according to operating arrangement. The accumulated impairment losses relate to "Coal-fired electricity" segment and "Hydropower electricity" segment.

A segment-level summary of the goodwill allocation at cost before impairment and at net book value is presented below:

	Coal-fired electricity RMB'000	Hydropower electricity RMB'000	Photovoltaic power electricity RMB'000	Total RMB'000
Cost				
At 31 December 2020	234,651	872,865	246,637	1,354,153
At 31 December 2021	**234,651**	**853,543**	**246,637**	**1,334,831**
Net book value				
At 31 December 2020	67,712	788,266	246,637	1,102,615
At 31 December 2021	**67,712**	**768,944**	**246,637**	**1,083,293**

Notes:

(a) For the purpose of impairment assessment, the recoverable amount of each CGU or group of CGUs is determined based on value in use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management for the purposes of impairment assessment covering a five-year period. Annual cash flows beyond the five-year period are expected to be similar to that of the fifth year based on the then production capacity, taking into account of the expected remaining useful lives of the relevant underlying operating assets.

18. GOODWILL (CONTINUED)

Notes: *(Continued)*

(b) Management prepared the financial budgets taking into account of the actual and prior years' performance and market development expectations. For certain CGUs in "Coal-fired electricity" segment, the growth rates in electricity sold and pre-tax discount rates used for value in use calculations range from 0% to 2% (2020: 0%) and at 9.07% (2020: 8.6%) respectively. For certain CGUs in "Hydropower electricity" segment, the growth rates in electricity sold and pre-tax discount rates used for value in use calculations range from 0% to 2% (2020: 0% to 2%) and at 8.5% (2020: 8.5%) respectively. For certain CGUs in "Photovoltaic power electricity" segment, the growth rates in electricity sold and pre-tax discount rates used for value in use calculations range from 0% to 7.2% (2020: 0% to 7.2%) and at 9.3% (2020: 9.3%) respectively. Management estimates the growth rates in electricity sold by reference to the expected demand for electricity in the regions where the power plants are located. In addition, management estimates the discount rates using pre-tax rate that reflects market assessments of the time value of money and the specific risks relating to the CGUs. Other key assumptions applied in the impairment assessment include the expected tariff rates and staff costs.

(c) Management of the Group has performed impairment test of goodwill of related CGUs. Based on the value in use calculation and the allocation, no impairment (2020: RMB84,599,000 in "Hydropower electricity" segment) has been recognized against the carrying amount of goodwill for the year ended 31 December 2021.

19. OTHER INTANGIBLE ASSETS

	2021 RMB'000	2020 RMB'000
Cost		
At 1 January	**1,097,600**	1,108,100
Disposal of a subsidiary	**–**	(10,500)
At 31 December	**1,097,600**	1,097,600
Accumulated amortization		
At 1 January	**107,927**	53,970
Amortization charge for the year (Note 8)	**54,873**	55,050
Disposal of a subsidiary	**–**	(1,093)
At 31 December	**162,800**	107,927
Net book value		
At 1 January	**989,673**	1,054,130
At 31 December	**934,800**	989,673

Other intangible assets represent the carrying amount of the favourable tariff contracts acquired on the acquisitions of certain photovoltaic power companies. These intangible assets have finite useful lives and are amortized on a straight-line basis over the period of 17 to 20 years (2020: 17 to 20 years).

Such favourable tariff contracts arising from the tariff difference between the original tariffs granted to such solar power plants acquired in their respective power purchase contracts and the market prevailing tariffs at their respective acquisition dates. The latter were lower as a result of recent market trend in PRC's solar power industry. The Directors are of the opinion that these solar power CGUs within those acquired solar power plants which have successfully secured the original tariffs based on contractual/legal rights, will maintain the expected future cash flows and returns despite the fair value of the solar panels included in their property, plant and equipment at their respective acquisition dates had recorded a decline over their carrying amounts.

20. INTERESTS IN ASSOCIATES

	2021 RMB'000	2020 RMB'000
Cost of investment in associates	**3,495,970**	2,751,651
Share of undistributed post-acquisition reserves	**30,585**	453,571
	3,526,555	3,205,222

As at 31 December 2021, interests in associates include goodwill of RMB158,732,000 (2020: RMB158,732,000).

There are no contingent liabilities relating to the Group's interests in associates and these associates did not have any material contingent liabilities as at 31 December 2021 and 2020.

Dividends from associates for the year ended 31 December 2021 amounted to RMB209,462,000 (2020: RMB198,537,000).

The followings are the details of the associates as at 31 December 2021:

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Sichuan Energy Investment Development Co., Ltd. ("Sichuan Energy Investment") (四川能投發展股份有限公司)	The PRC	RMB1,074,358,000	9.13% (note)	–	Joint stock, limited liability company with its H-shares listed on the Stock Exchange	Energy investment
Jiangsu Changshu Electric Power Generating Company Limited ("Changshu Power Plant") (江蘇常熟發電有限公司)	The PRC	RMB2,685,000,000	50%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Guizhou Pu'an Diguapo Coal Industry Co., Ltd. (貴州普安地瓜坡煤業有限公司)	The PRC	RMB630,000,000/ RMB94,500,000	35%	–	Sino-foreign equity joint venture	Coal management and consultancy service
Hunan China Resources Power Liyujiang Company Limited (湖南華潤電力鯉魚江有限公司)	The PRC	RMB573,660,000	–	40%	Sino-foreign equity joint venture	Generation and sale of electricity
Hunan Nuclear Power Company Limited (湖南核電有限公司)	The PRC	RMB389,600,000/ RMB369,480,000	–	20%	Limited liability company	Generation and sale of electricity
Jiangsu Changdian Environmental Technology Company Limited (江蘇常電環保科技有限公司)	The PRC	RMB8,000,000	–	50%	Limited liability company	Sale of electricity generation by-products
Gui'an New District Power Distribution and Sales Company Limited ("Gui'an New District") (貴安新區配售電有限公司)	The PRC	RMB1,500,000,000/ RMB814,350,952	8% (note)	–	Sino-foreign equity joint venture	Distribution and sale of electricity
Sujin Energy Holding Company Limited ("Sujin Energy") (蘇晉能源控股有限公司)	The PRC	RMB6,000,000,000/ RMB4,574,372,701	–	9.5% (note)	Limited liability company	Generation and sale of electricity

20. INTERESTS IN ASSOCIATES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Yibin Fuxi Fly Ash Development Co., Ltd. (宜賓福溪粉煤灰開發有限公司)	The PRC	RMB5,800,000	–	39%	Limited liability company	Sale of coal by-products
Shangdianpingnan New Energy Company Limited (上電平南新能源有限公司)	The PRC	RMB97,182,000	–	40%	Limited liability company	Generation and sale of electricity
Shandong Green Energy Investment Co., Ltd. (山東綠色能源投資有限公司)	The PRC	RMB4,000,000,000/ RMB1,400,000,000	–	30%	Limited liability company	Energy investment
SPIC Anhui Hailuo Electricity Power Sales Co., Ltd. (國家電投集團安徽海螺售電有限公司)	The PRC	RMB200,000,000/ RMB2,000,000	–	50%	Limited liability company	Generation and sale of electricity
SPIC Guangxi Jinzishan Wind Power Ltd. ("Jinzishan Wind Power") (國家電投集團廣西金紫山風電有限公司)	The PRC	RMB523,012,295	–	15.22% (note)	Limited liability company	Generation and sale of electricity
Hubei Liefeng Energy Co., Ltd. (湖北獵風能源有限公司)	The PRC	RMB128,180,000	–	30%	Limited liability company	Generation and sale of electricity
Shanghai Qiyuanxin Power Technology Co., Ltd # (上海啟源芯動力科技有限公司)	The PRC	RMB200,000,000/ RMB240,480,000	36%	–	Sino-foreign equity joint venture	Provision of technical services
China Power Shentou Power Generating Company Limited ("CP Shentou") # (中電神頭發電有限責任公司)	The PRC	RMB1,000,000,000/ RMB900,308,740	–	40%	Limited liability company	Generation and sale of electricity
Heze Lvyuan New Energy Co., Ltd. ("Heze Lvyuan") # (菏澤綠源新能源有限公司)	The PRC	RMB123,750,000/ RMB91,612,500	–	11% (note)	Sino-foreign equity joint venture	Generation and sale of electricity
Qingdao Lvhe New Energy Management Co., Ltd # (青島綠和新能源管理有限公司)	The PRC	RMB45,000,000	–	20%	Limited liability company	Generation and sale of electricity
Hubei Yufeng Energy Development Co., Ltd # (湖北御風能源發展有限公司)	The PRC	RMB244,420,000	–	20%	Sino-foreign equity joint venture	Generation and sale of electricity
Hubei Zhuifeng Energy Development Co., Ltd # (湖北追風能源發展有限公司)	The PRC	RMB251,460,000/ RMB50,292,000	–	20%	Sino-foreign equity joint venture	Generation and sale of electricity
Wuhan Lvda New Energy Co., Ltd # (武漢綠達新能源有限公司)	The PRC	RMB47,000,000/ RMB235,000,000	–	20%	Sino-foreign equity joint venture	Generation and sale of electricity
Hubei Lvhe New Energy Co., Ltd # (湖北綠和新能源有限公司)	The PRC	RMB239,630,000/ RMB47,926,000	–	20%	Sino-foreign equity joint venture	Generation and sale of electricity

20. INTERESTS IN ASSOCIATES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Hubei Lanfeng Energy Development Co., Ltd # (湖北嵐風能源發展有限公司)	The PRC	RMB579,210,800/ RMB579,210,760	–	20%	Sino-foreign equity joint venture	Generation and sale of electricity
Hunan Energy Big Data Center Co., Ltd ("Hunan Energy Big Data") # (湖南能源大數據中心有限責任公司)	The PRC	RMB300,000,000/ RMB100,000,000	–	9% (note)	Limited liability company	Software and information technology services
China Power Yuchuang (Suzhou) Intelligent Technology Co., Ltd ^# (中電昱創(蘇州)智能科技有限公司)	The PRC	RMB10,000,000/ RMB3,000,000	–	35%	Limited liability company	Provision of technical services

^ Not commenced operation yet.
# Newly set up or acquired in 2021.

Note:

The Group could exercise significant influence over Sichuan Energy Investment, Gui'an New District, Sujin Energy, Jinzishan Wind Power, Heze Lvyuan and Hunan Energy Big Data through its representative on their boards of directors, and therefore classified these six companies as associates.

Summarized unaudited financial information of a material associate

In the opinion of the Directors, Changshu Power Plant and its subsidiary (collectively referred to as "Changshu Group") is a material associate to the Group and its summarized unaudited financial information is set out below:

Summarized consolidated statement of financial position

	Changshu Group	
	2021 RMB'000	2020 RMB'000
Non-current assets	**7,329,623**	7,677,865
Current assets	**2,321,564**	1,063,244
Non-current liabilities	**(2,872,197)**	(2,756,971)
Current liabilities	**(3,607,453)**	(2,045,591)
Net assets	**3,171,537**	3,938,547

Summarized consolidated income statement and consolidated statement of comprehensive income

	Changshu Group	
	2021 RMB'000	2020 RMB'000
Revenue	**7,541,338**	5,162,475
(Loss)/profit and total comprehensive (expense)/income for the year	**(446,050)**	436,709
Dividend received from the associate	**160,480**	135,381

20. INTERESTS IN ASSOCIATES (CONTINUED)

Reconciliation of summarized unaudited financial information

Reconciliation of summarized unaudited financial information presented above to the carrying amount of interest in Changshu Group is as follows:

	Changshu Group	
	2021 **RMB'000**	2020 RMB'000
Opening net assets	**3,938,547**	3,772,600
(Loss)/profit and total comprehensive (expense)/income for the year	**(446,050)**	436,709
Dividend paid	**(320,960)**	(270,762)
Closing net assets	**3,171,537**	3,938,547
Interest in associate (at 50%) — At carrying amount	**1,585,769**	1,969,274

Aggregate information of associates that are not individually material

	2021 **RMB'000**	2020 RMB'000
The Group's share of results and total comprehensive income for the year	**9,501**	65,598
Aggregate carrying amount of the Group's interests	**1,940,786**	1,235,948

21. INTERESTS IN JOINT VENTURES

	2021 **RMB'000**	2020 RMB'000
Unlisted investments, at cost	**1,690,212**	1,146,644
Share of undistributed post-acquisition reserves	**(104,898)**	37,508
Less: Accumulated impairment (note)	**(156,370)**	(156,370)
	1,428,944	1,027,782

Note: It represents the full impairment on the carrying amount of the Group's interest in Chuanjing Coal (as defined below) provided in 2015.

21. INTERESTS IN JOINT VENTURES (CONTINUED)

The followings are the details of the joint ventures as at 31 December 2021:

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Sichuan Guangwang Group Chuanjing Coal Industry Company Limited ("Chuanjing Coal") (四川廣旺集團船景煤業有限責任公司)	The PRC	RMB472,000,000/ RMB329,182,000	49%	–	Sino-foreign equity joint venture	Coal mining
Guangzhou China Power Lixin Industry Company Limited (廣州中電荔新電力實業有限公司)	The PRC	RMB604,000,000	50%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Henan Zhongping Coal & Electricity Co., Ltd. (河南中平煤電有限責任公司)	The PRC	RMB131,880,000	50%	–	Sino-foreign equity joint venture	Coal transportation and selling
SPIC Guangxi Beibu Gulf (Qinzhou) Thermal Power Co., Ltd. ("Beibu Gulf Thermal Power") (國家電投集團廣西北部灣(欽州)熱電有限公司)	The PRC	RMB125,470,588	–	51% (note)	Limited liability company	Generation and sale of electricity
Guangxi SPIC Overseas Energy Investment Co., Ltd. ("Guangxi Overseas") (廣西國電投海外能源投資有限公司)	The PRC	RMB2,000,000,000	–	40%	Limited liability company	Energy investment
China Power Lubei Clean Energy (Shandong) Co., Ltd ^# (中電魯北清潔能源(山東)有限公司)	The PRC	RMB30,000,000/ RMB5,000,000	–	45%	Limited liability company	Generation and sale of electricity
Tianjin Dongfu Zengxiao Investment Management Center (limited partnership) ("Tianjin Dongfu") # (天津東富增效投資管理中心(有限合夥))	The PRC	RMB766,302,920/ RMB766,292,920	35%	–	Limited partnership	Investment activity

^ Not commenced operation yet.
# Newly set up in 2021.

Note:

In accordance with the articles of Beibu Gulf Thermal Power, decisions on business and investment plan, annual financial budget plan, profit distribution and loss recovery plans should be approved by more than 2/3 voting rights. Thus the minimum decision-making voting rights could not be achieved by the Group alone and the relevant activities require the unanimous consent of the two shareholders. Therefore, the Group recognizes this equity investment as an interest in a joint venture.

None of the joint ventures was individually material.

There were no contingent liabilities relating to the Group's interests in the joint ventures and the joint ventures did not have any material contingent liabilities as at 31 December 2021 and 2020.

Dividend from a joint venture for the year ended 31 December 2021 amounted to RMB23,126,000 (2020: RMB26,436,000).

22. EQUITY INSTRUMENTS AT FVTOCI

	2021 RMB'000	2020 RMB'000
Unlisted equity investments in the PRC (note (a))	**578,589**	475,312
Listed equity securities in the PRC		
— Shanghai Electric Power Co., Ltd. ("Shanghai Power") (note (b))	**4,657,406**	2,586,640
	5,235,995	3,061,952

Notes:

(a) Unlisted equity investments mainly represent interests in certain unlisted companies which are principally engaged in financial services, coal production, water supply and electricity trading services respectively. The Directors have elected to designate these investments as equity instruments at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes and realizing their performance potential in the long run.

(b) Details of the equity securities listed in the PRC held directly by the Company as at 31 December 2021 and 2020 are as follows:

Name of company	Place of establishment and operation	Registered and paid up capital	Equity interest attributable to the Company	Type of legal entity	Principal activity
Shanghai Power #	The PRC	RMB2,617,164,197	13.88%	Joint stock, limited liability company with its A-share listed on the Shanghai Stock Exchange	Investment holdings and generation and sale of electricity

Shanghai Power is a subsidiary of SPIC.

These equity securities are not held for trading, instead, they are held for long-term strategic purposes. The Directors have elected to designate these equity securities as equity instruments at FVTOCI as they believe that recognizing short-term fluctuations in these equity securities' fair value in profit or loss would not be consistent with the Group's strategy of holding these equity securities for long-term purposes and realizing their performance potential in the long run.

23. DEFERRED INCOME TAXES

Deferred income taxes are calculated in respect of temporary differences under the liability method using the tax rates enacted or substantively enacted by the end of reporting period.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current income tax assets against current income tax liabilities and when the deferred income taxes relate to the same taxation authority. The following amounts, determined after appropriate offsetting, are shown in the consolidated statement of financial position:

	2021 RMB'000	2020 RMB'000
Deferred income tax assets	**714,348**	874,210
Deferred income tax liabilities	**(2,380,195)**	(1,916,206)
Net deferred income tax liabilities	**(1,665,847)**	(1,041,996)

23. DEFERRED INCOME TAXES (CONTINUED)

Notes:

The comparative data in the analysis below includes those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) The net movements in the deferred income tax assets/(liabilities) during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, are as follows:

	Accelerated tax depreciation RMB'000	Decelerated tax depreciation RMB'000	Changes in fair value (note (b)) RMB'000	Provisions RMB'000	Tax losses RMB'000	Right-of-use assets/ lease liabilities RMB'000	Others RMB'000	Before classified to held for sale RMB'000	Held for sale RMB'000	After classified to held for sale RMB'000
At 1 January 2021	**(1,726,505)**	**284,787**	**(345,205)**	**348,635**	**308,159**	**1,922**	**85,946**	**(1,042,261)**	**265**	**(1,041,996)**
Credited/(charged) to profit or loss (Note 11)	**54,335**	**(126,446)**	**–**	**(151,740)**	**151,195**	**(529)**	**(12,325)**	**(85,510)**	**(265)**	**(85,775)**
Charged to other comprehensive income	**–**	**–**	**(538,076)**	**–**	**–**	**–**	**–**	**(538,076)**	**–**	**(538,076)**
At 31 December 2021	**(1,672,170)**	**158,341**	**(883,281)**	**196,895**	**459,354**	**1,393**	**73,621**	**(1,665,847)**	**–**	**(1,665,847)**
At 1 January 2020	(1,595,884)	359,787	(426,899)	218,456	461,367	2,579	53,437	(927,157)	(96,884)	(1,024,041)
(Charged)/credited to profit or loss (Note 11)	(130,621)	(75,000)	–	130,179	(153,208)	(657)	32,509	(196,798)	97,149	(99,649)
Credited to other comprehensive income	–	–	81,694	–	–	–	–	81,694	–	81,694
At 31 December 2020	(1,726,505)	284,787	(345,205)	348,635	308,159	1,922	85,946	(1,042,261)	265	(1,041,996)

(b) These were deferred income tax on fair value changes of equity instruments at FVTOCI and debt instruments at FVTOCI and release of deferred income tax on derecognition of debt instruments at FVTOCI.

(c) Deferred income tax assets are recognized for tax losses carried forward to the extent that the realization of the related tax benefit through future taxable profits is probable. As at 31 December 2021, the Group had unrecognized tax losses to be carried forward against future taxable profits amounting to RMB5,273,100,000 (2020: RMB2,751,800,000), which will expire within 5 years.

(d) As at 31 December 2021, the Group had deductible temporary differences of RMB475,273,000 (2020: RMB803,197,000), which mainly relates to the impairment losses of the Group's property, plant equipment and interest in a joint venture. No deferred income tax assets had been recognized in relation to such deductible temporary difference as it is not probable that taxable profits will be available against which the deductible temporary differences can be utilized.

(e) As the Company is a deemed PRC Tax Resident Enterprise, the Company is exempted from the withholding tax charged on the dividends remitted to the Company by the subsidiaries, associates or joint ventures. As such, no deferred income tax liabilities on unremitted earnings of subsidiaries, associates or joint ventures would be recognized.

24. OTHER NON-CURRENT ASSETS

	2021 RMB'000	2020 RMB'000
Deductible value-added tax ("VAT") and other taxes	**4,207,702**	3,554,211
Accounts receivable (Note 26)	**1,224,850**	1,217,308
Amounts due from related parties (Note 28(a))	**100,000**	–
Others	**381,397**	210,935
	5,913,949	4,982,454

As at 31 December 2021, balance included the other non-current assets recognized by the Group in respect of the transferred assets to the extent of its continuing involvement of RMB188,803,000 (2020: RMB112,575,000). Details are disclosed in Note 41.

25. INVENTORIES

	2021 RMB'000	2020 RMB'000
Coal and oil	**1,288,406**	556,320
Spare parts and consumables	**180,152**	141,295
	1,468,558	697,615

26. ACCOUNTS RECEIVABLE

	2021 RMB'000	2020 RMB'000
Accounts receivable from regional and provincial power grid companies (note (b))	**8,753,405**	8,309,429
Accounts receivable from other companies (note (b))	**675,972**	14,691
	9,429,377	8,324,120
Notes receivable (note (d))	**158,355**	179,169
	9,587,732	8,503,289
Analyzed for reporting purpose as:		
— Non-current (included in other non-current assets (Note 24) (note (b))	**1,224,850**	1,217,308
— Current	**8,362,882**	7,285,981
	9,587,732	8,503,289

26. ACCOUNTS RECEIVABLE (CONTINUED)

Notes:

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) To measure the ECL of accounts receivable, accounts and notes receivables have been assessed individually upon the application of HKFRS 9. The loss allowance of the accounts receivable as at 31 December 2021 and 2020 was insignificant.

(b) The ageing analysis of the accounts receivable based on invoice date is as follows:

	2021 RMB'000	2020 RMB'000
Unbilled	**1,224,850**	1,217,308
1 to 3 months	**8,204,527**	7,223,953
	9,429,377	8,441,261

The accounts receivable that are neither past due nor impaired have been assessed by reference to the historical information about counterparty default rates. The existing counterparties did not have significant default in the past.

As at 31 December 2021, accounts receivable from regional and provincial power grid companies include clean energy power price premium receivable of RMB1,224,850,000, which is unbilled and is stated after discounting.

The clean energy power price premium, which is a component of the government-approved on-grid tariff for wind and photovoltaic power generation, is recognized as revenue from sales of electricity in the consolidated income statement of the Group for its wind and photovoltaic power projects.

The financial resource for the clean energy power price premium is the national renewable energy fund that accumulated through a special levy on the consumption of electricity. Pursuant to Caijian [2012] No. 102 Notice on the Interim Measures for Administration of Subsidy Funds for Tariff Premium of Renewable Energy (可再生能源電價附加補助資金管理暫行辦法) jointly issued by the Ministry of Finance (the "MOF"), the National Development and Reform Commission (the "NDRC") and the National Energy Administration (the "NEA") in March 2012, the standardized application and approval procedures on a project by project basis for the settlement of the tariff premium came into force since 2012, and such applications are accepted and approved batch by batch jointly by the MOF, the NDRC and the NEA at intervals in form of announcing renewable energy subsidy catalogues (the "Subsidy Catalogue").

In February 2020, the MOF, the NDRC and the NEA jointly issued new guidelines and notices, i.e., Caijian [2020] No. 4 Guidelines on the Stable Development of Non-Water Renewable Energy Generation (關於促進非水可再生能源發電健康發展的若干意見) and Caijian [2020] No. 5 Measures for Administration of Subsidy Funds for Tariff Premium of Renewable Energy (可再生能源電價附加資金管理辦法) (collectively referred to as the "New Guidelines"). Pursuant to the New Guidelines, the quota of new subsidies are decided based on the scale of subsidy funds, there will not be any new Subsidy Catalogue to be published for tariff premium and as an alternative, power grid companies will publish lists of renewable energy projects qualified for tariff premium (the "Subsidy List") periodically after the renewable energy generators have gone through certain approval and information publicity process.

Based on the above New Guidelines and their past experience, the Directors estimate that there are no foreseeable obstacles that would lead to the application not being approved before entering into either the Subsidy Catalogue or the Subsidy List. It is expected that the Group's wind and photovoltaic power projects will be listed as qualified projects for tariff premium after 31 December 2022 (2020: obtained after 31 December 2021) and the corresponding premium receivables are estimated to be recovered after twelve months from the reporting date. Therefore, the Directors consider the renewable energy electricity sales contract for projects before entering into the Subsidy Catalogue or the Subsidy List contains a significant financing component. For the year ended 31 December 2021, the respective clean energy power price premiums were adjusted for this financing component based on an effective interest rate of 4.01% (2020: 4.75%) per annum, and the Group's revenue was adjusted by RMB58,148,000 (2020: RMB42,668,000) and interest income amounting to RMB76,336,000 (2020: RMB282,364,000)(Note 10) was recognized.

26. ACCOUNTS RECEIVABLE (CONTINUED)

Notes: *(Continued)*

(c) In December 2020, accounts receivable amounting to RMB950,000,000 has been transferred to a single asset management plan (the "Assets Management Plan") set up by Shenwan Hongyuan Securities Co., Ltd ("Shenwan Hongyuan"). The Directors consider that the Group has neither transferred nor retained substantially all the risks and rewards of ownership of the accounts receivables and retained control of the underlying assets, and therefore, as at 31 December 2021 the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB75,050,000 (2020: RMB112,575,000) as other non-current asset and the associated liabilities as other non-current liabilities. Further details are disclosed in Note 41.

In November 2021, accounts receivable amounting to RMB1,184,931,000 has been transferred to SPIC for participating in its Asset Backed Notes Transaction (the "ABN Transaction"). The Directors consider that the Group has neither transferred nor retained substantially all the risks and rewards of ownership of the accounts receivables and retained control of the underlying assets, and therefore, as at 31 December 2021 the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB113,753,000 as other non-current asset and the associated liabilities as other non-current liabilities. Further details are disclosed in Note 41.

(d) As at 31 December 2021, notes receivable were bank acceptance notes issued by third parties and were normally with a maturity period of 360 days (2020: 360 days).

(e) As at 31 December 2021, certain of the bank borrowings, long-term borrowings from related parties, and lease liabilities (Notes 36(d), 37(b) and 39) were secured by the rights on certain accounts receivable. The accounts receivable pledged under these debts as at 31 December 2021 amounted to RMB2,568,225,000 (2020: RMB2,476,191,000).

(f) Apart from certain clean energy power price premium receivables of RMB1,224,850,000 (2020: RMB1,217,308,000) which are stated after discounting, the fair values of the remaining accounts and notes receivables approximate their carrying amounts as the impact of discounting is not significant. All accounts and notes receivables are denominated in RMB.

27. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

Prepayments, deposits and other receivables mainly represent current portion of deductible VAT, prepayments for purchasing inventories and materials, deposits and other receivables.

	2021 **RMB'000**	2020 RMB'000
Deposits and other receivables	**1,350,789**	883,143
Prepayments	**1,368,392**	555,884
Deductible VAT	**1,489,321**	1,223,293
Provision under ECL	**(99,736)**	(100,127)
	4,108,766	2,562,193

As at 31 December 2021, prepayments, deposits and other receivables included prepayments to non-controlling shareholders of subsidiaries of RMB78,496,000 (2020: RMB21,270,000).

28. AMOUNTS DUE FROM/TO RELATED PARTIES

	2021 RMB'000	2020 RMB'000
Amounts due from related parties		
Amounts due from CPDL	14,120	14,120
Amounts due from CPI Holding	97,390	62,285
Amounts due from SPIC Financial	6,695	2,420
Amounts due from companies controlled by SPIC other than CPI Holding and SPIC Financial	117,816	597,811
Amounts due from associates (note (a))	1,633,233	334,121
Amounts due from joint ventures (note (b))	665,409	654,745
Amounts due from non-controlling shareholders of subsidiaries	100,496	73,982
	2,635,159	1,739,484
Less: Amount that is expected to realize after 12 months shown under non-current assets (note 24)	(100,000)	–
Amounts that is expected to realize within 12 months shown under current assets	2,535,159	1,739,484

	2021 RMB'000	2020 RMB'000
Amounts due to related parties		
Amounts due to CPI Holding (note (c))	110,409	127,946
Amounts due to SPIC Financial	33,523	357,605
Amounts due to companies controlled by SPIC other than CPI Holding and SPIC Financial	762,986	708,687
Amounts due to SPIC	42,650	72,438
Amounts due to associates	160,007	54,466
Amounts due to joint ventures	22	20
Amounts due to non-controlling shareholders of subsidiaries (note (d))	240,195	552,990
	1,349,792	1,874,152

28. AMOUNTS DUE FROM/TO RELATED PARTIES (CONTINUED)

Notes:

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) The amounts due from associates are unsecured. Except for a balance of RMB200,000,000 (2020: Nil) which is interest bearing at 3.00% (2020: Nil) per annum, a balance of RMB55,080,000 (2020: RMB55,080,000) which is interest bearing at 1.75% (2020: 1.75%) per annum and repayable within one year, the remaining balances are interest free and repayable on demand. A balance of RMB100,000,000 (2020: Nil) which is interest bearing at 3.50% (2020: Nil) per annum and repayable by 2024, has been included in other non-current assets (Note 24).

(b) The amounts due from joint ventures are unsecured, interest free and repayable on demand, except for the amount due from Beibu Gulf Thermal Power of RMB261,300,000 (2020: RMB261,300,000) which is interest bearing at 5.66% (2020: 5.66%) per annum and repayable within one year. In 2019, Beibu Gulf Thermal Power ceased operation as a result of an unforeseeable adverse change in the operating environment of its thermal power project and a loss allowance for the amount due from such joint venture of RMB261,300,000 has been fully recognized in 2019 based on the impairment assessment under lifetime ECL, as the Group considers that the joint venture is in severe financial difficulty and it has no realistic prospect of recovery. Details of impairment assessment are set out in Note 46.2(d).

(c) The amounts due to CPI Holding are unsecured. Except for a balance of RMB106,440,000 (2020: RMB106,440,000) which is interest bearing at 1.75% (2020: 1.75%) per annum and repayable within one year, the remaining balances are interest free and repayable on demand.

(d) The amounts due to non-controlling shareholders of subsidiaries included dividend payable of RMB43,663,397 (2020: RMB55,708,000).

(e) Balances with related parties, other than those disclosed in notes (a) to (d) above, are unsecured, interest free and repayable on demand.

(f) The fair values of these balances approximate their carrying amounts as the impact of discounting is not significant.

29. DEBT INSTRUMENTS AT FVTOCI

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

As at 31 December 2021, debt instruments at FVTOCI represent certain notes receivable issued by third parties and related parties, and were normally with maturity period within 360 days (2020: 360 days). Notes receivable discounted and endorsed to banks, suppliers and related parties of RMB982,934,000, RMB381,679,000 and RMB345,958,000 respectively (2020: RMB926,496,000, RMB492,359,000 and RMB439,490,000 respectively) are derecognized by the Group (the "Derecognized Notes"). In accordance with the Law of Negotiable Instruments in the PRC, the holders of the Derecognized Notes have a right of recourse against the Group if the PRC banks default (the "Continuing Involvement"). In the opinion of the Directors, the Group has transferred substantially all risks and rewards relating to the Derecognized Notes. Accordingly, it has derecognized the full carrying amounts of the Derecognized Notes and the associated trade payables and amounts due to related parties. The maximum exposure to loss from the Group's Continuing Involvement in the Derecognized Notes and the undiscounted cash flows to repurchase these Derecognized Notes equal to their derecognized amounts. In the opinion of the Directors, the fair value of the Group's Continuing Involvement in the Derecognized Notes is not significant.

Details of impairment assessment are set out in Note 46.2(d).

30. RESTRICTED DEPOSITS

Restricted deposits are all restricted cash deposits. As at 31 December 2021, the restricted deposits of the Group are interest bearing from 0.30% to 0.35% (2020: 0.30% to 0.35%) per annum.

The restricted cash deposits mainly represent cash deposits held in the "joint control account" under the names of certain subsidiaries of the Group for the co-development of wind power plants with local government. The deposits are operated with the approvals from both parties and will be released upon the completion of power plant construction.

31. CASH AND CASH EQUIVALENTS

	2021 **RMB'000**	2020 RMB'000
Cash at banks and in hand (note (a))	**1,232,849**	792,599
Deposits at SPIC Financial (note (b))	**533,783**	523,752
	1,766,632	1,316,351
Denominated in:		
RMB	**1,737,933**	1,287,282
United States Dollar ("USD")	**6,559**	7,406
HK$	**22,140**	21,663
	1,766,632	1,316,351

Notes:

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) As at 31 December 2021, the balance of the Group's cash at banks included the remaining net proceeds from the placement of new shares by the Company in December 2021 (Note 33) of RMB299,195,000, which will be utilized in the development and expansion of the Group's clean energy businesses and as general working capital.

The Group's cash at banks are interest bearing from 0.30% to 0.35% (2020: 0.30% to 2.03%) per annum.

(b) The Group's deposits at SPIC Financial are interest bearing at 1.38% (2020: 1.38%) per annum.

(c) The Group's cash and cash equivalents denominated in RMB of RMB1,482,942,000 (2020: RMB1,059,042,000) are deposited at banks and SPIC Financial in mainland China. The conversion of these RMB denominated balances into foreign currencies and the remittance of funds out of the PRC are subject to the rules and regulations of foreign exchange control promulgated by the PRC government.

32. ASSETS AND LIABILITIES ASSOCIATED WITH DISPOSAL GROUPS CLASSIFIED AS HELD FOR SALE

CP Shentou

During the year ended 31 December 2018, Shanxi Shentou Power Generating Company Limited ("Shanxi Shentou"), a wholly-owned subsidiary of the Company, entered into a joint venture agreement to form Sujin Energy, an associate of the Group, in Shanxi Province of the PRC. The Company would use its 80% equity interest in CP Shentou as part of the capital contribution to Sujin Energy. Accordingly, the assets and liabilities attributable to CP Shentou had been classified as a disposal group held for sale and were separately presented in the consolidated statement of financial position as at 31 December 2018.

On 26 November 2021, the Company entered into the partnership agreement with Dongyin (Tianjin) Enterprise Management Consulting Co., Ltd., China Orient Asset Management Co., Ltd. and SPIC Asset Management Co., Ltd. to form a limited partnership Tianjin Dongfu, pursuant to which the Company acted as a limited partner. On the same day, Shanxi Shentou and Tianjin Dongfu executed the equity transfer agreement, pursuant to which Shanxi Shentou would sell and Tianjin Dongfu would purchase the target equity interest (40% equity interest of CP Shentou) for a consideration of RMB206,293,000. On 23 December 2021, the transaction was completed as the China Beijing Equity Exchange issued the equity transaction certificate to Tianjin Dongfu. Upon completion, CP Shentou ceased to be a subsidiary and became an associate of the Group. Since then, the financial results and financial position of CP Shentou was accounted for under the equity method by the Group.

For the year ended 31 December 2020, an impairment of a disposal group classified as held for sale of RMB587,327,000 (Note 7), being the difference of CP Shentou's fair value less costs to sell and its carrying amount as at 31 December 2020 and an impairment of property, plant and equipment of RMB6,075,000 (Note 7) were recognized as other losses in the consolidated income statement. There was no such impairment recorded for the year ended 31 December 2021.

Sichuan Xingtie Electrical Equipment Co., Ltd. ("Sichuan Xingtie")

In December 2020, Wu Ling Power Corporation ("Wu Ling Power"), a subsidiary of the Company, entered into a transfer agreement, pursuant to which Wu Ling Power transferred its 70% equity interest in Sichuan Xingtie to Beijing Guangyao Chunxi Enterprise Management Consulting Partnership (limited partnership), a third party. This transaction was highly probable to complete within one year, and therefore, the assets and liabilities attributable to Sichuan Xingtie were classified as a disposal group held for sale and were separately presented in the consolidated statement of financial position as at 31 December 2020. In 2021, the transaction was complete and the consideration of RMB9,682,000 was received.

32. ASSETS AND LIABILITIES ASSOCIATED WITH DISPOSAL GROUPS CLASSIFIED AS HELD FOR SALE (CONTINUED)

At the dates of disposals, the carrying values of the net assets/(liabilities) of the disposal groups are as follows:

	CP Shentou RMB'000	Sichuan Xingtie RMB'000
Property, plant and equipment	3,776,493	153,192
Right-of-use assets	152,216	–
Prepayments for construction of power plants	3,239	10,316
Equity instruments at FVTOCI	17,877	–
Other non-current assets	1,500	–
Inventories	46,622	179
Accounts receivable	146,831	8,428
Prepayments, deposits and other receivables	132,855	656
Debt instruments at FVTOCI	883	–
Cash and cash equivalents	2,242	23
Deferred income	(18,760)	–
Bank borrowings	(1,627,735)	–
Borrowings from related parties	(800,000)	–
Deferred income tax liabilities	–	(265)
Accounts payable	(1,528,057)	–
Construction costs payable	–	(1,726)
Other payables and accrued charges	(58,762)	(271,414)
Net assets/(liabilities)	247,444	(100,611)
Non-controlling interests	151,732	(30,184)
Equity attributable to owners of the company	95,712	(70,427)
Net assets/(liabilities) subject to disposal	47,856	(70,427)
Consideration	206,293	9,682
Gain on disposal of equity interest	158,437	80,109
Gain on remeasurement of the remaining equity interest on an associate at fair value	83,846	–
Total gain on disposal (Note 7)	242,283	80,109
Net cash and cash equivalents received	204,051	9,659

32. ASSETS AND LIABILITIES ASSOCIATED WITH DISPOSAL GROUPS CLASSIFIED AS HELD FOR SALE (CONTINUED)

Major classes of assets and liabilities of CP Shentou and Sichuan Xingtie as at 31 December 2020 are as follows:

	2020 RMB'000
Property, plant and equipment (note (a))	4,246,775
Right-of-use assets	152,216
Equity instruments at FVTOCI — unlisted equity investments in PRC	17,877
Accounts receivable (Note 26)	117,141
Prepayments, deposits and other receivables	18,329
Amounts due from related parties (Note 28)	14,322
Debt instruments at FVTOCI (Note 29)	56,654
Cash and cash equivalents	1,980
Other assets	32,212
Impairment of assets classified as held for sale	(672,848)
Total assets associated with disposal groups classified as held for sale	3,984,658
Deferred income	20,160
Long-term bank borrowings (Note 36) (note (b))	928,435
Long-term borrowings from SPIC (Note 37(a))	200,000
Deferred income tax liability	265
Accounts payable (Note 42)	73,738
Construction costs payable	83,906
Other payables and accrued charges	97,004
Taxation payable	115
Amounts due to related parties (Note 28)	18,750
Short-term bank borrowings (Note 36)	699,300
Short-term borrowings from SPIC	600,000
Total liabilities associated with disposal groups classified as held for sale	2,721,673

Notes:

(a) An impairment of RMB6,075,000 (Note 7) was provided for a single asset that is no longer in use for the year ended 31 December 2020.

(b) As at 31 December 2020, current portion of long-term bank borrowings was RMB290,000,000.

33. SHARE CAPITAL

(a) Share capital

	2021 RMB'000	2020 RMB'000
Ordinary shares, issued and fully paid:		
10,833,386,321 (2020: 9,806,886,321) ordinary shares	**20,418,001**	17,268,192

	Number of ordinary shares	Share capital RMB'000
At 31 December 2020 and 1 January 2021	9,806,886,321	17,268,192
Placing and subscription of shares (note)	**1,026,500,000**	**3,149,809**
At 31 December 2021	**10,833,386,321**	**20,418,001**

Note:

The Company placed new shares via top-up placing of existing shares and subscription of new shares transaction. On 6 December 2021, an aggregate of 1,026,500,000 placing shares have been successfully placed by a placing agent at the price of HK$3.80 per placing share.

On 9 December 2021, a total of 1,026,500,000 subscription shares (equal to the number of the placing shares actually sold by CPI Holding, the controlling shareholder of the Company (the vendor) under the placing) were subscribed by CPI Holding at the subscription price of HK$3.80 per subscription share. The net proceeds from such subscription amounted to approximately HK$3,868,000,000 (equivalent to RMB3,149,809,000).

There are no movements in the number of shares of the Company from 1 January 2020 to 31 December 2020.

(b) Share option scheme

There were no outstanding share options as at 31 December 2021 and 2020.

34. OTHER EQUITY INSTRUMENTS

On 5 November 2020, the Company issued the first tranche of RMB1,500,000,000 perpetual medium-term note ("the First Perpetual Medium-term Note") at an initial interest rate of 4.35% per annum. The proceeds from the issuance of the First Perpetual Medium-term Note after deducting the issuance cost were approximately RMB1,498,800,000. Coupon interest payments of 4.35% are paid annually in arrears on 5 November each year starting from 2021, and may be deferred at the discretion of the Company. The first call date is 5 November 2023.

On 18 November 2020, the Company issued the second tranche of RMB1,500,000,000 perpetual medium-term note ("the Second Perpetual Medium-term Note") at an initial interest rate of 4.60% per annum. The proceeds from the issuance of the Second Perpetual Medium-term Note after deducting the issuance cost were approximately RMB1,498,800,000. Coupon interest payments of 4.60% are paid annually in arrears on 18 November each year starting from 2021, and may be deferred at the discretion of the Company. The first call date is 18 November 2023.

In 2021, the profit attributable to holders of other equity instruments, based on the applicable interest rate, was RMB134,250,000 (2020: RMB18,140,000), and RMB134,250,000 (2020: Nil) has been paid in 2021.

35. RESERVES

	Merger reserve (note (a)) RMB'000	Capital reserve (note (b)) RMB'000	FVTOCI reserve RMB'000	Exchange fluctuation reserve RMB'000	Statutory reserves (note (c)) RMB'000	Others RMB'000	Other reserves sub-total RMB'000	Retained earnings (note (d)) RMB'000	Total RMB'000
At 1 January 2021	306,548	2,299,142	903,760	–	1,605,070	389,286	5,503,806	7,610,069	13,113,875
Loss for the year	–	–	–	–	–	–	–	(515,693)	(515,693)
Profit attributable to holders of other equity instruments	–	–	–	–	–	–	–	(134,250)	(134,250)
Fair value gain on equity instruments at FVTOCI	–	–	2,110,109	–	–	–	2,110,109	–	2,110,109
Deferred income tax on fair value gain on equity instruments at FVTOCI	–	–	(527,527)	–	–	–	(527,527)	–	(527,527)
Fair value loss on debt instruments at FVTOCI	–	–	(798)	–	–	–	(798)	–	(798)
Deferred income tax on fair value loss on debt instruments at FVTOCI	–	–	199	–	–	–	199	–	199
Release on derecognition of debt instruments at FVTOCI	–	–	7,796	–	–	–	7,796	–	7,796
Release of deferred income tax on derecognition of debt instruments at FVTOCI	–	–	(1,949)	–	–	–	(1,949)	–	(1,949)
Exchange differences on translation of foreign operations	–	–	–	28	–	–	28	–	28
Transfer to statutory reserves	–	–	–	–	368,394	–	368,394	(368,394)	–
Acquisition of non-controlling interests	–	11,544	–	–	–	–	11,544	–	11,544
Disposal of interests in a subsidiary without loss of control	–	(393,746)	–	–	–	–	(393,746)	–	(393,746)
Disposal of equity interests in a subsidiary	–	–	(3,388)	–	–	–	(3,388)	–	(3,388)
2020 final dividend (Note 13)	–	–	–	–	–	–	–	(1,274,895)	(1,274,895)
At 31 December 2021	306,548	1,916,940	2,488,202	28	1,973,464	389,286	7,074,468	5,316,837	12,391,305

35. RESERVES (CONTINUED)

	Merger reserve (note (a)) RMB'000	Capital reserve (note (b)) RMB'000	FVTOCI reserve RMB'000	Statutory reserves (note (c)) RMB'000	Others RMB'000	Other reserves sub-total RMB'000	Retained earnings (note (d)) RMB'000	Total RMB'000
At 1 January 2020	306,548	2,406,069	1,150,111	1,309,998	389,286	5,562,012	7,489,871	13,051,883
Profit for the year	–	–	–	–	–	–	1,708,305	1,708,305
Profit attributable to holders of other equity instruments	–	–	–	–	–	–	(18,140)	(18,140)
Fair value loss on equity instruments at FVTOCI	–	–	(322,835)	–	–	(322,835)	–	(322,835)
Deferred income tax on fair value loss on equity instruments at FVTOCI	–	–	80,708	–	–	80,708	–	80,708
Fair value loss on debt instruments at FVTOCI	–	–	(7,796)	–	–	(7,796)	–	(7,796)
Deferred income tax on fair value loss on debt instruments at FVTOCI	–	–	1,949	–	–	1,949	–	1,949
Release on derecognition of debt instruments at FVTOCI	–	–	2,164	–	–	2,164	–	2,164
Release of deferred income tax on derecognition of debt instruments at FVTOCI	–	–	(541)	–	–	(541)	–	(541)
Acquisition of non-controlling interests of subsidiaries	–	(106,927)	–	–	–	(106,927)	–	(106,927)
Transfer to statutory reserves	–	–	–	295,072	–	295,072	(295,072)	–
2019 final dividend (Note 13)	–	–	–	–	–	–	(1,274,895)	(1,274,895)
At 31 December 2020	306,548	2,299,142	903,760	1,605,070	389,286	5,503,806	7,610,069	13,113,875

Notes:

(a) Merger reserve

The merger reserve of the Group represents the difference between the nominal amount of the share capital issued by the Company and the nominal amount of the registered capital of the subsidiaries transferred to the Company pursuant to the reorganization of the Group which took place in 2004.

(b) Capital reserve

Capital reserve represents the difference between the fair value of the net assets injected by the then owner of the relevant companies of the Group and the registered capital of these companies upon their establishment.

(c) Statutory reserves

Statutory reserves are non-distributable and the transfers to these funds are determined by the boards of directors of the relevant PRC subsidiaries in accordance with the relevant laws and regulations in the PRC.

(d) Retained earnings

Accumulated profits retained by the Group, its associates and joint ventures included impairment losses on property, plant and equipment of an associate which have been accounted for in the Group's consolidated income statement in prior years. In the local statutory financial statements of that company, these impairment losses have been dealt with in the respective company's capital reserves in accordance with the relevant local accounting rules and regulations. Profit distributions made by that company were based on the distributable reserves as reported in its statutory financial statements.

36. BANK BORROWINGS

Bank borrowings are analyzed as follows:

	2021 RMB'000	2020 RMB'000
Non-current		
Long-term bank borrowings		
— secured (note (d))	**19,142,557**	17,008,281
— unsecured (note (e))	**46,454,396**	38,066,320
	65,596,953	55,074,601
Less: Current portion of long-term bank borrowings	**(10,666,540)**	(9,715,493)
	54,930,413	45,359,108
Current		
Short-term bank borrowings		
— secured	**1,080,087**	848,777
— unsecured	**10,165,064**	10,648,158
Current portion of long-term bank borrowings	**10,666,540**	9,715,493
	21,911,691	21,212,428
	76,842,104	66,571,536

Notes:

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) The carrying amounts of the Group's bank borrowings are denominated in the following currencies:

	2021 RMB'000	2020 RMB'000
RMB	**76,560,357**	65,160,890
USD	**–**	2,707,834
Japanese Yen ("JPY")	**281,747**	330,547
	76,842,104	68,199,271

36. BANK BORROWINGS (CONTINUED)

Notes: *(Continued)*

(b) The repayment terms of the long-term bank borrowings are analyzed as follows:

	2021 RMB'000	2020 RMB'000
Within one year	**10,666,540**	10,005,493
Between one and two years	**5,349,271**	4,153,258
Between two and five years	**13,607,748**	10,206,927
Over five years	**35,973,394**	31,637,358
	65,596,953	56,003,036

(c) The effective interest rates per annum of the Group's bank borrowings are as follows:

	2021	2020
Short-term bank borrowings	**3.71%**	3.58%
Long-term bank borrowings (including current portion)	**4.20%**	4.30%

As at 31 December 2021 and 2020, the bank borrowings of the Group in fixed and floating rates are as follows:

	2021 RMB'000	2020 RMB'000
Fixed-rate borrowings	**16,717,785**	22,864,186
Floating-rate borrowings	**60,124,319**	45,335,085
	76,842,104	68,199,271

(d) As at 31 December 2021 and 2020, the bank borrowings of the Group are secured as follows:

	2021 RMB'000	2020 RMB'000
Secured by the equity of a non-controlling shareholder of a subsidiary	**186,160**	202,500
Secured by certain property, plant and equipment (Note 15(c))	**114,620**	129,620
Secured against the rights on certain accounts receivable (Note 26(e))	**19,921,864**	17,962,063

(e) As at 31 December 2021, bank borrowings amounting to RMB281,747,000 (2020: RMB330,547,000) were guaranteed by Hunan Provincial Finance Bureau.

(f) As at 31 December 2021, the Group had available unutilized banking facilities amounting to RMB24,385,836,000 (2020: RMB39,288,347,000).

(g) The fair values of short-term bank borrowings approximate their carrying amounts as the impact of discounting is not significant. The fair values of long-term bank borrowings at floating interest rates approximate their carrying amounts.

As at 31 December 2021, the carrying amounts and fair values of long-term bank borrowings at fixed interest rates amount to RMB9,875,299,000 (2020: RMB15,961,321,000) and RMB9,850,520,000 (2020: RMB15,754,061,000) respectively. The fair values are calculated using cash flows discount rates from 1% to 5.30% (2020: 1% to 5.15%) and are within level 3 of the fair value hierarchy.

37. BORROWINGS FROM RELATED PARTIES

	2021 RMB'000	2020 RMB'000
Non-current		
Long-term borrowings from SPIC (note (a))	**8,653,020**	8,758,020
Long-term borrowings from SPIC Financial (note (b))	**3,799,840**	3,759,840
Long-term borrowings from CPI Holding (note (c))	**50,000**	–
Long-term borrowings from other related parties (note (d))	**379,800**	584,600
	12,882,660	13,102,460
Less: Current portion of long-term borrowings from SPIC	**(2,900,000)**	(500,000)
Current portion of long-term borrowings from SPIC Financial	**(1,425,000)**	(480,000)
	8,557,660	12,122,460
Current		
Short-term borrowings from SPIC	**–**	900,000
Short-term borrowings from SPIC Financial (note (e))	**1,130,000**	300,000
Short-term borrowings from CPI Holding (note (f))	**200,000**	–
Short-term borrowings from other related parties (note (g))	**453,626**	647,210
Current portion of long-term borrowings from SPIC (note (a))	**2,900,000**	500,000
Current portion of long-term borrowings from SPIC Financial (note (b))	**1,425,000**	480,000
	6,108,626	2,827,210
	14,666,286	14,949,670

Notes:

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) The long-term borrowings from SPIC are unsecured, interest bearing from 3.29% to 4.75% (2020: 3.45% to 5.15%) per annum.

These borrowings are repayable as follows:

	2021 RMB'000	2020 RMB'000
Within one year	**2,900,000**	500,000
Between one and two years	**830,000**	3,900,000
Between two and five years	**4,923,020**	1,600,000
Over five years	**–**	2,958,020
	8,653,020	8,958,020

37. BORROWINGS FROM RELATED PARTIES (CONTINUED)

Notes: *(Continued)*

(b) The long-term borrowings from SPIC Financial of RMB50,000,000 (2020: RMB50,000,000) are secured against the rights on accounts receivable of a subsidiary (Note 26(e)), interest bearing at 4.42% (2020: 4.51%) per annum. The remaining balances are unsecured, interest bearing from 3.25% to 5.07% (2020: 3.50% to 5.23%) per annum.

The repayment terms of these borrowings are analyzed as follows:

	2021 RMB'000	2020 RMB'000
Within one year	**1,425,000**	480,000
Between one and two years	**800,000**	1,360,000
Between two and five years	**1,324,840**	1,144,840
Over five years	**250,000**	775,000
	3,799,840	3,759,840

As at 31 December 2021 and 2020, the long-term borrowings from SPIC Financial in fixed and floating rate are as follows:

	2021 RMB'000	2020 RMB'000
Fixed-rate borrowings	**2,545,000**	1,715,000
Floating-rate borrowings	**1,254,840**	2,044,840
	3,799,840	3,759,840

(c) As at 31 December 2021, the long-term borrowings from CPI Holding were unsecured, interest bearing at 3.92% per annum.

(d) As at 31 December 2021, the long-term borrowings from other related parties were unsecured, interest bearing from 4.41% to 4.46% (2020: 4.66% to 5.95%) per annum.

(e) The short-term borrowings from SPIC Financial as at 31 December 2021 are unsecured, interest bearing from 3.45% to 4.34% (2020: 3.92% to 4.34%) per annum and repayable within one year.

(f) The short-term borrowings from CPI Holding as at 31 December 2021 are unsecured, interest bearing at 3.92% per annum and repayable within one year.

(g) The short-term borrowings from other related parties as at 31 December 2021 are unsecured, interest bearing from 3.47% to 3.75% (2020: 3.47% to 3.75%) per annum and repayable within one year.

(h) As at 31 December 2021, the Group had available unutilized facilities from SPIC Financial amounting to RMB10,000,000,000 (2020: RMB10,100,000,000).

(i) The fair values of short-term borrowings from related parties approximate their carrying amounts as the impact of discounting is not significant.

The fair values of long-term borrowings from related parties at floating interest rates approximate their carrying amounts.

As at 31 December 2021, the carrying amounts and fair values of long-term borrowings from related parties at fixed interest rates amounted to RMB11,577,820,000 (2020: RMB8,257,620,000) and RMB11,538,007,000 (2020: RMB8,185,802,000) respectively. The fair values are calculated using cash flows with discount rates from 3.29% to 4.75% (2020: 3.55% to 5.15%) and are within level 3 of the fair value hierarchy.

38. OTHER BORROWINGS

	2021 RMB'000	2020 RMB'000
Non-current		
Medium-term notes issued by the Company (note (a))	**7,000,000**	4,000,000
Long-term other borrowings from third parties (note (b))	**1,200,325**	100,000
	8,200,325	4,100,000
Less: Current portion of medium-term notes issued by the Company	**(2,000,000)**	(2,000,000)
	6,200,325	2,100,000
Current		
Super & short-term commercial papers issued by a subsidiary (note (c))	**1,020,000**	1,000,000
Super & short-term commercial papers issued by the Company (note (d))	**1,500,000**	500,000
Short-term other borrowing from a third party	**100,000**	430,000
Current portion of medium-term notes issued by the Company (note (a))	**2,000,000**	2,000,000
	4,620,000	3,930,000
	10,820,325	6,030,000

Notes:

(a) The balance represents three medium-term notes and a green note issued by the Company, which are unsecured and RMB denominated. These medium-term notes are each of RMB2,000,000,000 issued in September 2019, April 2021 and October 2021 respectively, each for a term of three years, interest bearing at 3.55%, 3.54% and 3.47% per annum respectively. The green note of RMB1,000,000,000 was issued in October 2021 for a term of three years, interest bearing at 3.39% per annum. As at 31 December 2021, the medium-term note issued in September 2019 was classified and presented as current.

As at 31 December 2021, the fair value of the medium-term note amounted to RMB6,911,978,000 (2020: RMB4,021,495,000), which was the quoted prices in active markets for identical liabilities and was within level 2 of fair value hierarchy.

As at 31 December 2021, the Company had no (2020: RMB2,000,000,000) unutilized medium-term note facilities available.

(b) As at 31 December 2021, the balance is unsecured, interest bearing from 4.05% to 5.30% (2020: 4.45%) per annum. The fair values of the long-term other borrowings from third parties approximate their carrying amounts as the impact of discounting is not significant.

(c) As at 31 December 2021, the balance represented unsecured RMB denominated super & short-term commercial papers issued by Wu Ling Power, interest bearing from 2.57% to 2.90% (2020: 2.50%) per annum.

(d) The balance represents two unsecured RMB denominated super & short-term commercial papers of RMB500,000,000 and RMB1,000,000,000 (2020: RMB500,000,000) issued by the Company in August and November 2021 (2020: May 2020) for a term of 210 days and 269 days respectively (2020: 270 days), interest bearing at 2.63% and 2.88% (2020: 2.00%) per annum respectively.

As at 31 December 2021, the Company had no (2020: RMB500,000,000) unutilized short-term note facilities available.

39. LEASE LIABILITIES

	2021 RMB'000	2020 RMB'000
Lease liabilities payable:		
Within one year	417,917	543,387
Between one and two years	657,406	630,940
Between two and five years	738,594	859,475
Over five years	1,778,469	1,846,927
	3,592,386	3,880,729
Less: Amounts payable within 12 months shown under current liabilities	(417,917)	(543,387)
Amounts payable after 12 months shown under non-current liabilities	3,174,469	3,337,342

The balance as at 31 December 2021 includes certain lease agreements entered into with related parties, namely CPI Ronghe Financial Leasing Co., Ltd. and China Kangfu International Leasing Co., Ltd. ("Kangfu Leasing") for the use of property, plant and equipment for 1 to 16 years amounting to RMB1,365,020,000, of which RMB1,270,534,000 (2020: RMB1,533,944,000) are secured against the rights on certain accounts receivable (Note 26(e)) with interest rates ranging from 4.01% to 7% (2020: 4.01% to 7%) per annum. Interest rates for the remaining balances are ranging from 4.01% to 7% (2020: 4.01% to 7%) per annum.

In 2020, SPIC Gushi New Energy Co., Ltd. ("Gushi New Energy"), a subsidiary of the Group, entered into a fifteen-year lease with Kangfu Leasing in respect of certain power generators and equipment. Gushi New Energy recognized right-of-use assets and lease liabilities respectively of RMB91,062,000 (2020: RMB539,996,000) each in 2021.

Except for short-term leases and low value leases in which the Group applied recognition exemption, the Group has recognized additions of right-of-use assets and lease liabilities of RMB1,142,331,000 (2020: RMB1,743,644,000) (Note 16) and RMB910,840,000 (2020: RMB1,245,529,000) respectively.

40. PROVISIONS FOR OTHER LONG-TERM LIABILITIES

Provisions for other long-term liabilities represent provisions for inundation compensation caused by the construction of certain hydropower plants of the Group, namely the Baishi Power Plant, Tuokou Power Plant and Changzhou Hydropower Plant in accordance with the rules and regulations of inundation compensation.

The provisions are measured at the present value of the expenditures expected to be required to settle the compensations, based on the latest rules and regulations as set out by the relevant local government authorities in the PRC, compensation per unit of area, growth rate of compensation, and the expected useful lives of these hydropower plants, using a pre-tax discount rate that reflects current assessments of the time value of money and the risks specific to the compensations. The increase in the provisions due to the passage of time had been recognized as interest expense.

40. PROVISIONS FOR OTHER LONG-TERM LIABILITIES (CONTINUED)

Analysis of the provisions for inundation compensation as at 31 December 2021 and 2020 is as follows:

	2021 RMB'000	2020 RMB'000
Non-current liabilities	**1,868,232**	1,868,610
Current liabilities (included in other payables and accrued charges) (Note 43)	**104,432**	103,224
	1,972,664	1,971,834

The movements of the provisions for inundation compensation for the years ended 31 December 2021 and 2020 are as follows:

	2021 RMB'000	2020 RMB'000
At 1 January	**1,971,834**	1,173,786
Recognition during the year (Note 15(d))	**–**	775,305
Interest expense (Note 10)	**104,054**	103,969
Payment	**(103,224)**	(81,226)
At 31 December	**1,972,664**	1,971,834

41. OTHER NON-CURRENT LIABILITIES

In December 2020, certain subsidiaries entered into several agreements in respect of the Asset Management Plan with Shenwan Hongyuan and transfer an aggregate amount of RMB950,000,000 of clean energy power price premium receivable (Note 26(c)) to the Asset Management Plan. Meanwhile, SPIC acts as the authorized agent of these subsidiaries to sign and execute all agreements in relation to the Asset Management Plan. SPIC has also committed that should any incident occur that disqualifies any receivables from the Asset Management Plan, SPIC will be solely responsible to purchase them. Under the Asset Management Plan, the Group neither transferred nor retained substantially all the risks and rewards of ownership of the accounts receivables and retained control of the underlying assets. At 31 December 2021, the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB75,050,000 (2020: RMB112,575,000) as other non-current assets and the associated liabilities amounting to RMB75,050,000 (2020: RMB112,575,000) as other non-current liabilities, which approximate the maximum exposure to losses from its continuing involvement in the underlying assets.

On 16 November 2021, under the arrangement of ABN transaction arrangements, the Group transferred an aggregate amount of RMB1,184,931,000 of renewable energy tariff subsidies (Note 26(c)) to SPIC as the underlying assets for the purpose of issuing Asset-Backed Notes. The Directors consider that the Group neither transferred nor retained substantially all the risks and rewards of ownership of the accounts receivables and retained control of the underlying assets. At 31 December 2021, the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB113,753,000 (2020: Nil) as other non-current assets and the associated liabilities amounting to RMB113,753,000 (2020: Nil) as other non-current liabilities, which approximate the maximum exposure to losses from its continuing involvement in the underlying assets.

42. ACCOUNTS AND BILLS PAYABLES

	2021 RMB'000	2020 RMB'000
Accounts payable (note (a))	**1,668,327**	657,443
Bills payable (note (b))	**167,695**	336,454
	1,836,022	993,897

Notes:

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) The normal credit period for accounts payable generally ranges from 60 to 180 days. The ageing analysis of the accounts payable based on invoice date is as follows:

	2021 RMB'000	2020 RMB'000
1 to 6 months	**1,531,869**	678,832
7 to 12 months	**69,598**	74
Over 1 year	**66,860**	52,275
	1,668,327	731,181

(b) As at 31 December 2021, bills payable are bills of exchange with maturity period ranged from 3 to 12 months (2020: ranged from 3 to 12 months).

(c) The fair values of accounts and bills payables approximate their carrying amounts as the impact of discounting is not significant. All accounts and bills payables are denominated in RMB.

43. OTHER PAYABLES AND ACCRUED CHARGES

	2021 RMB'000	2020 RMB'000
Salaries and staff welfare payable	**201,914**	185,811
VAT payable	**300,584**	217,943
Other taxes payable	**342,651**	320,828
Repairs and maintenance expense payable	**53,005**	50,332
Insurance expense payable	**5,113**	4,461
Reservoir maintenance and usage fees payables	**21,226**	22,598
Interest payable	**434,008**	416,747
Current portion of provisions for other long-term liabilities (Note 40)	**104,432**	103,224
Consideration payable for acquisition of subsidiaries	**16,851**	15,366
Dividends payable to non-controlling shareholders of subsidiaries	**74,746**	71,684
Other payables and accrued operating expenses	**698,937**	700,055
	2,253,467	2,109,049

44. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of profit before taxation to cash generated from operating activities

The comparative data included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

	2021 RMB'000	2020 RMB'000
Profit before taxation	**533,166**	3,826,127
Share of results of associates	**213,524**	(283,952)
Share of results of joint ventures	**119,280**	(43,661)
Finance income	**(126,603)**	(330,352)
Finance costs	**3,861,500**	3,203,698
Dividend income	**(39,962)**	(47,228)
Depreciation of property, plant and equipment	**5,714,884**	4,935,156
Depreciation of right of use assets	**377,736**	386,338
Reversal of impairment of other receivables	**(1,696)**	(3,243)
Impairment of property plant and equipment	**1,004**	31,350
Impairment of assets classified as held for sale	**–**	587,327
Impairment of goodwill	**–**	84,599
Amortization of other intangible assets	**54,873**	55,050
Amortization of deferred income	**(34,092)**	(21,643)
Gain on disposal of property, plant and equipment	**(1,270)**	(2,114)
Loss/(gain) on disposal of subsidiaries (pre-tax)	**113,229**	(29,343)
Gain on disposal of assets and liabilities associated with disposal groups classified as held for sale	**(80,109)**	–
Gain on transfer from assets and liabilities associated with disposal groups classified as held for sale to an associate	**(242,283)**	–
Gain on previously held equity interest remeasured at acquisition date fair value	**–**	(17,227)
Gain on disposal of a joint venture	**–**	(1,192)
Operating cash flows before working capital changes	**10,463,181**	12,329,690
Increase in inventories	**(770,943)**	(7,753)
Increase in accounts receivable	**(587,777)**	(1,858,283)
Increase in prepayments, deposits and other receivables	**(248,138)**	(125,863)
Increase in amounts due from related parties	**(795,675)**	(1,278,610)
Decrease/(increase) in debt instruments at FVTOCI	**223,395**	(334,659)
Increase in accounts and bills payables	**723,709**	119,821
(Decrease)/increase in other payables and accrued charges	**(2,321,078)**	101,308
Increase in amounts due to related parties	**15,419**	652,000
Increase in deferred income	**2,892**	15,507
Cash generated from operations	**6,704,985**	9,613,158
Interest paid	**(4,149,811)**	(3,559,967)
Tax paid	**(1,212,800)**	(551,315)
Net cash generated from operating activities	**1,342,374**	5,501,876

44. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Analysis of changes in financing during the year

The comparative data included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

	Bank borrowings and other borrowings RMB'000	Borrowings from related parties RMB'000	Leases liabilities RMB'000	Non-controlling interests RMB'000
At 1 January 2021	74,229,271	15,749,670	3,880,729	12,392,110
Drawdown of bank borrowings	63,393,033	–	–	–
Repayment of bank borrowings	(53,123,829)	–	–	–
Drawdown of other borrowings	9,800,325	–	–	–
Repayment of other borrowings	(5,010,000)	–	–	–
Drawdown of borrowings from related parties	–	7,943,406	–	–
Repayment of borrowings from related parties	–	(8,696,090)	–	–
Payments for lease liabilities	–	–	(1,058,158)	–
Interest expense on lease liabilities (Note 10)	–	–	172,266	–
New finance leases (note (c)(ii))	–	–	308,978	–
Profit for the year attributable to non-controlling interests	–	–	–	686,912
Capital injections from non-controlling shareholders of subsidiaries	–	–	–	479,747
Fair value gain on financial instruments at FVTOCI attributable to non-controlling interests	–	–	–	26,400
Dividends recognized as distributions to non-controlling interests	–	–	–	(421,730)
Acquisition of non-controlling interests	–	–	–	(14,808)
Acquisitions of subsidiaries (Note 48)	–	469,300	308,484	47,904
Disposal of equity interests in a subsidiary without loss of control	–	–	–	2,969,746
Disposal of subsidiaries	–	–	(19,913)	20,027
Disposal of assets and liabilities associated with disposal groups classified as held for sale	–	–	–	43,299
Transfer from assets and liabilities associated with disposal groups classified as held for sale to an associate	(1,627,735)	(800,000)	–	(151,732)
Exchange gain, net	1,364	–	–	16
At 31 December 2021	87,662,429	14,666,286	3,592,386	16,077,891

44. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Analysis of changes in financing during the year *(Continued)*

	Bank borrowings and other borrowings RMB'000	Borrowings from related parties RMB'000	Leases liabilities RMB'000	Non-controlling interests RMB'000
At 1 January 2020	39,702,588	37,229,469	4,422,286	14,813,134
Drawdown of bank borrowings	23,950,312	–	–	–
Repayment of bank borrowings	(18,111,858)	–	–	–
Drawdown of other borrowings	2,030,000	–	–	–
Repayment of other borrowings	(528,000)	–	–	–
Drawdown of borrowings from related parties	–	26,023,327	–	–
Repayment of borrowings from related parties	–	(19,386,788)	–	–
Payments for lease liabilities	–	–	(1,962,727)	–
Interest expense on lease liabilities (Note 10)	–	–	178,577	–
New finance leases (note (c)(ii))	–	–	842,307	–
Capital injections from non-controlling shareholders of subsidiaries	–	–	–	491,680
Acquisitions of subsidiaries	–	840,932	403,222	95,615
Profit for the year attributable to non-controlling interests	–	–	–	1,217,246
Dividends recognized as distributions to non-controlling interests	–	–	–	(953,229)
Reclassification of Agricultural Bank of China ("ABC") and Industrial and Commercial Bank of China ("ICBC")	27,973,511	(27,973,511)	–	–
Fair value gain on financial instruments at FVTOCI attributable to non-controlling interests	–	–	–	1,258
Acquisition of non-controlling interests	–	–	–	(2,969,866)
Disposal of subsidiaries	(600,491)	(983,759)	(2,936)	(303,728)
Exchange gain, net	(186,791)	–	–	–
At 31 December 2020	74,229,271	15,749,670	3,880,729	12,392,110

(c) Major non-cash transactions

The comparative data included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(i) For the year ended 31 December 2021, accounts payable and amounts due to related parties of RMB381,679,000 (2020: RMB492,359,000) and RMB345,958,000 (2020: RMB439,490,000) (Note 29) respectively have been settled through endorsement of notes receivables.

(ii) During the year ended 31 December 2021, the Group entered into new lease agreements for the use of power generator equipment, leasehold land and buildings from 2 to 20 years. Upon the lease commencement, the Group recognized right-of-use assets of RMB308,978,000 (2020: RMB842,307,000) and lease liabilities of RMB308,978,000 (2020: RMB842,307,000).

45. COMMITMENTS

The comparative data included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

	2021 RMB'000	2020 RMB'000
Contracted but not provided for in respect of		
— property, plant and equipment	**8,474,476**	11,049,244
— capital contribution to associates	**3,955,870**	1,624,833
	12,430,346	12,674,077

46. FINANCIAL INSTRUMENTS

46.1 Categories of financial instruments

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

	2021 RMB'000	2020 RMB'000
Financial assets		
Equity investment at FVTOCI	**5,235,995**	3,079,829
Financial assets at amortized cost	**15,360,680**	12,403,503
Debt instruments at FVTOCI	**213,660**	485,510
	20,810,335	15,968,842
Financial liabilities		
Amortized cost	**119,075,567**	105,887,836

46.2 Financial risk management objectives and policies

The Group's activities expose it to a variety of financial risks: market risks (including foreign exchange risk, interest rate risks and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020, unless otherwise stated.

(a) Foreign exchange risk

The Group mainly operates in the PRC with most of the transactions settled in RMB. Foreign exchange risk arises when future commercial transactions or recognized assets and liabilities are denominated in a currency that is not the entity's functional currency. The Group is exposed to foreign exchange risk primarily with respect to JPY, HK$ and USD.

The Group's assets and liabilities, and transactions arising from its operations primarily do not expose to material foreign exchange risk. Other than certain bank borrowings, and certain cash and cash equivalents, the Group's assets and liabilities are primarily denominated in RMB. The Group generates RMB from sales in the PRC to meet its liabilities denominated in RMB.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies *(Continued)*

(a) Foreign exchange risk *(Continued)*

As at 31 December 2021, the Group was exposed to foreign exchange risk primarily with respect to certain bank borrowings which were denominated in USD and JPY, and certain cash and cash equivalents which were denominated in USD and HK$, details of which have been disclosed in Notes 36 and 31 respectively.

The Group manages its foreign currency risk by closely monitoring the movements in the foreign currency rates.

RMB experienced certain appreciation against USD, JPY and HK$ during the year which is the major reason for the exchange gain recognized by the Group for the year. Further exchange rate fluctuation of USD, JPY and HK$ against RMB will affect the Group's financial position and results of operations.

As at 31 December 2021, if RMB had weakened/strengthened by 5% (2020: 5%) against JPY, with all other variables held constant, the Group's post-tax profit for the year would have been RMB10,565,000 lower/higher (2020: RMB12,396,000 lower/higher), mainly as a result of foreign exchange differences on translation of JPY denominated borrowings.

As at 31 December 2021, if RMB had weakened/strengthened by 5% (2020: 5%) against USD, with all other variables held constant, the Group's post-tax profit for the year would have been RMB246,000 lower/higher (2020: RMB101,266,000 lower/higher), mainly as a result of net foreign exchange differences on translation of USD denominated borrowings and bank deposits.

As at 31 December 2021, if RMB had weakened/strengthened by 5% (2020: 5%) against HK$, with all other variables held constant, the Group's post-tax profit for the year would have been RMB830,000 higher/lower (2020: RMB1,621,000 higher/lower), mainly as a result of foreign exchange differences on translation of HK$ denominated bank deposits.

In the Group management's opinion, the sensitivity analysis is unrepresentative of the inherent currency risk as the exposure at the end of the reporting period does not reflect the exposure during the year.

(b) Interest rate risk

The Group's income and operating cash flows are substantially independent of changes in market interest rates. The Group's interest-bearing assets mainly include amounts due from an associate and a joint venture, cash at banks and deposits at SPIC Financial, details of which have been disclosed in Notes 28 and 31. The Group's exposure to changes in interest rates is mainly attributable to its borrowings and lease liabilities, details of which have been disclosed in Notes 36 to 39. Borrowings carried at floating rates expose the Group to cash flow interest rate risk whereas borrowings and lease liability carried at fixed rates expose the Group to fair value interest rate risk, details of which have been disclosed in Notes 36 to 39. The Group has not used any specific interest rate swap contracts to hedge its exposure to interest rate risk.

The Group's cash flow interest rate risk is mainly concentrated on the fluctuation of PBOC interest rate arising from the Group's RMB denominated floating rate bank borrowings.

As at 31 December 2021, if the interest rates on bank borrowings and borrowings from related parties had been 50 basis points (2020: 50 basis points) higher/lower than the prevailing interest rates, with all other variables held constant, post-tax profit for the year (net of interest capitalized) would have been RMB324,430,000 lower/higher (2020: RMB293,162,000 lower/higher) mainly as a result of higher/lower interest expense on floating rate bank borrowings and borrowings from related parties.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies *(Continued)*

(b) Interest rate risk *(Continued)*

As at 31 December 2021, if the interest rates on cash at banks and deposits at SPIC Financial had been 50 basis points (2020: 50 basis points) higher/lower than the prevailing interest rates, with all other variables held constant, post-tax profit for the year would have been RMB5,784,000 higher/lower (2020: RMB4,794,000 higher/lower) mainly as a result of higher/lower interest income on floating rate cash at banks and deposits at SPIC Financial.

Total interest income from financial assets that are measured at amortized cost is as follows:

	2021 RMB'000	2020 RMB'000
Interest income		
Cash and cash equivalents and Restricted deposits	**23,406**	14,826
Amounts due from related parties	**26,861**	33,162
Discounting effect on clean energy power price premium receivable	**76,336**	282,364
Total interest income	**126,603**	330,352

Interest expense on financial liabilities not measured at FVTPL:

	2021 RMB'000	2020 RMB'000
Interest expense on financial liabilities at amortized cost	**3,800,688**	3,288,491

(c) Price risk

The Group is exposed to equity securities price risk in respect of investments held by the Group which are classified as equity instruments at FVTOCI. Most of the Group's equity instruments at FVTOCI are publicly traded. However, the Group does not trade these investments as such investments are held for strategic rather than trading purpose. The stock market is relatively more volatile in recent years. As at 31 December 2021, if the quoted market price of the listed equity investments held by the Group had increased/decreased by 10 % to 30% (2020: 10% to 30%), with all other variables held constant, the results of the Group would have been unaffected as these investments are classified as equity instruments at FVTOCI; and equity would have been RMB349,305,000 to RMB1,047,916,000 (2020: RMB193,998,000 to RMB581,994,000) higher/lower, mainly as a result of the changes in fair value of equity instruments at FVTOCI.

In addition, the Group also invested in certain unquoted equity securities for investees operating in financial services, coal production, water supply and electricity trading services industry sectors for long term strategic purposes which had been designated as at FVTOCI. The Group has appointed a special team to monitor the price risk and will consider hedging the risk exposure should the need arise.

The Group is also exposed to commodity price risk mainly in relation to the coal price. The Group manages such risk by entering into certain bulk purchase agreements with coal suppliers.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies (Continued)

(d) Credit risk and impairment test

The Group's credit risk primarily arises from accounts receivable (Note 26), deposits and other receivables (Note 27), amounts due from related parties (Note 28), debt instruments at FVTOCI (Note 29), restricted deposits (Note 30), and cash and cash equivalents (Note 31). The Group does not hold any collateral or other credit enhancements to cover its credit risks associated with its financial assets.

Accounts receivable arising from contracts with customers (including those under other non-current assets)

The Group is exposed to significant concentration of credit risk in terms of electricity sales as a majority of the Group's sales of electricity were made to regional and provincial power grid companies. The Group normally grants credit terms ranged from 15 to 90 days to these power grid companies except for the clean energy power price premium. The collection of such clean energy power price premium is subject to the allocation of funds by relevant government authorities to local grid companies, which therefore takes a relatively long time for settlement. The Group only accepts bills issued or guaranteed by reputable PRC banks if accounts receivables are settled by bills and therefore the management of the Group considers the credit risk arising from the endorsed or discounted bills is insignificant. The Group normally does not require collaterals from trade debtors. In addition, the Group performs impairment assessment under ECL model upon application of HKFRS 9 on accounts receivable individually. Ageing analysis of the Group's accounts receivable is disclosed in Note 26 and management does not expect any losses from non-performance by these counterparties.

Deposits, other receivables and amounts due from related parties

The counterparties of the Group's deposits, other receivables and amounts due from related parties are mainly large state-owned enterprises with good credit quality and subsidiaries of SPIC. Under ECL model upon application of HKFRS 9, management makes periodic collective assessment as well as individual assessment on the recoverability of all loans and receivables, based on historical payment records, the length of the overdue period, the financial strength of the debtors and whether there are any disputes with the relevant debtors. The Group's historical experience in collection of loans and receivables falls within the recorded allowances and the Directors are of the opinion that adequate provision for uncollectible receivables has been made.

Restricted deposits and cash and cash equivalents

Substantially all of the Group's cash and deposits are held in major financial institutions and SPIC Financial, which management believes are of high credit quality. Therefore, the Group performs impairment assessment under 12m ECL model upon application of HKFRS 9 on restricted deposits and cash and cash equivalents on collective basis. Management does not expect any losses from non-performance by these counterparties.

Debt instruments at FVTOCI

The Group's debt instruments at FVTOCI are Group's certain notes receivable which were considered as within the hold to collect contractual cash flows and to sell business model. The notes which have been classified as debt instruments at FVTOCI are issued by major financial institutions with high credit quality and therefore are considered to be low credit risk investments. Therefore, the Group performs impairment assessment under 12m ECL model upon application of HKFRS 9 on debt instruments at FVTOCI on individual basis. For the year ended 31 December 2021, no ECL on debt instruments at FVTOCI has been recognized.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies (Continued)

(d) Credit risk and impairment test (Continued)

The tables below detail the credit risk exposures of the Group's financial assets, including accounts receivable, deposits and other receivables, amounts due from related parties, other non-current assets, debt instruments at FVTOCI, restricted deposits and cash and cash equivalents, which are subject to ECL assessment:

	Notes	External credit rating	Internal credit rating	12m or lifetime ECL	Gross carrying amount	
					2021 RMB'000	2020 RMB'000
Debt instruments at FVTOCI	29	A1	Note (i)	12m ECL	**213,660**	485,510
Financial assets at amortized cost:						
Amounts due from related parties	24 and 28	N/A	Note (ii)	12m ECL	**2,635,159**	1,753,806
				Lifetime ECL (credit impaired)	**261,300**	261,300
Restricted deposits	30	A1	Note (i)	12m ECL	**20,368**	35,393
Cash and cash equivalents	31	A1	Note (i)	12m ECL	**1,766,632**	1,318,331
Deposits and other receivables	27	N/A	Note (iii)	12m ECL	**1,350,789**	854,712
				Lifetime ECL (credit impaired)	**33,286**	34,982
Accounts receivable	26	A1	Note (iv)	Lifetime ECL (not credit impaired)	**8,204,527**	7,044,784
Notes receivable	26	A1	Note (iv)	12m ECL	**158,355**	179,169
Other non-current assets	24	A1	Note (v)	12m ECL	**1,224,850**	1,217,308

Notes:

(i) Debt instruments at FVTOCI, restricted deposits and cash and cash equivalents:

At the end of the reporting period, the Directors have performed impairment assessment under 12m ECL model for debt instruments at FVTOCI, restricted deposit and cash and cash equivalents, and concluded that there has been no significant increase in credit risk since initial recognition. Since the counterparties are in major financial institutions with high credit ratings assigned by international credit-rating agencies, the probability of defaults of the counterparties are insignificant and accordingly, no allowance for credit losses is provided for these financial assets.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies *(Continued)*

(d) Credit risk and impairment test *(Continued)*

Notes: *(Continued)*

(ii) Amounts due from related parties:

For the purposes of internal credit risk management, the Group uses past due information to assess whether credit risk has increased significantly since initial recognition. The management assessed no past due situation based on historical payment, therefore concluded that these receivables have low credit risk and remote possibility of default.

	Past due RMB'000	Not past due/ No fixed repayment terms RMB'000	Total RMB'000
2021	**261,300**	**2,635,159**	**2,896,459**
2020	261,300	1,753,806	2,015,106

For all amounts due from related parties, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition or the financial instrument is not determined to have low credit risk at the reporting date, the Group recognizes lifetime ECL. The assessment of whether lifetime ECL should be recognized is based on significant increases in the likelihood or risk of a default occurring since initial recognition. The estimated loss rates are estimated based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue costs or effort.

(iii) Deposits and other receivables:

For the purposes of internal credit risk management, the Group uses past due information to assess whether credit risk has increased significantly since initial recognition.

The Group's internal credit risk grading assessment comprises the following categories:

Internal credit rating	Description	Deposits and other receivables
A	The counterparties can honor the terms of the contracts. There is no reason to doubt their ability to fulfill the payment on a timely basis.	12m ECL
B	The counterparties frequently repay after due dates but usually settle after due date.	12m ECL
C	The counterparties cannot repay in full and there has been a significant increase in credit risk since initial recognition.	Lifetime ECL (not credit-impaired)
D	There is evidence indicating the asset is credit-impaired.	Lifetime ECL (credit-impaired)

	Past due RMB'000	Not past due/ No fixed repayment terms RMB'000	Total RMB'000
2021	**181,083**	**1,202,992**	**1,384,075**
2020	183,643	706,051	889,694

For the year ended 31 December 2021, the Group reversed RMB1,696,000 (2020: RMB3,243,000) (Note 8) impairment allowance based on the provision matrix for other receivables arising from revenue and incomes other than sales of electricity. The estimated loss rates are estimated based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue cost or effort. The grouping is regularly reviewed by management to ensure relevant information about specific debtors is updated.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies *(Continued)*

(d) Credit risk and impairment test *(Continued)*

Notes: *(Continued)*

(iv) Accounts receivable:

As a majority of the Group's sales of electricity were made to regional and provincial power grid companies, the Group has applied the simplified approach in HKFRS 9 to measure the loss allowance at lifetime ECL individually for accounts receivable. At the end of the reporting period, the Directors have performed impairment assessment for accounts receivable based on external credit rating and corresponding default rate issued by international credit-rating agencies, and concluded that the credit losses of the accounts receivable as at 31 December 2021 were insignificant and therefore no allowance is provided for accounts receivable.

(v) Other non-current assets

For the year ended 31 December 2021, other non-current assets include clean energy power price premium of RMB1,224,850,000 (2020: RMB1,217,308,000). The collection of such clean energy power price premium is subject to the allocation of funds by relevant government authorities to local grid companies, which therefore takes a relatively longer time for settlement. The Group periodically makes credit assessment of the counterparties, which are regional and provincial power grid companies by reference to external ratios to evaluate the 12m ECL.

(e) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and cash equivalents and the availability of funding through an adequate amount of credit facilities.

The Group's primary cash requirements have been for construction of power plants, additions of and upgrades on property, plant and equipment, payment on related debts and payment for purchases and operating expenses. The Group finances its working capital requirements through a combination of internal resources, borrowings from related parties, and short-term and long-term bank and other borrowings and perpetual securities.

As at 31 December 2021, the net current liabilities of the Group amounted to RMB26,965,432,000. Management monitors regularly the Group's current and expected liquidity requirements to ensure it maintains sufficient cash and cash equivalents and has available funding through adequate amount of facilities to meet its working capital requirements. As at 31 December 2021, the Group had available unutilized facilities in writing from banks and from related parties amounted to approximately RMB34,385,836,000 as disclosed in Notes 36(f), 37(h), 38(a) and 38(d) respectively, and will refinance and/or restructure certain short-term loans into long-term loans or consider alternative sources of financing, where applicable.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.2 Financial risk management objectives and policies *(Continued)*

(e) Liquidity risk *(Continued)*

The table below analyzes the Group's financial liabilities into relevant maturity groupings based on the remaining period at the end of reporting period to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash outflows by maturity and its carrying amounts. (The comparative data in the table below excluded those classified as part of the disposal groups classified as held for sale as at 31 December 2020.)

	Within one year RMB'000	Between one and two years RMB'000	Between two and five years RMB'000	Over five years RMB'000	Total contractual undiscounted cash outflows RMB'000	Total Carrying amount RMB'000
At 31 December 2021						
Payables and accrued charges	**9,936,442**	**–**	**–**	**–**	**9,936,442**	**9,936,442**
Amounts due to related parties	**1,351,655**	**–**	**–**	**–**	**1,351,655**	**1,349,792**
Bank borrowings	**22,360,210**	**5,799,135**	**15,324,326**	**42,023,982**	**85,507,653**	**76,842,104**
Borrowings from related parties	**6,290,488**	**1,767,080**	**5,797,248**	**2,079,156**	**15,933,972**	**14,666,286**
Other borrowings	**4,801,287**	**5,420,491**	**–**	**1,402,215**	**11,623,993**	**10,820,325**
Lease liabilities	**434,634**	**711,050**	**898,613**	**2,340,343**	**4,384,640**	**3,592,386**
At 31 December 2020						
Payables and accrued charges	9,238,621	–	–	–	9,238,621	9,238,621
Amounts due to related parties	1,876,015	–	–	–	1,876,015	1,874,152
Bank borrowings	22,124,492	4,510,411	11,523,519	36,330,325	74,488,747	66,571,536
Borrowings from related parties	3,019,603	5,568,879	3,328,915	4,662,230	16,579,627	14,949,670
Other borrowings	4,098,977	2,280,586	–	–	6,379,563	6,030,000
Lease liabilities	547,129	649,237	887,477	2,701,687	4,785,530	3,880,729

46.3 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group manages the capital structure and makes adjustments to it in light of changes in economic condition. In order to maintain or adjust the capital structure, the Group may adjust the dividend payments to shareholders, return capital to shareholders, issue new shares, and sell assets to reduce debt or to obtain bank and other borrowings.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total debts (including current and non-current borrowings as well as lease liabilities as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is calculated as total equity, as shown in the consolidated statement of financial position, plus net debt.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.3 Capital risk management *(Continued)*

The table below analyzes the Group's capital structure (the comparative data included those classified as part of the disposal groups classified as held for sale as at 31 December 2020).

	2021 RMB'000	2020 RMB'000
Bank borrowings (Note 36)	76,842,104	68,199,271
Borrowings from related parties (Note 37)	14,666,286	15,749,670
Other borrowings (Note 38)	10,820,325	6,030,000
Lease liabilities (Note 39)	3,592,386	3,880,729
Less: Cash and cash equivalents (Note 31)	(1,766,632)	(1,318,331)
Net debt	104,154,469	92,541,339
Total equity	51,884,797	45,789,917
Total capital	156,039,266	138,331,256
Gearing ratio	67%	67%

46.4 Fair value estimation

The table below analyzes the Group's financial instruments carried at fair value by level of the inputs to valuation techniques used to measure fair value. Such inputs are categorized into 3 levels within a fair value hierarchy as follows:

- Quoted prices (unadjusted) in active markets for identical assets and liabilities (level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

The fair value of financial instruments traded in active markets is based on quoted market prices at the end of the year. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1. Instruments included in level 1 comprise listed equity investments classified as equity instruments at FVTOCI.

If one or more of the significant inputs are not based on observable market data, the instrument is included in level 3.

46. FINANCIAL INSTRUMENTS (CONTINUED)

46.4 Fair value estimation *(Continued)*

The comparative data in the analysis below included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

(a) Fair value of the Group's financial assets that are measured at fair value on a recurring basis:

Financial assets	Fair value 2021 RMB'000	Fair value 2020 RMB'000	Fair value hierarchy	Valuation technique and key inputs
Equity instruments at FVTOCI — Shanghai Power	**4,657,406**	2,586,640	Level 1	Quoted market prices at the end of reporting period (current bid price).
Equity instruments at FVTOCI — Unlisted equity investments in the PRC	**578,589**	493,189	Level 3	Market approach — Fair value of such equity instruments is estimated by calculating the appropriate value ratio based on market multiples derived from a set of comparable listed companies in the same or similar industries. Key inputs are market value of the equity interest, price-to-book ratio (0.87-2.06) of comparable companies and the marketability discount (12.83%–31.77%). The fair value measurement is positively correlated to the above ratios and negatively correlated to the discount for lack of marketability.
Debt instruments at FVTOCI	**213,660**	485,510	Level 3	Discounted cash flow at a comparable discount rate of 3.80%.

(b) Reconciliation of level 3 fair value measurements — Financial assets at FVTOCI:

	2021 RMB'000	2020 RMB'000
At 1 January	**978,699**	641,221
Additions	**1,460,458**	2,172,913
Derecognition	**(1,728,448)**	(1,858,345)
Total gains in other comprehensive income	**81,540**	22,910
At 31 December	**792,249**	978,699

Included in other comprehensive income is a gain of RMB81,540,000 (2020: RMB24,853,000) relating to equity instruments at FVTOCI — unlisted equity investments in the PRC and debt instruments at FVTOCI held at the end of the current reporting period and , which is reported as changes of FVTOCI reserve.

47. DISPOSAL OF INTERESTS IN SUBSIDIARIES

(a) Without loss of control

On 26 November 2021, the Company completed the establishment of the "China Power Energy Infrastructure Investment and Anhui's Asset-backed Special Program (similar to REITS) (the "Special Program"). Under the Special Program, the Company transferred its 100% equity interest in Wuhu Electric Power Generating Company Limited, a wholly-owned subsidiary of the Company to a limited partnership (the special purpose vehicle set up for issuance of the asset-backed securities, the "SPV"). CSC Financial Co., Ltd. ("CSCFC") acting on behalf of the Special Program and its asset-backed securities holders, holds 80% interest of the SPV (the "Asset-backed Securities") while 20% interest of the SPV is held and controlled by the Company. CSCFC issued the Asset-backed Securities in the form of similar REITS products to the qualified investors for a total amount of RMB2,576,000,000.

(b) Loss of control

On 31 December 2021, the Group disposed of its 100% equity interests in a subsidiary, China Power (Deyang) Comprehensive Energy Company Limited (中電(德陽)綜合能源有限公司) ("CP Deyang"), to China Power Maintenance Engineering Company Limited (中電電力檢修工程有限公司) ("CP Maintenance Engineering"), for a consideration of RMB20,128,000 and recorded a disposal gain (pre-tax) of RMB1,242,000 (Note 49(a)(iv)).

CP Maintenance Engineering is a wholly-owned subsidiary of SPIC. SPIC is the ultimate controlling shareholder of the Company, which is interested in approximately 54.35% of the issued share capital of the Company. As such, CP Maintenance Engineering is a related party and a connected person of the Company as defined in the Listing Rules. Accordingly, the transaction constitutes a connected transaction of the Company under the Listing Rules.

In July 2021, Wu Ling Power disposed all its equity interests in four subsidiaries of the Group and recorded a disposal loss (pre-tax) of RMB97,698,000.

In September 2021, the Company disposed all its equity interests in four subsidiaries of the Group and recorded a disposal loss (pre-tax) of RMB16,773,000.

Upon loss of control over these subsidiaries, the Group recognized a disposal loss (pre-tax) amounting to RMB113,229,000 (Note 7), recognized non-controlling interests of RMB63,326,000 and resulted in net cash outflows of RMB23,999,000 during the year ended 31 December 2021.

As disclosed in Note 32, on 23 December 2021, the Group completed the disposal of equity interests in CP Shentou. Upon completion, CP Shentou ceased to be a subsidiary and became an associate of the Group. In December 2021, the Group completed the disposal of equity interests in Sichuan Xingtie which ceased to be a subsidiary of the Group upon completion.

48. ACQUISITIONS OF SUBSIDIARIES

During the year ended 31 December 2021, the Company and its subsidiaries acquired certain equity interests in twenty entities (collectively referred to as "Acquired Entities"). These acquisitions have been accounted for using the acquisition method when being acquired. The Acquired Entities were all individually not material. No goodwill or newly identified assets arose as a result of these acquisitions.

48. ACQUISITIONS OF SUBSIDIARIES (CONTINUED)

Consideration transferred

	2021 RMB'000
Cash	568,522
Consideration payable, which has been accounted for as other payables as at 31 December 2021	207,188
	775,710

Assets and liabilities recognized at the date of acquisition

	2021 RMB'000
Non-current assets	
Property, plant and equipment	2,853,504
Right-of-use assets	354,939
Other non-current assets	26,700
Current assets	
Cash and cash equivalents	127,248
Accounts receivable	336,083
Prepayments, deposits and other receivables	151,314
Current liabilities	
Other payables and accrued charges	(2,211,288)
Borrowings from related parties	(469,300)
Lease liabilities	(308,484)
Deferred tax liabilities	(33,852)
Other non-current liabilities	(3,250)
Net identifiable assets acquired	823,614

Non-controlling interest

The non-controlling interests in Acquired Entities recognized at the acquisition date were measured by reference to the proportionate share of recognized amounts of net assets of the Acquired Entities and amounts to RMB47,904,000.

Goodwill arising on acquisition

	2021 RMB'000
Consideration transferred	775,710
Add: Non-controlling interests	47,904
Less: Net identifiable assets acquired	(823,614)
	–

48. ACQUISITIONS OF SUBSIDIARIES (CONTINUED)

Net cash outflows arising on acquisition

	2021 RMB'000
Consideration paid in cash	(568,522)
Less: Cash and cash equivalents acquired	127,248
	(441,274)

49. RELATED PARTY TRANSACTIONS

The Group is controlled by CPI Holding, an intermediate holding company which directly holds approximately 26.2% (2020: 28.9%) of the Company's shares, and indirectly holds approximately 24.6% (2020: 27.1%) of the Company's shares through CPDL. As at 31 December 2021, CPI Holding owned approximately 50.8% (2020: 56.0%) equity interest of the Company in aggregate. In addition, SPIC International Finance (Hong Kong) Company Limited, a wholly-owned subsidiary of SPIC and also a fellow subsidiary of the Company, held 3.6% (2020: 4.0%) of the Company's shares as at 31 December 2021. The Directors regard SPIC, a wholly state-owned enterprise established in the PRC, which is the beneficial owner of CPI Holding, as the ultimate holding company.

SPIC is controlled by the PRC government which also owns a significant portion of the productive assets in the PRC. In accordance with HKAS 24 (Revised), government-related entities and their subsidiaries, directly or indirectly controlled, jointly controlled or significantly influenced by the PRC government are defined as related parties of the Group. On that basis, related parties include SPIC, its subsidiaries, joint ventures and associates (other than the Group), other government-related entities and their subsidiaries, other entities and corporations in which the Company is able to control or exercise significant influence and key management personnel of the Company and SPIC as well as their close family members.

For the purpose of the related party transactions disclosures, the Directors believe that it is also meaningful to disclose the related party transactions with SPIC companies for the interests of financial statements users. The Directors believe that the information of related party transactions has been adequately disclosed in the consolidated financial statements. Some of the related party transactions also constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules.

During the year of 2018, ABC Financial Asset Investment Co., Ltd. ("ABC Financial"), a subsidiary of ABC, and ICBC Financial Asset Investment Co., Ltd. ("ICBC Financial"), a subsidiary of ICBC, have respectively become non-controlling shareholders of Huaihua Yuanjiang Power Development Co., Ltd. ("Yuanjiang Power") and SPIC Guangxi Changzhou Hydropower Development Co., Ltd. ("Changzhou Hydropower"), both being significant subsidiaries of the Group. ABC and its subsidiaries (collectively the "ABC Group") and ICBC and its subsidiaries (collectively the "ICBC Group") could exercise significant influence through these subsidiaries and were identified as related parties to the Group accordingly. On 29 October 2020, Wu Ling Power re-purchased all 6.86% and 34.32% equity interests of Yuanjiang Power from ABC Financial and ICBC Financial respectively by a cash consideration of RMB3,000,000,000. In December 2020, Guangxi Overseas (a joint venture of the Group) acquired all 11.69% and 23.38% equity interests of Changzhou Hydropower from ABC Financial and ICBC Financial respectively. Upon completion of these transactions, ABC Financial and ICBC Financial ceased to hold any equity interest in the Group's subsidiaries and ceased to be recognized as related parties of the Group.

49. RELATED PARTY TRANSACTIONS (CONTINUED)

The following is a summary of significant related party transactions which, in the opinion of the Directors, are entered into in the ordinary course of the Group's business in addition to the related party information shown elsewhere in the consolidated financial statements.

(a) Income

	Notes	2021 RMB'000	2020 RMB'000
Interest income from:	(i)		
— SPIC Financial		**18,507**	17,668
— ICBC and ABC		**–**	3,224
— associates		**6,493**	10,675
— non-controlling interests		**1,861**	1,595
Dividend income from Shanghai Power	(ii)	**39,962**	47,228
Rental income from joint ventures	(iii)	**1,558**	1,558
Income from provision of repairs and maintenance services to:	(iii)		
— SPIC		**94**	142
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**69,052**	5,338
— associates		**9,742**	8,437
Income from provision of other services (entrusted management services) to:	(iii)		
— CPI Holding		**70,326**	47,208
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**21,057**	15,775
Income from provision of IT and other services to:	(iii)		
— CPI Holding		**1,132**	–
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**56,524**	18,413
— associates		**25,371**	11,193
Sales of coal, coal by-products and spare parts to:	(iii)		
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**20,795**	3,399
— associates		**173,396**	172,535
Sales of heat to non-controlling interests	(iii)	**34,386**	35,752
Sales of unused power production quota to companies controlled by SPIC other than CPI Holding and SPIC Financial	(iii)	**2,089**	9,270
Gain on disposal of subsidiaries net, (pre-tax)	(iv)	**1,242**	28,628
Gain on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate (a company controlled by SPIC other than CPI Holding and SPIC Financial) (Note 32)		**242,283**	–
Transfer of renewable energy accounts receivable to SPIC (Note 41)		**1,184,931**	–

49. RELATED PARTY TRANSACTIONS (CONTINUED)

(a) Income *(Continued)*

Notes:

(i) Interest income from these related parties are charged at interest rates from 0.30% to 5.66% (2020: 0.30% to 5.66%) per annum.

(ii) Dividend income from Shanghai Power was recognized based on dividends declared by its boards of directors in proportion to the Group's interests in it.

(iii) These incomes were charged in accordance with the terms of the relevant agreements.

(iv) As disclosed in Note 47(b), the Group disposed a subsidiary to CPEPE and recorded a disposal gain (pre-tax) of RMB1,242,000.

(b) Expenses

	Notes	2021 RMB'000	2020 RMB'000
Purchases of coal, coal by-products and spare parts from:	(i)		
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**105,808**	350,973
— joint ventures		**44,727**	27,888
— non-controlling interests		**7,608,441**	4,414,143
Construction costs and other services fees to:	(ii)		
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**744,785**	1,093,457
— non-controlling interests		**934,012**	1,901,147
Interest expenses to:	(iii)		
— SPIC		**348,903**	258,777
— CPI Holding		**34,640**	21,834
— SPIC Financial		**196,223**	373,896
— ICBC and ABC		**–**	970,369
— an associate		**539**	952
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**35,082**	29,649
— companies controlled by SPIC other than CPI Holding and SPIC Financial on lease liabilities		**82,012**	87,291
Acquisition of an associate from CPI Holding	(iv)	**18,010**	–

Notes:

(i) Purchases of coal, coal by-products and spare parts were charged in accordance with the terms of the relevant agreements.

(ii) Construction costs and other services fees were mainly related to construction services, repairs and maintenance services, transportation services and other services which were charged based on mutually agreed prices.

(iii) Interest expenses to these related parties are charged at interest rates ranged from 1.85% to 7% (2020: ranged from 1.64% to 7%) per annum.

(iv) On 30 July 2021, the Company entered into the Equity Transfer Agreement with CPI Holding, pursuant to acquire 36% of the equity interest of Qiyuanxin Power, at a consideration of RMB18,010,000.

49. RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Financial assistance provided by a related party

As disclosed in Note 41, SPIC has provided financial assistance to the Group related to an asset management plan.

(d) Year-end balances with related parties

Year-end balances with related parties are disclosed in Notes 17, 24, 27, 28, 31, 32 and 37.

(e) Lease arrangements with related parties

Details of lease arrangements with related parties are disclosed in Note 39.

(f) For the years ended 31 December 2021 and 2020, the Group's significant transactions and balances with entities that were controlled, jointly-controlled or significantly influenced by the PRC government mainly include:

(i) bank deposits in state-owned banks and the related interest income

(ii) bank borrowings from state-owned banks and the related interest expenses

(iii) sales of electricity to provincial power grid companies owned by the PRC government and the related receivables

(iv) purchases of coal from state-owned enterprises and the related payables

(v) reservoir maintenance and usage fees to the PRC government

(vi) service fees to state-owned enterprises

(vii) compensation for inundation to the PRC government

The prices and terms of these transactions are set out in the relevant agreements governing these transactions or as mutually agreed.

(g) Key management personnel compensation

	2021 RMB'000	2020 RMB'000
Fees, basic salaries, housing allowance, other allowances and benefits in kind, discretionary bonuses and other benefits	**9,428**	9,210
Employer's contribution to pension plans	**758**	814

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES

The following is a list of the principal subsidiaries as at 31 December 2021 and 2020:

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Proportion of ownership interest Held by subsidiaries	Type of legal entity	Principal activities
Anhui Huainan Pingwei Electric Power Generation Company Limited (安徽淮南平圩發電有限責任公司)	The PRC	RMB841,600,000	60%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Huainan Pingwei No. 2 Electric Power Generation Co., Ltd. (淮南平圩第二發電有限責任公司)	The PRC	USD104,153,000	60%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Huainan Pingwei No. 3 Electric Power Generation Co., Ltd. (淮南平圩第三發電有限責任公司)	The PRC	RMB1,571,800,000/ RMB1,460,079,000	60%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Huanggang Dabieshan Power Generation Company Limited (黃岡大別山發電有限責任公司)	The PRC	RMB1,667,486,000/ RMB1,663,065,000	51%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Pingdingshan Yaomeng Power Company Limited (平頂山姚孟發電有限責任公司)	The PRC	RMB1,702,335,500	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Wu Ling Power (五凌電力有限公司)	The PRC	RMB7,790,000,000	63%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Sichuan CPI Fuxi Power Company Limited (四川中電福溪電力開發有限公司)	The PRC	RMB968,000,000	51%	–	Sino-foreign equity joint venture	Generation and sale of electricity
China Power Guorui Supply Chain Management Co., Ltd (中電國瑞供應鏈管理有限公司) (formerly known as China Power Guorui Logistics Company Limited (中電國瑞物流有限公司))	The PRC	RMB1,850,000,000/ RMB302,655,000	100%	–	Wholly foreign-owned enterprise	Provision of logistic services
Wuhu Electric Power Generating Company Limited (蕪湖發電有限責任公司)	The PRC	USD142,500,000	–	20%	Limited liability company	Generation and sale of electricity
China Power (Pu'an) Power Generating Company Limited (中電(普安)發電有限責任公司)	The PRC	RMB999,120,000/ RMB940,023,000	95%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Shanxi China Power Shentou No.2 Power Generating Company Limited (山西中電神頭第二發電有限責任公司)	The PRC	RMB2,385,316,700/ RMB1,434,776,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Huainan China Power Jiaoganghu Photovoltaic Power Generating Company Limited (淮南中電焦崗湖光伏發電有限責任公司)	The PRC	RMB123,012,000/ RMB101,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Datong China Power Photovoltaic Power Generating Company Limited (大同中電光伏發電有限公司)	The PRC	RMB680,430,000/ RMB635,490,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
China Power (Jiangmen) Comprehensive Energy Company Limited (中電(江門)綜合能源有限公司)	The PRC	RMB204,000,000/ RMB193,000,000	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
China Power Shenyang Energy Investment Limited (中電(沈陽)能源投資有限公司)	The PRC	RMB500,000,000/ RMB376,100,000	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
China Power Yantai Energy Investment Limited (中電(煙台)能源投資有限公司)	The PRC	USD220,000,000/ RMB137,128,000	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
Hubei China Power Zhiguang New Energy Company Limited (湖北中電智光新能源有限公司)	The PRC	RMB140,000,000/ RMB112,500,000	–	100%	Limited liability company	Generation and sale of electricity
China Power (Shangqiu) Thermal Power Company Limited (中電(商丘)熱電有限公司)	The PRC	RMB1,435,522,900/ RMB1,111,629,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Ruicheng China Power Photovoltaic Power Generating Co., Ltd. (芮城中電光伏發電有限公司)	The PRC	RMB200,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Huainan China Power Shijiahu Photovoltaic Power Generating Company Limited (淮南中電施家湖光伏發電有限責任公司)	The PRC	RMB220,260,000/ RMB189,120,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Zhongdian Zhihui Comprehensive Energy Limited (中電智慧綜合能源有限公司)	The PRC	RMB200,000,000/ RMB139,438,000	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
China Power (Pu'an) New Energy Company Limited (中電(普安)新能源有限責任公司)	The PRC	RMB287,540,000/ RMB237,080,000	–	100%	Limited liability company	Generation and sale of electricity
Shanxi Shentou (山西神頭發電有限責任公司)	The PRC	RMB1,162,631,200/ RMB1,219,631,187	86.6%	13.4%	Sino-foreign equity joint venture	Generation and sale of electricity
Guizhou Qingshuijiang Hydropower Co., Ltd. (貴州清水江水電有限公司)	The PRC	RMB3,400,000,000/ RMB3,285,500,000	–	95%	Limited liability company	Generation and sale of electricity

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Yuanjiang Power (懷化沅江電力開發有限責任公司)	The PRC	RMB6,460,387,600	–	100%	Limited liability company	Generation and sale of electricity
China Electric Changshu Thermoelectric Co., Ltd. (中電常熟熱電有限公司)	The PRC	RMB344,000,000/ RMB250,070,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Wuling Shanshan Electric Power Co., Ltd. (五淩鄯善電力有限公司)	The PRC	RMB274,000,000	–	100%	Limited liability company	Generation and sale of electricity
Wuling Linxiang Electric Power Co., Ltd. (五淩臨湘電力有限公司)	The PRC	RMB279,000,000	–	100%	Limited liability company	Generation and sale of electricity
Wuling Xinshao Electric Power Co., Ltd. (五淩新邵電力有限公司)	The PRC	RMB183,000,000	–	100%	Limited liability company	Generation and sale of electricity
Gulangxian Yonghe New Energy Investment Co., Ltd. (古浪縣雍和新能源投資有限責任公司)	The PRC	RMB140,000,000	–	70%	Limited liability company	Generation and sale of electricity
Hunan Province Hongzhao Wind Power Co., Ltd. (湖南省鴻兆風力發電有限公司)	The PRC	RMB85,000,000	–	70%	Limited liability company	Generation and sale of electricity
Henan New Hope New Energy Co., Ltd. (河南新希望新能源有限公司)	The PRC	RMB138,930,000/ RMB115,530,000	60%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Wuling Jiangyong Electric Power Co., Ltd. (五淩江永電力有限公司)	The PRC	RMB100,000,000	–	70%	Limited liability company	Generation and sale of electricity
Wuling Shuangfeng Electric Power Co., Ltd. (五淩雙峰電力有限公司)	The PRC	RMB80,000,000	–	70%	Limited liability company	Generation and sale of electricity
Tieling China Power Photovoltaic Power Generating Co., Ltd. (鐵嶺中電光伏發電有限公司)	The PRC	RMB97,420,000/ RMB81,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Wu Ling Buerjin Electric Power Co., Ltd. (五淩布爾津電力有限公司)	The PRC	RMB139,000,000	–	100%	Limited liability company	Generation and sale of electricity
SPIC Guangxi Electric Power Co., Ltd (國家電投集團廣西電力有限公司)	The PRC	RMB1,474,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Changzhou Hydropower (國家電投集團廣西長洲水電開發有限公司)	The PRC	RMB2,072,098,581	–	79%	Limited liability company	Generation and sale of electricity
SPIC Guangxi Xing'an Wind Power Co., Ltd (國家電投集團廣西興安風電有限公司)	The PRC	RMB776,610,526/ RMB1,152,391,526	–	95%	Limited liability company	Generation and sale of electricity
SPIC Shandong Energy Development Co., Ltd. (國家電投集團山東能源發展有限公司)	The PRC	RMB2,200,000,000/ RMB1,229,260,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Anqiu Hengtai New Energy Technology Co. Ltd. (安丘恒泰新能源科技有限公司)	The PRC	RMB240,000,000/ RMB325,644,781	–	51%	Limited liability company	Generation and sale of electricity
SPIC Anhui New Energy Co., Ltd. (國家電力投資集團安徽新能源有限公司)	The PRC	RMB503,000,000/ RMB501,350,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
SPIC Huainan New Energy Co. Ltd. (淮南市國家電投新能源有限公司)	The PRC	RMB300,000,000/ RMB235,600,000	–	100%	Limited liability company	Generation and sale of electricity
SPIC Hubei lvdong New Energy Co., Ltd. (國家電投集團湖北綠動新能源有限公司)	The PRC	RMB1,480,000,000/ RMB1,313,612,600	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
Shayang Green Power Photovoltaic Power Generating Company Limited (沙洋綠動光伏發電有限公司)	The PRC	RMB77,560,000/ RMB138,050,000	–	100%	Limited liability company	Generation and sale of electricity
Zhongning Longji Photovoltaic New Energy Co., Ltd. (中寧縣隆基光伏新能源有限公司)	The PRC	RMB300,000,000	–	70%	Limited liability company	Generation and sale of electricity
Daqing Huiqing Energy Development Company Limited (大慶市輝慶新能源有限公司)	The PRC	RMB132,460,000	–	70%	Limited liability company	Generation and sale of electricity
Zhaozhou Longhui New Energy Co., Ltd. (肇州縣隆輝新能源有限公司)	The PRC	RMB118,410,000	–	70%	Limited liability company	Generation and sale of electricity
Hunyuan China Power Photovoltaic Power Generating Co., Ltd. (渾源中電光伏發電有限公司)	The PRC	RMB178,815,700/ RMB174,648,100	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
China Power Chaoyang New Energy Co., Ltd. (中電(朝陽)新能源有限公司)	The PRC	RMB960,000,000/ RMB786,907,200	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Xin'an GCL Photovoltaic Power Co., Ltd. (新安縣協鑫光伏電力有限公司)	The PRC	RMB183,170,000	–	55%	Limited liability company	Generation and sale of electricity
Ruzhou GCL Photovoltaic Power Co., Ltd. (汝州協鑫光伏電力有限公司)	The PRC	RMB184,240,000	–	55%	Limited liability company	Generation and sale of electricity
Jiangling GCL Photovoltaic Power Co., Ltd. (江陵縣協鑫光伏電力有限公司)	The PRC	RMB230,000,000	–	55%	Limited liability company	Generation and sale of electricity
Jiangyong Shenghua Energy Development Co., Ltd. (江永晟華能源開發有限公司)	The PRC	RMB214,600,000/ RMB130,000,000	–	51%	Limited liability company	Generation and sale of electricity
Jiangyong Clean Energy Development Co., Ltd. (江永清潔能源開發有限公司)	The PRC	RMB130,000,000	–	70%	Limited liability company	Generation and sale of electricity

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Proportion of ownership interest Held by subsidiaries	Type of legal entity	Principal activities
Beijing Haoyu New Energy Investment Co., Ltd. (北京浩宇新能源投資有限公司)	The PRC	RMB164,000,000	–	70%	Limited liability company	Provision of technical services in relation to generation of electricity
Daixian Xinhuaneng Energy Development Co., Ltd. (代縣新華能能源開發有限公司)	The PRC	RMB270,000,000	–	51%	Limited liability company	Provision of technical services in relation to generation of electricity
Jingle Xinfeng Energy Development Co., Ltd. (靜樂縣新風能源發展有限公司)	The PRC	RMB180,000,000	–	70%	Limited liability company	Provision of technical services in relation to generation of electricity
Jingle Hongyi Energy Development Co., Ltd. (靜樂弘義能源開發有限公司)	The PRC	RMB360,000,000	–	70%	Limited liability company	Provision of technical services in relation to generation of electricity
Shenchi Jinyuan Xinfeng Energy Development Co., Ltd. (神池晉源新風能源開發有限公司)	The PRC	RMB180,000,000	–	70%	Limited liability company	Provision of technical services in relation to generation of electricity
Gushi New Energy (國家電投固始新能源有限公司)	The PRC	RMB324,000,000/ RMB227,007,553	–	100%	Limited liability company	Provision of technical services in relation to generation of electricity
SPIC Jingmen Lvdong Energy Company Limited (國家電投集團荊門綠動能源有限公司)	The PRC	RMB200,000,000/ RMB123,000,000	–	90%	Limited liability company	Generation and sale of electricity
Dezhou Tianrui Wind Power Co., Ltd. (德州天瑞風力發電有限公司)	The PRC	RMB129,000,000	–	98.73%	Limited liability company	Generation and sale of electricity
Shandong Tianrui New Energy Co., Ltd. (山東天瑞新能源有限公司)	The PRC	RMB169,100,000/ RMB160,420,000	–	70%	Limited liability company	Generation and sale of electricity
Ningjin Guorui Power Investment New Energy Co., Ltd. (寧津國瑞電投新能源有限公司)	The PRC	RMB175,000,000/ RMB79,759,000	–	66%	Limited liability company	Generation and sale of electricity
Shanghe Guorui Power Investment Wind Power Co., Ltd. (商河國瑞電投風力發電有限公司)	The PRC	RMB332,000,000/ RMB153,298,000	–	66%	Limited liability company	Generation and sale of electricity
Qingyun Guorui Power Investment New Energy Co., Ltd. (慶雲國瑞電投新能源有限公司)	The PRC	RMB172,000,000/ RMB148,460,000	–	66%	Limited liability company	Generation and sale of electricity

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Name of companies	Place of establishment and operation	Registered/ paid up capital	Proportion of ownership interest Held by the Company	Held by subsidiaries	Type of legal entity	Principal activities
Lixian Huacheng Hydropower Development Co., Ltd. (理縣華成水電開發有限責任公司)	The PRC	RMB255,818,420	–	100%	Limited liability company	Generation and sale of electricity
Hunan Zhongshui Investment Co., Ltd. (湖南中水投資有限公司)	The PRC	RMB67,000,000	–	100%	Limited liability company	Generation and sale of electricity
Qianjiang Lvdong Wind Power Co., Ltd. (潛江綠動風電有限公司)	The PRC	RMB152,000,000/ RMB135,621,358	–	90%	Limited liability company	Generation and sale of electricity
Xintai Zhongdian Photovoltaic Power Co., Ltd. (新泰中電光伏發電有限公司)	The PRC	RMB272,000,000/ RMB265,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Ruicheng Lvlong Clean Energy Co., Ltd. (芮城縣綠隆清潔能源有限公司)	The PRC	RMB192,000,000/ RMB93,450,000	–	70%	Limited liability company	Generation and sale of electricity
SPIC Huangmeilvdong Wind Power Co., Ltd. (國家電投黃梅綠動風電有限公司)	The PRC	RMB85,000,000/ RMB80,000,000	–	100%	Limited liability company	Generation and sale of electricity
SPIC Haiyang Offshore Wind Power Co., Ltd. # (國家電投集團海陽海上風電有限公司)	The PRC	RMB1,100,000,000/ RMB892,490,000	–	100%	Limited liability company	Generation and sale of electricity
SPIC Haiyang Energy Development Co., Ltd. # (國家電投集團海陽能源發展有限公司)	The PRC	RMB730,000,000/ RMB410,050,000	45.21%	54.79%	Sino-foreign equity joint venture	Generation and sale of electricity
Heze State Power Investment New Energy Co., Ltd. (菏澤國電投新能源有限公司)	The PRC	RMB132,000,000/ RMB131,819,848	–	100%	Limited liability company	Generation and sale of electricity
Datong Xinrong Ruilong Clean Energy Co., Ltd. # (大同市新榮區瑞隆清潔能源有限公司)	The PRC	RMB651,000,000/ RMB650,999,640	–	100%	Limited liability company	Generation and sale of electricity
Xinyuan Smart Storage Energy Development (Beijing) Co., Ltd. (新源智儲能源發展(北京)有限公司)	The PRC	RMB500,000,000/ RMB200,000,000	51%	–	Sino-foreign equity joint venture	Generation and sale of electricity
Xilinhot Mingyang Smart Energy Co., Ltd. (錫林浩特市明陽智慧能源有限公司)	The PRC	RMB146,000,000/ RMB120,428,134	–	100%	Limited liability company	Generation and sale of electricity
Dongying Xihe New Energy Co., Ltd. (東營曦和新能源有限公司)	The PRC	RMB135,000,000/ RMB25,900,000	–	100%	Limited liability company	Generation and sale of electricity
China Power He Wan (Tianjin) Investment Partnership (Limited partnership) (中電和皖(天津)投資合夥企業(有限合夥))	The PRC	RMB3,221,000,000	20%	–	Limited partnership	Investment on new energy power resources

\# The power plant is under development.

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Material non-controlling interests

The table below shows details of non-wholly-owned subsidiaries of the Group that have material non-controlling interests:

Name of subsidiaries	Place of incorporation	Proportion of ownership interests and voting rights held by non-controlling interests		Total comprehensive income allocated to non-controlling interests		Accumulated non-controlling interests	
		2021 RMB'000	2020 RMB'000	2021 RMB'000	2020 RMB'000	2021 RMB'000	2020 RMB'000
Wu Ling Power and its subsidiaries (collectively known as "Wu Ling Group")	The PRC	**37%**	37%	**417,654**	493,772	**5,714,215**	5,419,936
Changzhou Hydropower and its subsidiaries (collectively known as "Changzhou Group")	The PRC	**35.07%**	35.07%	**74,191**	83,898	**1,397,851**	1,323,660
Subsidiaries with individually immaterial non-controlling interests						**8,965,825**	5,648,514
						16,077,891	12,392,110

The non-controlling interests in respect of the rest of entities with non-controlling interests were individually not material. Set out below are the summarized financial information in respect of each of the Group's subsidiaries that has material non-controlling interests.

(1) Wu Ling Group

Summarized consolidated statement of financial position

	Wu Ling Group	
	2021 RMB'000	2020 RMB'000
Non-current assets	**58,857,449**	56,287,714
Current assets	**2,294,187**	2,735,912
Non-current liabilities	**(29,880,812)**	(28,991,582)
Current liabilities	**(13,766,482)**	(13,698,277)
Total equity	**17,504,342**	16,333,767
Non-controlling interests within Wu Ling Group	**(2,060,517)**	(1,685,290)
Equity attributable to equity holders of Wu Ling Power	**15,443,825**	14,648,477
Non-controlling interests of Wu Ling Power (at 37%)	**5,714,215**	5,419,936

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Material non-controlling interests *(Continued)*

(1) Wu Ling Group *(Continued)*

Summarized consolidated income statement and consolidated statement of comprehensive income

	Wu Ling Group	
	2021 RMB'000	2020 RMB'000
Revenue	**6,976,302**	6,602,231
Profit for the year	**1,251,384**	1,564,736
Profit attributable to the non-controlling interests of Wu Ling Group's subsidiaries	**(193,240)**	(233,318)
Profit attributable to the equity holders of Wu Ling Power	**1,058,144**	1,331,418
Profit attributable to the non-controlling interests of Wu Ling Power (at 37%)	**391,513**	492,625
Other comprehensive income for the year	**70,678**	3,055
Other comprehensive (income)/expense attributable to the non-controlling interests of Wu Ling Group's subsidiaries	**(27)**	45
Other comprehensive income attributable to the equity holders of Wu Ling Power	**70,651**	3,100
Other comprehensive income attributable to the non-controlling interests of Wu Ling Power (at 37%)	**26,141**	1,147
Total comprehensive income for the year	**1,322,062**	1,567,791
Total comprehensive income attributable to the non-controlling interests of Wu Ling Group's subsidiaries	**(193,267)**	(233,273)
Total comprehensive income attributable to the equity holders of Wu Ling Power	**1,128,795**	1,334,518
Total comprehensive income attributable to the non-controlling interests of Wu Ling Power (at 37%)	**417,654**	493,772

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Material non-controlling interests *(Continued)*

(1) Wu Ling Group *(Continued)*

Summarized consolidated statement of cash flows

	Wu Ling Group	
	2021 RMB'000	2020 RMB'000
Dividends paid	**(615,028)**	(219,791)
Dividends paid to non-controlling interests	**(1,231,248)**	(423,325)
Net cash inflow from operating activities	**3,883,021**	4,829,451
Net cash outflow from investing activities	**(6,754,099)**	(8,762,474)
Net cash inflow from financing activities	**4,956,504**	4,577,082
Net increase in cash and cash equivalents	**239,150**	943
Cash and cash equivalents at 1 January	**68,439**	67,496
Cash and cash equivalents at 31 December	**307,589**	68,439

The financial information presented above is before inter-company eliminations.

(2) Changzhou Group

Summarized statement of financial position

	Changzhou Group	
	2021 RMB'000	2020 RMB'000
Non-current assets	**4,688,800**	4,892,130
Current assets	**2,162,993**	2,061,465
Non-current liabilities	**(2,136,070)**	(2,163,682)
Current liabilities	**(565,259)**	(852,698)
Total equity	**4,150,464**	3,937,215
Non-controlling interests within Changzhou Group	**(1,700)**	–
Equity attributable to equity holders of Changzhou Hydropower	**4,148,764**	3,937,215
Non-controlling interests of Changzhou Hydropower	**1,397,851**	1,323,660

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES (CONTINUED)

Material non-controlling interests *(Continued)*

(2) Changzhou Group *(Continued)*

Summarized income statement and statement of comprehensive income

	Changzhou Group	
	2021 **RMB'000**	2020 RMB'000
Revenue	**870,554**	865,195
Profit and total comprehensive income for the year	**211,551**	239,230
Total comprehensive income attributable to the equity holders of Changzhou Group	**211,551**	239,230
Total comprehensive income attributable to the non-controlling interests of Changzhou Group (at 35.07%)	**74,191**	83,898

Summarized statement of cash flows

	Changzhou Group	
	2021 **RMB'000**	2020 RMB'000
Dividends paid	**(84,988)**	(210,060)
Dividends paid to non-controlling interests	**–**	(113,458)
Net cash inflow/(outflow) from operating activities	**198,284**	(25,431)
Net cash inflow from investing activities	**205,660**	504,658
Net cash outflow from financing activities	**(314,800)**	(157,780)
Net increase/(decrease) in cash and cash equivalents	**4,156**	(2,071)
Cash and cash equivalents at 1 January	**1,653**	3,724
Cash and cash equivalents at 31 December	**5,809**	1,653

The financial information presented above is before inter-company eliminations.

51. CONTINGENT LIABILITIES

There are no material contingent liabilities of the Group as at 31 December 2021.

52. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
ASSETS		
Non-current assets		
Property, plant and equipment	**26,112**	22,151
Right-of-use assets	**74,462**	41,779
Investments in subsidiaries	**26,609,250**	23,603,891
Interests in associates	**1,958,722**	1,654,072
Interests in joint ventures	**640,707**	372,504
Equity instruments at FVTOCI	**4,657,406**	2,586,640
Other non-current assets	**14,367**	14,367
Loans to subsidiaries	**4,194,500**	3,740,000
	38,175,526	32,035,404
Current assets		
Loans to subsidiaries	**7,402,760**	6,484,360
Prepayments, deposits and other receivables	**176,258**	119,425
Amounts due from related parties	**1,412,172**	291,473
Amounts due from subsidiaries	**757,440**	442,501
Dividends receivable	**112,083**	192,240
Cash and cash equivalents	**576,156**	588,547
	10,436,869	8,118,546
Total assets	**48,612,395**	40,153,950
EQUITY		
Share capital (Note 33)	**20,418,001**	17,268,192
Other equity instruments (Note 34)	**2,997,600**	3,015,740
Reserves (note)	**5,538,301**	5,507,449
Total equity	**28,953,902**	25,791,381

52. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
LIABILITIES		
Non-current liabilities		
Bank borrowings	**5,542,000**	–
Other borrowings	**5,000,000**	2,000,000
Lease liabilities	**63,574**	5,137
Deferred income tax liabilities	**852,402**	334,767
	11,457,976	2,339,904
Current liabilities		
Other payables and accrued charges	**261,854**	212,316
Amounts due to related parties	**340,473**	305,321
Amounts due to subsidiaries	**1,913,458**	1,052,940
Bank borrowings	**2,179,000**	7,916,834
Other borrowings	**3,500,000**	2,500,000
Lease liabilities	**5,732**	35,254
	8,200,517	12,022,665
Total liabilities	**19,658,493**	14,362,569
Total equity and liabilities	**48,612,395**	40,153,950
Net current assets/(liabilities)	**2,236,352**	(3,904,119)
Total assets less current liabilities	**40,411,878**	28,131,285

The statement of financial position was approved and authorized for issue by the Board on 17 March 2022 and is signed on its behalf by:

HE Xi
Director

GAO Ping
Director

52. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

Note:

Movements in the Company's reserves

	FVTOCI reserve RMB'000	Retained earnings RMB'000	Total RMB'000
At 1 January 2021	**1,003,259**	**4,504,190**	**5,507,449**
Loss for the year	**–**	**(113,077)**	**(113,077)**
Profit attributable to holders of other equity instruments	**–**	**(134,250)**	**(134,250)**
Fair value loss on equity instruments at FVTOCI, net of tax	**1,553,074**	**–**	**1,553,074**
2020 final dividend	**–**	**(1,274,895)**	**(1,274,895)**
At 31 December 2021	**2,556,333**	**2,981,968**	**5,538,301**
At 1 January 2020	1,266,836	4,823,295	6,090,131
Profit for the year	–	973,930	973,930
Profit attributable to holders of other equity instruments	–	(18,140)	(18,140)
Fair value loss on equity instruments at FVTOCI, net of tax	(263,577)	–	(263,577)
2019 final dividend	–	(1,274,895)	(1,274,895)
At 31 December 2020	1,003,259	4,504,190	5,507,449

The loss for the year attributable to ordinary shareholders of the Company is dealt with in the financial statements of the Company to the extent of RMB247,327,000 (2020: profit of RMB955,790,000).

Five-Year Financial and Operations Summary

	2021 **RMB million**	2020 RMB million	2019 RMB million	2018 RMB million (restated)	2017 RMB million
Revenue	**34,734.3**	28,427.7	27,763.3	23,175.6	19,966.8
Profit before taxation	**533.2**	3,826.1	2,714.2	2,069.9	1,560.6
Income tax expense	**(362.0)**	(900.5)	(513.0)	(432.7)	(279.9)
Profit for the year	**171.2**	2,925.6	2,201.2	1,637.2	1,280.7
Attributable to:					
Equity holders of the Company	**(515.7)**	1,708.3	1,284.4	1,098.4	795.3
Non-controlling interests	**686.9**	1,217.3	916.8	538.8	485.4
Basic (loss)/earnings per share (RMB)	**(0.07)**	0.17	0.13	0.11	0.10
Dividend per share (RMB)	**0.05**	0.130	0.130	0.110	0.081
Total non-current assets	**156,183.7**	137,842.8	127,310.7	111,723.9	88,706.7
Total current assets	**18,570.4**	18,105.9	12,979.0	13,232.8	9,319.9
Total assets	**174,754.1**	155,948.7	140,289.7	124,956.7	98,026.6
Total current liabilities	**45,535.8**	43,277.9	35,535.2	29,721.1	28,821.5
Total non-current liabilities	**77,333.5**	66,880.9	59,621.3	52,386.6	32,010.6
Net assets	**51,884.8**	45,789.9	45,133.2	42,849.0	37,194.5
Equity attributable to equity holders of the Company	**35,806.9**	33,397.8	30,320.1	29,949.9	29,801.9
Non-controlling interests	**16,077.9**	12,392.1	14,813.1	12,899.1	7,392.6
Total equity	**51,884.8**	45,789.9	45,133.2	42,849.0	37,194.5
Consolidated installed capacity (MW)	**28,931.9**	26,845.8	23,698.7	21,439.2	17,839.6
Attributable installed capacity (MW)	**24,960.8**	23,878.2	21,113.2	19,731.6	17,051.6
Gross power generation (MWh)	**103,048,687**	91,902,510	87,134,871	74,101,429	66,683,402
Total electricity sold (MWh)	**98,793,792**	88,255,525	83,558,993	70,964,796	64,053,714
Net coal consumption rate (g/kWh)	**301.16**	303.31	301.82	302.41	304.23

"ASEAN"	Association of Southeast Asian Nations
"attributable installed capacity"	the proportionate amount of installed capacities of a power plant attributable to a company based on the percentage of equity interest held by the company in that power plant
"average utilization hours"	for a specified period, the amount of electricity (MWh) produced in such period divided by the average installed capacity (MW) in such period
"Board"	the board of Directors of the Company
"Changshu Power Plant"	Jiangsu Changshu Electric Power Generating Company Limited (江蘇常熟發電有限公司), an associate of the Company
"Changzhou Hydropower"	SPIC Guangxi Changzhou Hydropower Development Co., Ltd.* (國家電投集團廣西長洲水電開發有限公司), a subsidiary of the Company
"Chaoyang Power Station"	China Power Chaoyang New Energy Company Limited (中電(朝陽)新能源有限公司), a subsidiary of the Company
"China Power" or "Company"	China Power International Development Limited
"consolidated installed capacity"	100% installed capacity of a company that is deemed as a subsidiary in the Group's consolidated financial statements
"CP Guorui"	China Power Guorui Supply Chain Management Co., Ltd.* (formerly known as China Power Guorui Logistics Company Limited*) (中電國瑞供應鏈管理有限公司 (前稱中電國瑞物流有限公司)), a subsidiary of the Company
"CP Hua Chuang"	China Power Hua Chuang Electric Power Technology Research Company Limited* (中電華創電力技術研究有限公司), a subsidiary of the Company
"CP Huayuan"	CP Huayuan Nuclear Power Engineering Technical Co., Ltd.* (中電華元核電工程技術有限公司), a subsidiary of the Company
"CP Shentou"	China Power Shentou Power Generating Company Limited* (中電神頭發電有限責任公司), an associate of the Company
"CP Zhihui"	Zhongdian Zhihui Comprehensive Energy Limited* (中電智慧綜合能源有限責任公司), a subsidiary of the Company
"CPDL"	China Power Development Limited (中國電力發展有限公司*), a substantial shareholder of the Company and a subsidiary of CPI Holding
"CPI Holding"	China Power International Holding Limited (中國電力國際有限公司), the intermediate holding company of the Company and a subsidiary of SPIC

Technical Glossary and Definitions

"CPI Xianrong"	CPI Xianrong (Tianjin) Risk Management Co., Ltd* (中電投先融(天津)風險管理有限公司), an indirect subsidiary of SPIC
"Dabieshan Power Plant"	Huanggang Dabieshan Power Company Limited* (黃岡大別山發電有限責任公司), a subsidiary of the Company
"date of this annual report"	17 March 2022
"Datong CP"	Datong China Power Photovoltaic Power Company Limited* (大同中電光伏發電有限公司), a subsidiary of the Company
"Director(s)"	director(s) of the Company
"Fuxi Power Plant"	Sichuan CPI Fuxi Power Company Limited (四川中電福溪電力開發有限公司), a subsidiary of the Company
"Group" or "We"	the Company and its subsidiaries from time to time
"Guangxi Overseas"	Guangxi SPIC Overseas Energy Investment Co., Ltd.* (廣西國電投海外能源投資有限公司), a joint venture of the Company
"GW"	gigawatt, that is, one billion watts
"Haiyang Power Storage"	Haiyang SPIC Power Storage Technology Co., Ltd.* (海陽國電投儲能科技有限責任公司), a subsidiary of the Company
"Haiyang Wind Power"	SPIC Haiyang Offshore Wind Power Co., Ltd* (國家電投集團海陽海上風電有限公司), a subsidiary of the Company
"HK$"	Hong Kong dollars, the lawful currency of Hong Kong
"Hong Kong"	Hong Kong Special Administrative Region of the PRC
"Hong Kong Companies Ordinance"	Companies Ordinance, Chapter 622 of the Laws of Hong Kong (as amended from time to time)
"Hong Kong Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Huainan Mining"	Huainan Mining Industry (Group) Company Limited* (淮南礦業(集團)有限責任公司), a substantial shareholder of certain subsidiaries of the Company
"installed capacity"	the manufacturers' rated power output of a generating unit or a power plant, usually denominated in MW

"Jilin Electric"	Jilin Electric Power Co., Ltd.* (吉林電力股份有限公司), an associate of SPIC
"Jingmen Power Station"	SPIC Jingmen Lvdong Energy Company Limited* (國家電投集團荊門綠動能源有限公司), a subsidiary of the Company
"kWh"	kilowatt-hour, a standard unit of energy used in the electric power industry. One kilowatt-hour is the amount of energy that would be produced by a generator producing one thousand watts for one hour
"Listing Rules"	the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange
"market-power"	electricity buy and sell in the open market
"Mingyang New Energy"	Inner Mongolia Mingyang New Energy Development Company Limited* (內蒙古明陽新能源開發有限責任公司)
"MW"	megawatt, that is, one million watts. The installed capacity of a power plant is generally expressed in MW
"MWh"	megawatt-hour, which is equal to one thousand kWh
"net coal consumption rate"	average consumption of standard coal for supplying 1 kWh power (deducting self-used power)
"PBOC"	People's Bank of China* (中國人民銀行)
"Pingwei Power Plant"	Anhui Huainan Pingwei Electric Power Company Limited (安徽淮南平圩發電有限責任公司), a subsidiary of the Company
"PRC" or "China" or "State"	the People's Republic of China (for the purpose of this annual report excluding the Hong Kong, Special Administrative Region of Macau of the PRC and Taiwan)
"Pu'an Power Plant"	China Power (Pu'an) Power Generating Company Limited* (中電(普安)發電有限責任公司), a subsidiary of the Company
"Qiyuanxin Power"	Shanghai Qiyuanxin Power Technology Co., Ltd.* (上海啟源芯動力科技有限公司), an associate of the Company
"RMB"	Renminbi, the lawful currency of the PRC
"Shandong Institute"	Shandong Institute Power Engineering Consulting Institute Corp., Ltd.* (山東電力工程諮詢院有限公司), an indirect subsidiary of SPIC
"Shandong Nuclear Power"	Shandong Nuclear Power Co., Ltd.* (山東核電有限公司), an indirect subsidiary of SPIC

Technical Glossary and Definitions

"Shanghai Power"	Shanghai Electric Power Co., Ltd.* (上海電力股份有限公司), an investment holding company of the Company
"Shanxi Shentou"	Shanxi Shentou Power Generating Company Limited* (山西神頭發電有限責任公司), a subsidiary of the Company
"Sichuan Energy Investment"	Sichuan Energy Investment Development Co., Ltd.* (四川能投發展股份有限公司), an associate of the Company
"SPER Institute"	Shanghai Power Equipment Research Institute Co., Ltd* (上海發電設備成套設計研究院有限責任公司), an indirect subsidiary of SPIC
"SPIC"	State Power Investment Corporation Limited* (國家電力投資集團有限公司), the ultimate holding company of the Company
"SPIC Aluminum"	SPIC Aluminum International Trading Co., Ltd.* (國家電投集團鋁業國際貿易有限公司), an indirect subsidiary of SPIC
"SPIC Asset Management"	SPIC Asset Management Co., Ltd.* (國家電投集團資產管理有限公司), a subsidiary of SPIC
"SPIC Finance HK"	SPIC International Finance (Hong Kong) Company Limited (國家電投香港財資管理有限公司), a subsidiary of SPIC
"SPIC Financial"	SPIC Financial Company Limited* (國家電投集團財務有限公司), a subsidiary of SPIC
"SPIC (Materials)"	State Power Investment Corporation Limited Materials and Equipment Branch* (國家電力投資集團有限公司物資裝備分公司), a branch company of SPIC
"SPICOI"	SPIC Overseas Investment Limited* (國家電力投資集團海外投資有限公司), a subsidiary of SPIC
"standard coal"	coal with an energy content of 7,000 kilocalories per kilogram
"State Nuclear Institute"	State Nuclear Electric Power Planning Design & Research Institute Company Limited* (國核電力規劃設計研究院有限公司), an indirect subsidiary of SPIC
"Sujin Energy"	Sujin Energy Holding Company Limited* (蘇晉能源控股有限公司), an associate of the Company
"Suzhou Shared Service Company"	China Power (Suzhou) Shared Service Co., Ltd* (中電(蘇州)共享服務有限公司), a subsidiary of the Company
"Weining Energy"	SPIC Guizhou Jinyuan Weining Energy Co., Ltd.* (國家電投集團貴州金元威寧能源股份有限公司), an associate of SPIC

"Wu Ling Power"	Wu Ling Power Corporation* (五凌電力有限公司), a subsidiary of the Company
"Wuhu Power Plant"	Wuhu Electric Power Generating Company Limited* (蕪湖發電有限責任公司), a subsidiary of the Company
"Xiaogang Energy"	SPIC Anhui Xiaogang Village Integrated Smart Energy Company Limited* (國家電投安徽小崗村綜合智慧能源有限公司), a subsidiary of the Company
"Xinyuan Smart Storage"	Xinyuan Smart Storage Energy Development (Beijing) Co., Ltd.* (新源智儲能源發展(北京)有限公司), a subsidiary of the Company
"Yaomeng Power Plant"	Pingdingshan Yaomeng Power Company Limited (平頂山姚孟發電有限責任公司), a subsidiary of the Company
"Yuanda EP Catalyst"	SPIC Yuanda Environmental Protection Catalyst Co., Ltd.* (國家電投集團遠達環保催化劑有限公司), an indirect subsidiary of SPIC
"Yuanda EP Engineering"	SPIC Yuanda Environmental Protection Engineering Co., Ltd.* (國家電投集團遠達環保工程有限公司), an indirect subsidiary of SPIC

* *For identification purpose only*

Useful Information for Investors

ANNUAL REPORT

This annual report has been posted on our website at www.chinapower.hk on 19 April 2022. The reports are sent to the shareholders of the Company who have selected to receive the printed version of corporate communication by 22 April 2022.

ANNUAL GENERAL MEETING (AGM)

The Company's AGM will be held on 2 June 2022. Information regarding the business to be considered in the AGM is set out in the circular to the shareholders of the Company dated 22 April 2022 together with a proxy form.

INVESTOR CALENDAR

Closure of register of members for determining shareholders' eligibility to attend and vote at the AGM	30 May 2022 to 2 June 2022 (both days inclusive)
AGM date	2 June 2022
Ex-dividend date	7 June 2022
Closure of register of members for determining shareholders' entitlement to 2021 Final Dividend	9 June 2022 to 13 June 2022 (both days inclusive)
Record date for 2021 Final Dividend	13 June 2022
Proposed 2021 Final Dividend payable* ***RMB0.05 (equivalent to HK$0.0616) per ordinary share***	30 June 2022

* Subject to approval by shareholders of the Company at the AGM to be held on 2 June 2022.

INVESTOR ENQUIRIES

For enquiries about share transfer and registration, please contact the share registrar of the Company:

Computershare Hong Kong Investor Services Limited
Shops 1712–1716, 17/F, Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong
Tel.: (852) 2862 8628
Fax: (852) 2865 0990
Email: chinapower.ecom@computershare.com.hk

For enquiries from investors and securities analysts, please contact:

Capital Markets & Investor Relations Department
China Power International Development Limited
Suite 6301, 63/F, Central Plaza
18 Harbour Road
Wanchai, Hong Kong
Tel.: (852) 2802 3861
Fax: (852) 2802 3922
Email: ir@chinapower.hk
Website: www.chinapower.hk

China Power International Development Limited
中國電力國際發展有限公司

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Suite 6301, 63/F, Central Plaza,
18 Harbour Road,
Wanchai, Hong Kong
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Fax: (852) 2802 3922

Beijing Office:
East Building, Hui Huang Shi Dai Plaza,
56 North West Fourth Ring Road, Haidian District,
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