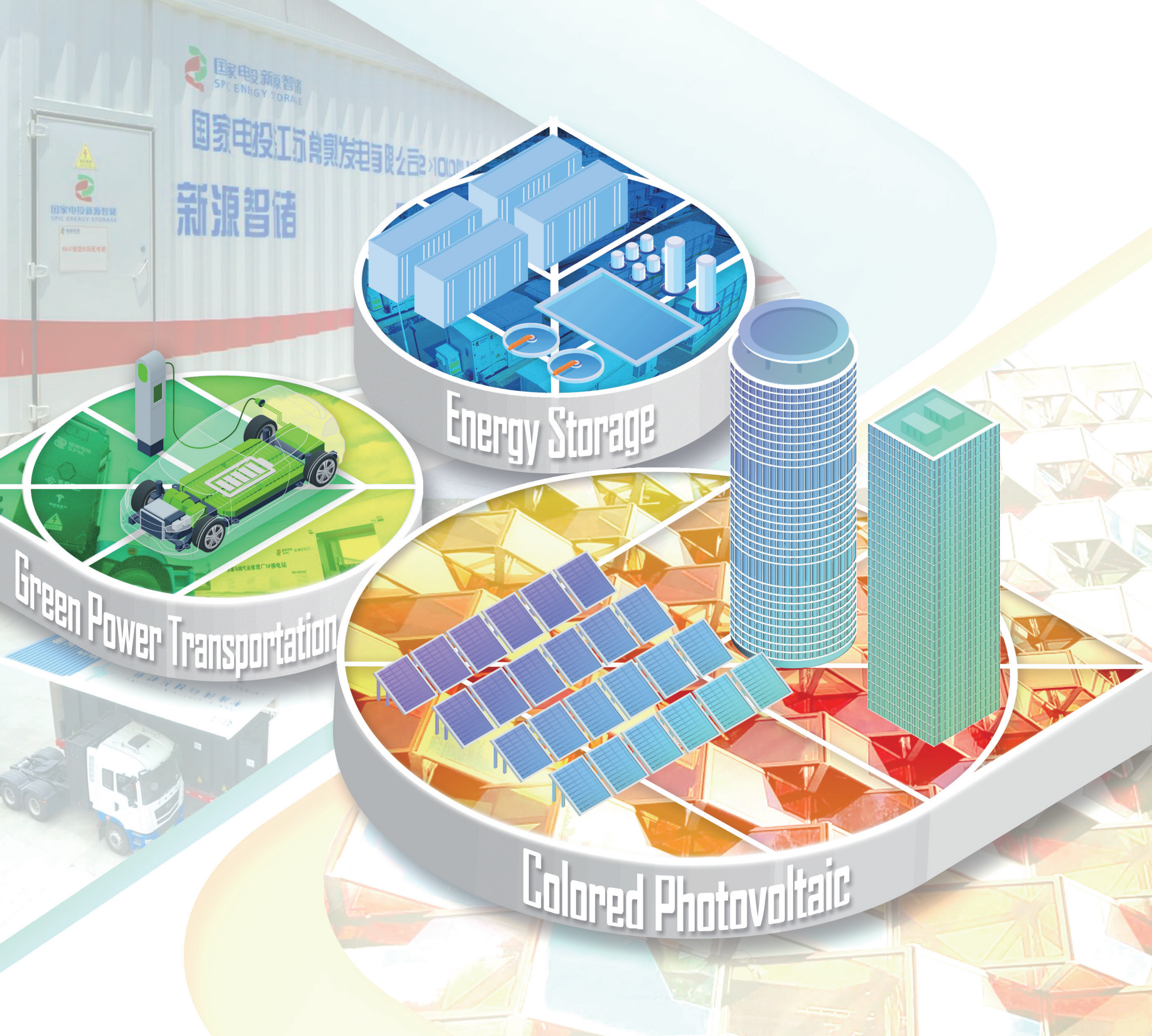
China Power International Development Limited
中國電力國際發展有限公司

(incorporated in Hong Kong with limited liability)

(Stock Code : 2380)

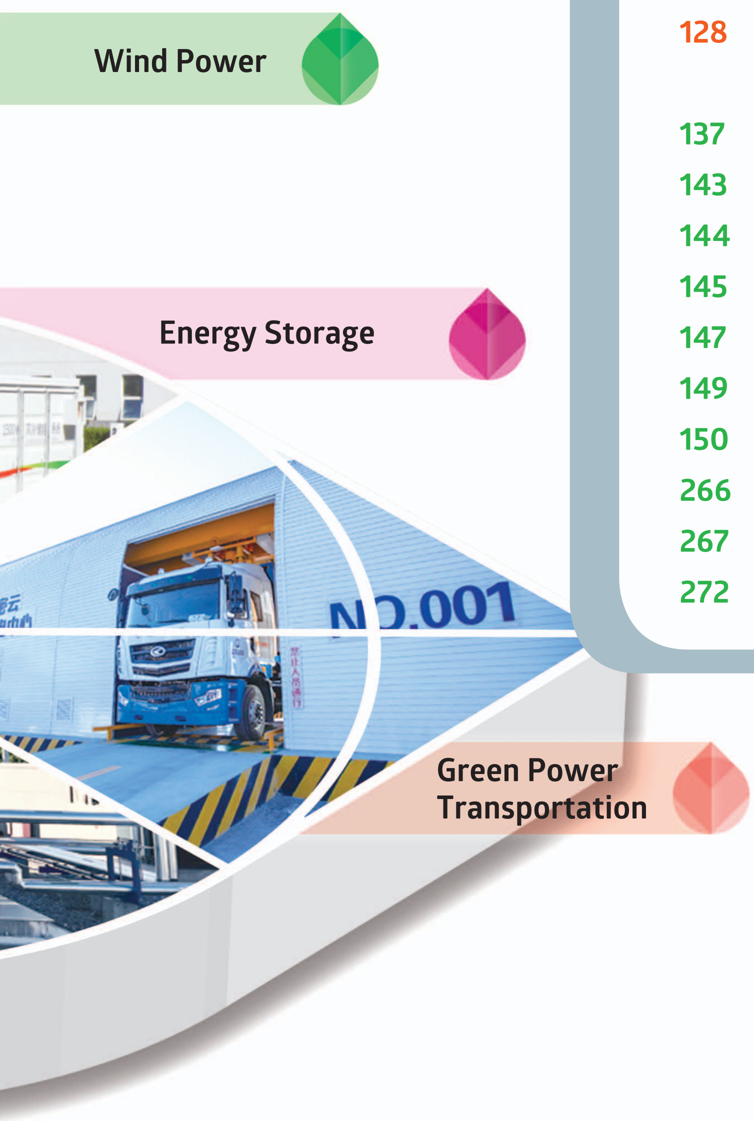
2022
Annual Report



Lower Carbon
Empower Better Life

CLEAN ENERGY INSTALLED CAPACITY REACHED ABOUT 65%

CONTENTS



2022 Performance Highlights

PROFIT/(LOSS) ATTRIBUTABLE TO

Equity holders of the Company

2022
2,648,051 RMB'000

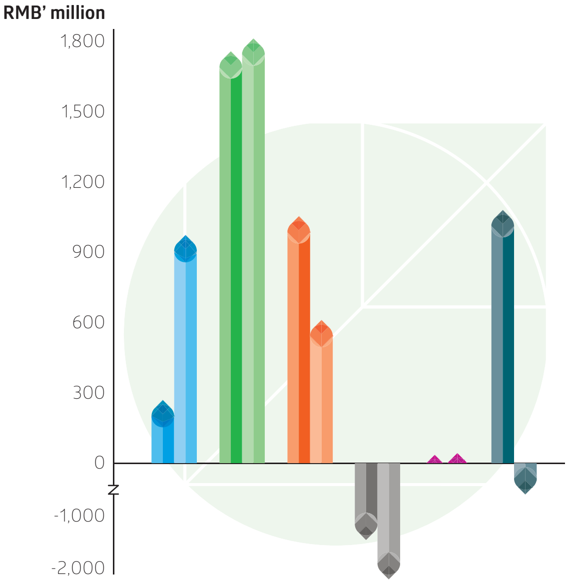
2021 (restated)
(256,257) RMB'000

Ordinary Shareholders of the Company

2022
2,480,840 RMB'000

2021 (restated)
(390,507) RMB'000

NET PROFIT/(LOSS)



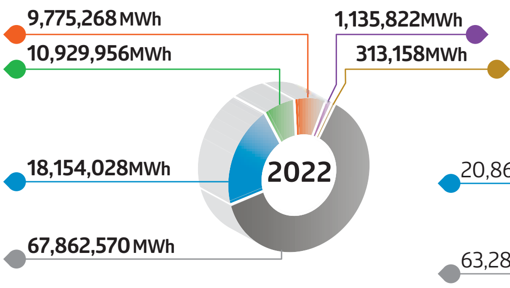
	2022 /RMB'000	2021 (restated) / RMB'000
HYDROPOWER	261,385	945,715
WIND POWER	1,707,501	1,760,933
PHOTOVOLTAIC POWER	1,023,678	593,536
THERMAL POWER	(1,390,602)	(2,101,429)
ENERGY STORAGE	34,220	42,093
UNALLOCATED	1,049,156	(564,552)
TOTAL	2,685,338	676,296

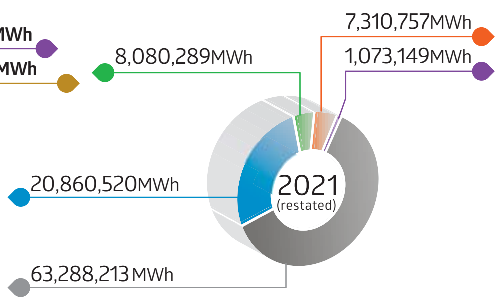
TOTAL ELECTRICITY SOLD

2022
108,170,802 MWh

2021 (restated)
100,612,928 MWh

CHANGE
7.51%





Hydropower	Wind Power	Photovoltaic Power	Coal-fired Power	Natural Gas Power	Environmental Power
12.97%	35.27%	33.71%	7.23%	5.84%	N/A

OTHER KEY PERFORMANCE INDICATORS

Revenue

2022
43,689,129
RMB'000

23.15 %

2021
(restated)
35,476,703
RMB'000

Operating Profit

2022
7,604,262
RMB'000

48.93 %

2021
(restated)
5,105,944
RMB'000

Basic Earnings/(Loss) Per Share

2022
0.22
RMB

2021
(restated)
(0.04)
RMB

Dividend Per Ordinary Share

2022
0.11
RMB

120.00 %

2021
0.05
RMB

Equity Attributable To Equity Holders Of The Company

2022
46,968,645
RMB'000

30.28 %

2021
(restated)
36,052,468
RMB'000

Net Assets

2022
68,590,105
RMB'000

30.96 %

2021
(restated)
52,376,683
RMB'000

Total Assets

2022
211,404,964
RMB'000

20.63 %

2021
(restated)
175,245,988
RMB'000

Cash And Cash Equivalents

2022
4,228,099
RMB'000

139.33 %

2021
1,766,632
RMB'000

Total Debts

2022
116,606,464
RMB'000

10.09 %

2021
105,921,101
RMB'000

Consolidated Installed Capacity

2022
31,599.2
MW

9.22 %

2021
28,931.9
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 Hong Kong Stock Exchange (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

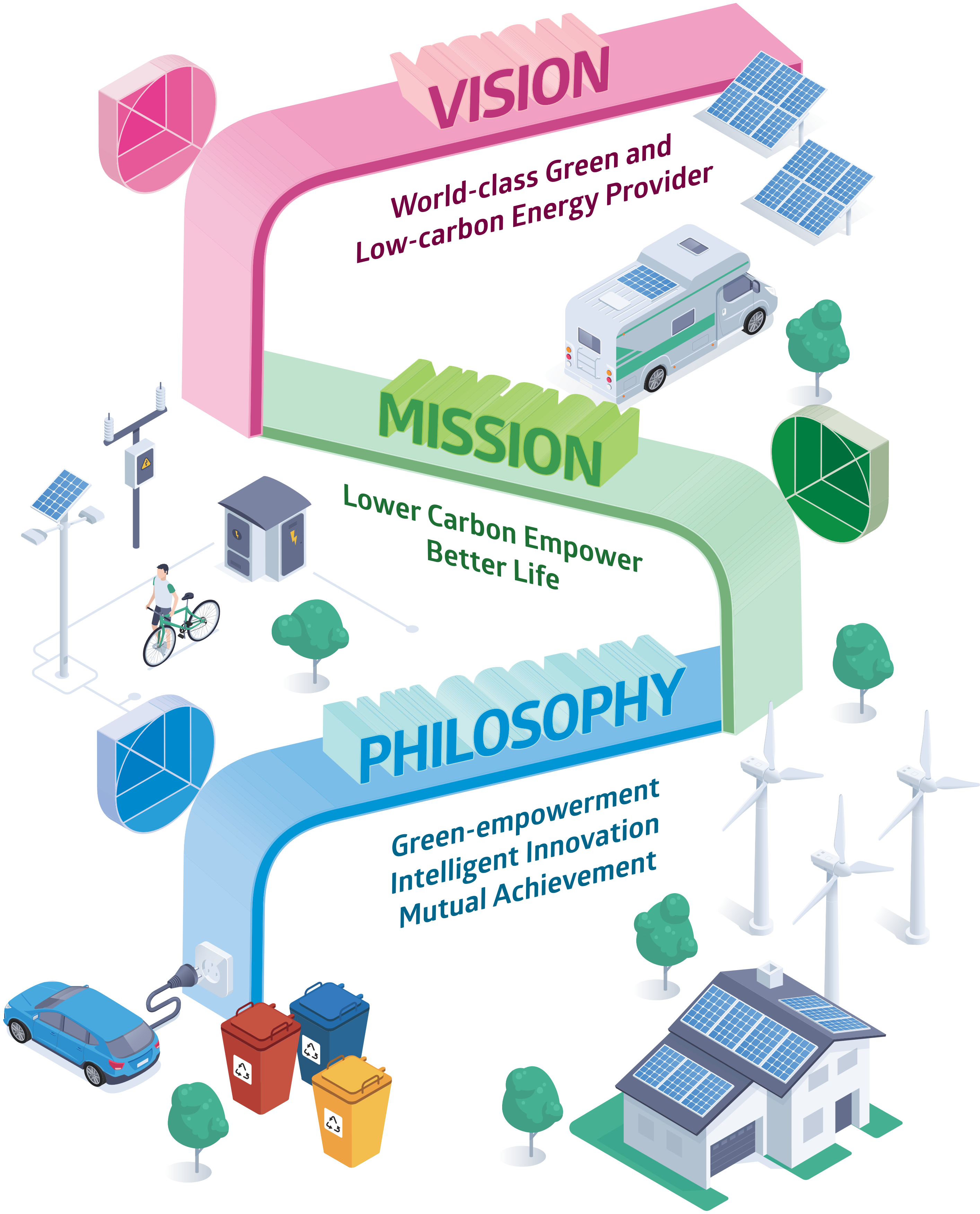
Computershare Hong Kong Investor Services Limited
Shops 1712–1716
17th Floor, Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong

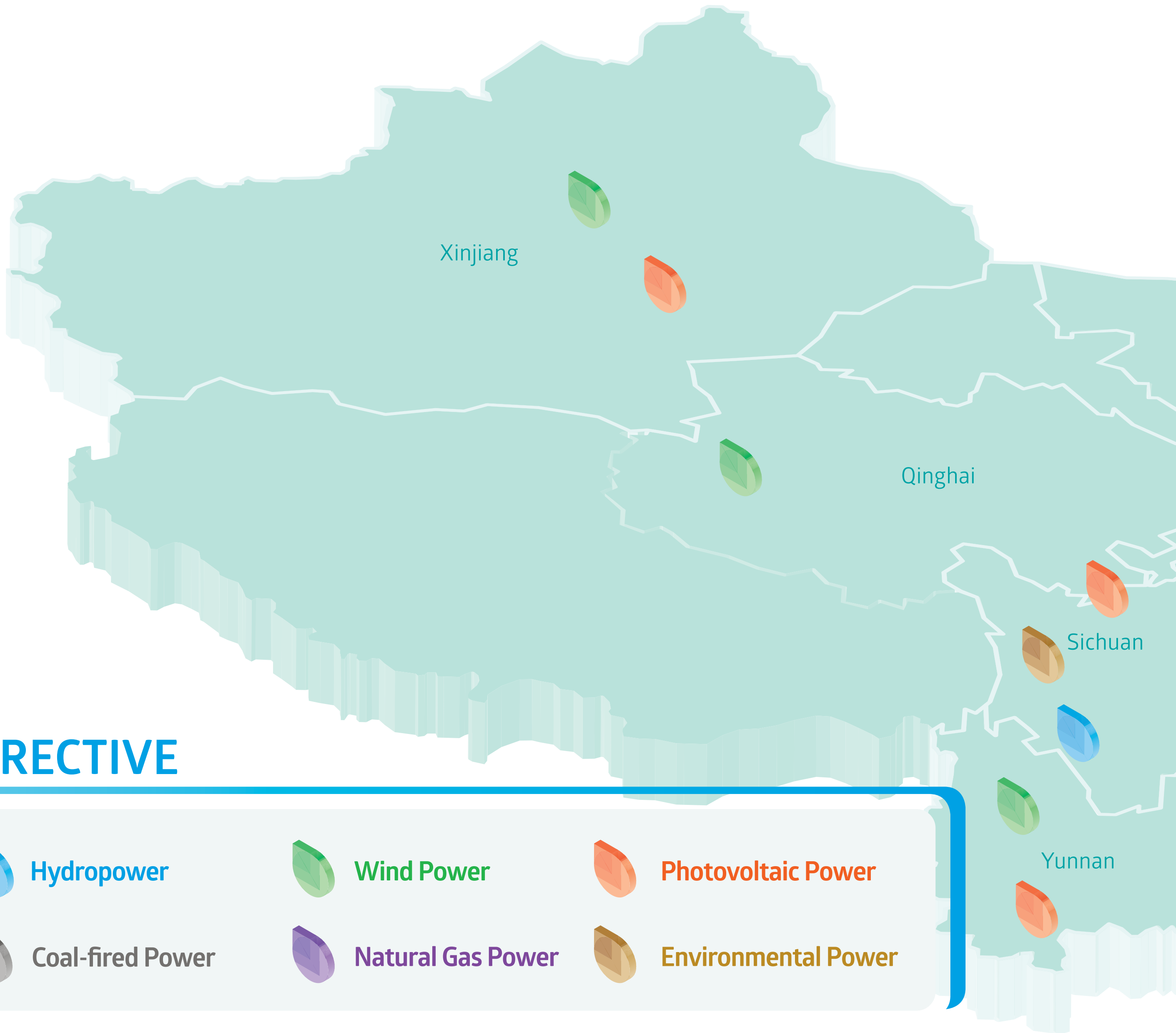
COMPANY SECRETARY

CHEUNG Siu Lan

AUDITOR

Ernst & Young


VISION
World-class Green and
Low-carbon Energy Provider
MISSION
Lower Carbon Empower
Better Life
PHILOSOPHY
Green-empowerment
Intelligent Innovation
Mutual Achievement



DIRECTIVE

Hydropower	Wind Power	Photovoltaic Power
Coal-fired Power	Natural Gas Power	Environmental Power

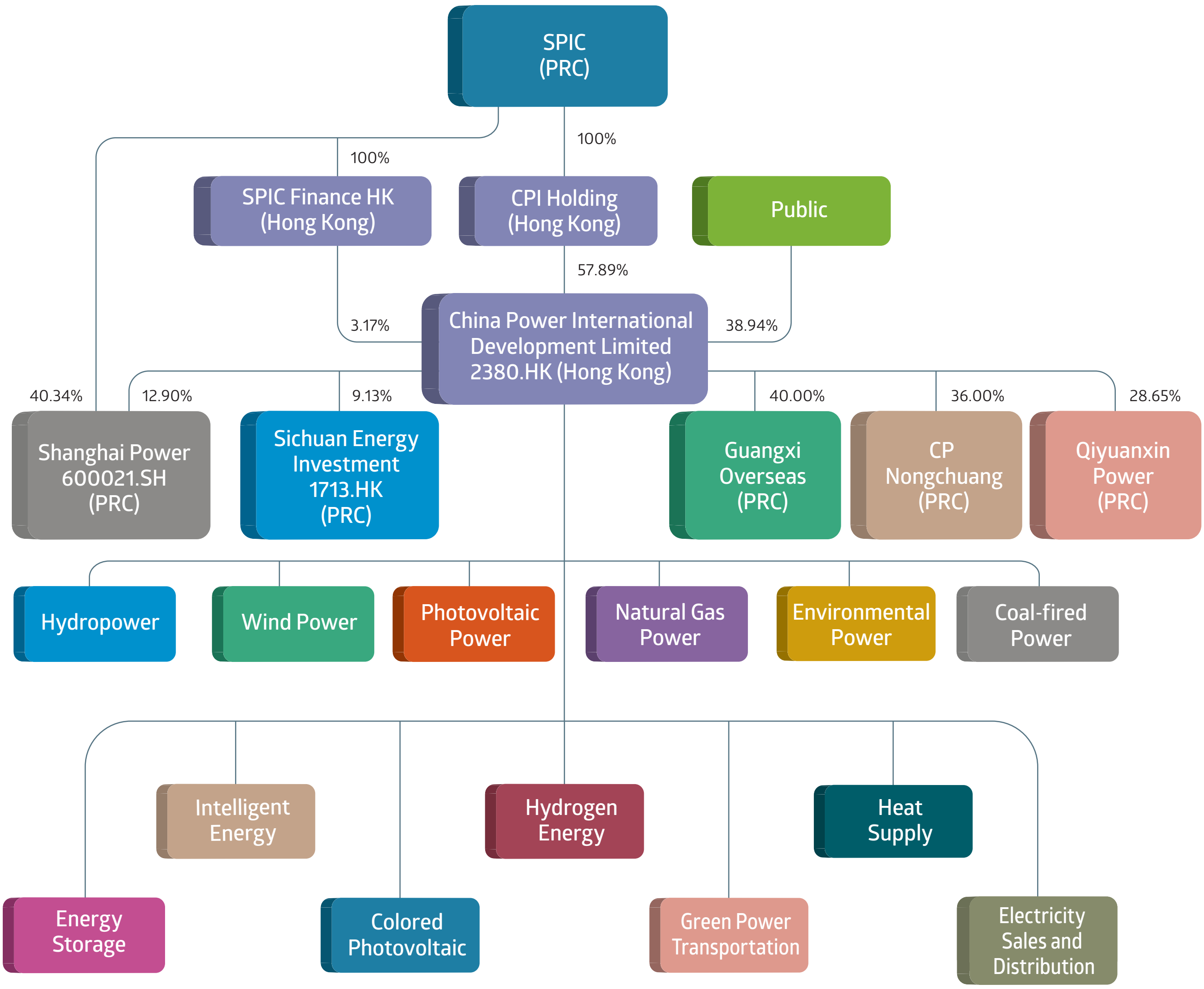
- 51.00% stake in Xinyuan Smart Storage
- 51.00% stake in Xinyuan Jinwu
- 40.00% stake in Guangxi Overseas *(with other investments located in the ASEAN region)*
- 36.00% stake in CP Nongchuang
- 28.65% stake in Qiyuanxin Power
- 12.90% stake in Shanghai Power
- 9.13% stake in Sichuan Energy Investment

Beijing
Tianjin
Heilongjiang
Liaoning
Inner Mongolia
Beijing
Tianjin
Hebei
Ningxia
Shanxi
Shandong
Gansu
Shaanxi
Henan
Jiangsu
Shanghai
Hubei
Anhui
Chongqing
Zhejiang
Guizhou
Hunan
Jiangxi
Fujian
Guangxi
Guangdong
Hainan

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, which is an integrated energy group that simultaneously owns thermal 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, environmental power, energy storage, green energy transportation and integrated energy services through continuous development. Various business segments have been kept growing along with the constant expansion of the Group.

GROUP STRUCTURE



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

EXISTING POWER PLANTS

As at 31 December 2022, the Group's total consolidated installed capacity was 31,599.2MW, of which consolidated installed capacity of clean energy was 20,519.2MW, accounting for 64.94% of the total consolidated installed capacity. While the Group's total consolidated installed capacity presented by **type of power plants** is as follows:

Type of Power Plants	Installed Capacity (MW)	Interest (%)	Attributable Installed Capacity (MW)	Consolidated Installed Capacity (MW)
Hydropower	**5,810.4**	~9.13–64.93	3,497.1	5,451.1
Wind Power	**10,536.8**	~9.75–100	5,683.5	7,189.3
Photovoltaic Power	**10,587.9**	~12.6–100	6,074	7,206.6
Natural Gas Power	**3,597.7**	~12.9–100	862.6	475.2
Environmental Power	**197**	~70–100	186.2	197
Coal-fired Power	**33,025**	~9.5–100	13,085.2	11,080
Total			29,568.6	31,599.2

As at 31 December 2022, 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 (MW)	Interest (%)	Attributable Installed Capacity (MW)
Hydropower Power Plant	Hunan	**3,109.7**	63	1,959.2
	Guizhou	**1,570**	59.85	939.7
	Sichuan	**141.4**	~57.33–63	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	**979.9**	~31.5–63	529.1
	Inner Mongolia	**253.1**	~63–100	177.8
	Gansu	**1,171**	~44.1–100	901.3
	Yunnan	**97.5**	~32.13–44.1	37.1
	Shanxi	**948.7**	~32.13–100	523.2
	Anhui	**49.5**	32.13	15.9
	Guangdong	**196**	~32.13–44.1	74.4
	Guangxi	**1,025.4**	~94.89–95	973.8
	Shandong	**991**	~51–100	639
	Henan	**332.1**	~60–100	313.5
	Qinghai	**50**	100	50
	Heilongjiang	**99.3**	100	99.3
	Jiangsu	**302.7**	~70–100	287
	Hubei	**268.1**	~30–100	254.4
	Shanxi	**149**	~51–100	100.5
	Ningxia	**78**	100	78
	Total	**7,189.3**		5,179.1

	Region	Consolidated Installed Capacity (MW)	Interest (%)	Attributable Installed Capacity (MW)
Photovoltaic Power Station	Henan	**230.3**	~34.65–100	100.7
	Anhui	**384.6**	~20–100	357.9
	Shanxi	**1,156.6**	~70–100	1,027.2
	Liaoning	**586**	100	586
	Hubei	**1,007.4**	~34.65–100	817.7
	Guangdong	**57.2**	~54.65–100	44.8
	Guizhou	**305.3**	~63–100	229.3
	Shandong	**401**	~49–100	366.2
	Heilongjiang	**206**	~70–100	158
	Beijing	**4**	~51–100	3
	Guangxi	**72.9**	~38.96–100	65.4
	Tianjin	**8.6**	~35.7–70	3.7
	Xinjiang	**40**	~63–100	32.6
	Jiangxi	**57**	~70–100	50.9
	Hebei	**458.8**	100	458.8
	Jiangsu	**31.5**	~100	31.5
	Ningxia	**1,402.5**	~32.13–100	661.9
	Hunan	**81.2**	~32.13–100	42.8
	Gansu	**298**	~60.47–100	235.1
	Fujian	**20**	100	20
	Hainan	**20**	100	20
	Sichuan	**34.3**	100	34.3
	Yunnan	**49.4**	~56.70–100	36.7
	Inner Mongolia	**190**	63	119.7
	Zhejiang	**104**	100	104
	Total	**7,206.6**		5,608.2
Natural Gas Power Plant	Hubei	**155.2**	~90–100	139.8
	Guangdong	**120**	100	120
	Jiangsu	**200**	100	200
	Total	**475.2**		459.8

	Region	Consolidated Installed Capacity (MW)	Interest (%)	Attributable Installed Capacity (MW)
Environmental Power Plant	Hainan	**125**	100	125
	Hebei	**24**	100	24
	Henan	**24**	85	20.4
	Sichuan	**24**	70	16.8
	Total	**197**		186.2
Coal-fired Power Plant	Anhui	**5,860**	~20–60	2,988
	Henan	**700**	100	700
	Sichuan	**1,200**	51	612
	Shanxi	**2,000**	~100	2,000
	Guizhou	**1,320**	95	1,254
	Total	**11,080**		7,554

As at 31 December 2022, the total attributable installed capacity of the Group's main associates, joint ventures and investment holding companies' power plants are as follows:

Power Plant	Installed Capacity (MW)	Interest (%)	Attributable Installed Capacity (MW)
Changshu Power Plant	**3,320**	50	1,660
Yaomeng Power Plant	**2,160**	40	864
CP Shentou	**1,200**	54*	648
Dabieshan Power Plant	**2,600**	20.4	530.4
Xintang Power Plant	**600.2**	50	300.1
Li Yu Jiang Power Plant	**600**	25.2	151.2
Shanghai Power	**17,329.9**	12.9	2,235.6
Sujin Energy	**2,983.2**	9.5	283.4
Guangxi Overseas	**537.9**	40	215.2
Sichuan Energy Investment	**138.4**	9.13	12.6
Fushan Power Station	**75**	50	37.5
Haiyang Offshore Wind Power	**500**	47	235
Guigang Wind Power	**60.9**	9.75	5.9
Hunan Nuclear Power	**50.1**	12.6	6.3
Total			7,185.2

* *including indirect equity interest of 14% held through a joint venture of the Company*

PROJECTS UNDER CONSTRUCTION

As at 31 December 2022, the Group's projects under construction presented by type of power plants is as follows:

Type of Power Plants	Installed Capacity (MW)	Interest (%)	Attributable Installed Capacity (MW)
Hydropower	**500**	63	315
Wind Power	**1,712**	~32.1–100	1,445.9
Photovoltaic Power	**5,348.8**	~32.1–100	4,055.2
Natural Gas Power	**31.6**	100	31.6
Total	**7,592.4**		5,847.7

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 approvals from the government of the PRC have been applied for) is approximately 9,400MW. The categories are distributed as follows:

Type of Projects	Installed Capacity (MW)
Renewable energy (wind power and photovoltaic power)	**8,940**
Integrated intelligent energy	**440**
Waste-to-energy	**20**
Total, approximately	**9,400**

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 in the PRC and abroad with a total installed capacity of approximately 211GW, of which the total installed capacity of clean energy was approximately 139GW, accounting for 65.79% of total installed capacity.

Major Events in 2022

FEBRUARY

Qiyuanxin Power collaborated with 江蘇遠洋運輸有限公司 (Jiangsu Ocean Shipping Co., Ltd.*) and other parties to jointly develop China's first pure-electric battery-swap container vessel which emits zero emissions in shipping and represents another innovative demonstration of China Power in the pursuit of the "Dual Carbon" goals. It also accelerated the green transformation and development of shipping, thereby opening up a huge market for the green power transportation segment of the Company.

In the updated list of index constituents, FTSE Russell (a subsidiary of London Stock Exchange Group and a global index industry leader) selected China Power as a constituent of the FTSE China Large Cap Index.

The SPIC Haiyang Energy Storage Power Station of Shandong Company completed spot market trading of electricity in Shandong and became one of the first independent energy storage power stations to participate in China's electricity spot market.

The Yanqing Garden Hydrogen Refueling Station served the Winter Olympic Games hosted in Beijing, China. The Company successfully completed the task of guaranteeing hydrogen supply as the designated energy for green transportation throughout the games.

MARCH

Xinyuan Smart Storage was selected as one of the "Demonstration Enterprises in Science and Technology Reform (科改示範企業)" and "National High-and-New-Tech Enterprises (國家高新技術企業)" by the SASAC (國資委) in recognition of its dedication to promote energy storage technology.

APRIL

China Energy Storage Alliance (中關村儲能產業技術聯盟) (CNESA) published the "China's Power Storage Companies Ranking 2021". Xinyuan Smart Storage ranked third in "Shipment Volume of Energy Storage Systems in Domestic Market for 2021" and fifth in "Newly Installed Capacity in China for 2021", which showcased its leading position in the industry.

China Power entered into a cooperation agreement with Mexico-based SESELEC (墨西哥斯萊克公司) and Zhejiang Chint Electrics Co., Ltd. (浙江正泰電器股份有限公司) to jointly promote Phase I of the 120MW Puerto Penasco Port Photovoltaic Project in Mexico. Xinyuan Smart Storage will provide advanced energy storage equipment and technology for the cooperation project, marking the first step of internationalization of China Power's energy storage segment.

國家電投集團湖北售電有限公司 (SPIC Hubei Power Sales Co., Ltd.*), a subsidiary of Hubei Company, ranked first in the "Power Market Operation Evaluation for 2021" and was awarded the "AAA-grade Power Sales Company" title by the Hubei Power Exchange Center (湖北電力交易中心).

MAY

Winner Announcement

Pillar	Rank	Project	Economy
Smart Transport	Gold	Battery-Swap Electric Heavy-Duty Truck: A Low Carbon Transportation Like No Other	China
	Silver	MaaS(Mobility as a Service) MeN Go Program –New Opportunities for the Digital Transformation of Transportation Services	Chinese Taipei
Smart Buildings	Gold	80 Atlantic	Canada
	Silver	The Affiliated Hospital of Qingdao University (West Coast District Hospital) Smart and Low-carbon Hospital Renovation	China
Smart Grids	Gold	Project EDGE	Australia
	Silver	Microgrid Systems Laboratory	The United States
Smart Jobs and Consumers	Gold	Retro-commissioning (RCx) Training and Registration Scheme – From Active Training to In-class Training	Hong Kong, China
	Silver	Professional Training Program for Energy Managers in Industry and Mining	Chile
Low Carbon Model Towns	Gold	Kaohsiung's Green Transformation: from Heavy Industry to Semiconductor Clusters, a Roadmap to Low Carbon Nirvana	Chinese Taipei
	Silver	City of Austin- Efforts to Reduce Carbon Emissions	The United States

The heavy-duty truck battery-swap project of Qiyuanxin Power stood out from 65 projects submitted by 17 economies including Australia, Canada and the United States, and won the "Gold Award for Smart Transportation" in the "5th APEC-ESCI Best Practice Awards" organized by the Energy Working Group of the Asia-Pacific Economic Cooperation.

The Company successfully completed construction of the photovoltaic direct power and battery-swap station in Yinchuan City, Ningxia Hui Autonomous Region, marking the official commissioning of China's first photovoltaic direct power and battery-swap station.

The Company was honored by BDO Limited (BDO), one of the five largest accounting firms globally, to receive the "Best in ESG Reporting Awards 2022" in the "Main Board — Middle Market Capitalization" category at the "BDO ESG Awards 2022", in appreciation of our outstanding environmental, social and governance (ESG) performance.

JUNE

Phase I of the Tongshanling Wind Farm of Wu Ling Power was recognized as a "High Quality Small to Medium-sized Power Project in China for 2022" at the "2022 China High Quality Power Project Award" by China Electric Power Construction Association (中國電力建設企業協會).


中国电力建设企业协会文件

关于公布 2022 年度中国电力优质工程评审结果的通知


证书编号：CC 7892

香港品質保證局

中国电力 2022 绿色贷款

中国电力国际发展有限公司

香 港 品 质 保 证 局

China Power received the "Green Finance Pre-issuance Stage Certificate" from the Hong Kong Quality Assurance Agency for its cooperation green loan project with the Hong Kong Branch of China Construction Bank with a principal amount of RMB2 billion, which is the first Hong Kong-listed mainland power enterprise to receive such certification.

China Power announced the acquisition of clean energy assets of 2,155.4MW in total from CPNE and CPINE under SPIC and the consideration was settled by a combination of cash and issuance of consideration shares. The acquisition has accelerated the Company's strategic transformation into a "**World-class Green and Low-carbon Energy Provider**".

JULY

China Power won two awards at "The 6th International Energy Storage Innovation Competition" organized by the International Energy Storage Alliance. Mr. HE Xi, the Chairman of the Board, was honored with the "2022 Person of the Year for Energy Storage Award", and the SPIC Haiyang 101MW/202MWh Energy Storage Power Station Project won the "2022 Top Ten Energy Storage Application Innovation Models" award.

The Company participated in the summit titled "The Future of Investor Relations — Innovation, ESG and Impact" held by The Hong Kong Exchanges and Clearing Limited in Hong Kong and gave a keynote presentation on the ESG practices of the Group.

AUGUST

CP Huayuan, a company principally engaged in the provision of technical inspection and maintenance services for nuclear power stations and comprehensive intelligent energy business, was selected as one of the first batch of "Specialized and New" enterprises by the Shanghai Municipal Commission of Economy and Informatization (上海市經濟和信息化委員會) in 2022.

SEPTEMBER

Changzhou Hydropower, a subsidiary of Guangxi Company, was accredited the title of outstanding generating unit for "5A Regular Tubular Hydropower (10MW and above)" by the China Electricity Council (中國電力企業聯合會).

附件 5

10MW 及以上常规贯流式水电机组优胜名单

AAAAA 级

国家电投广西电力公司长洲水电站	6 号机组
大唐内蒙古分公司海渤湾水电站	2 号机组
大唐陕西发电有限公司蜀河水电站	4 号机组
国投电力甘肃小三峡公司乌金峡水电站	3 号机组
国家电投五凌电力公司凌津滩水电站	8 号机组

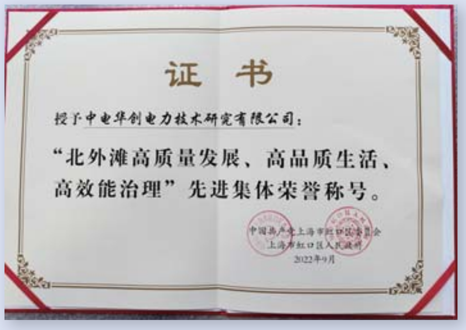
Dongping Hydropower, a subsidiary of Wu Ling Power, completed its first transaction in the carbon emissions reduction market, realizing a new profit growth impetus for clean energy assets.

OCTOBER

Qiyuanxin Power received two awards at "The 8th China International EV Charging & Battery Swapping Industry Conference 2022", namely the "Top 10 Most Influential Brands" and "Financial Technology Influential Award of the Year" for the charging and battery swapping industry in China in 2022. As an expert in comprehensive green power transportation solutions, Qiyuanxin Power will continue to contribute its efforts in achieving the goal of "Carbon Emissions Peak and Carbon Neutrality" in the transportation sector.

The first integrated "Power Source, Power Grid, Power Load and Energy Storage" project located in Lubei, Shandong Province and invested by the Company through 中電魯北清潔能源(山東)有限公司 (China Power Lubei Clean Energy (Shandong) Co., Ltd*), a joint venture of the Company, was officially approved, marking the implementation of the Company's strategy for establishing an integrated intelligent energy ecosystem.

CP Hua Chuang was accredited the honorary title of "Advanced Collective in Promoting High-quality Development in North Bund, Hongkou District" in Shanghai City, China.



With its outstanding performance in respect of environmental, social and corporate governance, the Company was once again honored as one of the "Excellent ESG Enterprises of 2021–2022" by Hong Kong Economic Times, a major financial newspaper in Hong Kong.

NOVEMBER

Xinyuan Smart Storage, Qiyuanxin Power and Xinyuan Jinwu, all being China Power's joint ventures under the emerging business segment, participated in the "24th China Hi-tech Fair" held in Shenzhen and attracted wide attention.

China Power was honored with two awards of "Outstanding Award for Green and Sustainable Loan Issuer (Integrated Power Energy Industry) — Visionary Green Loan Framework (傑出綠色和可持續貸款發行機構 (綜合電力能源行業) — 卓越遠見綠色貸款框架)" and "Pioneering Organization in ESG Disclosure Enhancement (ESG披露優化先鋒機構)" in the "Hong Kong Green and Sustainable Finance Awards 2022" held by the Hong Kong Quality Assurance Agency.

The 20MW Offshore Wind Farm and Deep-sea Floating 0.5MW Photovoltaic Demonstration Project of Shandong Company in Shandong Province successfully commenced power generation, which is the first deep-sea "wind-photovoltaic hybrid" floating photovoltaic demonstration project in the world.

China Power entered into a framework agreement with the People's Government of Hengyang and 雪天鹽業集團股份有限公司 (Snowsky Salt Industry Group Co., Ltd.*) in respect of a 100MW-level salt-cavern compressed air energy storage innovation demonstration project, pursuant to which the parties are expected to jointly develop the first compressed air energy storage project in Hunan Province.

DECEMBER

The Company entered into an equity transfer agreement with China Coal Group for the disposal of 60% equity interest in Xinyuan Ronghe to China Coal Power. Xinyuan Ronghe has a controlling stake in both Yaomeng Power Plant and Dabieshan Power Plant, and has a total installed capacity of coal-fired power of 4,760MW. The transaction will improve the Company's asset structure by reducing its interest in the traditional coal-fired power segment, and will effectively enhance its operational efficiency by realizing "joint operations between coal and power enterprises".

2022 was a crucial year for the strategic transformation of China Power. During the year, we were faced with complex and volatile international situations, recurring impacts of the COVID-19 pandemic, and pressure from elevated prices of upstream resources and commodities such as thermal coal, natural gas, photovoltaic modules and lithium batteries, etc. Against such backdrop, the Group embraced challenges, marched forward against adversity, overcame difficulties and gained profound strengths. With new breakthroughs in areas such as strategic transformation, business development, reform and innovation, and capital utilization, we successfully achieved all annual missions and targets and opened up a new chapter for transformation and development with the influence of the "China Power" brand being enhanced and extended further.

REVIEW OF 2022

Multi-energy Complementary 1,000,000kW New Energy Base Project in Macheng City, Hubei Province

Achieved new breakthroughs in the principal business of clean energy development. As of the end of 2022, the Group increased the installed capacity of clean energy by 5.9GW and the proportion of installed capacity of clean energy reached approximately 65%. Solid progress was made in various large-scale new energy base projects, including completion of construction and grid connection for Phase I of the Macheng Multi-energy Complementary 1,000,000kW Base Project in Hubei Province, successfully obtained the construction permits for the 3.5GW-plus offshore photovoltaic power generation project and the 2.3GW offshore wind power project in Shandong Province, as well as the 900MW wind power project in Guangxi Zhuang Autonomous Region.

A number of our new energy pilot demonstration projects were among the first to achieve "first-mover" breakthroughs, including the Hengyang compressed air energy storage project in Hunan Province, the integrated zero-carbon smart power plants in Chaoyang City of Liaoning Province, Wuhu City of Anhui Province and Fangshan District of Beijing City, the Photovoltaic, Energy Storage, Direct Current and Flexibility (PEDF) project (a novel building energy system solution that integrates photovoltaic power, energy storage and power distribution) in Ruicheng County, Shanxi Province, and the zero-carbon green power transportation and county development project in Chaoyang City of Liaoning Province.

Strived to advance the emerging business of green energy. Last year, the Group's continuous innovation in the development of its emerging green and low-carbon energy business gained wide recognition both at home and abroad.

Xinyuan Smart Storage's "Smart Brain" energy storage system has taken shape, and as of now, the construction of two production lines have been completed and commenced operation, and one production line is still under construction, thus creating autonomous and controllable production capacity for innovative energy storage on a continuous basis. During the year, Xinyuan Smart Storage was selected as one of the "Demonstration Enterprises in Science and Technology Reform" and "National High-and-New-Tech Enterprises" by the SASAC and also entered into an overseas contract for the construction of an energy storage power station project in Puerto Penasco Port, Mexico.

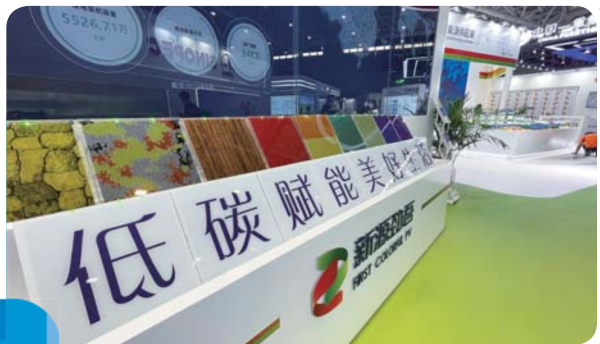
Xinyuan Smart Storage — the construction of two production lines have been completed and commenced operation

Qiyuanxin Power — swappable battery heavy-duty truck fleet

Qiyuanxin Power adhered to its corporate positioning as an "integrated zero-carbon green power transportation service provider" and completed its series A and series A+ financing during the year, further consolidating its leading edges in the heavy-duty truck battery-swap industry.

Xinyuan Jingwu set up its colored photovoltaic power generation module production base in Tongzhou District of Beijing. It has progressed from the planning and design drawings stage to the construction drawings stage for the factory production lines. In order to promote all-round development in the emerging green energy business, the Group took initiative in developing new businesses such as providing quality and safety assurance, inspection and certification services for energy storage, and green products and projects.

Qiyuanxin Power — charging and battery-swap station for heavy-duty trucks



Xinyuan Jingwu — colored photovoltaic power generation modules

Optimized asset structure to boost long-term competitiveness. During the year, the Group completed the acquisition of 23 new energy project companies from CPNE and CPINE under SPIC at a consideration of RMB7.453 billion for high-quality wind power, photovoltaic and environmental power generation assets with a total installed capacity of approximately 2.16GW which have been consolidated into the Group, realizing kick-off and completion of the acquisition in the same year and significantly improving its asset quality and profitability.

Newly acquired Hainan Environmental Power Plant

The collaboration with China Coal Power for the professional integration of their coal and power businesses was commenced and the equity cooperation for coal and power projects with an installed capacity totaling 4.76GW was completed. With the substantial progress achieved under the national policy of "joint operations between coal and power enterprises", the Company enhanced its risk resilience, effectively improved its projected results and demonstrated its commitment to the capital market on new energy transformation.

Signed a framework agreement for the professional integration of coal and power businesses with China Coal Power

During the year, the Group fully utilized the support from policies and leveraged its advantages from economies of scale to obtain low-cost financing. It proactively adjusted its debt structure and reduced the combined financing rate to 3.34%, representing a decrease of 0.69 percentage points from the beginning of the year.

Deepened the reform to further stimulate corporate development vitality. The Company completed institutional reform and staff reshuffling firmly and steadily, established a highly efficient and capable governance structure and management chain of command at the headquarters. It increased efforts to recruit senior management and technical talents in areas such as technological innovation and capital financing with an international perspective. The Company further established the benefit-sharing mechanism between its employees and shareholders as a whole, following the successful implementation of the new share incentive scheme. Besides, Xinyuan Smart Storage, a leading business innovation subsidiary of the Group, adopted a share incentive scheme for its employees with technology and innovation background to motivate creativity and entrepreneurship. With a focus on value creation, it offered project awards and timely awards to encourage "exceptional staff, tremendous efforts and extraordinary achievements".

Actively promoted corporate social responsibilities and sound governance. We duly performed our social responsibilities and acted our part as a State-owned enterprise. We played an important role in ensuring domestic power and heat supply at crucial moments, and successfully completed the mission of ensuring power supply for the Winter Olympic Games. We also provided care and support for our model and pioneer workers, overseas employees as well as staff in difficulties, and ensured safe production with "zero fatality and zero accident". Moreover, we strived to implement practical measures to help solve difficulties encountered by our employees, and offered them with greater opportunities in the course of our corporate transformation and development.

In 2022, the Company successively won the "Best in ESG Reporting Awards 2022" in the "Main Board-Middle Market Capitalization" category from BDO Limited (BDO), and was honored as one of the "Excellent ESG Enterprises of 2021-2022" by Hong Kong Economic Times, which attested to the wide public recognition gained by the Company for its efforts in sustainability, transparency and governance in its operations.

OUTLOOK FOR 2023

2023 is a critical year filled with opportunities and hopes. Policies and measures for stimulating the economy, accelerating green transformation, enhancing innovation-driven development and deepening reform will be implemented synchronously, among which "Green Infrastructure" and "New Infrastructure", including new energy, energy storage, green power substitution and green power transformation, are likely to be areas of particular focus. In anticipation of the bold new strides to be made in the reform of the power industry, it is expected that both investment in and consumption of energy and power will remain robust.

With increased vulnerability and volatility of the global energy supply chain resulted from the competition and geopolitics among world powers, the demands for energy safety and energy transformation are intertwined. The tensions between all stakeholders including governments, enterprises, the general public and parties along the upstream and downstream industrial chain have also intensified. During the restructuring of the energy and power supply system from order to disorder and finally back to order, the Group will establish its dynamic cost advantages in all aspects throughout the process and build up its leading advantages in technological innovation in the energy industry.

Unwavering commitment to maintain momentum for leapfrog development of principal clean energy business. Focusing on achieving the goal of raising the Company's installed capacity of clean energy to over 70% by 2023, we will prioritize the development of large-scale new energy base projects and expand our integrated intelligent energy businesses such as multi-energy complementary system, power source, power grid, power load and energy storage system, green power transformation and energy circular business.

Realizing strategic cultivation and effective commercial application of the emerging green energy businesses. The Group will continue to step up its efforts in cultivating emerging businesses with leading edges and seize the opportunities for market development and marketing of electrochemical energy storage and colored photovoltaic power and develop business models for these new technologies. Meanwhile, the Group will seek to nurture new businesses in new arenas such as recycling of green energy by-products, inspection and certification services for photovoltaic power and wind power energy storage products and green hydrogen production equipment.

Strengthening and integrating environmental, social responsibilities and governance ("ESG") into our strategic development. We will accelerate the application of our ESG principles and brand building, and ensure compliance with domestic and international ESG standards and regulatory requirements in order to improve the Group's internal ESG governance structure and organizational systems. We will enhance our ESG governance on all fronts and integrate such practices into the Group's strategic development.

In the meantime, the Group will continue to optimize the performance-based incentive system for employees and devote more resources to the development of a professional and talented team, aiming to further enhance labour productivity and hence better cater to the needs of our new businesses and new projects by leveraging a more flexible and market-oriented human resources mechanism.

2023 is a year in the "14th Five-Year" Plan for National Economic and Social Development of China that inherits the past and ushers into the future. It is also a crucial year for our strategic transformation and therefore a year of significance to China Power. The Group will go all out to take advantage of the momentum and double its efforts to accelerate the transformation from a traditional power generation enterprise into a green and low-carbon energy provider, and deliver a satisfactory set of results for its shareholders.

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 majoring in accountancy 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 the chairman of the Supervisory Board of Jilin Electric (a company listed on the Shenzhen Stock Exchange), a special duty director of SPIC and a director of SPIC Group Intelligent Energy Investment Co., Ltd. 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 with 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, Illinois CPA Society 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 Beijing Capital International Airport Co., Ltd. which is listed on the Main Board of the Hong Kong Stock Exchange and Guangzhou Baiyun International Airport Co., Ltd which is listed on the Shanghai Stock Exchange. 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, a director and chief executive officer of Greater Bay Airlines.

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. He also previously served as a member of the General Committee of the Hong Kong General Chamber of Commerce. 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 Affairs Department of State Nuclear Technology Corporation, a seconded research consultant of Bureau of Enterprise Reform of the SASAC, 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 stayed with the Group until 2019. He re-joined the Group in 2021.

TONG Yumei

· Vice president

TONG Yumei, born in 1966, is a senior political officer and has a bachelor degree in economics and management from Qinghai Branch of Central Party School of the Chinese Communist Party. Ms. TONG previously served the secretary of discipline commission and the chairman of Labour Committee of SPIC Science & Technology Research Institute Co., Ltd., the chairman of Labour Committee of the Training Center of Sinohydro Engineering Bureau 4 Co., Ltd., the head of the General Office of Labour Committee, a manager of Party-Mass Work Department and a director of Discipline Inspection and Supervision Department of Huanghe Hydropower Development Co., Ltd., and the senior manager of Party-Mass Work Department (Labour Work Committee) of SPIC. She joined the Group in 2022.

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.

LV Keqi

· Vice president

LV Keqi, born in 1970, is a senior engineer and has a bachelor degree in engineering from Fuzhou University. Mr. LV previously served as the assistant to the President, the general manager of Production and Operation Department of the Company, the general manager of Pu'an Power Plant, China Power (Pu'an) New Energy Company Limited and China Power (Gu'an New District) Distribution and Sales Company Limited, and the deputy general manager of Liaoning Qinghe Electric Power Company 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 QriginWater 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 and The Chartered Governance Institute, 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.

BUSINESS REVIEW

In 2022, the Chinese economy adhered to the principle of stable growth and ensured that market prices remained stable amidst a high level of global inflation, thereby demonstrating the tenacity of the economy. Thanks to the effective implementation of policies to secure energy supply and stabilize energy prices, the steady progress of high-quality development of the industry, and coupled with the relaxation of stringent pandemic control measures late last year, the national economy showed signs of gradual recovery and growth.

In 2022, the national total electricity consumption in China rose by 3.6% year-on-year and the national power generation recorded a year-on-year increase of 2.2%, among which, hydropower, wind power, solar power and thermal power increased by 1.0%, 16.3%, 30.8% and 0.9%, respectively.

The Group has proactively invested in the development of clean energy, optimized our asset structure and accelerated our strategic transformation. During the year, not only have we acquired various clean energy projects, but we have also disposed of our equity interest in certain of our coal-fired power businesses, thereby promoting further increase in the proportion of the installed capacity of our clean energy and its profit contribution. Energy storage and environmental power businesses became the new profit drivers of the Group. Our thermal power segment recorded a year-on-year decrease in losses as compared with the previous year. However, it remained in a loss-making position amid high level of coal prices, therefore dragging down the overall financial performance of the Group.

In 2022, the Group stepped up the pace of implementing its strategies by swiftly increasing the proportion of clean energy asset in our power generation portfolio, and expanding the business scope of the Group. The Company acquired a total of 23 clean energy project companies from CPNE and CPINE, which are both indirect subsidiaries of SPIC, the ultimate controlling shareholder of the Company. All of the acquisitions have been completed during the year. Such companies have installed capacities of wind power, photovoltaic power and environmental power of 1,550.0MW, 408.4MW and 197.0MW, respectively. During the year under review, these companies contributed a net profit of RMB70,807,000 in aggregate after being consolidated into the financial statements of the Group.

For the year ended 31 December 2022, the profit attributable to equity holders of the Company amounted to RMB2,648,051,000 (2021 (restated): loss of RMB256,257,000). Profit attributable to ordinary shareholders of the Company amounted to RMB2,480,840,000 (2021 (restated)): loss of RMB390,507,000). Basic earnings per share was approximately RMB0.22 (2021 (restated): loss of RMB0.04). As at 31 December 2022, net assets per share (excluding non-controlling interests and other equity instruments) was approximately RMB3.10.

NATIONAL TOTAL ELECTRICITY CONSUMPTION IN CHINA

3.6 %

NATIONAL POWER GENERATION

2.2 %

PROFIT ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY

2,648,051 RMB'000

BASIC EARNINGS PER SHARE

0.22 RMB

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

3.10 RMB

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

Installed Capacity

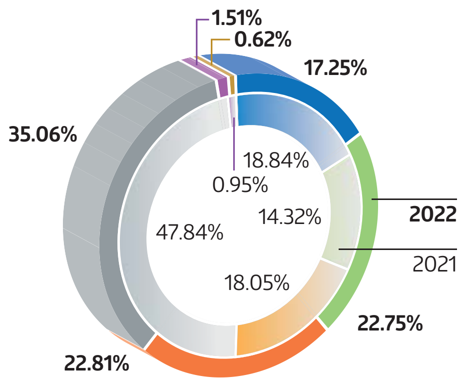
As at 31 December 2022, the consolidated installed capacity of the Group's power plants was 31,599.2MW, representing a year-on-year increase of 2,667.3MW. Among which, the consolidated installed capacity of clean energy including hydropower, wind power, photovoltaic power, natural gas power and environmental power was 20,519.2MW in total, accounting for approximately 64.94% of the total consolidated installed capacity and representing an increase of 12.78 percentage points as compared with the previous year.

During the year under review, the Company successfully completed the acquisition of 23 clean energy project companies from CPNE and CPINE, among which an aggregate installed capacity of 2,155.4MW were in operation, which increased the proportion of clean energy of the Group significantly.

During the year, the Group also successfully implemented the joint operations between coal and power enterprises through the disposal of part of its controlling interests in two coal-fired power subsidiaries to China Coal Power, thereby reducing the consolidated installed capacity of coal-fired power by 4,760.0MW in total. This further adjusted the asset structure of our existing power generation portfolio, and will hopefully overhaul the long-term loss-making situation of the Group's coal-fired power assets, significantly improve the Group's financial performance, and pave an important step for the gradual and orderly withdrawal from the less efficient coal-fired power generation business.

The details of consolidated installed capacity of the Group as at 31 December 2022 are set out as follows:

Type of Power Plants	2022 MW	2021 MW
Hydropower	5,451.1	5,451.1
Wind Power	7,189.3	4,143.3
Photovoltaic Power	7,206.6	5,222.3
Coal-fired Power	11,080.0	13,840.0
Natural Gas Power	475.2	275.2
Environmental Power	197.0	N/A
Total	31,599.2	28,931.9



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

Type of Power Plants	Consolidated Installed Capacity MW
Wind Power	3,046.0
Photovoltaic Power	2,000.2
Coal-fired Power	2,000.0
Natural Gas Power	200.0
Environmental Power	197.0
Total	7,443.2

Technological Innovations

In light of the "New Industries, New Business Forms and New Business Models" (the "Three-New") of the energy sector, we highly emphasize technological innovation capabilities. In order to strengthen and enhance our first-mover advantages in the Three-New segment, we have constantly enhanced our technological innovation capabilities, focused on innovation of key techniques, accumulation of intellectual property rights and introduction and nurturing of key personnel, whilst accelerating the incubation of new business forms and new business models, thereby initiating a new phase of strategic transformation and leapfrog development.

Energy Storage

During the year, the Company formed a strong alliance with Snowsky Salt Industry Group Co., Ltd.*, a leading company in the salt and chemical industry, and intended to introduce the pioneer team for salt-cavern compressed air energy storage technology from Tsinghua University to jointly develop the first compressed air energy storage project in Hunan Province. The project is expected to become the first 100MW-level salt-cavern compressed air energy storage project in the PRC, marking the Company's major breakthrough in the innovative application of new energy storage and its entry into the long-duration energy storage (LDES) sector officially.

Signing ceremony of the Hengyang 100MW-level Salt Cavern Compressed Air Energy Storage Innovation Demonstration Project in Hunan Province

Colored Photovoltaic

Xinyuan Jinwu is a high-tech company with photovoltaic color micro-coating technology and product development capability. During the year under review, Xinyuan Jinwu promoted the orderly development of its photovoltaic colorization business and reuse of decommissioned photovoltaic modules. It has also completed the process design of production lines and ordering of core equipment for the Beijing Tongzhou Demonstration Project. Xinyuan Jinwu owns a number of patents and has seized first-mover advantages in the industry.

Green Power Transportation

Qiyuanxin Power continued its leading position in the green power transportation industry and won the Gold Award for Smart Transportation (智慧交通金獎) from the Energy Working Group of Asia-Pacific Economic Cooperation. During the year, Qiyuanxin Power jointly designed and developed the first 3,000-tonnes inland river pure-electric container vessel in the PRC with renowned academic institutions and enterprises. The successful launch of the vessel signified that the first inland river high-quality "Zero-Carbon Demonstration Route (零碳示範航線)" in the PRC has officially commenced operation. During the year under review, Qiyuanxin Power successfully completed Series A Financing of RMB1 billion and will continue to maintain strong momentum of development in the green power transportation sector going forward. It will further consolidate upstream and downstream resources in the industrial chain, and promote the battery-swap business ecosystem throughout the country while continuously spearheading the development of the industry.

Energy Solutions Technology

In line with the low-carbon development direction of the Company's strategy, the Group is currently exploring ways to promote the expansion of presence in sectors such as Photovoltaic, Energy Storage, Direct Current and Flexibility (PEDF) (a novel building energy system solution that integrates photovoltaic power, energy storage and power distribution), intrinsic material safety of energy storage, urban redevelopment and integrated clean energy solutions.

Status of Key Projects

In light of the Dual Carbon Goals of the State, the transformation of the power industry towards clean energy in its entirety is an inevitable trend. Following the latest round of revolution, consolidation and development of technology and the industrial chain, new industries and modes of energy usage, such as big data, cloud computing, energy storage technology and smart energy have been emerging, and integration of areas such as smart energy and energy storage shall become the new driver of energy revolution.

Offshore Wind Power Projects

In 2022, the Development and Reform Commission of Guangxi Zhuang Autonomous Region issued the "Notice on Competitive Allocations to Investors of Offshore Wind Power Demonstration Projects in Guangxi" (《廣西海上風電示範項目投資主體競爭性配置公告》), which involved two offshore wind power demonstration projects with a total planned installed capacity of 2,700MW. Through the relentless efforts of the Group, the consortium led and controlled by Guangxi Company successfully emerged from the nine investment entities who participated in the competitive allocation and won the bid for the Qinzhou 900MW Offshore Wind Power Project. The project accounted for one-third of the total capacity under competitive allocation in Guangxi Zhuang Autonomous Region. It was groundbreaking progress of the Group in the development of offshore wind power in Guangxi Zhuang Autonomous Region, and has laid a solid foundation for the Group's future development in this area.

"Photovoltaic+" Project

In 2022, Guyuan County Guangcheng Photovoltaic Power Generation Company Limited*, a subsidiary of the Company, launched the Guyuan County 400MW "Photovoltaic+" Demonstration Project as the Group's first project in Hebei Province, which achieved full capacity power grid connection. The project not only contributes to the profitability of the Group and lowers carbon emissions, but also provides reliable power supply for economic development in the local region, and promotes the development of local industries. Therefore, it has significant economic and social benefits. Furthermore, the project utilizes land beneath the photovoltaic modules for farming, thereby achieving effective utilization of land resources and improving ecological environment on the one hand, while protecting photovoltaic power generation equipment from sandstorm on the other hand.

Guyuan "Photovoltaic +" Demonstration Project

Shandong Deep-sea Floating Photovoltaic Demonstration Project

Integrated Wind-photovoltaic Hybrid Project

In 2022, the 20MW Offshore Wind Farm and Deep-sea Floating 500kW Photovoltaic Demonstration Project of Shandong Company successfully commenced power generation, which is the first deep-sea "wind-photovoltaic hybrid" floating photovoltaic demonstration project in the world. As the first integrated wind-photovoltaic hybrid project endorsed by Shandong Province as a key project, the project realized simultaneous wind and photovoltaic hybrid power generation, which lowered construction costs and operational and maintenance costs. Shandong Company will continue to proactively and steadily promote the development of floating offshore photovoltaic power in the local region, while incorporating offshore wind power planning and construction to create a new development mode for integrated wind-photovoltaic hybrid, gradually expanding the construction scale of floating offshore photovoltaic power generation projects, and pushing forward its development towards the deep-sea area.

Multi-energy Complementary New Energy Power Generation Project

Phase 1 of the Multi-energy Complementary 1,000,000kW New Energy Base Project (400MW) in Macheng City, Hubei Province, the PRC achieved full capacity power grid connection during the year, which accelerated the transformation of the Company into a "**World-class Green and Low-carbon Energy Provider**". The Group will continue to leverage its advantages in the clean energy industry in Hubei Province to establish a new facet of green and low carbon development of the industry, push forward commencement of high-standard construction of phase II and phase III of the project and achieve the target of full capacity power grid connection of clean energy base projects as soon as possible, thereby facilitating rural revitalization by contributing more green and low-carbon clean energy to the transformation of old districts so as to accelerate achievement of the Dual Carbon Goals of the State.

Energy Storage Projects

Qinghai Golmud Energy Storage Sharing Power Station Demonstration Project

During the year under review, Xinyuan Smart Storage expanded its presence in various places and launched projects with a capacity of over 1,500MWh. Among them, the Shandong Jining Weishan 100MW/200MWh Peak-shaving Energy Storage Power Station Demonstration Project ("Shandong Weishan Energy Storage Project") and Qinghai Golmud 100MW/200MWh Energy Storage Sharing Power Station Demonstration Project ("Qinghai Golmud Energy Storage Project"), both being constructed by Xinyuan Smart Storage, were successfully connected to the power grid. By integrating a broad range of advanced energy storage technologies from the PRC and abroad, the Shandong Weishan Energy Storage Project has achieved new breakthroughs in aspects such as energy management and battery system, which may effectively optimize the allocation of regional power resources and thus mitigate the pressure on peak-shaving of the regional power grid. On the other hand, the Qinghai Golmud Energy Storage Project has demonstrated the safety and reliability of the energy storage systems under harsh natural environment such as high altitude (3,200 meters) and extreme temperature differences (-30°C~35°C). The project adopted intelligent temperature control system and advanced system integration technology to ensure high degree of safety, long operating life and high performance of the energy storage power stations. Upon commencement of operation, the project will be able to realize dispatching and trading of new energy through integrated station hubs and power stations, thereby facilitating the establishment of a new power system in Golmud, Qinghai Province, the PRC.

Multi-energy Complementary 1,000,000kW New Energy Base Project in Macheng City, Hubei Province

Projects under Construction

As at 31 December 2022, the consolidated installed capacity of the projects under construction was 7,592.4MW, all of which were clean energy projects (excluding clean energy projects of which the acquisitions have not yet been completed during the year).

While the pandemic situation remained volatile during the year, the Group effectively implemented pandemic prevention and control measures and undertook various tasks in advance to minimize the obstacles that may arise in the course of daily operations. As a result, construction works were carried out in an orderly manner and projects commenced operation as scheduled, including various large-scale wind power and photovoltaic power generation projects in Shanxi Province, Hebei Province, Guangxi Zhuang Autonomous Region and Liaoning Province, and large-scale new energy base projects in Hubei Province and Shandong Province.

New Development Projects

During the year under review, the Group continued with the development of, among other things, integrated power source, power grid, power load and energy storage ("Source-Grid-Load-and-Storage") projects and achieved breakthroughs for several projects. Among which, the Hubei Macheng Base Project further obtained a construction quota of 300MW. The CP Pu'an 1,000MW Integrated Wind, Photovoltaic, Thermal Power and Energy Storage Demonstration Project was included in the "14th Five-Year" power development plan of Guizhou Province. In addition, the Xinjiang Hutubi Integrated Source-Grid-Load-and-Storage Project (300MW of photovoltaic power) and the Integrated Source-Grid-Load-and-Storage Project in the Lubei Integrated Intelligent Industrial Park (50MW of wind power and 450MW of photovoltaic power) have received official approval from the local administrative examination and approval bureau.

In addition, Xinyuan Smart Storage has pipeline projects with a capacity of over 2,500MWh located across more than ten provinces, municipalities and autonomous regions nationwide, including Qinghai, Shandong, Jiangsu and Anhui. Among which, two energy storage demonstration projects were located in Hebei Province, namely the Mancheng 100MW/200MWh Independent Energy Storage Demonstration Project and the Wangdu 100MW/200MWh Independent Energy Storage Demonstration Project in Baoding, respectively. At the same time, the Group actively supported the compressed air energy storage project in Hunan Province with a view to laying a solid foundation for future development.

Regarding overseas projects, Xinyuan Smart Storage achieved groundbreaking success by completing the factory acceptance test for its first overseas energy storage project, namely Phase I of the Puerto Peñasco Port 120MW Photovoltaic Power Integrated with Energy Storage Project in Mexico. Meanwhile, the Group is gradually tapping into overseas markets such as Chile, Australia and Thailand. The energy storage business segment is set to be a strong driver for China Power to develop itself internationally.

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 9,400MW, all of which are clean energy projects primarily located in areas with development potential, such as Shandong Province, Guangxi Zhuang Autonomous Region, Anhui Province and Hubei Province.

Power Generation and Electricity Sales

In 2022, the details of power generation and electricity sold by the Group are set out as follows:

POWER GENERATION

GROSS POWER GENERATION

112,942,437 MWh

Compared with 2021

7.64 %

	2022 / MWh	2021 / MWh (Restated)	Changes / %
Hydropower	**18,373,926**	21,072,395	-12.81
Wind Power	**11,155,405**	8,229,473	35.55
Photovoltaic Power	**9,924,832**	7,453,289	33.16
Coal-fired Power	**71,943,010**	67,063,259	7.28
Natural Gas Power	**1,171,078**	1,107,818	5.71
Environmental Power	**374,186**	N/A	N/A

ELECTRICITY SALES

TOTAL ELECTRICITY SOLD

108,170,802 MWh

Compared with 2021

7.51 %

	2022 / MWh	2021 / MWh (Restated)	Changes / %
Hydropower	**18,154,028**	20,860,520	-12.97
Wind Power	**10,929,956**	8,080,289	35.27
Photovoltaic Power	**9,775,268**	7,310,757	33.71
Coal-fired Power	**67,862,570**	63,288,213	7.23
Natural Gas Power	**1,135,822**	1,073,149	5.84
Environmental Power	**313,158**	N/A	N/A

In 2022, the total electricity sold by the Group amounted to 108,170,802MWh, representing an increase of 7.51% as compared with the previous year. The changes in electricity sold by each power segment as compared with the previous year (restated) were as follows:

Hydropower	↓ 12.97%	Hydropower — A decrease of 12.97% in electricity sold due to a year-on-year decrease in average rainfall during the year in the river basins where the Group's hydropower plants are located.
Wind Power	↑ 35.27%	Wind Power and Photovoltaic Power — During the year, the electricity sold of wind power and photovoltaic power recorded a year-on-year increase of 35.27% and 33.71%, respectively, due to the commencement of commercial operation of a large number of new wind power and photovoltaic power generating units of the Group.
Photovoltaic Power	↑ 33.71%	
Coal-fired Power	↑ 7.23%	Coal-fired Power — Driven by the increase in electricity demand during the year and the commencement of commercial operation of new coal-fired power generating units at the beginning of the year, the electricity sold increased by 7.23% year-on-year.
Natural Gas Power	↑ 5.84%	Natural Gas Power — The electricity sold increased by 5.84% year-on-year due to the commencement of commercial operation of a new project with a capacity of 200MW during the year.
Environmental Power		Environmental Power — The Group acquired various environmental power generation companies during the year with an aggregate electricity sales of 313,158MWh.

In 2022, the details of electricity sold by the Group's main associates and joint ventures are set out as follows:

ASSOCIATES

	2022 / MWh	2021 / MWh	Changes / %
Photovoltaic Power	**107,953**	107,597	0.33
Coal-fired Power	**23,455,722**	18,440,493	27.20

JOINT VENTURES

	2022 / MWh	2021 / MWh	Changes / %
Wind Power	**1,426,708**	1,374,815	3.77
Photovoltaic Power	**128**	N/A	N/A
Coal-fired Power	**2,917,577**	3,527,257	-17.28
Total	**27,908,088**	23,450,162	19.01

Heat Sales

In order to strongly support the existing environmental policies promulgated by the Chinese Government, the Group has carried out in-depth exploration of potential sites for heat supply in various regions, strengthened development of the heat market, promoted the construction of centralized heating pipe networks, and developed heat and electricity co-generation projects, thereby achieving satisfactory results in various areas such as enhanced energy efficiency upgrade and exploitation of the heat supply market. Yaomeng Power Plant completed the capacity expansion and upgrade of the heat supply station, which increased the heat supply capacity of the entire plant substantially. Wuhu Power Plant and Pingwei Power Plant are also building branch pipelines to extend the reach of their heat supply services.

In 2022, the total heat sold by the Group was 16,851,046GJ, representing an increase of 4,281,621GJ or 34.06% as compared with the previous year. The Group's two associates and a joint venture recorded total heat sold of 14,304,152GJ, representing a decrease of 1,333,109GJ or 8.53% as compared with the previous year.

TOTAL HEAT SOLD

16,851,046 GJ

Compared with 2021

34.06 %

Direct Power Supply

The Group has actively participated in the market-oriented reform of the national power industry and enhanced research on electricity market policies, particularly trading of spot electricity, green certificate/green energy, carbon emission quotas and related market policies and regulations. Keeping abreast of the reform, the Group maximized electricity sold through the market and its 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 electricity sales centers to attract more target customers through the provision of quality services.

In 2022, for those coal-fired power plants and hydropower plants of the Group which participated in direct power supply market transactions, their electricity sold through direct power supply transactions amounted to 67,862,570MWh and 583,650MWh, respectively, together accounting for approximately 63.28% (2021 (restated): 45.73%) of the Group's total electricity sold. The proportion of coal-fired power and hydropower generated electricity sold through direct power supply transactions accounted for 100% and 3.21% (2021 (restated): 63.30% and 28.54%) of their respective segments, respectively. During the year under review, the on-grid tariffs of direct power supply by hydropower were much lower than the official benchmark on-grid tariffs that the government approved for hydropower, and thus the Group has reduced the proportion of hydropower generated electricity sold through direct power supply transactions significantly.

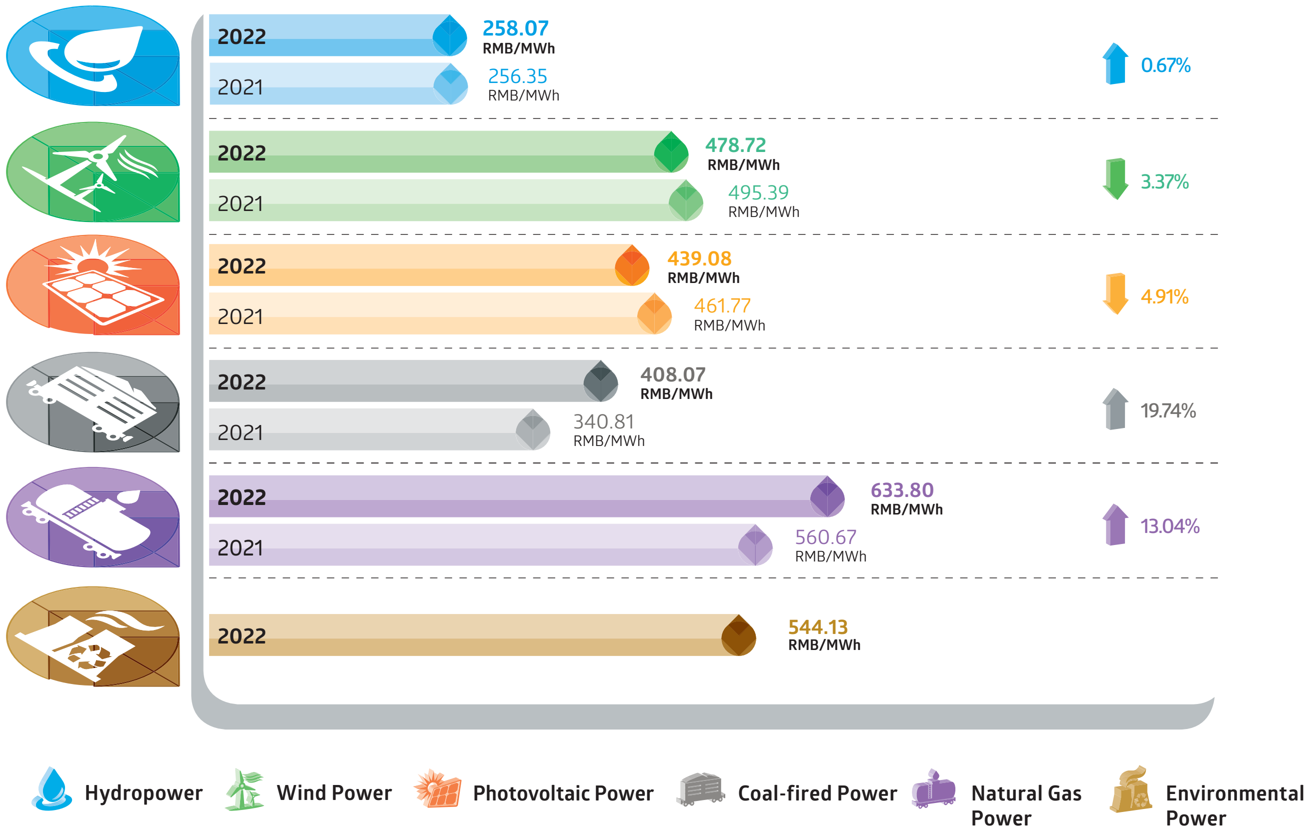
In October 2021, the NDRC published Circular No. 1439 "Notice on Further Deepening the Market-oriented Reform of On-Grid Tariff for Coal-fired Power Generation (《關於進一步深化燃煤發電上網電價市場化改革的通知》)", pursuant to which, all existing coal-fired power generated electricity would be traded via market transactions, and currently, since all the power production quota of large-scale coal-fired power generating units of the Group were obtained from the market, therefore the proportion of electricity sold through direct power supply transactions has reached 100%.

For those coal-fired power and hydropower plants of the Group which participated in direct power supply market transactions in 2022, their average on-grid tariffs were at a premium of approximately 20.11% and a discount of approximately 33.20% (2021: discounts of 0.70% and 6.53%), respectively, compared with their respective average on-grid tariffs officially approved by the Chinese Government.

As coal prices soared, coal-fired power enterprises of various provinces increased the market trading prices of electricity. Save for Guizhou Province, the market trading prices of electricity in the regions where the Group's coal-fired power plants were located have all increased to approach, or reached, the price cap of 20% above the local benchmark on-grid tariffs for coal-fired power generated. Meanwhile, certain power plants have increased their on-grid tariffs to over 20% above the benchmark on-grid tariffs through peak-valley time-sharing transactions and cross-provincial and cross-regional transactions.

Average On-Grid Tariff

In 2022, the average on-grid tariffs of each power segment of the Group as compared with the previous year (restated) were as follows:

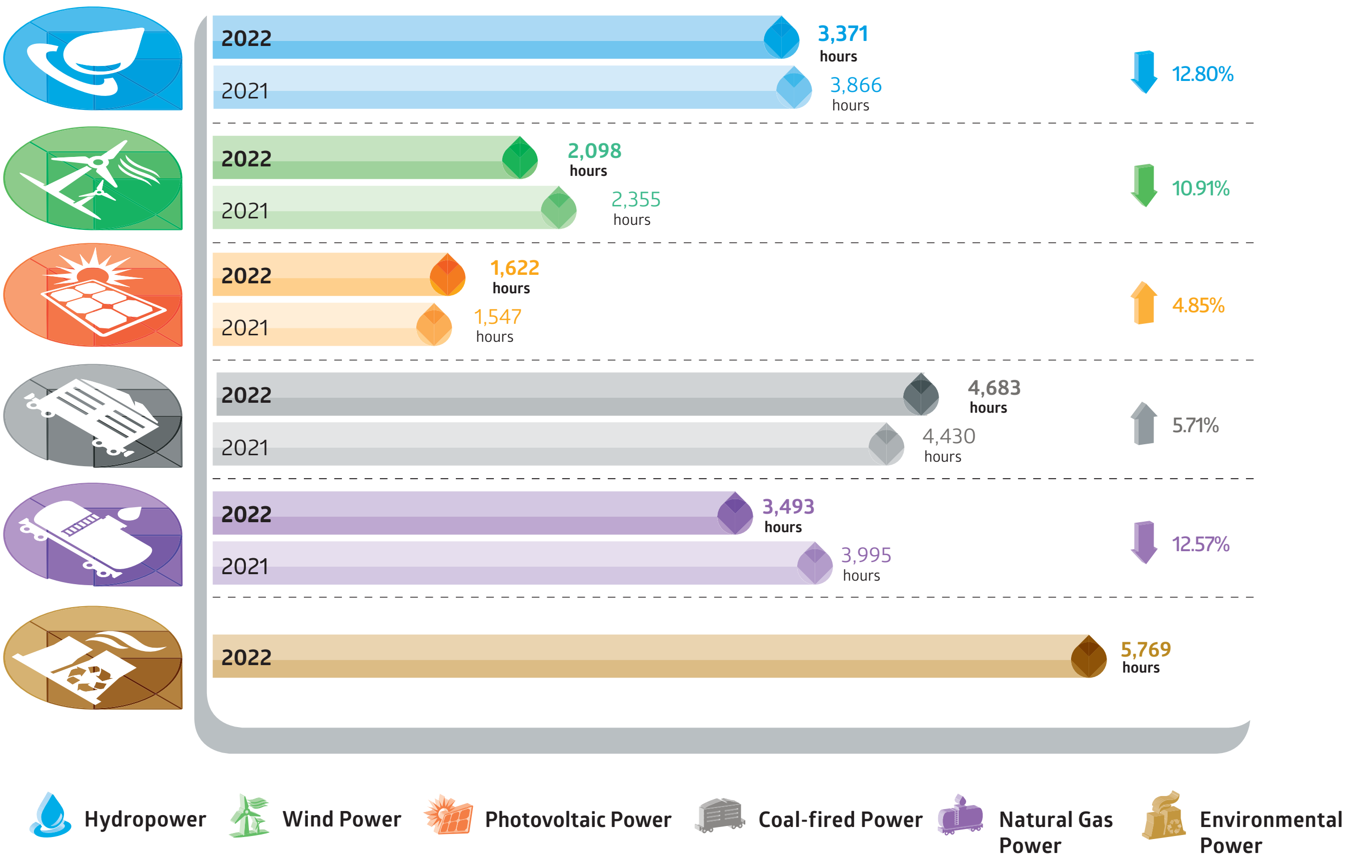


Hydropower	It was mainly attributable to the decrease in the proportion of market-traded electricity sales with relatively lower on-grid tariffs, and thus resulted in a higher average on-grid tariff of hydropower.
Wind Power	It was mainly attributable to the year-on-year increase in the proportion of market-traded electricity sales with lower on-grid tariffs, and thus resulted in a lower average on-grid tariff of wind power.
Photovoltaic Power	It was mainly attributable to the commencement of operation of the Group's grid parity and competitive-bidding photovoltaic power generation projects during the year, which resulted in a lower average on-grid tariff of photovoltaic power.
Coal-fired Power	It was mainly attributable to the fact that the on-grid tariffs for the production quota that were traded through the direct power supply market have all increased to above the benchmark on-grid tariffs for coal-fired power generated during the year.
Natural gas Power	It was mainly attributable to the benefits derived from the subsidy policy of Guangdong Development and Reform Commission for natural gas power.

In 2022, all coal-fired power production quota trading via market-power transactions and the development of the power spot market gained momentum. 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 2022, the average utilization hours of power generating units of each power segment of the Group as compared with the previous year were as follows:



Hydropower	It was mainly attributable to the decrease in power generation as a result of the decrease in the average rainfall during the year in the river basins where the Group's hydropower plants are located.
Wind Power	It was mainly attributable to insufficient wind resources in 2022 as compared with the previous year.
Photovoltaic Power	It was mainly attributable to the results achieved from effective facility management and maintenance as the Group has strengthened the management and analysis of photovoltaic power generating units, established various reporting mechanisms, set up a special group to study the countermeasures for photovoltaic curtailment, comprehensively improved the reliability of equipment in the station, and improved the optical power prediction system and model optimization to achieve enhanced effectiveness of management and maintenance.
Coal-fired Power	It was mainly attributable to the recovery of overall power consumption driven by the year-on-year increase in electricity demand, in particular power consumption in the industrial sector, during the year.
Natural gas Power	It was mainly attributable to the sharp increase in demand for heat supply in the industrial park where the Group's natural gas project is located in Hubei Province, and the project has maximized its profits by reducing power generation and increasing heat supply.

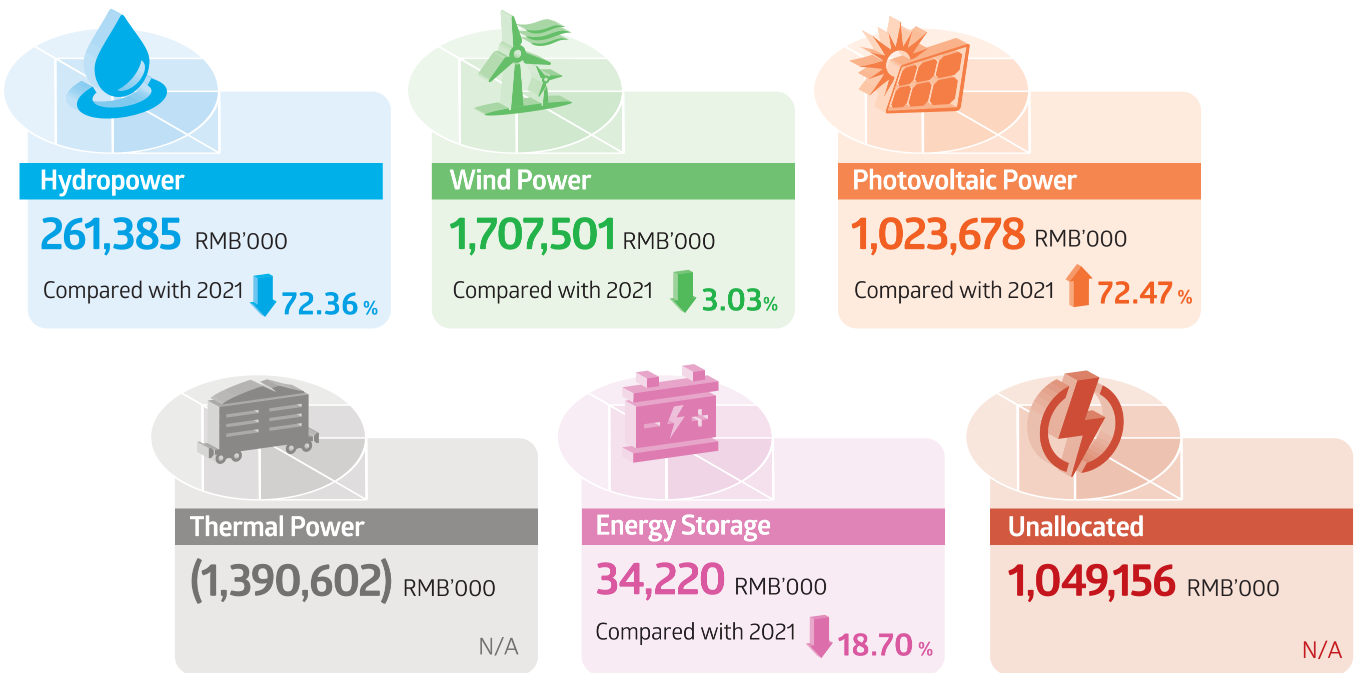
Energy Storage Business

For 2022, the net profit from the energy storage business amounted to RMB34,220,000, representing a decrease of RMB7,873,000 or 18.70% as compared with the previous year. The energy storage business mainly comprises the sales of energy storage equipment, the provision of subcontracting services for developing and assembling power stations integrated with energy storage and energy storage capacities leasing services, and charging services of energy storage power stations. Energy storage is an emerging industry, and the Group's energy storage business is still at the initial stage of development. During the year under review, the Group overcame unfavorable factors such as recurring pandemic and rising raw material prices, continued to optimize its business structure, diversified the development of its energy storage projects, deepened its intensive procurement model to reduce material costs, and hence successfully maintained its profitability. However, it is expected that with the continuous adjustment and optimization of the energy storage policies in the PRC, the prospect of commercial application of energy storage will become clearer, hence the growth rate of investment in energy storage will increase and contribute to a strong growth of the energy storage market. Against such back drop, the Group's energy storage business segment will continue to adapt to market changes, and the Group is optimistic that the energy storage business segment will continue to expand in the future.

OPERATING RESULTS OF 2022

In 2022, the net profit of the Group amounted to RMB2,685,338,000, representing an increase of RMB2,009,042,000 or 297.07% as compared with the previous year.

In 2022, the net profit (loss) of each operating segment and their respective changes over the previous year were as follows:



As compared with 2021, 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 energy storage-related services. In 2022, the Group recorded a revenue of RMB43,689,129,000, representing an increase of 23.15% as compared with RMB35,476,703,000 (restated) of the previous year.

In 2022, the details of revenue of each operating segment are set out as follows:

Hydropower
4,685,036 RMB'000
Compared with 2021 ↓ 12.39 %

Wind Power
5,232,439 RMB'000
Compared with 2021 ↑ 30.72%

Photovoltaic Power
4,292,128 RMB'000
Compared with 2021 ↑ 27.14 %

Thermal Power
28,583,266 RMB'000
Compared with 2021 ↑ 28.92 %

Energy Storage
896,260 RMB'000
Compared with 2021 ↑ 54.63 %

- Revenue from hydropower decreased by RMB662,516,000, which was mainly attributable to the decrease in electricity sales of hydropower as a result of decreased average rainfall in the river basins during the year where most of the Group's hydropower plants are located.

- Revenue from wind power and photovoltaic power increased by RMB2,145,790,000 in aggregate due to the commencement of commercial operation of a large number of new power generating units of wind power generation companies and photovoltaic power generation companies of the Group.

- Revenue from thermal power increased by RMB6,412,496,000, which was mainly attributable to an increase in market trading prices as a result of the relaxation of the on-grid tariff price cap for coal-fired power generated, the year-on-year increase in electricity demand during the year, and the commencement of commercial operation and consolidation of various coal-fired, natural gas and environmental power generation projects.

- Revenue from energy storage increased by RMB316,656,000, which was mainly due to the substantial increase in the sales of energy storage equipment business during the year under review.

Operating Costs

Operating costs of the Group mainly consist of fuel costs, repairs and maintenance expenses for power generating units and facilities, depreciation and amortization, staff costs, subcontracting costs, cost of sales of energy storage equipment, consumables and other operating expenses. In 2022, the operating costs of the Group amounted to RMB39,347,562,000, representing an increase of 23.58% as compared with RMB31,838,603,000 (restated) of the previous year. The increase in operating costs was mainly due to the significant increase in fuel costs and depreciation, as further explained below.

Total Fuel Costs

The total fuel costs increased by RMB4,671,670,000, mainly due to the year-on-year surge in coal prices and the corresponding increase in fuel consumption in tandem with the increase in coal-fired power generated.

Unit Fuel Cost

The average unit fuel cost of the Group's coal-fired power business was RMB326.16/MWh, representing an increase of 17.41% as compared with RMB277.79/MWh (restated) of the previous year. Coal prices remained steadily high due to the continuous tight supply and demand of thermal coal. In response to this unfavourable situation, the Group adopted the principal strategy of "developing long-term contract and further enhancing mixed-combustion" to stabilize supply of thermal coal and has utilized over 80% of the long-term coal contracts. In addition, the Group formulated plans for accumulating coal reserve for consumption during peak seasons such as summer and winter periods, and actively placed accumulating coal reserve during low seasons into practice in an effort to curb the purchase prices of coal.

Depreciation and Staff Costs

Depreciation of property, plant and equipment and right-of-use assets and staff costs increased by RMB2,050,966,000, in aggregate, as a result of business expansion and the large number of new power generating units that commenced commercial operation during the year.

Cost of Energy Storage Equipment Sales and Subcontracting Costs

The Group's energy storage business segment is principally engaged in sales of energy storage equipment and the provision of subcontracting services for developing and assembling power station integrated with energy storage. In 2022, the cost of energy storage equipment sales and subcontracting cost, being the operating costs of this business segment, totalled RMB753,951,000, representing an increase of RMB243,203,000 as compared with the previous year, which was mainly attributable to the year-on-year increase in sales of energy storage equipment during the year.

Other Operating Expenses

Other operating expenses increased by RMB309,553,000 year-on-year, mainly due to the increase in power and heat generation-related costs and the amortization of other intangible assets.

Other Gains and Losses, Net

The net gains from other gains and losses increased by RMB1,561,573,000 year-on-year, mainly due to the recognition of negative goodwill of approximately RMB1,551,609,000 generated from the acquisition of 23 companies from CPNE and CPINE during the year.

Operating Profit

In 2022, the Group's operating profit was RMB7,604,262,000, representing an increase of 48.93% as compared with the operating profit of RMB5,105,944,000 (restated) of the previous year.

Finance Costs

In 2022, the finance costs of the Group amounted to RMB4,260,961,000 (2021: RMB3,861,500,000), representing an increase of RMB399,461,000 or 10.34% as compared with the previous year. The increase in finance costs was mainly due to the increase in debt scale and the cessation of interest capitalization as certain power generating units commenced operation.

Share of Results of Associates

In 2022, the share of results of associates was a loss of RMB155,233,000, representing a decrease in loss of RMB58,291,000 as compared with the loss of RMB213,524,000 of the previous year. The decrease in losses was mainly due to the increase in return on investment in wind power projects, and the decrease in net losses of associates engaging in coal-fired power-related business as a result of the year-on-year increase in the average on-grid tariff of coal-fired power.

Share of Results of Joint Ventures

In 2022, the share of results of joint ventures was a profit of RMB2,375,000, representing an increase in profit of RMB121,655,000 as compared with the loss of RMB119,280,000 of the previous year. The increase in profits was mainly due to the increase in return on investment in wind power projects, and the increase in net profits of joint ventures engaging in coal-fired power-related business as a result of the year-on-year increase in the average on-grid tariff of coal-fired power.

Income Tax Expense

In 2022, income tax expense of the Group was RMB658,729,000, representing an increase of RMB296,782,000 as compared with RMB361,947,000 of the previous year. The increase was mainly due to the year-on-year decrease in losses of the thermal power segment.

Final Dividend

At the Board meeting held on 23 March 2023, the Board recommended the payment of a final dividend for the year ended 31 December 2022 of RMB0.11 (equivalent to HK$0.1256 at the exchange rate announced by the People's Bank of China on 23 March 2023) per ordinary share (2021: RMB0.05 per ordinary share), totaling RMB1,360,717,000 (equivalent to HK$1,553,691,000) (2021: RMB541,669,000), which is based on 12,370,150,983 shares in issue on 23 March 2023.

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

As at 31 December 2022, the carrying amount of equity instruments at FVTOCI was RMB4,131,667,000, accounting for 1.95% of total assets, including listed equity securities of RMB3,636,555,000 and unlisted equity investments of RMB495,112,000.

Listed equity securities represent the equity interests in Shanghai Power held by the Group. As at 31 December 2022, the Group held 12.90% (2021: 13.88%) of the issued share capital of Shanghai Power, the A shares of which are listed on the Shanghai Stock Exchange. It was categorized as level 1 financial assets of fair value measurements, and its fair value decreased by 21.92% as compared with RMB4,657,406,000 as at 31 December 2021.

Unlisted equity investments represent the Group's equity investment in certain unlisted companies principally engaged in financial services, coal production and electricity trading services, respectively. They were categorized as level 3 financial assets of fair value measurements. As at 31 December 2022, the aggregate fair value of unlisted equity investments owned by the Group was RMB495,112,000, representing a decrease of 14.43% from RMB578,589,000 as at 31 December 2021.

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 (1.39) and price-earning ratio (3.44) of the comparable companies, and (iii) the marketability discount (12.83%-31.77%).

The fair value loss on equity instruments at FVTOCI for the year ended 31 December 2022 of RMB768,112,000 (net of tax) (2021: gain of RMB1,608,081,000) was recognized in the consolidated statement of comprehensive income.

MATERIAL ACQUISITIONS AND DISPOSALS

In June 2022, the Company and CPNE entered into a sale and purchase agreement, pursuant to which the Company conditionally agreed to acquire, and CPNE conditionally agreed to sell, equity interests in 16 target companies at an adjusted consideration of RMB5,790,593,419.82, of which RMB5,782,593,419.82 was settled by the issue of 1,536,764,662 consideration shares of the Company. On the same day, the Company and CPINE entered into another sale and purchase agreement, pursuant to which the Company conditionally agreed to acquire, and CPINE conditionally agreed to sell, equity interests in 10 target companies at a consideration of RMB1,670,098,862.61, which was settled by cash.

The aforementioned target companies are mainly engaged in clean energy power generation, including wind power, photovoltaic power and environmental power. The acquisitions will accelerate the strategic progress of the expedited development of clean energy business of the Company and expand its clean energy bases in new regions of China. For details, please refer to the announcements of the Company dated 30 June, 26 September and 26 October 2022, respectively, and the circular dated 28 July 2022.

In December 2022, the Company entered into an equity transfer agreement and a supplemental agreement with China Coal Power Co., Ltd.*, an independent third party, to sell 60% equity interest in Xinyuan Ronghe, an investment holding company engaged in power generation, power transmission, power distribution, power generation technological services and emerging energy technology research and development, at a consideration of RMB1,264,735,140. For details, please refer to the announcement of the Company dated 28 December 2022.

In December 2022, Guangxi Nanning Lvdong New Energy Investment Co., Ltd.*, an indirect wholly-owned subsidiary of the Company, entered into an equity transfer agreement with Guangxi SPIC Overseas Energy Investment Limited*, to acquire 79.67% equity interest in SPIC Guangxi Jinzishan Wind Power Limited*, a company engaged in wind power generation, at an adjusted consideration of RMB547,131,500. For details, please refer to the announcements of the Company dated 3 January and 5 January 2023.

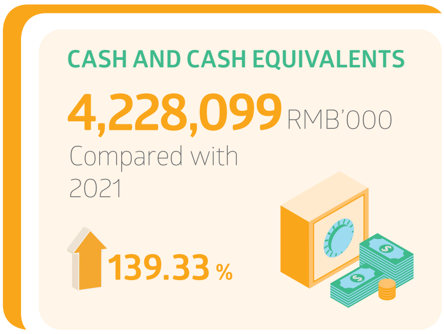
Save as disclosed above, the Group did not have any other material acquisitions and disposals during the year under review.

EVENT AFTER THE REPORTING PERIOD

On 31 December 2022, the Company and Xinyuan Green Power, a wholly-owned subsidiary of the Company, entered into a capital injection agreement and a cooperation agreement with CCB Investment, pursuant to which CCB Investment agreed to inject an aggregate amount of RMB2,000,000,000 into Xinyuan Green Power. Upon completion, Xinyuan Green Power will be held as to 54.56% by the Company and 45.44% by CCB Investment, and Xinyuan Green Power shall remain as a subsidiary of the Company. For details, please refer to the announcement of the Company dated 3 January 2023.

LIQUIDITY, CASH FLOWS AND FINANCIAL RESOURCES

As at 31 December 2022, cash and cash equivalents of the Group were RMB4,228,099,000 (31 December 2021: RMB1,766,632,000). Current assets amounted to RMB30,885,745,000 (31 December 2021: RMB18,570,390,000), current liabilities amounted to RMB45,925,034,000 (31 December 2021: RMB45,535,822,000) and current ratio was 0.67 (31 December 2021: 0.41).



In April 2019, the Company entered into the financial services framework agreement with SPIC Financial for a term of three years, pursuant to which SPIC Financial has agreed to provide 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. This framework agreement officially came into effect on 7 June 2019 and expired on 6 June 2022.

In May 2022, the Company and SPIC Financial renewed the financial services framework agreement for a term of three years, pursuant to which SPIC Financial has agreed to continue to provide the Group with deposit services, settlement services, loan services and other financial services approved by the CBIRC on a non-exclusive basis upon expiry of the previous framework agreement. During the term of this framework agreement, 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 RMB5.5 billion. This framework agreement has officially come into effect on 7 June 2022. For details, please refer to the announcement of the Company dated 6 May 2022.

For the period between 1 January 2022 and 6 June 2022 and the period between 7 June 2022 and 31 December 2022, the maximum daily balance of deposit (including accrued interests) placed by the Group with SPIC Financial was approximately RMB4.13 billion and RMB5.45 billion, respectively (31 December 2021: RMB3.27 billion).

Pursuant to the aforementioned 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 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 gives rise to more flexible capital flow at home and abroad, broadens financing channels for domestic subsidiaries and reduces 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 of RMB2,458,965,000 (2021: a net increase of RMB435,245,000 (including cash and cash equivalents as part of the disposal groups classified as held for sale)). For the year ended 31 December 2022:

- net cash generated from operating activities amounted to RMB5,725,614,000 (2021 (restated): RMB1,547,926,000). Significant increase in cash inflow was mainly attributable to the year-on-year surge in operating profit.

- net cash used in investing activities amounted to RMB20,075,107,000 (2021 (restated): RMB18,721,137,000), 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. The increase in cash used was mainly attributable to increased investment in new energy projects to expand our new energy assets portfolio.

- net cash generated from financing activities amounted to RMB16,808,458,000 (2021: RMB17,608,456,000). The decrease in net cash generated, as compared with the previous year, was mainly attributable to the year-on-year decrease in the amount of drawdown of bank borrowings.

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 2022, total debts of the Group amounted to RMB116,606,464,000 (31 December 2021: RMB105,921,101,000). All debts of the Group are denominated in RMB, Japanese Yen ("JPY") or United States Dollars ("USD").

As at 31 December 2022, 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 62% (31 December 2021: approximately 67%). The Group's gearing ratio remained stable.

As at 31 December 2022, the amount of borrowings granted by SPIC Financial was approximately RMB2.01 billion (31 December 2021: approximately RMB4.93 billion).

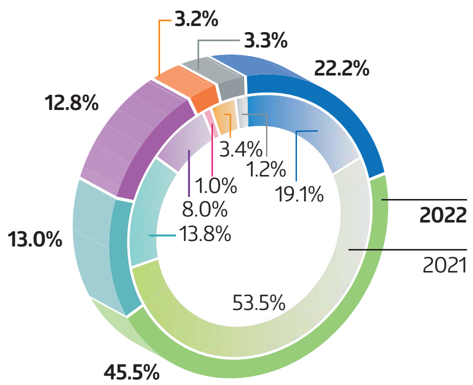
DEBTS

116,606,464 RMB'000

Compared with 2021

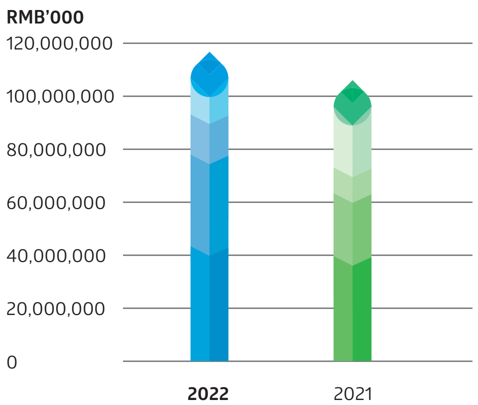
10.09%

The details of the Group's debt as at 31 December 2022 and 2021 are set out as follows:



	2022 RMB'000	2021 RMB'000
Bank borrowings, secured	**25,878,250**	20,222,644
Bank borrowings, unsecured	**53,060,727**	56,619,460
Borrowings from related parties	**15,134,304**	14,666,286
Medium-term notes and super & short-term commercial papers issued by the Company	**15,000,000**	8,500,000
Super & short-term commercial papers issued by Wu Ling Power	**–**	1,020,000
Lease liabilities	**3,706,652**	3,592,386
Other borrowings	**3,826,531**	1,300,325
	116,606,464	105,921,101

The above debts are repayable as follows:



	2022 RMB'000	2021 RMB'000
Within one year	**23,977,778**	33,258,234
Between one and two years	**15,089,720**	9,636,677
Between two and five years	**34,461,220**	23,644,202
Over five years	**43,077,746**	39,381,988
	116,606,464	105,921,101

Among the above debts, approximately RMB43,065,624,000 (31 December 2021: approximately RMB39,092,805,000) 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 1.25% to 5.39% (2021: ranged from 1.30% to 5.30%) 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.

In 2022, the Group recognized impairment of RMB265,047,000 in total, which mainly included an impairment of goodwill of RMB250,905,000 recognized for two hydropower plants and a coal-fired power plant.

SIGNIFICANT FINANCING ACTIVITIES

Issue of commercial papers

In March 2022, Wu Ling Power issued the fifth tranche of super & short-term commercial papers in the PRC in a principal amount of RMB1 billion at the interest rate of 2.10% per annum and a maturity period of 180 days. The proceeds have been fully applied towards the repayment of existing bank borrowings. Such super & short-term commercial papers can be issued in tranches on a revolving basis with an aggregate principal amount of 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 in June, July and September 2022, (i) the first tranche of medium-term notes in a principal amount of RMB2 billion at the interest rate of 3.00% per annum and a maturity period of three years; (ii) the first tranche of super & short-term commercial papers (rural revitalization) in a principal amount of RMB1 billion at the interest rate of 2.10% per annum and a maturity period of 270 days; (iii) the second tranche of medium-term notes in a principal amount of RMB2 billion at the interest rate of 2.99% per annum and a maturity period of three years; (iv) the third tranche of medium-term notes in a principal amount of RMB2 billion at the interest rate of 2.87% per annum and a maturity period of three years; (v) the second tranche of super & short-term commercial papers (old district revitalization) in a principal amount of RMB1 billion at the interest rate of 1.75% per annum and a maturity period of 180 days; and (vi) the fourth tranche of medium-term notes in a principal amount of RMB2 billion at the interest rate of 2.71% per annum and a maturity period of three years, respectively.

Perpetual Debt Investment Contracts

In August 2022, the Central Government adopted a series of follow-up policies for stabilizing the economy as part of its intensified efforts to strengthen the foundation for economic recovery and growth according to the decision made at the executive meeting of the State Council. Among them, it encouraged power generation enterprises to issue energy supply assurance special bonds to enhance the financial strength of these enterprises, promote their reform and transformation, improve their ability to ensure stable energy supply, and thus promote the overall economic recovery and development. Through SPIC, the ultimate controlling shareholder of the Company, the Group has been allocated up to an aggregate amount of approximately RMB11.268 billion of funding in the form of perpetual debt instruments. The perpetual trust funds under the perpetual debt investment contracts enables the Group to expand its financing channels, enhance its cash flow adequacy, and optimize its asset-liability structure and thus its financial position. In 2022, certain subsidiaries and an associate of the Group have received a total of approximately RMB6.06 billion by entering into the perpetual debt investment contracts.

The proceeds from all of the above debt instruments have been fully applied towards the repayment of the existing borrowings and/or replenishment of the working capital of the Group and/or rural and old district revitalization projects.

SHARE INCENTIVE SCHEME

The Company adopted a new share option incentive scheme which was approved by its shareholders at an extraordinary general meeting held on 15 June 2022. Under the Share Incentive Scheme, the Company granted a total of 103,180,000 share options in two tranches in July 2022. All the aforesaid grantees are employees of the Company or its controlled subsidiaries. For details, please refer to the announcements of the Company dated 5 and 20 July 2022, respectively.

CAPITAL EXPENDITURE

In 2022, the capital expenditure of the Group was RMB20,332,484,000 (2021 (restated): RMB18,223,972,000). In particular, the capital expenditure for clean energy segments (hydropower, wind power, photovoltaic power and energy storage) was RMB18,082,070,000 (2021 (restated): RMB15,456,991,000), 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 thermal power segment was RMB1,880,414,000 (2021 (restated): RMB2,447,551,000), which was mainly applied for the project construction of new thermal 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 2022, the Group pledged certain property, plant and equipment with a net book value of RMB1,849,800,000 (31 December 2021: RMB386,243,000) to certain banks to secure bank borrowings in the amount of RMB741,473,000 (31 December 2021: RMB114,620,000). In addition, certain bank borrowings, borrowings from related parties and lease liabilities totaling RMB26,120,745,000 (31 December 2021: RMB21,242,398,000) were secured by the rights on accounts receivable of the Group. The accounts receivable secured under these borrowings amounted to RMB3,467,887,000 (31 December 2021: RMB2,568,225,000).

CONTINGENT LIABILITIES

As at 31 December 2022, 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 2022, the Group's borrowings denominated in foreign currencies amounted to RMB702,940,000 (31 December 2021: RMB281,747,000).

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 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 to access 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 2022, the Group had sufficient available undrawn financing facilities amounting to RMB35,092,730,000, 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

Impact on coal-fired power business

During the year, the NDRC further improved the market price formation mechanism for coal. Firstly, it proposed a reasonable range of market prices for coal. Secondly, it specified the reasonable range of market prices for coal and that coal prices and power tariffs can be effectively correlated within the reasonable range. At the same time, the NDRC also specified that coal-fired power generation enterprises can timely and reasonably pass on changes in fuel costs within the floating band of no more than 20% above or below the benchmark on-grid tariffs. By improving the market price formation mechanism for coal, the market can be directed to develop a reasonable coal price expectation, so as to curtail malicious and speculative capital operations and prevent huge fluctuations in coal prices. Benefitting from such policy and coupled with the increase in on-grid tariffs of coal-fired power as a result of increased marketing efforts for electricity sales of the Company, the average on-grid tariffs of coal-fired power increased by 20.11% year-on-year during the year.

Impact on energy storage business

The Chinese Government launched a series of policies in relation to energy storage during the year, including, among other things, the "Development and Implementation Plan of New Energy Storage under the "14th Five-Year" Plan (《「十四五」新型儲能發展實施方案》)" published in January 2022, and the "Notice Regarding the Further Promotion of the Participation of New Energy Storage in the Power Market and its Allocation and Use (《關於進一步推動新型儲能參與電力市場和調度運用的通知》)" published in June 2022. Such policies aim to drive the overall deployment of large-scale, industrialized and market-oriented development of new energy storage under the "14th Five-Year" Plan, further specify the market positioning of new energy storage, establish and optimize the relevant market, pricing and operational mechanisms, innovate power grid structure and operating mode, strengthen the coordination, optimization and operational capability of power sources, enhance the level of utilization of new energy storage and provide guidance for the healthy development of the industry. It is expected that the Chinese Government will continue to promote the integrated development of new energy storage with various aspects of the power system. The Company will closely monitor the implementation of these policies in various provinces and expedite the research on the transaction strategy for new energy equipped with energy storage, with a view to further securing the leading market position of the energy storage business of the Company.

Impact on clean energy business

During the year under review, the NDRC, the Ministry of Finance and the National Energy Administration jointly issued the "Notice Concerning the Interpretation of Policies on the Verification and Certification of Renewable Energy Power Generation Subsidies (《關於明確可再生能源發電補貼核查認定有關政策解釋的通知》)". The notice clarified several ambiguities in subsidy verification, including the determination of on-grid tariffs for certain special photovoltaic and wind power projects, the certification of installed capacity for entitled subsidized projects and the certification standards of installed capacity for project filing, etc. It is expected that subsidies will be granted at a faster pace going forward, which shall greatly improve the cash flows of the renewable energy segment of the Group.

Impact on governance system

In recent years, the Chinese Government has been focusing on promoting the in-depth and solid progress of the high-quality development of listed companies controlled by central enterprises. During the year, the SASAC formulated the "Task Plan on Enhancing the Quality of Listed Companies Controlled by Central Enterprises (《提高央企控股上市公司品質工作方案》)" (the "Task Plan"). By making deployments for tasks in relation to the enhancement of the quality of listed companies controlled by central enterprises, it aims to implement the new concept of development, explore and establish sound environmental, social and governance ("ESG") systems, and encourage more listed companies controlled by central enterprises to disclose their ESG reports, striving for the "full coverage" disclosure of the relevant reports by 2023. The Task Plan proposed 14 specific tasks and initiatives, which covered various key aspects of the reform and development of listed companies such as promoting the development of listing platforms, optimizing the shareholding structures, developing robust ESG mechanisms, and enhancing independent innovation capabilities, hence showing the commitment of the SASAC to enhance the quality of listed companies controlled by central enterprises. The Company will continue to conform with national policies, and proactively perform its corporate responsibilities and obligations to promote the sustainable development of both the society and economy. Furthermore, the Company will continue to make high-quality disclosure of its ESG information and enrich the contents of its ESG report.

SOCIAL AND ENVIRONMENTAL GOVERNANCE

Operational Safety

The Group set the goal of "Zero death, Zero accident" and strived to enhance the production safety management capability of management personnel. Focusing on strengthening the foundation and controlling at source, the Group takes a multi-pronged approach to achieve steady improvement in the level of production safety. During the year under review, the Company continued to organize training courses for environmental management officers and quality control officers, and held production safety meetings on a regular basis. It established the collective accountability mechanism for accidents and specified the responsibilities of the inspection team, which ensured inspection effectiveness and facilitated the exchange between base-level departments. At the same time, it conducted inspections on production safety and environmental specific inspections at various power plants. By adopting innovative means such as remote video surveillance, it monitored production safety of power plants and safety management at the sites of inspection, repair and technical upgrade, which helped curb major risks and potential safety hazards at an early stage.

During the year under review, the advent of new industries and modes of energy usage prompted the Group to establish various systems for construction, production, operation and maintenance management of new energy plants. The Group also formulated measures for construction, production and operation management of energy storage, hydrogen energy and integrated intelligent energy projects, and developed safety control solutions for new energy plants. A number of guiding opinions and management checklists were prepared, which included the list of safe production, operation and maintenance management systems for new energy plants, electric shock accident prevention measures, remote video surveillance inspection, fire prevention for household distributed photovoltaic power, onsite operation risk identification and control measure cards. As a result, the Group laid the foundation for further standardization and enhancement of safety management for new energy plants.

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 Prevention and Control of Occupational Diseases Law of the People's Republic of China and other laws and regulations relating to safety and hygiene. It equipped employees with work equipment and labor protective gear in line with safety standards and organized various training on safety knowledge and safety skills, as well as emergency training and drills.

The "three standards" Quality, Occupational Health and Safety, and Environment (QHSE) management system established by the Group maintained stable implementation. 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 and implementing transformational development.

In 2022, there had been no material accidents in relation to employees, facilities and environmental protection of the Group.

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

Human Resources

The Group has placed 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 company and prevailing market conditions. In addition, the Group has implemented an incentive policy that links emoluments with overall business performance.

During the year under review, the Company adopted the new Share Incentive Scheme. The purpose of the scheme is to (i) further improve the governance structure of the Company, and establish and improve the mechanism for balancing the interests between employees and shareholders, investors and the Company; (ii) establish a benefit sharing and risk sharing mechanism among shareholders, the Company and employees to enhance the Company's performance and promote its stable development in the long run; and (iii) effectively attract, motivate and retain core backbone employees of the Company to support the Company's strategic transformation and long-term development. For details, please refer to the announcement of the Company dated 10 May 2022 and the section headed "Share Incentive Scheme" in the Report of the Board of Directors of this annual report.

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 2022, the Group had a total of 10,829 (2021: 10,724) 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 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.

During the year under review, the Group accomplished the mission of securing energy supply for crucial periods such as the Winter Olympic Games, the summer peak season and the 20th National Congress of the Chinese Communist Party. Fuxi Power Plant and Dabieshan Power Plant received appreciation letters from relevant ministries, local governments and power grid companies in recognition of the outstanding contribution of China Power in ensuring a stable energy supply.

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 promoted the orderly elimination of traditional coal-fired power generating units with lagging 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, tackled business with material risks, devise the climate action list and assess potential financial impacts. Supplemented by the adoption of the "Climate-related Risks, Opportunities and Financial Impacts" framework, we also studied the risks and opportunities posed by climate change on the Group.

The Company published its latest Sustainability Report in May 2022. The report identified and analyzed corporate climate risks in line with the "Climate-related Risks, Opportunities and Financial Impacts" framework put forward by the TCFD and highlighted the Group's efforts in maintaining sustainable growth.

Energy Saving and Emissions Reduction

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

In 2022, the net coal consumption rate of the Group was 302.37g/kWh, representing a slight increase of 1.21g/kWh as compared with the previous year. As the generating units maintained high-load operation throughout the summer when energy consumption was higher, coupled with the increased use of coal for mixed combustion in an effort to control and reduce fuel costs, the net coal consumption indicators were affected to a certain extent. However, the energy-saving and heat supply transformation projects of various power generating units have been completed, which helped maintain the net coal consumption at a lower level.

In 2022, the operational ratio of desulphurization facilities for the coal-fired power generating units of the Group was 100% (2021: 100%), and the efficiency ratio of desulphurization reached 99.39% (2021: 99.35%); while the operational ratio of denitration facilities was 100% (2021: 100%) and the efficiency ratio of denitration reached 89.52% (2021: 89.13%).

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

Emission rate of sulphur dioxide

0.070 g/kWh

Compared with 2021

↓ **0.006** g/kWh

Emission rate of nitrogen oxide

0.131 g/kWh

Compared with 2021

↓ **0.008** g/kWh

Emission rate of flue gas and dusts

0.008 g/kWh

Same level as 2021

The environmental indicators further improved as compared with the previous year. This was mainly due to the completion of the ultra-low emission upgrade of two 660MW generating units in Pu'an Power Plant during the second half of 2021, of which the emission reduction benefits were fully reflected in 2022.

During the year under review, the Group carried out transformation at a number of power plants to enhance efficiency and save energy. For instance, Pingwei Power Plant and Fuxi Power Plant completed the air preheater transformation for three generating units, which improved their heat exchange efficiency and reduced energy consumption rate. Wuhu Power Plant completed the upgrade of sonic soot blowers at the tail flues of boilers nos. 1 and 2 and expanded the capacity of the compressed air conveying system, which reduced the use of steam, lowered the consumption rate of plant air, and cut energy consumption significantly. At the same time, Yaomeng Power Plant completed the transformation to boost the capacity and efficiency of the ash removal and air compressing system at generating units nos. 5 and 6, which trimmed down the consumption rate of plant air.

During the year under review, all the power plants over which the Group has operational control complied with the relevant local 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. We are committed to offering high-quality services to customers and recognize the importance of our business relationship which is built on trust. The Group has been maintaining good communication with them and hence established a trusting, effective and enduring cooperation relationship to understand their expectation of us more fully, so that we can join hands to achieve our sustainability goals and lay the foundation for our long-term success. During the year ended 31 December 2022, 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 its power plants are located. During the year under review, the aggregate turnover attributable to the Group's five largest customers (local power grid companies) accounted for 61.83% of the Group's total turnover.

The pace of market-oriented reform in the power industry continued to accelerate in 2022. Adhering to the customer-centric principle, the Group strived to provide reliable and eco-friendly energy products and services. Leveraging opportunities brought by the reform, the Group has established direct connections with power users, built market awareness with a focus on users, understood their needs, and developed and provided them with value-added services. It has also continuously enhanced service standards for users to respond to their needs effectively. The Group strengthened cooperation with major customers and offered low-carbon products and services with higher value. On the basis of securing existing key customers, it continued to expand its business clientele. 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 72.37% 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 strategic relationships with suppliers to enhance competitive advantages. It strictly fulfills the contractual agreements, respects and treats each supplier equally to achieve a win-win situation. The Group has formulated a stringent and standardized supplier selection and management system, established a supplier review team and conducted strict reviews according to the integrity, business ethics, quality assurance, punctuality of supply, price reasonableness, etc. As a result, it can select more competent and reputable suppliers that are committed to sustainable development, and join hands with them to 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. The Group encourages suppliers to adopt its values and principles, thereby preventing excessive pollutant emission at source.

OUTLOOK FOR 2023

The year 2023 is a crucial year for the "14th Five-Year" Plan for National Economic and Social Development of China that inherits the past and ushers into the future, and a year of opportunities for further deepening the reform and transformation of the power industry. Against the backdrop of proactive and prudent drive to achieve "Carbon Emissions Peak and Carbon Neutrality" and accelerated planning and development of a new energy system, the energy industry will enter an era of higher-quality development.

In 2023, pursuing its strategic positioning of "green and low-carbon, innovation-driven", the Company will accelerate its clean transformation and expand its presence in emerging energy businesses, and make strenuous efforts in optimizing its asset structure, enhancing operation efficiency and implementing various reform and innovation initiatives, with a focus on the following tasks:

Remaining committed to improving asset quality and enhancing operation capability in the long run. The Company will step up its efforts in improving the quality and efficiency of existing assets, and carry out the professional integration of coal-fired power and natural gas power with low-efficiency innovatively. Further participating in the green power, green certificates and carbon trading market, the Company expects to boost revenue from equity interests with green attributes, further tap into the potential of efficiency improvement and profit growth in the new energy and hydropower segments, thereby maximizing operational efficiency.

Adhering to dual development of principal and emerging businesses while expediting strategic transformation. Firstly, the Company will promote the rapid implementation of large-scale new energy base projects and the two "integrated" projects (i.e. integrated Source-Grid-Load-and-Storage project and integrated multi-energy complementary project). Secondly, the Company will accelerate the development of emerging industries in a bid to achieve new breakthroughs in segments such as electrochemical energy storage, compressed air energy storage, green power transportation, colored photovoltaic and virtual power plants.

Persisting on innovation-driven approach to unleash new momentum for development. The Company will enhance the research, development and application of advanced technologies, and improve its planning for technological innovation. Based on the advanced energy storage technology of Xinyuan Smart Storage and the comprehensive recycling technology of obsolete photovoltaic modules of Xinyuan Jinwu, the Company will actively apply for setting up provincial and ministerial key laboratories and engineering technology centers. Use of robots and artificial intelligence will be promoted to replace manual operation under "3H" (Height, High Pressure and High Temperature) environment. Furthermore, the Company will advance more rapidly the strategic cooperation with renowned universities and institutions and equipment manufacturers to develop an industry-academia-research alliance and an open, synergistic and efficient research and development system. It will also promote in-depth digital transformation and upgrade its digital infrastructure and data centers, so as to unlock the values of the data resources.

Strategic upgrade with new dimensions to promptly build up the new environmental, social and governance (ESG) corporate premium brand image. With highlighting the technology-oriented development, strengthening ESG concepts and brand building of the Group as the focus of its strategic upgrade and development, we will, under the guidance of the Board, seek ways to optimize our ESG governance structure and management system as a listed company in a scientific and effective manner. Meanwhile, we will further promote the integration of ESG into the Group's production, operation and corporate culture to demonstrate the Company's image of good governance.

The Group will continue to optimize its development path of transformation, stay committed to green, innovative and high-quality development and accelerate the pace to become a "**World-class Green and Low-carbon Energy Provider**" in full steam, and create substantial value for all shareholders and other stakeholders.

Corporate Governance Report

CORPORATE STRATEGY — CP VISION 2035

The Company's vision is to be the world's leading green and low carbon energy provider by 2035. Our mission and purpose is "**Lower Carbon Empower Better Life**" and in order to achieve our mission, the Board formulated the strategic plans and goals for the Company's future development aptly dubbed "**CP Vision 2035**" (中國電力願景2035).

In accordance with CP Vision 2035, 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, biomass energy, etc. Proactive efforts have been made to nurture emerging industries of green energy, including energy storage, hydrogen energy, green power transportation and integrated intelligent energy, as well as to increase the proportion of clean energy installed capacity at a faster pace. We forge ahead with the "dual-wheel drive" transformation of "clean and low-carbon energy" and "emerging industries of green energy", thereby developing a new ecology of energy and serving the transition of the economy and the society towards a green and low-carbon world in full swing.

Strategic Positioning

- "Core Business Transformation": 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.

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.

CORPORATE CULTURE

At China Power, we pursue the core sustainable development philosophy of "**Green-empowerment, Intelligent Innovation, Mutual Achievement**". Based on the foundation of this philosophy, we advocate a corporate culture of innovation, dedication, integrity, caring, harmony and value creation. We operate our business lawfully, ethically and responsibly while actively undertake social responsibilities, and promote coordinated and sustainable development of the economy, society and environment.

We adopt a top-down approach with the Board setting the tone and infuse the ideology throughout the organization, with management at various levels responsible for communicating the Board's vision to employees at all levels, and ensure that the Board's vision is reflected in the Company's business strategies, business models and operating practices, as well as the approach to risks.

The Board holds Directors and management accountable for implementing the Company's culture and values while employees at all levels are held accountable for their actions which conflict with the Company's culture and values.

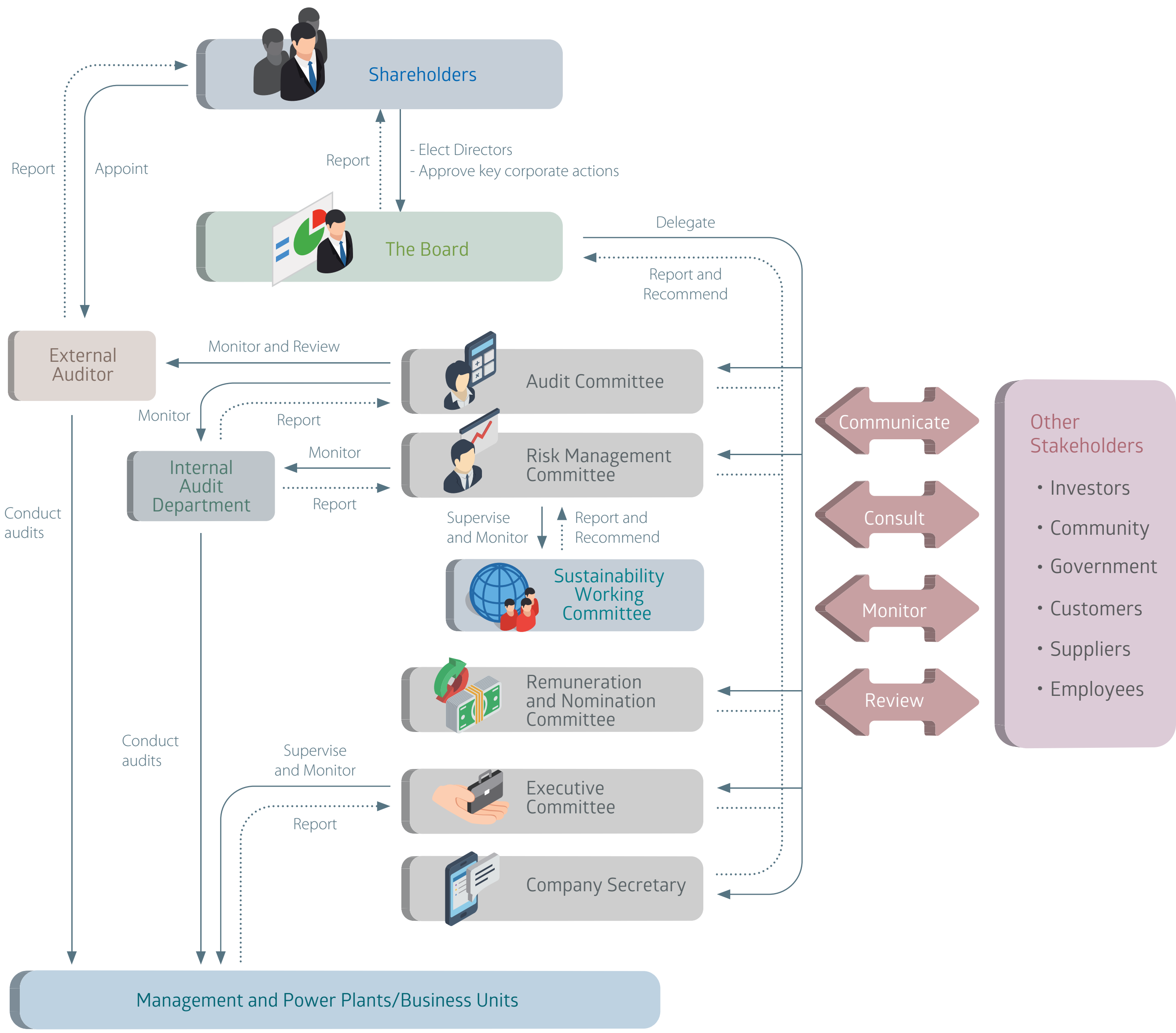
CORPORATE GOVERNANCE PRACTICES

The Board recognizes that good corporate governance is vital to the healthy and sustainable development of the Group, and the Board is committed to high standards of corporate governance. Through continuing exploration and practice, the Company has formed a standardized governance structure and formulated a comprehensive range of policies and procedures designed to ensure that it is well managed, with effective oversight and internal controls. The Board and management always follow good governance principles to manage the Group's business effectively, treat all stakeholders fairly and strive for the long-term, stable and growing return for shareholders.

The Hong Kong Stock Exchange published the conclusions to Review of Corporate Governance Code and the associated Listing Rules in December 2021, and introduced amendments to the CG Code with most amendments becoming effective for the financial year commencing on or after 1 January 2022. Throughout the year ended 31 December 2022, the Company has strictly complied with all the applicable code provisions of the CG Code.

GOVERNANCE FRAMEWORK

Set out below is our corporate governance framework:



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" in 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.

Board Diversity

The Company acknowledges that gender and other aspects of diversity is an important driver of the Board's effectiveness that is positively associated with the financial performance of the Company, more effective decision making and better risk management.

As such, the Board adopted a "Board Diversity Policy" in August 2013 and reviewed 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:

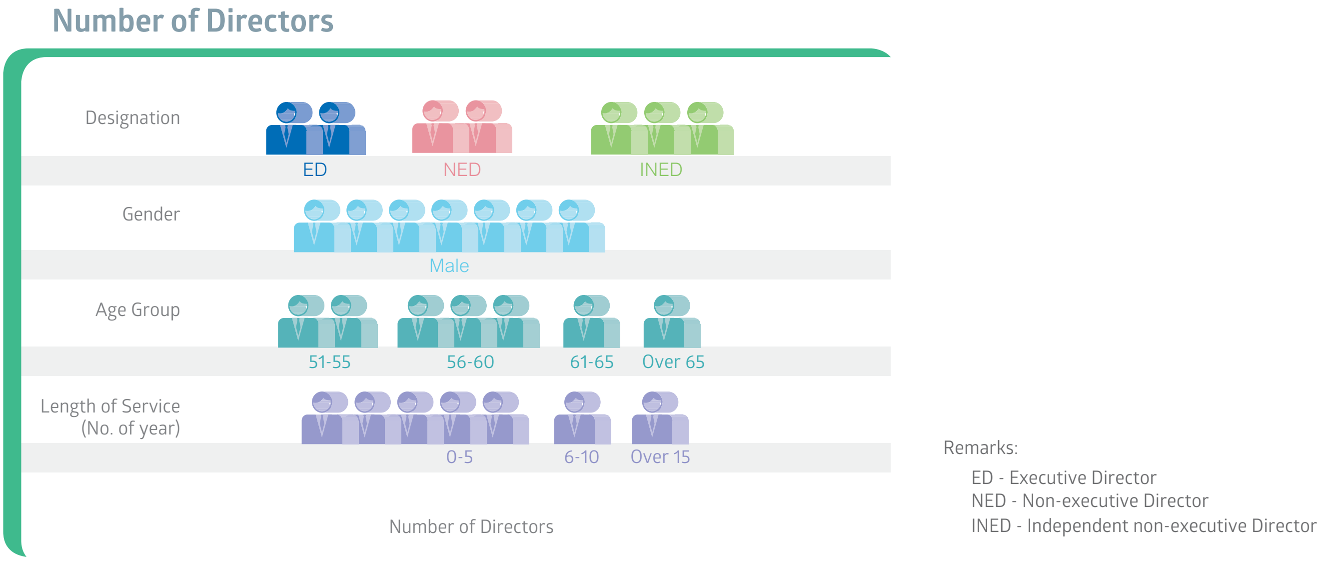
The Board Diversity Policy of the Company is summarized as follows:

- 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 a reasonable structure that allows the Board to function efficiently.

The Board Diversity Policy is reviewed periodically to ensure it remains in-line with the Company's culture and values.

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



In March 2023, the Remuneration and Nomination Committee and the Board have approved the nomination of Ms. HUANG Qinghua to take up the position of Mr. XU Zuyong who would resign from the Board as a non-executive Director with effect from the conclusion of the annual general meeting to be held on 8 June 2023. Subject to the shareholders' approval of Ms. HUANG's appointment, the Company believes that the Board would reasonably achieve its gender diversity.

Board Independence

For the year ended 31 December 2022, 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 strictly in accordance with relevant regulations and standards in order to protect the interests of the shareholders and the Company as a whole.

Both the Audit Committee and the Remuneration and Nomination Committee comprise all independent non-executive Directors, and both committees are chaired by an independent non-executive Director. Independent non-executive Directors are entitled to directors' fees reflecting their membership of the Board committees and additional fees for attendance of meetings. None of these Directors receives remuneration based on performance of the Group, and none of them are entitled to any incentive program of the Group.

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.

The Company has a vigorous nomination policy for selection, appointment and re-election procedures and process for Directors. 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.

Board's Role

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. The Board, led by the Chairman, is responsible for, among other things:

- promoting the Group's long-term sustainable development and success, thus delivering value to shareholders;
- establishing and approving strategies and objectives of the Group and ensuring that they align with the Company's culture and values;
- approving and monitoring business plans for achieving the Group's objectives;
- approving major investments, mergers and acquisitions, and other material transactions;
- overseeing the Group's risk management and internal control systems;
- overseeing the Group's corporate governance arrangements;
- overseeing the Group's ESG strategies and development;
- supervising and administrating the operation and financial position of the Group;
- approving result announcements, periodic reports and other disclosures as required in accordance with applicable laws and regulations and the Listing Rules;
- approving appointment of Directors and senior management personnel; and
- promoting engagement with our shareholders and other stakeholders.

Directly under the Board, there are Board committees that are specifically formed to carry out the above different functions.

Board Committees

During the year ended 31 December 2022, there were four committees under the Board, namely (1) Audit Committee, (2) Risk Management Committee, (3) Remuneration and Nomination Committee; and (4) Executive Committee to implement internal supervision and control on each relevant aspects of the Group. In addition, there is the Sustainability Working Committee under the Risk Management Committee, which was specifically formed to assist the Risk Management Committee with regards to policies formulation and practices implementation of sustainability-related matters of the Group.

In response to the finding of the Board evaluation that there is a lack of clear line of responsibility to handle ESG related matters at the Board level, the Board approved the establishment of a new Strategic and Sustainable Development Committee which is separate from the present Risk Management Committee and shall specifically oversee the ESG development of the Group as a whole, monitor changes in ESG related requirements, supervise the Sustainability Working Committee, and report ESG related matters to the Board for more regular discussion in late March 2023. At the same time, the Sustainability Working Committee has been reassigned as a sub-committee under the Strategic and Sustainable Development Committee. The new Strategic and Sustainable Development Committee is expected to function with effect from April 2023.

For further information on the Board committees, please refer to the reports from each of the Board committees set out in this annual report.

Board Evaluation

The Company acknowledges that regular Board performance evaluations can help build a high-performing Board, which is equipped with the necessary capabilities to anticipate, prepare for and overcome future challenges.

The Board concurs that board evaluation is useful to enhance Directors' accountability and provide valuable feedback for improving Board effectiveness, maximizing strengths, highlighting areas for further development and evaluating whether the Board is adhering to the Company's culture and values.

The Board and its committees are committed to regular evaluation of their effectiveness annually, thus to ensure that the Board and management are on the same page, and that the Board, being the prominent authority of the Company, its performance is actually leading the Company on the right track towards its long-term goals.

For 2022, the Board performance evaluation took the form of a questionnaire, which was prepared by the Company Secretary with inputs from third party stakeholders. In subsequent years, the content of the questionnaire will be refined from time to time to ensure that the questions are relevant to the present socioeconomic environment, as well as reflecting on issues identified in previous performance evaluations.

The questionnaire covered the following key areas:

- Role, Responsibility and Operation of the Board;
- Composition of the Board and Governance Structure;
- Function of Board committees;
- Conduct and Procedures of Board Meetings; and
- ESG and, in particular Climate Change.

Based on the feedback from the Directors, the Board evaluation revealed that they considered and were satisfied with the Board's performance in the following aspects, including

(i) leading the Company towards meeting its strategic goals;

(ii) practices in compliance with the CG Code, the Listing Rules and other laws, rules and regulations applicable to the Company;

(iii) functioning of the existing Board committees in assisting the Board with governance of the Company;

(iv) identification, discussion and resolution of key issues of the Group;

(v) frequency of Board meetings and Director's attendance at meetings; and

(vi) engagement with shareholders and investors relations.

While the Board evaluation identified certain issues where improvements are needed to enhance the effectiveness of the Board, including (i) board diversity; (ii) engagement in ESG and climate change related issues; (iii) provision of information to the Board; and (iv) financial assessment of transactions of the Group. As discussed with the Board, the Directors have made constructive suggestions to the management, summarized as follows:

	Findings from the evaluation	Recommendations for action
1	The Board is yet to achieve gender diversity as it is dominated by male Directors at present.	Appoint a female candidate as Director in 2023, but in any case, no later than the financial year ending 2024 as required under the Listing Rules.
2	Raising the level of awareness, discussion and reporting of climate change and other ESG related matters in relation to the Group's development.	Assign ESG related matters to a designated Board committee directly under the Board (separate from the present Risk Management Committee), which shall specifically oversee the ESG development of the Group as a whole, monitor changes in ESG related requirements, supervise the Sustainability Working Committee, and report ESG related matters to the Board for more regular discussion.
3	Further efforts should be made to ensure that reporting materials provided to the Board for deliberation should strike a balance between completeness and conciseness, and financial information in relation to corporate transactions should be closely kept track of and analysis with regards to such transactions should be in-depth and timely.	Management should optimize the provision of reporting materials in accordance with the type of agenda item, focus on key risks with major effects, and provide clear and concise reporting materials, thereby allowing the Board to make swift and wise decisions. Financial information of the Group should be reported to the Board on a monthly basis, and in-depth analysis on the financial impact upon completion of major transactions should be provided in a timely manner.

At the same time, all independent non-executive Directors have reviewed the performance of the Chairman of the Board and were satisfied with his performance.

Taken into consideration of the above recommendations, the Directors and together with the management have committed to take appropriate actions to further improve the Board's effectiveness.

DIRECTORS' APPOINTMENT, RESPONSIBILITIES, DELEGATION AND RELEVANT PROCEEDINGS

Appointment and Rotation 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” in the Remuneration and Nomination Committee Report in this annual report.

Directors Induction

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 the Hong Kong Companies Ordinance 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 keeps the Directors apprised on the latest laws, rules and regulations regarding their duties and responsibilities.

Directors’ Continuous Development

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 2022.

Directors’ 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.

Chairman and President

The division of responsibilities between the Chairman and the President (chief executive) has been clearly established and set out in writing. Under C.2.1 of the CG Code, the role of the Chairman and the President should be separate to ensure a balance of power and authority. During the year ended 31 December 2022, the Company strictly complied with C.2.1 of the CG Code. The roles of the Chairman and the President of the Company are separate and are currently assumed by Mr. HE Xi and Mr. GAO Ping, respectively.

Chairman

The Chairman provides leadership for the Board and is responsible for ensuring that all Directors promptly receive adequate information, which must be complete and reliable, 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.

President

The President is the chief executive of the Company who has delegated authority from, and is accountable to, the Board. The President is responsible for managing the Group's business, implementation of strategies, initiatives and directives set by the Board and coordinating overall business plans and budgets approved by the Board and make day-to-day operational decisions.

Delegation by the Board

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 has established 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 for 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 Board 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 Board 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.

DIRECTORS' ATTENDANCE RECORD

In the year 2022, the Company held nine Board meetings, two 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 general meetings are as follows:

Directors	Board	Audit Committee	Risk Management Committee	Remuneration and Nomination Committee	Annual General Meeting	General Meetings
Executive Directors:						
HE Xi *(Chairman of the Board and the Risk Management Committee)*	5/7	–	2/2	–	1/1	3/3
GAO Ping *(President of the Company)*	6/7	–	2/2	–	1/1	2/3
Non-executive Directors:						
WANG Xianchun(1)	2/2	–	–	–	–	–
ZHOU Jie	9/9	–	–	–	1/1	3/3
XU Zuyong(2)	7/7	–	–	–	1/1	3/3
Independent Non-executive Directors:						
LI Fang *(Chairman of the Remuneration and Nomination Committee)*	9/9	2/2	2/2	2/2	1/1	3/3
YAU Ka Chi *(Chairman of the Audit Committee)*	9/9	2/2	2/2	2/2	1/1	3/3
HUI Hon Chung, Stanley	8/9	2/2	2/2	2/2	1/1	3/3

Notes:

(1) Mr. WANG Xianchun resigned as a non-executive Director with effect from 25 February 2022.

(2) Mr. XU Zuyong was appointed as a non-executive Director with effect from 25 February 2022.

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 issues 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 25 meetings during 2022. 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 are 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.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

The Board recognizes the growing importance of ESG with the market, shareholders, investors and stakeholders placing increased weighting on the ESG performance of a company. In light of this trend, the Board has decided that it should be proactive in the development and oversight of the Company's ESG strategy.

The Company has established a comprehensive organizational structure for sustainable development, in which we count on the Sustainability Working Committee to carry out sustainable development matters of the Group, and to report to the Risk Management Committee and the Board in a timely manner, thereby further promoting the Group's practices for sustainable development.

The Group conducts climate risk assessment exercise with reference to the Task Force on Climate-related Financial Disclosures ("TCFD") recommendations, identifying some of the most material physical and transitional risks, their implications and corresponding mitigation measures. We have been continuously monitoring and disclosing the environmental and climate-related metrics to facilitate a transparent communication with our stakeholders.

During the year 2022, the Board had reviewed, discussed and approved the Sustainability Report 2021 of the Company as reported by the Risk Management Committee. The Board had ensured all new investment and acquisitions approved last year were in line with the Company's ESG strategy and ESG-related targets of the Company. The Board's statement and its engagement in relation to the ESG matters of last year were set out in the Company's Sustainability Report 2022.

For further information of our ESG strategy, governance approach, management of climate-related risks and progress towards our ESG-related targets, please refer to the Summary of Sustainability Report set out in this annual report and the full version of the **Sustainability Report 2022** of the Company as published on the websites of the Company and the Hong Kong Stock Exchange.

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 2022, all Directors have been given the latest information and briefings about the financial position, changes in the business and the development of the Group on a regular basis. "Letter to the Shareholders" from the Chairman of the Board in this annual report contains a summary of the Company's performance in this financial year 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 established an Internal Audit Department that 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 Internal Audit 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 for the development of the Group.

The Company has comprehensive internal control systems in place, including regulations such as the "Management Regulations for Internal Control", "Rules for Management Authorization", "Management Measures for Employees' Rewards and Punishments", "Management Measures for Conflicts of Interests", "Standards for Internal Control", "Risk Management Regulations" and "Working Measures for Internal Audit".

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, 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 the 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 the "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 the risks that might have impacts on the Company in achieving its goals effectively.

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 transformation and upgrade from traditional auditing to information-digitalized auditing, thereby advancing auditing works aided with big data comprehensively.

During the year, key tasks conducted by the Internal Audit Department include the following:

- **Conducting the audit of various projects with a focus on key areas.** With regard to areas of operational compliance and the quality and accuracy of accounting information, we carried out special audit for management and control on project construction and information safety of the relevant audit data. According to the progress of project construction and settlement progress, we organized the audit of newly commenced construction projects in a timely manner while properly tracking the audit of construction projects in progress, and provided guidance and summary analysis on a quarterly basis. We established and optimized the approval process for construction project audit, improved the authorization and entrusting mechanism to keep abreast of the progress of construction projects and enhanced the operational efficiency of construction projects.

- **Strengthening risk management and control on investment projects to align with the rapid development of the Company.** We improved the risk assessment and supervision mechanisms for investment projects, expedited the guidance for various business units to establish standardized investment decision management procedure and risk assessment mechanism for investment projects, regularly analyzed and tracked the risk response measures and their implementation during the entire life cycle of each investment project so as to implement a closed-loop risk management.

- **Pursuing investment post-evaluation to enhance the management standard of the decision-making and related process for investment projects.** We completed all the 31 projects under the annual investment post-evaluation plans with merit, summarized project experience and shortcomings, improved the mechanism for applying the post-evaluation results, and systematically reported on problems identified. We also regularly reported to the management and disseminated the results to all departments and subsidiaries in an effort to ensure that they follow and implement rectification by taking immediate actions and to practically improve the effectiveness of application of the post-evaluation results of investment projects. To improve the management mechanisms for post-evaluation of information-digitalized and technological development projects as well as technological upgrade projects, we established mechanisms for routine liaison among various business departments to ensure no "blind spots" in post-evaluation for investment projects. Based on all the project features, we flexibly adopted the modes of off-site remote evaluation and special evaluation, which further improved the efficiency of post-evaluations.

- **Improving the risk management systems and mechanisms and enhancing the effectiveness of risk management.** During the year, we revised the "Regulations for Risk Management (《風險管理規定》)" and newly issued the "Administrative Measures for Reporting of Major Operational Risk Events (《重大經營風險事件報告管理辦法》)" and "Audit Measures for Risk Management (《風險管理審計辦法》)" to strengthen the timely reporting mechanism for risk management. To strengthen risk management and control on operations, we performed effective monthly ledger tracking and quarterly monitoring of various risk management and risk indicator classification and monitoring, conducted research and analysis on major risks, deployed and effectively implemented control measures in a timely manner. In addition, we further optimized the internal approval system and management measures. We innovated and planned the "System Revision Fast Lane (制度修訂快車道)" special campaign, expedited and streamlined the approval process by revising and/or adding a total of more than 240 new regulatory governance systems for new energy and thermal power businesses. We organized and carried out a comprehensive inspection on the completeness of management policies and systems and formulated an all-round revision plan for the systems in response to the Group's requirements for high-quality transformation and development.

- **Further improving the internal systematic monitoring and evaluation process.** We pushed forward various audit plans in an orderly manner, while focusing on problems identified, sorted out and summarized by internal audits to ensure subsequent follow-up rectifications and further improvement of operation and management, thereby facilitating the effective implementation of the Group's new strategies. By setting up an evaluation system to promote the continuous optimization of internal control systems, we focused on key areas and problematic issues, and organized the annual internal control evaluation of 11 business units using various methods such as self-evaluation, on-site evaluation and online evaluation to achieve internal control evaluation with three-year full coverage. We carried out the revision of the "Evaluation Standards of Internal Control (《內控評價標準》)" to meet the current needs of the Group's rapid transformation and development. Based on the annual key tasks, a special implementation plan for the internal control system was formulated. By utilizing auditing information system technology to help innovate internal control management tools and enhance audit effectiveness, we updated the rectification of internal control deficiencies online in real time, and improved the transfer and acceptance mechanism of internal control deficiencies to enhance the timeliness and completion rate of rectification.

- **Review of continuing connected transactions.** The Internal Audit Department also took appropriate measures to review the implementation of the Group's existing continuing connected transactions on a quarterly basis. During the year under review, each of the relevant companies of the Group had strictly monitored the agreed prices and terms of the various continuing connected transactions in the actual course of business operations, hence none of the transactions exceeded the relevant annual caps as disclosed.

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 2022, 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 2022, 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	6,200
Non-audit services:	
• Interim review	1,400
• Continuing connected transactions	200
• Transaction services	2,870
• Issuance of debts	880
• Tax service	470
• Others*	2,568

* They were primarily the provision of advisory services relating to international accounting manual benchmarking and risk assessment.

WHISTLEBLOWING AND ANTI-CORRUPTION

Whistleblowing Policy

To ensure that the Company's culture and values are adhere to and for good corporate governance practices, in order to help detect and deter misconduct and malpractices, the Board approved the launching of the "Whistleblowing Policy" in April 2012, for employees and those who deal with the Group, including customers and suppliers, and other stakeholders to raise concerns about the practices of the Group, in a secure and confidential manner. The Internal Audit Department of the Group is tasked with handling any complaints received and deal with any improprieties in any matters related to the Group, and is responsible for reporting them to the Audit Committee, which in turn will decide whether any further action is required.

Anti-corruption Policies

The Board and management of the Company are committed to anti-corruption and ethical business practices. As such, 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 on a regular basis annually to educate our management and employees 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.

For further information of our works done in respect of anti-corruption, please refer to the Sustainability Report 2022 of the Company as published on the websites of the Company and the Hong Kong Stock Exchange.

ENGAGEMENT WITH WORKFORCE

The Board believes that employees are the most important resource for the sustainable development of the Company and to achieve its long-term goals, therefore, the Group has policies and mechanisms in place to ensure that the values and interests of employees align with that of the Company. Furthermore, there are channels for employees at all levels to provide feedback to management and the Board, thereby allowing the Board to be keep apprised of the expectations of employees and formulate appropriate policies to retain talented employees as well as attract talented individuals to join our Group.

Recruitment and Retention

The Group recruits fresh graduates, experienced professionals and other specialists to support its strategic development. At the same time, the Company promotes opportunities for internal career advancement for its employees. We offer competitive remuneration packages to employees at all levels and bonus tied to an employee's performance with reference to a specific set of key performance indicators (KPIs).

Staff Development

The Group is committed to the continuous development of competence and ethical behavior of all employees. This provides a win-win situation for the Group and its employees, which on one hand, furthers the professional development of employees, and on the other hand, brings value to the Group by way of having a competent workforce.

We offer a wide range of learning resources for employees to support staff learning and development. To start with, all new joiners are provided with comprehensive induction training covering various aspects, such as the Group's business, culture, values, history, corporate governance, anti-corruption, etc. Furthermore, we also offers job-specific training to employees depending on their position and job responsibilities, as well as education subsidies to eligible employees to pursue professional or academic qualifications and/or acquire job-related knowledge.

Staff Engagement Platform

The Company collaborated with Tencent Group to develop the tailor-made social communication mobile app named "Diantouyi" (電投壹) for our own staff, which allows two-way communication with fellow employees as well as management in a less formal environment. The app also features various tools which allows employees to receive news and access information of the Group, communicate with management and provide feedback, etc.

Incentive Schemes

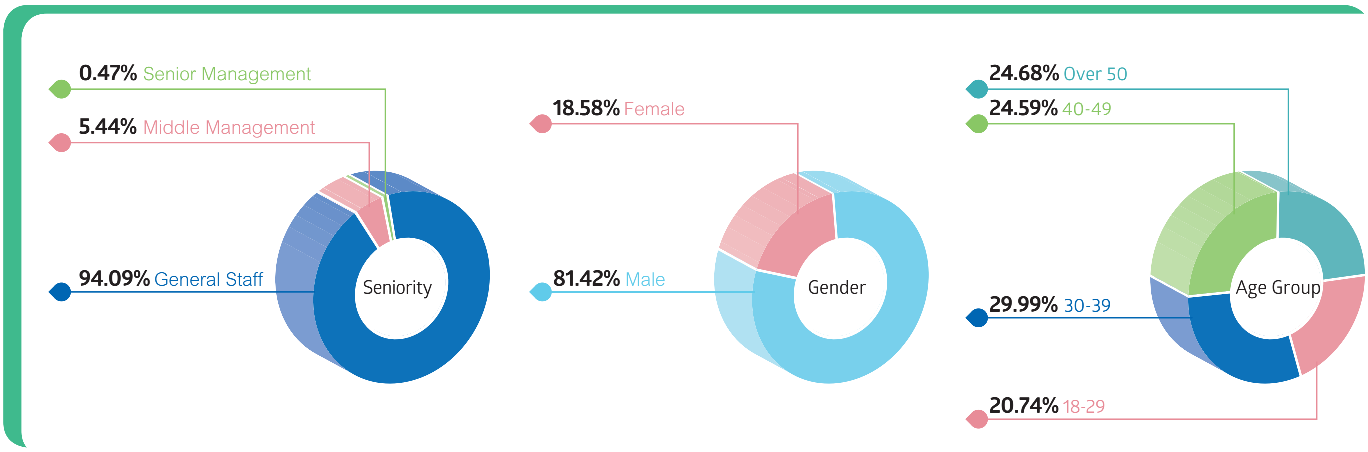
To encourage management and employees to adhere to the Company's strategic goals, values and culture, the Board adopted various incentive schemes to award management and employees who had contributed to achieving the Company's strategic goals or had made positive impacts in promoting the Company's culture and values. Most notably, the Company adopted a share incentive scheme, which was approved by shareholders of the Company at the general meeting held on 15 June 2022, the purpose of which is to award employees with outstanding contribution to the further development of the Group and align its interests with the Group by way of equity ownership in the Company. For further information of the aforementioned share incentive scheme, please refer to the section headed "Share Incentive Scheme" in the Report of the Board of Directors in this annual report.

Workforce Diversity

Whereas the current Board of the Group comprise all male members, viewing from a Group perspective, as at 31 December 2022, the Group had 10,829 employees, among which, 8,817 are male and 2,012 are female, i.e. a male-to-female ratio of approximately 8:2. Due to the inherent nature of the industry which the Group operates in, which involves intensive labour, it is historically a male dominated industry, and therefore the proportion of female employees of the Group is relatively low compared to other industries. However, if we focus on employees engaged in managerial and administrative work, including senior management and administrative executives, which is less labour intensive, the male-to-female ratio improved to approximately 7:3, reflecting a gender equality principle generally adhered by the Group.

The Company has implemented a series of policies to ensure that both male and female employees within the organization are treated equally in all aspects of their work.

The diversity mix of employees of the Group are summarized in the following chart:



ENGAGEMENT WITH SHAREHOLDERS

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, trading updates such as electricity sold of the Company quarterly, 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

Apart from the annual general meeting and other general meetings held in 2022, the Board held various meetings with shareholders, investors and potential investors on other occasions to communicate with them on the Company's strategies, goals and development direction, and to allow investors to provide us with feedback on areas which they believe improvement is needed from an investor's perspective. The Board values the feedback received and is formulating plans for improvement.

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, in order 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 Shareholders Communication 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, and annual general meetings and other general meetings that may be convened, maintenance of communication with investment market and media, as well as making available all the Company's disclosures, corporate communications and other corporate publications on a timely manner.

The channels for the 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 2 June 2022. 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, the Directors believe that the implementation of the Shareholders Communication Policy is effective and adequate. For further details, please refer to the section headed "Investor Relations and Frequently Asked Questions" in this annual report.

Dividend Policy

In January 2019, the Company has adopted a new "Dividend Policy" which aims to set out the provisions with the objective of 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 Hong Kong Company Ordinance 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 the 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 the 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 the Shareholders' questions. For Shareholders and investors' enquiries, the contact information is set out in the section headed "Useful Information for Investors" in 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 section headed "Useful Information for Investors" in this annual report.

MEMBERS

The members of the Audit Committee comprise entirely of independent non-executive Directors of the Board, as follows:

Chairman:	YAU Ka Chi	Independent non-executive Directors
Members:	LI Fang	Independent non-executive Directors
	HUI Hong Chung, Stanley	Independent non-executive Directors
Secretary:	CHEUNG Siu Lan	Company Secretary

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.

DUTIES AND FUNCTIONS

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

- To communicate with the 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.

ACCOUNTABILITY

The Audit Committee is accountable to the Board. The chairman of the committee reports to the Board at Board meetings in which the annual financial results and the interim financial results are considered, which would include various key issues identified and discussed during the course of reviewing the annual financial results and the interim financial results.

TERMS OF REFERENCE

The latest version of the terms of reference of the Audit Committee was adopted on 1 January 2019 and have been posted on the websites of the Company and the Hong Kong Stock Exchange.

WORK HIGHLIGHTS 2022

The Audit Committee held two meetings during 2022 with an attendance rate of 100%. Key work performed by the Audit Committee during the year include:

- reviewed the annual financial statements and "Corporate Governance Report" for the year ended 31 December 2021 and the interim financial statements for the six months ended 30 June 2022, including 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 2022;
- 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 the 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.

REVIEW OF CONTINUING CONNECTED TRANSACTIONS

The Audit Committee have reviewed the continuing connected transactions entered by the Group during the year 2022 (as set out in the following schedule annexed to this report) 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 Company and its shareholders as a whole.

The Company's external 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 (Revised) "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The external 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.

Save as disclosed, 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.

RELATED PARTIES TRANSACTIONS

During the year 2022, 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

The Company has complied with the disclosure requirements in accordance with the relevant Listing Rules.

LOOKING FORWARD TO 2023

Although the COVID-19 pandemic has begun to subside, the geopolitical environment and the global economy continues to be filled with uncertainties, therefore the operating environment of the Group ahead remains challenging in 2023. The Audit Committee will continue to serve its purpose in overseeing financial reporting and internal control functions, the preparation of the Group's financial statements, and ensure that the financial statements continue to accurately reflect the financial performance of the Group.

YAU Ka Chi
Chairman, Audit Committee

Hong Kong, 23 March 2023

CONNECTED TRANSACTIONS ENTERED BY THE GROUP

Connected Transactions

Transaction Date	Party within the Group	Connected Party of the Group	The Agreement/ Transaction	Consideration (RMB)
(A) Formation of a Joint Venture				
9 March 2022	Guangxi Company (as a joint venture partner)	Guangxi Nuclear Power (as a joint venture partner, an indirect subsidiary of SPIC)	Joint Venture Agreement	49,000,000
(B) Acquisitions				
30 June 2022	The Company (as the Purchaser)	CPNE (as the Seller, an indirect subsidiary of SPIC)	Acquisition of Equity Interest I in the Target Companies I	5,782,593,420
30 June 2022	The Company (as the Purchaser)	CPINE (as the Seller, an indirect subsidiary of SPIC)	Acquisition of Equity Interest II in the Target Companies II	1,670,098,863
31 December 2022	Nanning New Energy (as the Purchaser)	Guangxi Overseas (as the Seller, an indirect subsidiary of SPIC)	Acquisition of 79.67% in Jinzishan Wind Power	546,600,000

Nature, Purpose and Description of the Transaction

The Joint Venture focuses on new energy investment and development, the proposed business scope of the Joint Venture includes, but is not limited to, (i) investment holding; (ii) sales of battery swap equipment and complete component parts for new energy vehicles; (iii) research and development of emerging energy technologies; (iv) energy storage technical services; (v) technology research and development of nuclear power facilities services and engineering; and (vi) electric power generation, power transmission, and power supply and distribution business; and provision of related design, installation, testing and technical support, and repair and maintenance.

The registered capital of the Joint Venture is RMB100,000,000 which shall be contributed in cash by Guangxi Company and Guangxi Nuclear Power, respectively, representing 49% and 51% of their respective equity interest in the Joint Venture.

The Company agreed to acquire, and CPNE agreed to sell, 73.3049% equity interest in Jiuquan Third Wind Power, 46.0877% equity interest in Guazhou Wind Power, 51% equity interest in Wuwei Photovoltaic, 30.8397% equity interest in Baiyin Photovoltaic, 70% equity interest in Deyang Environmental, 85% equity interest in Shangqiu Environmental, and 100% equity interest in Dafeng Wind Power, Chunyang Mountain Wind Power, Panzhihua Photovoltaic, Yuanjiang Photovoltaic, Haikou Second Environmental, Wenchang Environmental, Haikou Environmental, Bazhou Environmental, Hainan Environmental and Qionghai Environmental (the "Equity Interest I") (the "Target Companies I").

The consideration for the acquisition of the Equity Interest I was arrived at after arm's length negotiations between the Company and CPNE, and was primarily based on (i) the appraised value of the Target Companies I according to the asset appraisal reports; (ii) the amount of dividend attributable to the profits generated from the Target Companies I up to the appraisal benchmark date; and (iii) the percentage of equity interest acquired.

The Company agreed to acquire, and CPINE agreed to sell, 53.9123% equity interest in Guazhou Wind Power, 49% equity interest in Wuwei Photovoltaic, 29.6303% equity interest in Baiyin Photovoltaic, 70% equity interest in Jiangxi Photovoltaic, and 100% equity interest in Inner Mongolia Wind Power, Hongqi Wind Power, Sea Wave Wind Power, Qiaowan Wind Power, Zhao'an Photovoltaic and Hainan Photovoltaic (the "Equity Interest II") (the "Target Companies II").

The consideration for the acquisition of the Equity Interest II was arrived at after arm's length negotiations between the Company and CPINE, and was primarily based on (i) the appraised value of the Target Companies II according to the asset appraisal reports; (ii) the amount of dividend attributable to the profits generated from the Target Companies II up to the appraisal benchmark date; and (iii) the percentage of equity interest acquired.

Nanning New Energy agreed to acquire, and Guangxi Overseas agreed to sell, 79.67% equity interest in Jinzishan Wind Power.

The consideration for the acquisition of Jinzishan Wind Power was arrived at after arm's length negotiations between Nanning New Energy and Guangxi Overseas, and was primarily based on (i) the appraised value of Jinzishan Wind Power according to the valuation report; (ii) the estimated amount of profit made by Jinzishan Wind Power during the transitional period; and (iii) the percentage of equity interest acquired.

Transaction Date	Party within the Group	Connected Party of the Group	The Agreement/ Transaction	Consideration (RMB)
(C) Partial Disposal of a Subsidiary				
21 October 2022	The Company (as the Transferor)	SPIC DiTech (as the Transferee, a subsidiary of SPIC)	Disposal of 51% equity interest in CP Huizhi	25,751,634
(D) EPC Contracting Agreements				
30 August 2022	CP Chaoyang (as the Employer)	State Nuclear Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	50,997,500
5 September 2022	CP Jiaxian (as the Employer)	SNI Chongqing (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	178,190,000
11 October 2022	CP Junan (as the Employer)	Shandong Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	153,900,200
25 October 2022	Shaoyang New Energy (as the Employer)	Shandong Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	2,069,538,100
1 December 2022	Nantong Energy (as the Employer)	SPER Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	40,986,756
6 December 2022	Yaomeng Power Plant (as the Employer)	SPER Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	39,080,000

Nature, Purpose and Description of the Transaction
The Company agreed to sell, and SPIC DiTech agreed to purchase, 51% equity interest in CP Huizhi. The consideration was arrived at with reference to the appraised value of CP Huizhi based on the asset appraisal report.
Chaoyang Smart Project is an integrated smart energy project being carried out by CP Chaoyang which involves the development and construction of certain smart public facilities in Chaoyang County, Chaoyang City, Liaoning Province, the PRC. The Contractor provides design, procurement, construction and installation, and technical support services in relation to the Chaoyang Smart Project.
The Jiaxian Photovoltaic Project involves the development and construction of household-use photovoltaic power in Jia County, Pingdingshan City, Henan Province, the PRC, covering a vast area of 14 townships in Jia County with a planned installed capacity of 60MW. The Contractor provides design, procurement, construction and installation, and technical support services in relation to the Jiaxian Photovoltaic Project.
The Junan Project involves the development of household-use roof-top distributed photovoltaic power project in Junan County, Linyi City, Shandong Province, the PRC, with a planned installed capacity of 42MW. The Contractor provides survey and design, procurement, construction and installation, and technical support services in relation to the Junan Project.
The Shaoyang Project involves the development of roof-top distributed photovoltaic power and integrated smart energy project in Shaoyang County, Hunan Province, the PRC, with a planned installed capacity of 140MW. The Contractor provides survey and design, procurement, construction and installation, and technical support services in relation to the Shaoyang Project.
The Nantong Intelligent Project involves the development and provision of a roof-top distributed photovoltaic power generation system equipped with a comprehensive smart energy management and control center in Jingyuan Ruigu Ecological Technology City located in Nantong City, Jiangsu Province, the PRC. The Contractor provides design, engineering, procurement, construction and installation services and technical support services in relation to the Nantong Intelligent Project.
The Yaomeng Upgrade Project involves upgrading improvement works for increasing the heat supply capacity of the two 630MW electricity and heat co-generating units of Yaomeng Power Plant. The Contractor provides design, procurement, construction and installation services, and technical support services in relation to the Yaomeng Upgrade Project.

Transaction Date	Party within the Group	Connected Party of the Group	The Agreement/ Transaction	Consideration (RMB)
7 December 2022	Shouguang New Energy (as the Employer)	Shandong Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	192,270,000
8 December 2022	Kezhou New Energy (as the Employer)	Shandong Institute (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	162,649,687
15 December 2022	Lingyun Energy (as the Employer)	Shanghai Heyun (as the Contractor, an indirect subsidiary of SPIC)	EPC Contracting Agreement	40,986,756
(E) Provision of EPC Services				
29 December 2022	Shandong Engineering (as the Contractor)	Jingyi ES-Tech (as the Employer, an indirect subsidiary of SPIC)	Provision of EPC Services	442,523,000

All of the above EPC 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.

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

Nature, Purpose and Description of the Transaction
The Shouguang Project is fishery and photovoltaic complementary photovoltaic power generation project in Hou Town, Shouguang City, Shandong Province, the PRC, with a planned installed capacity of 100MW. The Contractor provides design, procurement, construction and installation services, and technical support services in relation to the Shouguang Project.
The Akto Photovoltaic Project involves the development and construction of a photovoltaic power generation station with a planned installed capacity of 100MW, including an energy storage power station with energy storage capacity of 10MW/20MWh located in Akto County, Kizilsu Kyrgyz Autonomous Prefecture, Xinjiang Uygur Autonomous Region, the PRC. The Contractor provides design, procurement, construction and installation services, and technical support services in relation to the Akto Photovoltaic Project.
The Wudalianchi Project involves the development and construction of a distributed photovoltaic power generating project covering nine townships in Wudalianchi City with a planned installed capacity of 69.5MW located in Wudalianchi City, Heilongjiang Province, the PRC. The Contractor provides survey and design, procurement, construction and installation services, and technical support services in relation to the Wudalianchi Project.
The Yishui Energy Storage Project involves the development and construction of an energy storage power station with energy storage capacity of 100MW/200MWh located in Yishui County, Linyi City, Shandong Province, the PRC. The Contractor provides design, procurement, construction and installation services, and technical support services in relation to the Yishui Energy Storage Project.

Continuing Connected Transactions

Date and Name of the Agreement	Party within the Group	Connected Party of the Group	Term	Annual Cap for 2022 (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 2021 to 31 December 2022	90,300,000
(B) Service Agreements				
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	150,220,000
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	550,000,000
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	315,000,000

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 and with reference to, among other things, the prevailing local market transactions for similar Materials from other independent suppliers in nearby locations where our power plants are located (not less than three latest comparable transactions).
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 the Entrusting Parties to the Managing Party consist of (i) 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 onshore and offshore risks, 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 by and with reference to, among other things, 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 determined by and with reference to, among other things, 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.

Date and Name of the Agreement	Party within the Group	Connected Party of the Group	Term	Annual Cap for 2022 (RMB)
6 May 2022 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 2022 to 6 June 2025	5,500,000,000 (the maximum daily balance of deposit (including accrued interest) placed by the Group with SPIC Financial)
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 *(Refers to the total consideration under the Maintenance Service Agreement from 1 January 2020 to 31 December 2022)*
(C) Loan Agreements				
26 September 2022 Entrusted Loan Agreement *(Pursuant to Rule 14A.60 of the Listing Rules after completion of acquisition)*	Seven subsidiaries of the Company (as the Lenders)	Two subsidiaries of SPIC (as the Borrowers)	3 months or 1 year	81,050,000 *(Refers to the principal amount of the loan under the Entrusted Loan Agreement)*
26 October 2022 Entrusted Loan Agreement *(Pursuant to Rule 14A.60 of the Listing Rules after completion of acquisition)*	Four subsidiaries of the Company (as the Lenders)	Eight subsidiaries of SPIC (as the Borrowers)	1 year to 3 years	404,980,000 *(Refers to the principal amount of the loan under the Entrusted Loan Agreement)*

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 23 basis point 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 Service Provider will provide the daily maintenance and repair works and technical support to the Employer for the nuclear island facilities of its two nuclear power generating units. The total consideration is 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.
The Lenders agreed to provide a loan to the Borrowers prior to completion of the acquisition of the seven lenders by the Company with interest rates ranging from 2.20% to 3.7% per annum.
The Lenders agreed to provide a loan to the Borrowers prior to completion of the acquisition of the four lenders by the Company with interest rates ranging from 2.20% to 3.65% per annum.

Date and Name of the Agreement	Party within the Group	Connected Party of the Group	Term	Annual Cap for 2022 (RMB)
(D) 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 subsidiaries of the Company)	1 January 2021 to 31 December 2022	8,171,000,000

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.

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, among other things, (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.

Remuneration and Nomination Committee Report

MEMBERS

Chairman:	LI Fang	Independent non-executive Director
Members:	YAU Ka Chi	Independent non-executive Director
	HUI Hong Chung, Stanley	Independent non-executive Director
Secretary:	CHEUNG Siu Lan	Company Secretary

DUTIES AND FUNCTIONS

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

ACCOUNTABILITY

The Remuneration and Nomination Committee is accountable to the Board. The chairman of the committee reports to the Board regularly or as requested at Board meetings on the Company's matters relating to the remuneration and nomination of Board members and senior management.

TERMS OF REFERENCE

The latest version of the terms of reference of the Remuneration and Nomination Committee was adopted on 16 August 2013 and have been posted on the websites of the Company and the Hong Kong Stock Exchange.

WORK HIGHLIGHTS 2022

The Remuneration and Nomination Committee held two meetings during 2022 with an attendance rate of 100%. Key work performed by the Remuneration and Nomination Committee during the year include:

- considered and approved the overall remuneration package of the Directors and senior management of the Company in 2021 with reference to the remuneration system of the parent companies;
- reviewed and approved the updated selection plan and the performance evaluation indictors of the senior management for the year 2022;
- considered the profile of 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. XU Zuyong as a non-executive Director of the Company, and made recommendations to the Board;
- reviewed, considered and confirmed the change of senior management during the year 2022 and made recommendations to the Board;
- reviewed, considered and confirmed the adoption of the new Share Incentive Scheme of the Company in May 2022; and
- reviewed, considered and confirmed granting of a total of 103,180,000 share options to the scheme participants in July 2022, after taking into account of the factors, among others things, (i) the conditions for grant as specified under the Share Incentive Scheme; (ii) the experience, potential and contribution of the grantees to the Group; (iii) the length of service of the grantees; and (iv) the performance of the grantee during the previous years.

REMUNERATION OF SENIOR MANAGEMENT

The remuneration of the members of the senior management by remuneration band for the year ended 31 December 2022 (which was reviewed, considered and confirmed by the Remuneration and Nomination Committee in early 2023) is set out below:

Remuneration band	Number of individuals	
(HK$)	2022	2021
0 to 1,000,000	5	5
1,000,001 to 1,500,000	6	7

LOOKING FORWARD TO 2023

The Remuneration and Nomination Committee is committed to ensuring that the Board will have appropriate diversity and independence and ensuring the Group offers competitive yet fair and reasonable remuneration packages to recruit and retain talented individuals.

LI Fang
Chairman, Remuneration and Nomination Committee

Hong Kong, 23 March 2023

Risk Management Committee Report

MEMBERS

Chairman:	HE Xi	Chairman of the Board and executive Director
Members:	GAO Ping	Executive Director and President
	LI Fang	Independent non-executive Director
	YAU Ka Chi	Independent non-executive Director
	HUI Hon Chung, Stanley	Independent non-executive Director
Secretary:	CHEUNG Siu Lan	Company Secretary

DUTIES AND FUNCTIONS

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

ACCOUNTABILITY

The Risk Management Committee is accountable to the Board and reports to the Board regularly on risks identified and make recommendations to mitigate such risks.

TERMS OF REFERENCE

The latest version of the terms of reference of the Risk Management Committee was adopted on 1 September 2020 and have been posted on the websites of the Company and the Hong Kong Stock Exchange.

WORK HIGHLIGHTS 2022

The Risk Management Committee held two meetings during 2022 with an attendance rate of 100%. Key work performed by the Risk Management Committee during the year include:

- reviewed and approved the "Risk Management Report" for the year 2021 and the first half of 2022, and the risk management plan for the year 2022 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;

- reviewed and approved the "Safety Risk Management Report" for the first half of 2022; and

- reviewed and approved the "Sustainability Report" for the year 2021.

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.

SUSTAINABILITY WORKING COMMITTEE

Members

The chairman of the Sustainability Working Committee is currently served by Mr. FU Jinsong, a vice president of the Company.

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.

Duties and Functions

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 include, inter alia, 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.

Terms of References

The latest version of the terms of reference of the Sustainability Working Committee was adopted on 27 August 2020 and have been posted on the websites of the Company and the Hong Kong Stock Exchange.

LOOKING FORWARD TO 2023

Since the beginning of 2023, the COVID-19 pandemic has begun to subside. Although the COVID-19 pandemic was an unfortunate event, it has showcased the world that contingencies plans are vital to the sustainable development of a corporation. We are grateful that China Power was able to get through the COVID-19 pandemic relatively unscathed, and the Risk Management Committee will continue to perform its function to identify and mitigate risks for the Group to ensure the sustainable development of the Group.

HE Xi
Chairman, Risk Management Committee

Hong Kong, 23 March 2023

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, management and all staff members as well as its entire business system.

The Board has established a risk management structure 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".

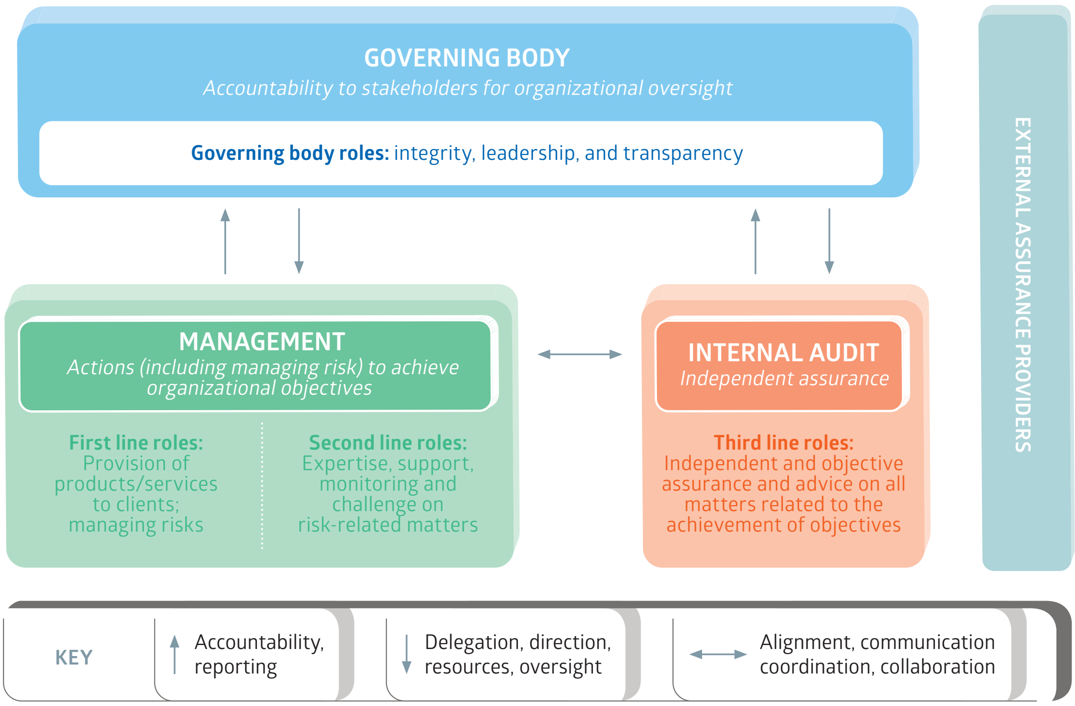
At a strategic level, the Board regularly studies and clarifies the comprehensive risk indicator system in monitoring material risks associated with the Group's businesses through the Risk Management Committee. At an operational level, the Group has also taken a dynamic approach to set up key risk checkpoints based on the internal and external changes of the Group, implemented major risk prevention in all aspects and ensured management bears 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 structure 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. For information on work highlights 2022 of the Risk Management Committee, please refer to the "Risk Management Committee Report" set out in this annual report.

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 from time to time) 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 (the board and its sub-committees) 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 is responsible for providing 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 2022, in conjunction with the post-pandemic risk management, the Group, in collaboration with all business departments, continued to carry out scheduled annual major risk prevention and mitigation works and risk assessment, prevention and control for major decision-making so as to ensure the management of major risks through coordination of joint management and joint prevention, and to continuously integrate risk management awareness and concepts into the business operation. In addition, the Group's Audit Center has made use of big data to commence the standardized development of audit, risks and internal control procedures, thereby optimizing the Group's risk management network. During the year, the Group also established a database of approved organizations providing risk assessment consultancy services for onshore investment projects to ensure prompt response to consultancy needs and to improve the quality of assessments.

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, which mainly comprises (i) comprehensive risk management, (ii) targeted risk management for 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 risks of the Group and 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 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 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 it 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.

(iv) 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.

During 2022, focusing on the Group's strategic vision of becoming a "**World-class Green and Low-carbon Energy Provider**" and the mission of "**Lower Carbon Empower Better Life**", the management, the Risk Management Committee and the Board have identified five major risks of the Group upon risk assessments based on the changes in recent and mid- to long-term internal and external conditions, including market risks, supply chain risks, financial risks, risks relating to green transformation and innovative development, and risks relating to the compatibility between operational control and management mechanisms and transformational development. Details of the relevant risks are as follows:

Description of Risks	Key Response Measures
No. 1 • Market risks	
Market-oriented reform of electricity sales. The Group's power generating units have successively entered the spot market for power trading and it is anticipated that it will be confronted with risks of reduced market share and reduced power production quota due to a completely different market trading model.	• Effectively implement strategic cooperation with major customers, carry out in-depth cooperation in, among other things, green and low-carbon energy supply. • Vigorously explore the market for small and medium-sized customers and continue to expand our market share. Increase efforts in market development and commit more personnel to give full play to the role of our platform companies engaged in electricity sales and enhance market awareness of the Group's electricity sales.
Reduced price of electricity sales. As competition in the electricity trading spot market intensifies, electricity tariffs are reduced by various parties to boost sales volume, thus leading to the risk of lowered market electricity tariffs, which in turn affects revenue.	• Continue to conduct training to develop new energy market trading capabilities and enhance marketing personnel's understanding of the spot market to increase their abilities to cope with electricity trading in the spot market. Continue to optimize relevant systems for assistance in decision-making to enhance preciseness and efficiency.

Description of Risks	Key Response Measures
Uncertainties in emerging green energy trading markets. The supply and demand situation in the carbon trading and green power/green certificate markets is unclear with a high degree of uncertainty. The price of green certificates are high but lacks a secondary market for trading, which results in poor liquidity.	• Strengthen policy research and market analysis. Pay close attention to industry and market policies to be launched and formulate countermeasures. • Properly analyze the supply and demand in the power market, ancillary services, green power/green certificates and carbon trading market, and direct all business units to participate in trading.
Shortage of specialists for directing electricity trading. Staffing ratio of personnel to trading level is insufficient to meet market demand. Newly operating new energy projects also lack, to a certain extent, staff with the capability in trading of electricity, green power, green certificates and ancillary services.	• Strengthen the building of the marketing team, promote the accurate implementation of the three-year development plan for staffing of marketing personnel, and properly train and build up marketing personnel reserve to respond to the complicated market environment and fierce market competition.
No. 2 • Supply chain risks	
Commodity price fluctuations. With the impact of rapidly increasing prices for commodity materials required for daily maintenance and repair of power generating units, the situation that the successful bidder refuses to enter into contract or fails to fully perform its obligations in accordance with the contract occurs, resulting in the suspension of material supply which affects the safe operation of the power generating units.	• Strengthen market research and assessment, appropriately increase the amount of material reserves, expand the scope of suppliers, and opt to cooperate with well-qualified and strong suppliers. • Enhance contractual terms, increase the penalty for suppliers' breach of contract, and proactively introduce price adjustment mechanisms to achieve risk sharing. Conduct monthly briefing on material and procurement management, and promptly identify and rectify problems.
Rising construction cost of new projects. Prices of building materials, components, wind turbines and other materials and equipment have risen sharply, making it difficult to control project construction costs, resulting in overbudgets, which leads to contractual disputes, delays in construction schedules and other issues, delaying the return from investment.	• Improve construction cost, project settlement and other related systems, and improve the standard of construction cost management with assistance of external think tanks such as cost consultancy agencies and process audit units. • Strengthen management and supervision over process settlement, and promptly solve issues in relation to material and equipment price increase in the course of contract performance to enhance project progress management.
Coal supply and purchase price fluctuations. The tight supply in the coal market, coupled with pressure on ensuring stable power supply, has resulted in high price volatility. Safeguarding steady coal supply and purchase prices are at risk to a certain extent.	• Increase the amount of long-term coal procurement agreements so as to give full play to the stabilizing effect of coal supply assurance under long-term agreements. Reasonably adjust the procurement structure to control and reduce procurement costs.

Description of Risks	Key Response Measures
No. 3 • Financial risks	
High gearing ratio. The coal-fired power generation business is faced with persistently high coal prices, further resulting in operating losses and increasing external debts, which hinders the reduction of gearing ratio. The Group has focused on the transformation towards, and continued to expand investment in, new energy development, thus accelerating the increase of gearing ratio.	• Further reduce the financial leverage by accelerating the disposal and divestment of the Group's traditional coal-fired power assets. • Through application of management tools such as "Plan-Budget-Assessment-Incentive" (JYKJ) and "Dual Benchmark and Dual Incentive" (SDSJ) throughout the entire cycle of investment projects to enhance profitability and cash flow recovery. • Increase capital injection by ways of debt-to-equity swaps, REITs and issuance of preferred shares and to bring in strategic investors.
Cash flow pressure. Thermal power companies are exposed to liquidity risk due to insufficient financing capacity, which is resulted from the severe operating losses caused by the cost price inversion of coal-fired power and natural gas power. The problem of inadequate new energy subsidies cannot be effectively alleviated in the short term, resulting in tight cash flow and rising financial costs for new energy companies, which limits the funding supply and investment in new projects.	• Actively communicate and engage with power grid companies and other customers to recover receivables from electricity sales in advance. Utilize financial derivative products to securitize assets with electricity sales receivables. • Adapt to the new energy subsidy recovery policies, effectively put efforts in recovery of subsidies to improve cash flow recovery. • Appropriately streamline investment amount, and to bring in strategic investors through the issuance of medium- and long-term bonds.
No. 4 • Risks relating to green transformation and innovative development	
Keen competition in bidding for projects. Under the national dual carbon strategy, the competition for new energy projects with good investment returns and excellent development conditions is intense, and the government accordingly imposes higher standards and requirements on the investment strategy, execution and management capabilities of investors.	• Strengthen cooperation with local governments and quality strategic partners, and dedicate every effort to identify and bid for quality projects with better returns. • Consolidate our advantageous position as the first-mover in the "Three-New" industries such as "technology-based, service-oriented and asset-light" industries, and increase our support and cultivation of these industries with a focus on competitive advantages by differentiation.

Description of Risks	Key Response Measures
Development of new energy business. Despite the Group's first-mover advantages in green emerging industries, namely green power transportation, energy storage and integrated intelligent energy solutions, it is still faced with various challenges such as uncertain supporting government policies, unrealized profitability, large investment in innovation and technology and shortage of professional talents.	• Capitalize on the marketing environment and its evolving development trends to promote the release of value of the investment in green emerging industries. • Innovate development and investment modes to closely integrate market development and capital operation, and make use of financing tools such as equity financing and industrial funds. • Conduct in-depth study on relevant supporting policies of national and local governments to take countermeasures in advance and capitalize on the development advantages arising therefrom. • Continuously improve and develop the professional capabilities of our employees through training and incentive schemes and build a sizeable team of professionals.
Inadequate investment management. The investment management of some subsidiaries is not stringent enough, risk assessment of individual projects are not sufficient and boundary conditions are over-optimistic. Accordingly, there exists a risk that the profitability of those projects fail to meet expectations.	• Carry out solid research and analysis on the boundary conditions of target projects. • Make efforts to improve the depth of feasibility study and due diligence. • Conduct strict audits of returns from target projects. • Raise requirements for the quality of investment projects.
High resources-consuming power generating units. The Group undergoes transformation to develop green and low-carbon energy, and certain of its coal-fired power generating units with low installed capacity are at risk of being shut down and eliminated due to high energy consumption.	• Continuously promote the optimization of existing thermal power assets, push forward the capacity substitution plan for 300MW-level coal-fired power generating units during the year, and realize the construction of 600MW-level heat-supply generating units to effectively increase capacity, reduce consumption and improve the operating efficiency of coal-fired power generating units.

Description of Risks	Key Response Measures
No. 5 • Risks relating to the compatibility between operational control and management mechanisms and transformational development	
Organizational structure. The current organizational structure of some business units, which was derived from coal-fired power operation and management, is incompatible with the new landscape of "green and low-carbon" transformational development of the Company and the management characteristics of various new energy and emerging industries. There are problems such as incomplete governance structure, unclear authorities and responsibilities for management and uncoordinated staffing.	• Timely adjust the management and control capacity and mode, specify authorities and responsibilities of management, optimize staffing and enhance incentive measures for those business units concerned. • Accelerate the establishment of more sound policy and system, management structure and composite talent pool that are in line with the Company's strategic goals and are necessary and appropriate for its transformational development.
Inadequate management innovation. Some members of management lack management experience in the new energy industry, and the management mode of the emerging green energy industries is still in the exploration stage. In particular, the industry policies of energy storage and rural revitalization are unclear. It is necessary to dynamically align management resources and innovate the management mode according to the development progress.	• Based on innovation-driven development, carry out full labor productivity benchmarking and assessment, and attract management talents in the new energy industry through the reform with market-oriented incentive mechanisms such as share incentive and project co-investment. • Closely follow policy orientation, strengthen industrial policy research and establish the corresponding management and control modes according to the characteristics and needs of the new intelligent green energy business forms.

Rating of the identified risks: High Middle Low

Summary of Sustainability Report

OUR MISSION

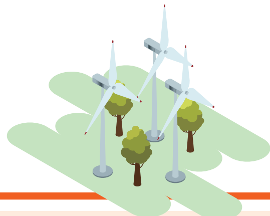
The Company is committed to sustainable operation and growth. In the course of the Group's own business development, it attaches great importance to its impacts on the society and the environment. Undertaking the mission of "**Lower Carbon Empower Better Life**", it strives to achieve its corporate vision of becoming a "**World-class Green and Low-carbon Energy Provider**".

In 2022, we continued to incorporate our core philosophy of "**Green-empowerment, Intelligent Innovation, Mutual Achievement**" for sustainable development into all our businesses. Our efforts in sustainable development can be categorized into three major aspects, namely environment and climate, energy ecosystem and connection with society.

Environment and climate

We conducted in-depth research on how to respond to climate change, promote green power generation, maintain green production, protect the natural environment, establish a low-carbon new energy ecosystem and comprehensively facilitate the green and low-carbon economic and social transformation.

Energy ecosystem



Through intelligent innovation, we actively expanded integrated intelligent energy projects such as multi-energy complementary projects, Source-Grid-Load-and-Storage projects and green power conversion and recycling projects. We also nurtured new energy industries and increased measures and investments in technological innovation and digital management.

Connection with society

We placed great emphasis on production safety, staff development, supply chain management and communication with various stakeholders, so as to contribute to the mission of joint development with the society and support the national initiative of rural revitalization.

STRATEGIC POSITIONING AND GOALS

"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.

The following is the short-term and medium-term goals of the sustainable development of the Group.

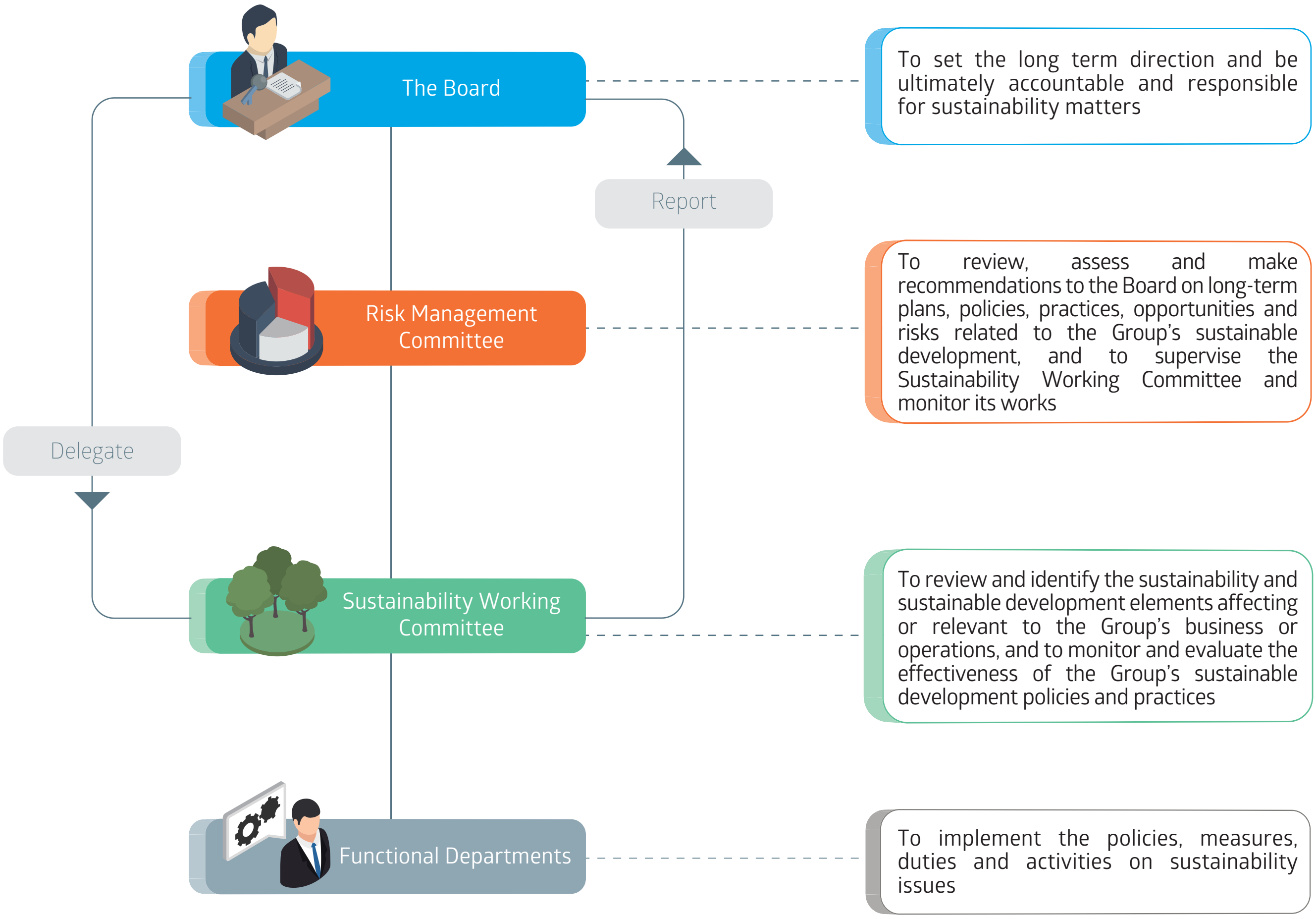
End of the Year	Installed Capacity (Clean energy)	Revenue (Clean energy)	Revenue (Integrated intelligent energy)	No. of confirmed sizable customers and confirmed cities, counties and districts for strategic cooperation
2023	Over 70%	Over 50%	Over 15%	Over 100
2025	Over 90%	Over 70%	Over 25%	Over 200
2030	Over 95%		Over 50%	Over 1,000

As of 31 December 2022, the Group's clean energy accounted for approximately 64.94% of the total consolidated installed capacity.

SUSTAINABILITY GOVERNANCE

The Board strongly believes in the crucial role of effective sustainability governance in the future sustainable development of the Group. We have established a robust environment, social and governance ("ESG") risk management system to boost performance and drive the effective management of sustainability issues. During the year under review, the Board, the Risk Management Committee and the Sustainability Working Committee were fully responsible for overseeing the sustainable development of the Group.

Governance Structure of Sustainability



Given the increasing focus of the world on ESG issues, the Board is well aware that incorporating ESG into business strategies is a core part of good governance and effective risk management. In late March 2023, the Board approved the formation of the new Strategic and Sustainable Development Committee which operates independently from the existing Risk Management Committee. The newly formed committee will be specialized in supervising the overall ESG development of the Group and reporting relevant issues to the Board for more regular discussion. At the same time, the Sustainability Working Committee has been reassigned as a sub-committee under the Strategic and Sustainable Development Committee. For details, please refer to the announcement of the Company dated 12 April 2023.

ESG STATEMENT OF THE BOARD

The Board endeavors to promote the ESG issues of the Group and attaches high importance to its sustainability management. For this purpose, it has set up a three-tier governance structure. Employing a "top-down" management approach, it identifies, assesses, manages and supervises ESG issues on an ongoing basis to ensure that the Group (i) incorporates ESG issues into its overall strategic planning; and (ii) follows our own principles to comprehensively improve the Group's ESG management standards so as to achieve the sustainability mission of the Group. With the assistance of the Risk Management Committee and the Sustainability Working Committee, the Board directs and oversees sustainability strategy and risk management in a holistic manner. It also acknowledges the following functions and responsibilities as the leader of ESG initiatives:

- Supervise the assessment on the environmental and social impacts of the Group;
- Understand the potential impacts and relevant risks of ESG issues on the business model of the Group;
- Meet the expectations of investors and regulators;
- Conduct the materiality assessment and implement the reporting procedures to monitor the effectiveness of various initiatives;
- Promote a "top-down" culture to ensure that the management has incorporated ESG into the decision-making and operation process of the Group; and
- Review and approve sustainability reports and other ESG-related management policies of the Group.

The Board formulates and reviews key targets and/or plans that cover all aspects of ESG annually, including but not limited to the followings:

Aspects	Targets/Plans
 **Environmental**	• Greenhouse Gas Emissions Management • Installed Capacity of Clean Energy Power Stations • Resources Usage Efficiency • Waste Management
 **Social**	• Workforce Equality and Diversity • Health and Safety • Employees' Rights and Development • Supply Chain Management
 **Governance**	• Board Diversity • Ethical Business Practices • Regulatory Compliance • Anti-bribery/Anti-corruption • Whistleblowing Procedures • Stakeholders Engagement and Exchange

OUR WORKS

In 2022, the Group implemented the following sustainability initiatives in three major directions, namely environment and climate, energy ecosystem and connection with society:

(A) Environment and Climate

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 their impacts on the long-term strategic development 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 and Goals" above.

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

(a) Policy guidance: the national goal of "30 · 60 Carbon Emissions 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》)", "Interim Measures for the Administration of Voluntary Greenhouse Gas Emission Reduction Trading (《溫室氣體自願減排交易管理暫行辦法》)", 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 various business units.

1.2 Climate Governance Framework

It has become a global consensus to actively address climate change. Against the current backdrop, we further understand the overall requirements of the "Dual Carbon Goals" and integrate climate issues into our overall corporate strategy. With reference to the draft of two disclosure standards, namely the "Sustainability Disclosure Standards of IFRS 1 — General Requirements for Disclosure of Sustainability-Related Financial Information" and "Sustainability Disclosure Standards of IFRS 2 — Climate-Related Disclosures" on which the International Sustainability Standards Board (ISSB) sought comments in March 2022, we have further improved our environmental and climate governance system based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in an effort to address climate change.

Climate governance framework of China Power

Governance
The Board established the Sustainability Working Committee under the Risk Management Committee in September 2020 to provide leadership, guidance and supervision on the Group's policy formulation on, and practical implementation of, sustainable development matters.

Strategy
China Power analyzes the physical and transition risks of its current main businesses brought by climate change to formulate its strategic directions and implement business transformation accordingly.

Risk Management
We have a Risk Management Committee under the Board, which is responsible for supervising the risk management structure of the Group, providing advice to the Board and reviewing the results. Experienced personnel is directly in charge of the risk management department (audit and internal control), and thereby the risk management system has been comprehensively enhanced.

Indicators and Goals
In October 2021, China Power released the Outline of the New Development Strategy, and set the short-, medium- and long-term goals for the Group. We have subdivided the goals into various performance indicators in order to conduct annual review with objective and quantitative criteria.

Practice
China Power has regularly invited professional external parties to provide ESG knowledge trainings for the management and various functional departments. We have been continuously monitoring and disclosing the environmental and climate-related metrics to facilitate a transparent communication with our stakeholders.

China Power has adopted the "Climate-Related Risks, Opportunities, and Financial Impacts" framework proposed by the TCFD. During the year, through qualitative means such as data analysis, management interviews and internal discussion, as well as quantitative means such as risk scoring, we assessed the financial impacts of various risks. Then, relevant risks were prioritized based on their possibility, impact, adaptability, resilience and other criteria, so that the Company could prepare the list of risks and determine the responsive measures accordingly.

1.3 *Identification and Analysis*

The assumption of climate change can have various impacts on the business of China Power, which include volatility in power generation, increased difficulty in production safety and elevated asset and financial management risks therefrom. The specific impacts are set out below:

Type of business	Impacts of climate change on the business of China Power
Hydropower	• Uneven rainfall can lead to flood and drought in certain areas with a great difference in regional water yields and cause failure in the prediction of water flow stability, which hinders hydropower generation • Severe cold weather can cause serious damage to hydropower facilities
Wind Power	• Wind power generation relies heavily on sufficient wind resources and its performance is unstable under extreme weather conditions. For instance, wind turbines might not be able to function and generate electricity for a certain period when there is only mild wind in the surrounding area due to the high temperature and static atmosphere. On extremely cold days, the operation of wind turbines must be suspended for safety protection
Photovoltaic Power	• Extreme high temperature can affect the power and performance of photovoltaic components and cause damage to photovoltaic inverters and other parts • Cloudy and rainy weather also reduce the amount of solar radiation and lead to unstable photovoltaic power generation
Energy Storage	• The management of China Power is well aware that climate change can easily affect the performance of its power generation business, thus we plan in advance and step up the research and development of energy storage technology

Source: The "Climate-Related Risks, Opportunities and Financial Impacts" framework proposed by the TCFD

Type of risks	Descriptions of risks/ opportunities	Classification of financial impact	Financial impacts	Responsive measures
Policy and legal	• The State Council issued the "2030 Carbon Emissions Peak Action Plan", and the Ministry of Ecology and Environment published the "Management Measures for Carbon Emission Rights Trading" and other relevant institutional documents, resulting in changes to national policies and related requirements	• Revenues • Expenditures • Assets	• **Impacts on business layout:** Dual control policies on energy and consumption vary from region to region. The Group needs to optimize and adjust its business layout and asset portfolio according to local conditions • **Increase in compliance costs:** The Group has to devote more resources to comply with increasingly stringent regulatory requirements, and implement higher-quality information disclosure • **Increase in operating costs:** There are stricter policy requirements for climate regulation, resulting in higher pricing for carbon emissions, which further restricts the Group's project development due to environmental protection requirements	• Gradually adjusting the ratio of coal-fired power generation to new energy power generation, and implementing joint operations of coal and power enterprises • Expanding business presence in emerging green energy industries, promoting the development of integrated energy, hydrogen energy, energy storage and green power transportation and exploring "new business segments" • Developing and implementing emission reduction strategies while paying close attention to carbon pricing mechanisms at the location of the relevant asset and at the global level • Building a high-quality data quality management system and laying a solid foundation for preparing high-quality disclosure reports on emissions. Improving the climate- related international evaluations to enhance corporate image and reputation through transparent disclosures
Market and technology	• The market demands lower-emission products and services • Strict requirements on the technological upgrade in clean development of existing coal-fired power assets • High level of technical requirements for the stability of new energy power grid connection and consumption • Limited room for development of energy storage technology • Changes in electricity spot market trading rules • Higher requirements posed on carbon trading	• Revenues • Expenditures • Assets	• **Promote asset appreciation:** The R&D of innovative technology and the addition of relevant patents will enrich the intangible assets of enterprises, while technological reform will help prolong the useful lives of the Group's fixed assets • **Increase in cost of technology R&D:** Increase in the R&D costs of technologies in the emerging segments such as technological upgrade and breakthroughs in environmental protection, new energy consumption technology and energy storage technology • **Increase in the costs of nurturing professional talents:** Talents in technological reform constitute the foundation of enterprises; therefore, the Group needs to establish and develop professional technological talent teams to strive their best for the development of the new business areas	• Strengthening the cooperation among industry-academia-research-application, and carefully selecting technological pathways in the process of low carbon transition • Conducting research on various low carbon technologies through feasibility study and cost-benefit analysis to develop a scientifically sound cost management system • Actively planning the business layout in the new energy power generation sector and increasing the proportion of new energy generation to meet market demand • Promoting the joint application of energy storage with distributed power generation and centralized new energy power generation • Enhancing staff training on professional competence and enhancing technological innovation capability

Type of risks	Descriptions of risks/ opportunities	Classification of financial impact	Financial impacts	Responsive measures
Reputation	• Penalties imposed by environmental-related regulatory authorities leading to doubts from market investors • Power-related incidents arising from extreme weather leading to negative public opinions	• Capital • Financing	• **Impacts of negative environmental information on reputation of enterprises in the capital market.** If a company is subject to environmental regulatory penalties or has an environmental incident, its financing in the capital markets will be affected	• Strengthening management of investor relationship, protecting investors' right to be informed and enhancing the timeliness of information disclosures • Enhancing communication with the community and promoting the understanding of the public on enterprises by running various forms of campaigns such as open-days • Following our own "Sustainable Development Strategy", strengthening the awareness of environmental management and improving the environmental management system
Acute Damages	• Extreme weather events such as floods, typhoons, droughts, etc.	• Assets • Liabilities • Expenditures	• **Frequent extreme weather can cause the increase in operating costs.** On the one hand, extreme weather can cause damage to assets, reduce power generation and damage the equipment, which will increase operating and maintenance costs. On the other hand, extreme weather may have impact on upstream fuel suppliers, increasing the management costs of supply chain • **Frequent extreme weather can cause the increase in staff costs.** Under prolonged bitter cold or high temperature weather, the enterprises' input of subsidies and condolences for on-site working staff may increase	• Strengthening climate risks identification and management, and actively cooperating with institutions such as the Meteorological Bureau to improve emergency planning and emergency management capabilities • Performing equipment maintenance effectively and timely repairing the damaged equipment following extreme weather events • Enhancing the management and training of suppliers and putting emergency plans in place for special conditions • Enhancing emergency response capabilities of staff and increasing the input for physical safety and protection of staff in extreme weather conditions

Type of risks	Descriptions of risks/ opportunities	Classification of financial impact	Financial impacts	Responsive measures
Chronic Damages	Global warming Rising sea level	Assets Liabilities Expenditures	**Climate change increases management costs.** Rising sea levels may damage some power facilities, resulting in the increase in the costs of infrastructure. Damage to water resources might cause shortage of water supply for hydropower stations and other power generation facilities for cooling, hence increasing the operating costs of enterprises. Furthermore, it will affect the stability of the power generation business and increase management costs in the long term	Using climate models to assess the future operations of projects and the resilience of physical assets in the face of extreme weather

2. *Promoting green power generation*

We have improved the resources consumption management of thermal power generating units, promoted the transformation and upgrading of generating units, continued to change the development mode of thermal power, and developed clean thermal power. We strengthened the management of environmentally friendly power generation to ensure the stable operation of environmentally friendly power generation. In 2022, the operational ratio of desulphurization and denitration facilities of the Group remained at 100%, the investment in environmental protection technological upgrade amounted to RMB64.21 million.

In 2022, the Group's clean energy power generation amounted to 40,999,427MWh, representing a reduction in carbon dioxide emission of 26,102,786 tonnes.

3. *Participation in market-oriented trading*

Against the backdrop of the changing power policies and market, we intensively participated in green power market transactions. Under the increasingly stringent policy requirements on management and control over carbon emissions and related transactions, we complied with the requirements of a series of policies such as "Administrative Measures for Carbon Emission Rights Trading (Trial) (《碳排放權交易管理辦法(試行)》)". We have properly studied, researched, analyzed and planned the business layout of carbon market trading to enhance the ability to respond to the power market, thereby proactively integrating into the green power trading landscape.

In 2022, China Power participated in market-oriented trading:

- Hydropower generating units obtained a total power production quota of approximately 583,650MWh with an average price of RMB190.48/MWh.

- Wind power generating units obtained a total power production quota of approximately 6,651,900MWh with an average price of RMB503.4/MWh.

4. *Adhering to green production*

4.1 *Carbon emission management*

Emission Types and Categories	Scope	Unit	2021	2022	Changes
Total CO_2 emission	Scope 1	'000 tonnes	53,691	61,731	14.97%
	Scope 2	'000 tonnes	25	169	576.00%
CO_2 emission density	Scope 1	g/kWh	800.61	546.57	–31.73%
	Scope 2	g/kWh	0.38	1.49	292.11%

4.2 *Energy saving and emission reduction*

Emission Types	Categories	Unit	2021	2022	Changes
NO_x emission	Total	'000 tonnes	9.230	9.236	0.07%
	Density	g/kWh	0.139	0.131	–5.76%
SO_2 emission	Total	'000 tonnes	5.065	4.954	–2.19%
	Density	g/kWh	0.076	0.070	–7.89%
Flue gas and dusts emission	Total	'000 tonnes	0.535	0.595	11.21%
	Density	g/kWh	0.008	0.008	–

Dabieshan Power Plant won the title of "Water Conservation Enterprise in Macheng City" in 2022

Dabieshan Power Plant won the title of "Water Conservation Enterprise in Macheng City" in 2022. In the recent two years, Dabieshan Power Plant has invested nearly RMB6 million in the upgrading of coal-containing wastewater system, oily wastewater system, reverse osmosis concentrated water utilization and other projects, reducing the amount of water replenishment by 400,000 m^3 per year. At the same time, taking the development of a water conservation society as the starting point, it reused 800,000 m^3 of domestic sewage, approximately 2,400,000 m^3 of backwater from ash yards, and 100,000 m^3 of coal-containing wastewater, with a reusing rate of 100%. It realized no discharge of wastewater, and established an efficient, clean, low-carbon, circular and green management system, improving the efficiency and water conservation level of water for industrial use.

5. *Protecting the natural environment*

We always attach importance to the protection and construction of the ecological environment, constantly standardize the management of the ecological environment, strive to improve the capability and level of ecological protection management, strengthen the protection of biodiversity and natural habitats, and promote the development of a resource-conserving and environmentally friendly society.

Proliferate and release of natural living organisms improved the ecology of Xijiang River significantly

Integrated development of "photovoltaic + ecological management"

(B) Energy Ecosystem

Amid the major shift to clean, diverse, digital and intelligent energy, China Power made the timely move to push forward the systematic reform for strategic transformation. In 2022, we increased investment in research and development and supported talent nurturing, which led to fruitful results. In terms of strategic development, China Power continued to explore and tap into new market segments, strived to develop emerging industries and made constant progress in the energy sector. We fully combined digitalization technology and green energy development through innovation and breakthrough, so as to build an intelligent energy ecosystem and evolve into a world-class energy enterprise.

Building a multi-energy complementary integrated energy base

The Qingshuijiang Integrated Hydropower, Wind and Photovoltaic Multi-Energy Complementary Energy Base is located in Southeast Qian Prefecture, Guizhou Province, China. It has a planned new energy capacity of 800 MW, including 350 MW of photovoltaic power and 450 MW of wind power. The project extends across Hunan and Guizhou provinces and connects to both State Grid and China Southern Power Grid. It is also the first 500kV grid-connected and direct dispatch new energy project of the dispatch network of Central China Grid. Upon completion, the project can increase the utilization rate of the existing power transmission system, give full play to the multi-year natural regulating function of Sanbanxi Reservoir, and achieve the integration of hydropower, wind and photovoltaic multi-energy complementary power generation.

China's first 3,000-tonne pure-electric inland river container vessel

The green power transportation segment of China Power jointly designed and developed China's first 3,000-tonne pure-electric inland river container vessel "Ganghang Chuantu 01" with Anhui Provincial Port and Shipping Group Co., Ltd., Anhui Chuantu Digital Technology Co., Ltd., Shanghai Jiao Tong University, Wuhan University of Technology and other well-known universities and enterprises. This pure-electric container vessel has significant eco-environmental and economic benefits. With zero emissions and pollution during voyage, the vessel can save energy costs by approximately 35% compared with traditional oil-fueled ships for the same voyage, while greatly shortening the voyage time and increasing the overall transport efficiency by approximately 15%.

(C) Connection with society

The Group adheres to the quality, safety, healthy and environmental management principle of "Quality Products and Services, People-oriented, Risk Prevention and 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 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 staff so as to create a corporate culture of loyalty and cohesiveness, promoting the mutual growth of staff and the corporation.

1.1 Supporting employees' development

We are committed to talent nurturing as evidenced by the formulation of our "Management Measures for Employees' Career Development". We adopted different measures to establish a talent pool, multiple approaches to enhance talent training and diverse levels of career paths for talent development, so as to optimize the holistic staff management mechanism for both employee development and sustainable corporate growth.

2022

- Percentage of employees who received training: 100%
- Total training hours of employees: 734,720 hours
- Total investment in employee training: RMB39,304,645

1.2 Caring for employees' livelihood

We followed our "Management Measures for Employee Caring Activities" and organized a wide range of staff activities on a daily basis. During the pandemic, we maintained effective disease control and extended our concern to employees, thereby showing our care for them through concrete actions.

Showing care to frontline production staff

2022

- Grant for employees with serious and critical illnesses: RMB957,038
- Assistance to employees with difficulties: 228 cases
- Helped children of staff with difficulties pursuing further studies: 27 cases
- Grant under our "Golden Autumn Education Fund": RMB197,160

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 2022, the Group assessed a total of 13,701 suppliers of fuels and other materials, and identified 305 unsatisfactory suppliers, 210 of which were blacklisted.

2022
- Audits carried out for suppliers*: 13,701
- No. of suppliers found defective: 305
- No. of suppliers blacklisted: 210
- Percentage of suppliers who received training: 98.89%

* The same supplier being audited more than once during the year was counted multiple times

2.2 *Production safety*

We always adhere to the safety philosophy that "no risks are uncontrollable, no breaches are unpreventable and no accidents are unavoidable". Based on the "3-year Action Plan for Targeted Safe Production Rectification", we formulated the "2022 Safety, Health and Environment System Enhancement Plan". Focusing on strengthening the foundation and controlling the source, we undertook our responsibilities and implemented relevant systems complemented by innovative and technology-driven safety measures, which ensure safe production and development. During 2022, the Group did not have any major safety incidents in respect of employees, equipment and environmental protection.

No. of work-related fatalities occurred in each of the past three years	2020	2021	2022
No. of people	0	0	0
Proportion	0	0	0

We continued to foster the foundation of safety management and set up the safety, health and environment management system. The safety management mechanism was continuously optimized, and specific production safety activities were rolled out. We imposed stringent due diligence to monitor production safety while preventing and mitigating material safety risks at the source. In order to strengthen safety management in all aspects, we stepped up safety education and promotion to establish the fundamental awareness of production safety among our employees and enhance safety in production.

2022

- No. of emergency drill carried out: 3,665
- No. of participants in the emergency drill: 46,642 person-times
- No. of safety education and training programs carried out: 4,561
- No. of participants in safety production training: 147,638 person-times

In 2022, no work days were lost due to work-related injuries.

2.3 *Anti-corruption*

The Group has established the "Whistleblowing Policy" in April 2012, which is applicable to employees and those who have dealings 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. During the reporting period, we have continuously improved anti-corruption and whistleblowing policies which are inducive to significantly reduce the cost of supervision, opened up channels for public supervision, and reduced corporate management risks. We have been in strict compliance with the law and regulations regarding corruption and bribery prevention, including the Company Law of the PRC, the Anti-money Laundering Law of the PRC and the Anti-unfair Competition Law of the PRC, continuously improved the internal integrity supervision system, and enhanced the focus and effectiveness of anti-corruption work to create an honest and regulated corporate atmosphere.

2022

- No. of integrity and anti-corruption training carried out: 465
- Participants in anti-corruption and integrity education and training activities: 42,286 person-times
- No. of anti-corruption special report meetings held at all levels: 95
- Timely handling of whistleblowing incidents with 100% satisfaction rate

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.

3.1 Volunteering services

Pursuing the volunteering spirits of "dedication, love, mutual help and progress", we formulated regulatory systems such as the "Management Measures for External Donation" and "Management Measures for 'Yingshanhong' Youth Volunteer Service Activities" to give back to society and address the needs and problems of the general public. We aim to promote volunteering as the new trend in society and build a more civilized world.

2022

- Total charity donation: RMB3,396,517
- Total volunteers: 1,823 persons
- Volunteer activities organized: 406
- Participants in volunteer activities: 3,902 person-times
- Hours of volunteer services: 11,199 hours

3.2 Rural revitalization

Building of an integrated intelligent energy rural revitalization demonstration project

We accelerated the planning process to establish the clean energy application system in rural regions based on renewable energy. By developing a new engine for rural revitalization, we strived to create a diverse society with a value of "beautiful villages, rich farmers, sound governance and robust industries".

On 26 June 2022, the CP Guorui Hebei Jinan Power Grid Household Photovoltaic Project was connected to the power grid for power generation for the first time. It is the first pure-household distributed photovoltaic project of China Power. The project covers 42 counties in 6 cities located in southern Hebei Province in China, including Shijiazhuang. By leasing out on-grid photovoltaic panels for power generation on the rooftop of local houses, over 20,000 farmers were able to earn extra income. The project has been launched in phases on a rolling basis and is expected to have an annual average on-grid power generation capacity of 618,850MWh when it reaches full capacity. Compared to coal-fired power plants with the same generation capacity, it can save approximately 185,655 tonnes of standard coal and reduce carbon dioxide emissions by 501,268.50 tonnes per year.

The full version of the Company's 2022 Sustainability Report has been published on the websites of the Company and the Hong Kong Stock Exchange. For details about the Group's sustainable development, please refer to the full version of the report.

INVESTOR RELATIONS

The Company, the Board and management always prioritize investor relation activities and well acknowledge that investor relations is one of the key strategic management actions which could enhance understanding between investors and the Company, upgrade the level of corporate governance, transparency and strategic credibility and create value for shareholders. Since the listing of the Company, we have strived to excel in investor relations work and maintain sufficient communications with investors. We are also convinced that reporting to shareholders and establishing good investor relations are important responsibilities of the Board and 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 in in-depth communications with investors regarding public information, investors can gain a comprehensive understanding of the status of production and operations of various business segments, corporate governance, dedication towards environmental protection and fulfillment of social responsibilities of the Company. The Chairman of the Board, the Directors and members of management have actively participated in a variety of investor relations activities to maintain direct communication with investors.

Furthermore, the Company places great emphasis on the feedback from investors, and ensure their feedback can reach the Board and management through effective channels, thereby allowing us to continuously improve our operations, development strategies and corporate governance, introduce potential investors and strengthen the relationship with securities analysts and fund managers so as to create greater value for shareholders.

Press Conferences for Annual and Interim Results

In March and August 2022, the Company organized online press conferences immediately following the publication of its 2021 annual results and 2022 interim results, respectively. Over 500 shareholders, potential investors, securities analysts and fund managers, in aggregate, attended the press conferences. The Directors and members of management actively communicated with the participants to explain in detail the operating conditions, development strategies, corporate governance and sustainability goals of the Company and actively sought investors' support for the future development plans of the Company.

Press conference for interim results 2022

General Meetings

Last year, the annual general meeting of the Company was held on 2 June 2022 and three general meetings were held on 2 June, 15 June and 24 August 2022, respectively, at the principal meeting place at Suite 6301, 63/F., Central Plaza, 18 Harbour Road, 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 members of management together with the external independent auditor attended the annual general meeting, and the Directors and members of management attended the three general meetings to answer enquiries from shareholders and investors attending the meetings either in person or online. All ordinary resolutions proposed at the abovementioned annual general meeting and the three general meetings were voted and passed by the shareholders.

Annual general meeting 2022

The annual general meeting for this year has been proposed to be held on 8 June 2023.

Roadshows

In 2022, in compliance with the pandemic containment requirements of various regions, we launched a number of on-site roadshows in Beijing, Shanghai, Shenzhen, Xiamen, Qingdao and Hong Kong as well as multiple online roadshows through video or telephone conference to announce the results of the Company and to promote the strategies, sustainability goals and operating achievements of the Company. The Directors, members of management and the investor relations team have participated in the roadshows to effectively communicate and exchange opinions with shareholders and potential investors, thereby enhancing the good interactive relationship between the Company and investors, and effectively attracted the attention of potential investors.

In 2022, the Company met with a total of over 1,100 securities analysts, fund managers and institutional investors through roadshows, more than doubled as compared with the previous year, which promoted effective communications between the Company and the market participants.

Investor Forums

In 2022, the Company was invited to participate in investment summits held by domestic and overseas investment institutions, through which the Company maintained close communication with investors and revealed to the market its strategic plans, sustainable development layout, financial performance and corporate governance capabilities, and was well-received by the participants.

In July 2022, The Hong Kong Exchanges and Clearing Limited held a summit titled "The Future of Investor Relations — Innovation, ESG and Impact". Mr. Shou Rufeng, the vice president of the Company, attended the event by online video from Beijing and gave a presentation on the Company's ESG practices, shared with the market and the participants the Group's strategic goals for sustainable development to achieve the corporate vision of becoming a "**World-class Green and Low-carbon Energy Provider**", and its ESG governance structure and philosophy of corporate social responsibility.

Regular Meetings with Investors

The Company is pleased to communicate with every investor. Apart from attending major investor activities regularly, its management makes their best efforts to meet with individual investors or investor groups from time to time, and arranges meetings earnestly.

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 are the Company's development strategies?

According to the "Outline of the New Development Strategy" of the Company announced in October 2021, the Company has taken "**Lower Carbon Empower Better Life**" as its mission, aiming to achieve the vision of becoming a "**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, green power transportation, colored photovoltaic and integrated intelligent energy, optimize and reduce 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 energy ecosystem to facilitate the green and low carbon transformation of the economy and the society.

2. Does the Company have any plans to acquire assets from its parent companies?

In 2022, the Company completed the acquisition of clean energy assets with a capacity of approximately 2.5GW from its parent companies so as to further implement the Company's strategy to vigorously develop clean energy and promote the continuous enhancement of its asset structure and profitability. In the future, the Company will capitalize on the support from its parent companies to continue to acquire clean energy assets and projects from independent third parties or its parent companies, as and when appropriate, and at the same time identify other quality clean energy assets and projects for development with a view to creating more value for its shareholders and to achieve the goals under its 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 equity holders of the Company to not less than 50% of the profit attributable to equity holders of the Company. The Company will strictly implement the dividend policy, and determine the amount of dividends to be distributed based on actual operating performance for a given year.

4. What is the Company's view on electricity supply and demand in 2023?

In 2023, the China Electricity Council anticipated that the national total electricity consumption will remain in equilibrium as a whole with a year-on-year increase of approximately 6%. In order to achieve the goals of "Carbon Emissions Peak and Carbon Neutrality", we will accelerate the construction of new power systems and further increase the growth rate of installed capacity and power generation capacity of clean energy, while thermal power will be facing a major transition from 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 Emissions Peak and Carbon Neutrality", energy storage technology is an integral aspect for the construction of new energy-oriented novel power systems, and can be applied to all aspects of power systems including power generation, transmission and distribution. In 2022, local governments of various regions in the PRC promulgated policies and standards which mandates wind and photovoltaic power stations to be equipped with energy storage facilities, which have played an important role in supporting the development of the industry. It is expected that with the growth in demand driven by the construction of large bases for wind and photovoltaic power, the energy storage industry of the country will soon enter a new era of rapid development.

The Company pays high regards to the development opportunities arising from the energy storage industry. Apart from providing EPC services to energy storage power stations, the Company has been planning the layout in aspects such as electrochemical energy storage, compressed air energy storage and pumped storage hydropower, and has accomplished initial achievements. Going forward, the Company will create new profit growth drivers through the energy storage segment in an effort to bring better returns to all shareholders.

6. What is the Company's ESG layout?

The Directors and management attaches great importance to ESG and believe that ESG is of utmost importance to the future development of the Company. The Company has recently established the Strategic and Sustainable Development Committee under the Board to lead the ESG development of the Company and report to the Board on a timely basis. Meanwhile, the Company also plans to establish an ESG office, which specializes in handling ESG-related works, and to plan and implement the ESG aspirations of the executive Directors and members of management.

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 2022 (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 thermal power plants, and provision of energy storage, green energy transportation, and integrated intelligent energy solution services. Its businesses are located in various major grid regions of China. 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 2022 are set out in the Consolidated Income Statement on page 143. The Board has recommended the payment of a final dividend of RMB0.11 (equivalent to HK$0.1256) per ordinary share for the year ended 31 December 2022, with a total amount of RMB1,360,717,000 (equivalent to HK$1,553,691,000).

BUSINESS REVIEW AND PERFORMANCE

Review of the Group's business and performance for the year ended 31 December 2022 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	• Letter to Shareholders • Management's Discussion and Analysis	20–22 33–51
A description of the principal risks and uncertainties facing the Group	• Risk Management Report • Note 46 to the Consolidated Financial Statements	101–109 232–240
The outlook of the Group's business	• Letter to Shareholders • Management's Discussion and Analysis	23 56–57
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	110–120 53–55
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	55–56 121–124 125–126

CORPORATE GOVERNANCE

The principles and practices of the Group's corporate governance are set out in the section headed "Corporate Governance Report" in 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" in 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 RMB16,526,390,000, 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 September and October 2022, the Company issued 451,503,136 ordinary shares and 1,085,261,526 ordinary shares, respectively, at the price of HK$4.40 per share under special mandate as consideration shares for the acquisition of equity interest in certain target companies. For further information, please refer to the announcement of the Company dated 30 June 2022, the circular of the Company dated 28 July 2022, the poll results announcement of the Company dated 24 August 2022, the partial completion announcements of the Company dated 26 September 2022 and the completion announcement of the Company dated 26 October 2022.

Details of movements in the share capital of the Company during the year are set out in Note 32 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 2022.

DEBT ISSUES, BANK LOANS AND OTHER BORROWINGS

For the year ended 31 December 2022, 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
14 June 2022	Medium-term note	2 billion	3 years
15 June 2022	Super & short-term commercial paper	1 billion	270 days
20 June 2022	Medium-term note	2 billion	3 years
20 July 2022	Medium-term note	2 billion	3 years
26 July 2022	Super & short-term commercial paper	1 billion	180 days
1 September 2022	Medium-term note	2 billion	3 years

Wu Ling Power

Date	Type	Principal amount (RMB)	Maturity period
10 March 2022	Super & short-term commercial paper	1 billion	180 days

Save for the super & short-term commercial paper issued on 15 June 2022 and 26 July 2022, respectively, which no less than 30% of proceeds will be used for rural revitalization projects, the proceeds from the above debt issues are used to (i) repay and/or refinance the existing indebtedness of the Group; and (ii) replenish working capital 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 Notes 36 and 38 to the Consolidated Financial Statements.

DISTRIBUTABLE RESERVES

As calculated in accordance with Sections 297 and 298 of the Hong Kong Companies Ordinance, as at 31 December 2022, the distributable reserve of the Company amounted to RMB2,633,167,000 (2021: RMB2,981,968,000).

Details of movements in the reserves of the Group and the Company during the year are set out in Notes 35 and 53 to the Consolidated Financial Statements respectively.

DIRECTORS

(A) Directors of the Company

The Directors during the year 2022 and up to the date of this annual report were:

Executive Directors

HE Xi
GAO Ping

Non-executive Directors

WANG Xianchun	(resigned on 25 February 2022)
ZHOU Jie	
XU Zuyong	(appointed on 25 February 2022)

Independent Non-executive Directors

LI Fang
YAU Ka Chi
HUI Hon Chung, Stanley

Mr. WANG Xianchun resigned due to other work arrangements. He has confirmed that he has 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. HE Xi and Mr. ZHOU Jie 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 2022, 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" in 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 2022 or during the period from 1 January 2023 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 Hong Kong Companies Ordinance, 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.

EQUITY-LINKED AGREEMENT

For the year ended 31 December 2022, the Company did not enter into any equity-linked agreement other than the "Share Incentive Scheme" described below.

SHARE INCENTIVE SCHEME

A share option incentive scheme was approved and adopted by the shareholders of the Company at the extraordinary general meeting held on 15 June 2022.

During the year ended 31 December 2022, 84,590,000 share options were granted on 5 July 2022 and 18,590,000 share options were granted on 20 July 2022, and no share options had lapsed. As at 31 December 2022, 103,180,000 share options were and still remained outstanding and have not yet been exercised. As at 31 December 2022, the total number of shares in respect of which share options may be granted under the Share Incentive Scheme was 8,531,100 shares, representing approximately 0.07% of the number of the existing issued shares of the Company. Details of the movement in share options of the Company during the year ended 31 December 2022 are set out in Note 33 to the Consolidated Financial Statements.

A summary of the Share Incentive Scheme is as follows:

Purpose of the Share Incentive Scheme	The Share Incentive Scheme aims at: (i) further improving the incentive mechanisms of the Company in support of the transaction and development of the Company; (ii) fully motivating the Company's senior management, middle management and core business backbone personnel; and (iii) aligning the interests of shareholders of the Company, the Company and the individual interests of the core backbone employees effectively, so that all parties will share a common concern for the long-term development of the Company.

Participants of the Share Incentive Scheme	The participants of the Share Incentive Scheme are: (i) Directors; (ii) senior management; (iii) backbone management; and (iv) technical and business personnel who has a director impact on the Company's operating performance and sustainable development of the Company and its controlled subsidiaries.
Total number of shares available for issue under the Share Incentive Scheme and the percentage of the issued shares that it represents as at the date of this annual report	The total number of shares to be issued pursuant to the exercise of the share options granted under the Share Incentive Scheme shall not exceed 111,711,100 Shares, representing 0.90% of the total issued share capital of the Company as at the date of this annual report.
Maximum entitlement of each participant	Unless approved by a resolution at a general meeting, the number of underlying shares in respect of the share options granted to a participant of the Share Incentive Scheme (including exercised and outstanding share options) during the effective period of the Share Incentive Scheme shall not in aggregate exceed 1% of the total issued share capital of the Company.
The vesting period of share options granted under the Share Incentive Scheme	No share options granted under the Share Incentive Scheme shall be exercised within 24 months from the grant date of the relevant share option (the "Waiting Period").
The period within which the share options must be exercised	A participant of the Share Incentive Scheme may exercise their share option in tranches during the exercise period after expiration of the Waiting Period, subject to the achievement of specific performance appraisal targets for the year, as follows:

Exercise Period	Timing of Exercise Period	Percentage of share options exercisable
First Exercise Period	From the first trading day after 24 months from the grant date to the last trading day within 36 months from the grant date	33%
Second Exercise Period	From the first trading day after 36 months from the grant date to the last trading day within 48 months from the grant date	33%
Third Exercise Period	From the first trading day after 48 months from the grant date to the last trading day within 60 months from the grant date	34%

The amount payable on application or acceptance of the share option, and the period within which payments or calls must or may be made, or loans for such purposes must be repaid	No payments are required from a participant of the Share Incentive Scheme on application or acceptance of the share option.
The basis of determining the exercise price of the share options granted under the Share Incentive Scheme	The exercise price of the share options granted under the Share Incentive Scheme shall be determined in accordance with the fair market price principle, with the grant date as the base day for pricing. The fair market price principle shall not be lower than the higher of the following prices: (i) the closing price of the shares on the grant date; and (ii) the average closing price of the shares on the 5 trading days prior to the grant date.
Effective Period of the Share Incentive Scheme	The Share Incentive Scheme shall be valid from the grant date until the date when all share options have been exercised or cancelled and the maximum effective period of the Share Incentive Scheme shall not exceed 72 months.

Movement in Share Options

Movements of the share options granted under the Share Incentive Scheme for the year ended 31 December 2022 are as follows:

Name or Category of Grantees	Date of Grant	Exercise Price (HK$)	Exercise Period (from Date of Grant)	As at 15 June 2022[(1)]	Granted during the year	Exercised during the year	Cancelled during the year	Lapsed during the year	As at 31 December 2022
Directors									
HE Xi	5 July 2022	4.82[(2)]	72 months	–	1,100,000	–	–	–	1,100,000
GAO Ping	5 July 2022	4.82[(2)]	72 months	–	1,100,000	–	–	–	1,100,000
Other Employees									
	5 July 2022	4.82[(2)]	72 months	–	82,390,000	–	–	–	82,390,000
	20 July 2022	4.90[(3)]	72 months	–	18,590,000	–	–	–	18,590,000

Note:

(1) The Share Incentive Scheme was approved and adopted by the shareholders of the Company at the extraordinary general meeting on 15 June 2022.

(2) The closing price of the shares of the Company immediately before the date of grant (i.e. 4 July 2022) was HK$4.76.

(3) The closing price of the shares of the Company immediately before the date of grant (i.e. 19 July 2022) was HK$4.75.

The Company has used the Black-Scholes Option Pricing Model (the "Model") to assess the value of the share option as at the dates of grant. The Model is one of the commonly used models to estimate the fair value of a share option. The value of a share option varies with different variables of certain subjective assumptions. Any change in the variables so adopted may materially affect the estimation of the fair value of a share option. As such, the fair values calculated are inherently subjective and uncertain due to the assumptions made and the limitations of the valuation model used.

Pursuant to the Share Incentive Scheme, the share options were granted on 5 July 2022 and 20 July 2022, respectively. The fair value of these share options determined at the date of grant using the Model were HK$1.61 and HK$1.56 per share option, respectively. For further information on the fair value of these share options, please refer to Note 33 to the Consolidated Financial Statements.

DIRECTORS' INTEREST IN CONTRACTS

During the year ended 31 December 2022, 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 Company	Other Interests
HE Xi	Chairman of the Board and Executive Director	Chief engineer of new energy of SPIC
WANG Xianchun	Non-executive Director	Special duty director of SPIC, director of CPI Holding, director of Shanghai Power and chairman of the supervisory board of Jilin Electric
ZHOU Jie	Non-executive Director	Director of CPI Holding and SPIC Guangdong Power Company Limited
XU Zuyong	Non-executive Director	Special duty director of SPIC, chairman of the supervisory board of Jilin Electric and director of SPIC Group Intelligent Energy Investment Co., Ltd.

DIRECTORS' INTERESTS IN SHARES, UNDERLYING SHARES OR DEBENTURES

As at 31 December 2022, the following Directors have the following interest in the shares of the Company:

Name	Capacity	Number of shares in which interested other than under equity derivatives	Percentage of issued share capital of the Company (%)	Long/Short position
He Xi	Beneficial owner	1,100,000	0.009	Long
Gao Ping	Beneficial owner	1,100,000	0.009	Long

Save as disclosed above, 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 2022, 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	3.17	Long
CPDL	Beneficial owner	2,662,000,000	21.52	Long
CPI Holding[1]	Interest of a controlled corporation	4,326,910,662	34.98	Long
	Beneficial owner	2,833,518,060	22.91	Long
CPNE	Beneficial owner	1,664,910,662	13.46	Long
SPIC[2]	Interest of controlled corporations	7,552,704,175	61.06	Long

Notes:

(1) CPI Holding is the beneficial owner of CPDL and CPNE and therefore CPI Holding is deemed to be interested in the shares of the Company owned by CPDL and CPNE 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, CPNE and SPIC Finance HK do not have any interest in the equity derivatives of the Company.

CONNECTED TRANSACTIONS

The connected transactions and continuing connected transactions entered by the Group during the year 2022 are set out in the schedule annexed to the Audit Committee Report in this annual report.

The Company confirmed that all the 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. The continuing connected transactions (including the related parties transactions) during the year have been reviewed by the Audit Committee and the Company's external auditor.

In the opinion of the Directors and as confirmed by the Audit Committee and the Company's external auditor (Ernst & Young), the Company has complied with the disclosure requirements in accordance with the relevant Listing Rules.

MAJOR CUSTOMERS AND SUPPLIERS

For the year ended 31 December 2022, the aggregate amount of purchases attributable to the Group's five largest suppliers accounted for approximately 72.37% of the Group's total purchases and purchases attributable to the Group's largest supplier accounted for approximately 48.85% of the Group's total purchases.

For the year ended 31 December 2022, the aggregate amount of turnover attributable to the Group's five largest customers accounted for approximately 61.83% of the Group's total turnover and turnover attributable to the Group's largest customer accounted for approximately 16.46% 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, 23 March 2023

Ernst & Young
27/F, One Taikoo Place
979 King's Road
Quarry Bay, Hong Kong

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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 143 to 265, which comprise the consolidated statement of financial position as at 31 December 2022, 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 2022, 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 2022, the Group's property, plant and equipment ("PPE") and goodwill amounted to RMB142,306 million and RMB832 million, respectively. As disclosed in Notes 2.10, 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 impairment assessments on goodwill are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. As a result of the impairment testing of the current year, impairment losses of RMB265 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 requires 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 might 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 the recoverable amount calculation based on future discounted cash flows to industry practice and tested the underlying data used in the projections. We evaluated the appropriateness of the classification of CGUs or groups 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 also assessed the competence and objectivity of external value appraisers and management's experts. In addition, we involved our valuation specialists to assist us in 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 2.10, 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 2022, the Group recognized provisions for compensation for inundation caused by the construction of certain hydropower plants amounting to RMB1,972 million, with interest expense related to the provisions amounting to RMB104 million for the year then ended. As disclosed in Notes 2.18, 3(ii) and 40 to the consolidated financial statements, provisions for inundation compensation 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. Management adopts highly subjective assumptions and judgements in the calculation of such provisions. 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 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 might be affected by unexpected changes in economic conditions.	Among other audit procedures performed, we compared the calculation method used by the Group, that is the calculation of 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 in 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 2.18, 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.

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

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.

- 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.

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

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
23 March 2023

Consolidated Income Statement

For the year ended 31 December 2022

	Notes	2022 RMB'000	2021 RMB'000 (restated)
		Year ended 31 December	
Revenue	4	43,689,129	35,476,703
Other income	5	747,050	513,772
Fuel costs		(22,725,546)	(18,053,876)
Depreciation		(7,661,040)	(6,099,637)
Staff costs	6	(3,840,191)	(3,350,628)
Repairs and maintenance		(964,658)	(868,295)
Subcontracting costs		(59,786)	(510,748)
Cost of sales of energy storage equipment		(694,165)	–
Consumables		(561,346)	(424,142)
Other gains and losses, net	7	2,515,645	954,072
Other operating expenses	8	(2,840,830)	(2,531,277)
Operating profit	9	7,604,262	5,105,944
Finance income	10	153,624	126,603
Finance costs	10	(4,260,961)	(3,861,500)
Share of results of associates		(155,233)	(213,524)
Share of results of joint ventures		2,375	(119,280)
Profit before taxation		3,344,067	1,038,243
Income tax expense	11	(658,729)	(361,947)
Profit for the year		2,685,338	676,296
Attributable to:			
Equity holders of the Company		2,648,051	(256,257)
Non-controlling interests		37,287	932,553
		2,685,338	676,296
Earnings/(loss) per share for profit/(loss) attributable to ordinary shareholders of the Company (expressed in RMB per share)			
— Basic	12	0.22	(0.04)
— Diluted	12	0.22	(0.04)

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 150 to 265 are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

For the year ended 31 December 2022

	Year ended 31 December	
	2022	2021
	RMB'000	RMB'000
		(restated)
Profit for the year	**2,685,338**	676,296
Other comprehensive income:		
Item that will not be reclassified to profit or loss:		
Fair value (loss)/gain on equity instruments at fair value through other comprehensive income ("FVTOCI"), net of tax	**(768,112)**	1,608,081
Items that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of foreign operations	**(44)**	44
Fair value (loss)/gain on debt instruments at FVTOCI, net of tax	**(548)**	6,149
Other comprehensive (expense)/income for the year, net of tax	**(768,704)**	1,614,274
Total comprehensive income for the year	**1,916,634**	2,290,570
Attributable to:		
Equity holders of the Company	**1,886,684**	1,331,601
Non-controlling interests	**29,950**	958,969
Total comprehensive income for the year	**1,916,634**	2,290,570

The notes on pages 150 to 265 are an integral part of these consolidated financial statements.

Consolidated Statement of Financial Position

As at 31 December 2022

	Notes	As at 31 December 2022 RMB'000	2021 RMB'000 (restated)
ASSETS			
Non-current assets			
Property, plant and equipment	15	**142,306,292**	129,187,137
Right-of-use assets	16	**6,893,878**	6,152,184
Prepayments for construction of power plants	17	**4,951,116**	2,488,827
Goodwill	18	**832,388**	1,083,293
Other intangible assets	19	**8,286,390**	934,800
Interests in associates	20	**5,455,182**	3,526,555
Interests in joint ventures	21	**1,201,014**	1,428,944
Equity instruments at FVTOCI	22	**4,131,667**	5,235,995
Deferred income tax assets	23	**288,300**	714,348
Restricted deposits	30	**18,711**	9,566
Other non-current assets	24	**6,154,281**	5,913,949
		180,519,219	156,675,598
Current assets			
Inventories	25	**1,091,344**	1,468,558
Accounts receivable	26	**12,634,771**	8,362,882
Prepayments, deposits and other receivables	27	**6,594,392**	4,108,766
Amounts due from related parties	28	**6,098,185**	2,535,159
Tax recoverable		**70,738**	103,931
Debt instruments at FVTOCI	29	**108,972**	213,660
Restricted deposits	30	**59,244**	10,802
Cash and cash equivalents	31	**4,228,099**	1,766,632
		30,885,745	18,570,390
Total assets		**211,404,964**	175,245,988
EQUITY			
Equity attributable to equity holders of the Company			
Share capital	32	**24,508,986**	20,418,001
Other equity instruments	34	**8,639,281**	2,997,600
Reserves	35	**13,820,378**	12,636,867
		46,968,645	36,052,468
Non-controlling interests	50	**21,621,460**	16,324,215
Total equity		**68,590,105**	52,376,683

	Notes	As at 31 December 2022 RMB'000	As at 31 December 2021 RMB'000 (restated)
LIABILITIES			
Non-current liabilities			
Deferred income		35,625	33,386
Bank borrowings	36	62,212,186	54,930,413
Borrowings from related parties	37	10,415,324	8,557,660
Other borrowings	38	16,811,531	6,200,325
Lease liabilities	39	3,189,645	3,174,469
Deferred income tax liabilities	23	2,275,328	2,380,195
Provisions for other long-term liabilities	40	1,866,003	1,868,232
Other non-current liabilities	41	84,183	188,803
		96,889,825	77,333,483
Current liabilities			
Accounts and bills payables	42	2,566,171	1,836,022
Construction costs payable		11,990,216	6,815,277
Other payables and accrued charges	43	3,607,678	2,253,467
Amounts due to related parties	28	3,412,795	1,349,792
Bank borrowings	36	16,726,791	21,911,691
Borrowings from related parties	37	4,718,980	6,108,626
Other borrowings	38	2,015,000	4,620,000
Lease liabilities	39	517,007	417,917
Tax payable		370,396	223,030
		45,925,034	45,535,822
Total liabilities		142,814,859	122,869,305
Total equity and liabilities		211,404,964	175,245,988
Net current liabilities		15,039,289	26,965,432
Total assets less current liabilities		165,479,930	129,710,166

The consolidated financial statements on pages 143 to 265 were approved and authorized for issue by the Board on 23 March 2023 and are signed on its behalf by:

HE Xi
Director

GAO Ping
Director

The notes on pages 150 to 265 are an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2022

	Attributable to equity holders of the Company						
	Share capital (Note 32) RMB'000	Other equity instruments (Note 34) RMB'000	Other reserves (Note 35) RMB'000	Retained earnings (Note 35) RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 31 December 2021	20,418,001	2,997,600	7,074,468	5,316,837	35,806,906	16,077,891	51,884,797
Effect of application of Amendments to HKAS 16 (Note 2.2)	–	–	–	245,562	245,562	246,324	491,886
At 1 January 2022 (restated)	20,418,001	2,997,600	7,074,468	5,562,399	36,052,468	16,324,215	52,376,683
Profit for the year	–	–	–	2,648,051	2,648,051	37,287	2,685,338
Profit attributable to holders of other equity instruments	–	167,211	–	(167,211)	–	–	–
Other comprehensive income for the year:							
Fair value loss on equity instruments at FVTOCI, net of tax	–	–	(760,724)	–	(760,724)	(7,388)	(768,112)
Fair value loss on debt instruments at FVTOCI, net of tax	–	–	(1,214)	–	(1,214)	(195)	(1,409)
Release on derecognition of debt instruments at FVTOCI, net of tax	–	–	599	–	599	262	861
Exchange differences on translation of foreign operations	–	–	(28)	–	(28)	(16)	(44)
Total comprehensive income/(expense) for the year	–	167,211	(761,367)	2,480,840	1,886,684	29,950	1,916,634
Shares issued for acquisition of subsidiaries (Note 32)	4,090,985	–	–	–	4,090,985	–	4,090,985
Share-based payment expenses (Note 33)	–	–	28,802	–	28,802	–	28,802
Issuance of perpetual debts (Note 34)	–	5,608,720	–	–	5,608,720	–	5,608,720
Transfer to statutory reserves	–	–	429,551	(429,551)	–	–	–
Capital injections from non-controlling shareholders of subsidiaries	–	–	–	–	–	3,837,954	3,837,954
Acquisitions of subsidiaries (Note 48)	–	–	–	–	–	1,358,647	1,358,647
Disposal of interests in subsidiaries without loss of control (Note 47(a))	–	–	(23,095)	–	(23,095)	1,108,275	1,085,180
Disposal of subsidiaries (Note 47(b))	–	–	–	–	–	(549,439)	(549,439)
Dividends paid to non-controlling interests	–	–	–	–	–	(488,142)	(488,142)
Distributions to holders of other equity instruments	–	(134,250)	–	–	(134,250)	–	(134,250)
Transfer of reserves upon disposal of equity instruments at FVTOCI	–	–	(15,560)	15,560	–	–	–
2021 final dividend (Note 13)	–	–	–	(541,669)	(541,669)	–	(541,669)
Total transactions recognized directly in equity	4,090,985	5,474,470	419,698	(955,660)	9,029,493	5,267,295	14,296,788
At 31 December 2022	24,508,986	8,639,281	6,732,799	7,087,579	46,968,645	21,621,460	68,590,105

Consolidated Statement of Changes in Equity

For the year ended 31 December 2022

	Attributable to equity holders of the Company						
	Share capital (Note 32) RMB'000	Other equity instruments (Note 34) RMB'000	Other reserves (Note 35) RMB'000	Retained earnings (Note 35) RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 31 December 2020	17,268,192	3,015,740	5,503,806	7,610,069	33,397,807	12,392,110	45,789,917
Effect of application of Amendments to HKAS 16	–	–	–	(13,874)	(13,874)	683	(13,191)
At 1 January 2021 (restated)	17,268,192	3,015,740	5,503,806	7,596,195	33,383,933	12,392,793	45,776,726
(Loss)/profit for the year (restated)	–	–	–	(256,257)	(256,257)	932,553	676,296
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	–	134,250	1,587,858	(390,507)	1,331,601	958,969	2,290,570
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	–	–	–	–	–	47,904	47,904
Acquisition of non-controlling interests	–	–	11,544	–	11,544	(14,808)	(3,264)
Disposal of interests in a subsidiary without loss of control	–	–	(393,746)	–	(393,746)	2,969,746	2,576,000
Disposal of subsidiaries	–	–	–	–	–	63,326	63,326
Disposal of equity interests in a subsidiary	–	–	(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	(152,390)	(17,196)	(1,643,289)	1,336,934	2,972,453	4,309,387
At 31 December 2021 (restated)	20,418,001	2,997,600	7,074,468	5,562,399	36,052,468	16,324,215	52,376,683

The notes on pages 150 to 265 are an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows

For the year ended 31 December 2022

	Notes	Year ended 31 December 2022 RMB'000	2021 RMB'000 (restated)
Cash flows from operating activities			
Net cash generated from operating activities	44(a)	5,725,614	1,547,926
Cash flows from investing activities			
Payments for property, plant and equipment and prepayments for construction of power plants		(17,595,752)	(17,165,399)
Payments for right-of-use assets		(498,025)	(478,414)
Proceeds from disposal of property, plant and equipment		15,312	23,737
Net cash outflow on acquisitions of subsidiaries	48	(1,510,983)	(441,274)
Net cash inflow/(outflow) on disposal of subsidiaries	47(b)	1,264,010	(23,999)
Net cash inflow on disposal of assets and liabilities associated with a disposal group classified as held for sale		–	9,659
Net cash inflow on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate		–	204,051
Investments in associates		(1,119,811)	(414,617)
Investments in joint ventures		(55,024)	(270,453)
Capital injections to associates, joint ventures and equity instruments at FVTOCI		(675,450)	(501,052)
Dividends received		26,832	272,550
Interests received		131,371	49,049
(Increase)/decrease in restricted deposits		(57,587)	15,025
Net cash used in investing activities		(20,075,107)	(18,721,137)
Cash flows from financing activities			
Drawdown of bank borrowings	44(b)	45,458,779	63,393,033
Drawdown of borrowings from related parties	44(b)	11,670,054	7,943,406
Drawdown of other borrowings	44(b)	12,307,218	9,800,325
Capital injections from non-controlling shareholders of subsidiaries		3,837,954	479,747
Proceeds from disposal of equity interests in subsidiaries without loss of control	47(a)	1,085,180	2,576,000
Acquisition of non-controlling interests		–	(3,264)
Issuance of perpetual debts	34	5,608,720	–
Net proceeds from issuance of ordinary shares		–	3,149,809
Repayment of bank borrowings	44(b)	(45,086,454)	(53,123,829)
Repayment of borrowings from related parties	44(b)	(10,288,043)	(8,696,090)
Repayment of other borrowings	44(b)	(4,620,000)	(5,010,000)
Payments for lease liabilities	44(b)	(1,985,982)	(1,058,158)
Dividend paid		(556,576)	(1,286,543)
Distributions to holders of other equity instruments	34	(134,250)	(134,250)
Dividends paid to non-controlling interests		(488,142)	(421,730)
Net cash generated from financing activities		16,808,458	17,608,456
Net increase in cash and cash equivalents		2,458,965	435,245
Cash and cash equivalents at 1 January (note)		1,766,632	1,318,331
Exchange gain, net		2,502	13,056
Cash and cash equivalents at 31 December	31	4,228,099	1,766,632

Note: The balance at 1 January 2021 included RMB1,980,000 as part of a then disposal group classified as held for sale.

The notes on pages 150 to 265 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 generation and sales of electricity in the People's Republic of China (the "PRC"), including investment, development, operation and management of hydropower, wind power, photovoltaic power and thermal power plants, and the provision of energy storage, green power transportation and integrated intelligent energy solution services. Its businesses are located in various major power grid regions of 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") regard 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 23 March 2023.

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 for equity instruments and debt instruments which have been measured at fair value.

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 3	*Reference to the Conceptual Framework*
Amendments to Hong Kong Accounting Standard ("HKAS") 16	*Property, Plant and Equipment: Proceeds before Intended Use*
Amendments to HKAS 37	*Onerous Contracts — Cost of Fulfilling a Contract*
Annual Improvements to HKFRSs 2018–2020	*Amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41*

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

Amendments to HKFRS 3

Amendments to HKFRS 3 replace a reference to the previous Framework for the Preparation and Presentation of Financial Statements with a reference to the Conceptual Framework for Financial Reporting issued in 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 has applied the amendments prospectively to business combinations that occurred on or after 1 January 2022. As there were no contingent assets, liabilities and contingent liabilities within the scope of the amendments arising in the business combination that occurred during the period, the amendments did not have any impact on the financial position and performance of the Group.

Amendments to HKAS 16

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

The following adjustments were made to the amounts recognized in the Group's consolidated statement of financial position at 1 January 2022. Line items that were affected by the changes of this accounting standard were shown below:

	As previously reported RMB'000	Effect of application of Amendments to HKAS 16 RMB'000	As restated RMB'000
Property, plant and equipment	128,695,251	491,886	129,187,137
Reserves	12,391,305	245,562	12,636,867
Non-controlling interests	16,077,891	246,324	16,324,215
	28,469,196	491,886	28,961,082

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

The nature and impact of the revised HKFRSs are described below: (Continued)

Amendments to HKAS 16 *(Continued)*

As a result of the application of Amendments to HKAS 16, the relevant line items in the Group's consolidated income statement and comprehensive income and loss per share for the year ended 31 December 2021 have been restated. The following table shows the effect for each individual line item affected:

	As previously reported RMB'000	Effect of application of Amendments to HKAS 16 RMB'000	As restated RMB'000
Revenue	34,734,288	742,415	35,476,703
Fuel costs	(17,937,891)	(115,985)	(18,053,876)
Depreciation	(6,092,620)	(7,017)	(6,099,637)
Staff costs	(3,334,389)	(16,239)	(3,350,628)
Repairs and maintenance	(867,430)	(865)	(868,295)
Consumables	(423,064)	(1,078)	(424,142)
Other operating expenses	(2,435,123)	(96,154)	(2,531,277)
Operating profit	4,600,867	505,077	5,105,944
Profit before taxation	533,166	505,077	1,038,243
Profit for the year	171,219	505,077	676,296
Attributable to equity holders of the Company	(515,693)	259,436	(256,257)
Attributable to non-controlling interests	686,912	245,641	932,553
Total comprehensive income for the year	1,785,493	505,077	2,290,570
Attributable to equity holders of the Company	1,072,165	259,436	1,331,601
Attributable to non-controlling interests	713,328	245,641	958,969
Loss per share for loss attributable to ordinary shareholders of the Company (expressed in RMB per share)			
— Basic and diluted	(0.07)	0.03	(0.04)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

The nature and impact of the revised HKFRSs are described below: (Continued)

Amendments to HKAS 16 *(Continued)*

As a result of the application of Amendments to HKAS 16, the relevant line items in the Group's consolidated income statement and comprehensive income for the year ended 31 December 2022 which have been affected are shown below:

	Before the application of Amendments to HKAS 16 RMB'000	Effect of application of Amendments to HKAS 16 RMB'000	After the application of Amendments to HKAS 16 RMB'000
Revenue	43,620,451	68,678	**43,689,129**
Depreciation	(7,635,956)	(25,084)	**(7,661,040)**
Other operating expenses	(2,836,273)	(4,557)	**(2,840,830)**
Operating profit	7,565,225	39,037	**7,604,262**
Profit before taxation	3,305,030	39,037	**3,344,067**
Profit for the year	2,646,301	39,037	**2,685,338**
Attributable to equity holders of the Company	2,601,480	46,571	**2,648,051**
Attributable to non-controlling interests	44,821	(7,534)	**37,287**
Total comprehensive income for the year	1,877,597	39,037	**1,916,634**
Attributable to equity holders of the Company	1,840,113	46,571	**1,886,684**
Attributable to non-controlling interests	37,484	(7,534)	**29,950**

As a result of the application of Amendments to HKAS 16, the relevant line items in the Group's consolidated statement of cash flows for the year ended 31 December 2021 have been restated. The following table shows the effect for each individual line item affected:

	As previously reported RMB'000	Effect of application of Amendments to HKAS 16 RMB'000	As restated RMB'000
Net cash generated from operating activities	1,342,374	205,552	1,547,926
Payments for property, plant and equipment and prepayments for construction of power plants	(16,959,847)	(205,552)	(17,165,399)
Net cash used in investing activities	(18,515,585)	(205,552)	(18,721,137)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

The nature and impact of the revised HKFRSs are described below: (Continued)

Amendments to HKAS 16 *(Continued)*

As a result of the application of Amendments to HKAS 16, the relevant line items in the Group's consolidated statement of cash flows for the year ended 31 December 2022 which have been affected are shown below:

	Before the application of Amendments to HKAS 16 RMB'000	Effect of application of Amendments to HKAS 16 RMB'000	After the application of Amendments to HKAS 16 RMB'000
Net cash generated from operating activities	5,609,931	115,683	**5,725,614**
Payments for property, plant and equipment and prepayments for construction of power plants	(17,480,069)	(115,683)	**(17,595,752)**
Net cash used in investing activities	(19,959,424)	(115,683)	**(20,075,107)**

Amendments to HKAS 37

Amendments to HKAS 37 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 Group has applied the amendments prospectively to contracts for which it has not yet fulfilled all its obligations at 1 January 2022 and no onerous contracts were identified. Therefore, the amendments did not have any impact on the financial position or performance of the Group.

Annual Improvements to HKFRSs 2018–2020

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. The Group has applied the amendment prospectively from 1 January 2022. As there was no modification or exchange of the Group's financial liabilities during the year, the amendment did not have any impact on the financial position or performance of the Group.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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 10 and HKAS 28 (2011)	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
Amendments to HKFRS 16	*Lease Liability in a Sale and Leaseback*[2]
HKFRS 17 and Amendments to HKFRS 17	*Insurance Contracts*[1]
Amendments to HKAS 1	*Classification of Liabilities as Current or Non-current (the "2020 Amendments")*[2,4]
Amendments to HKAS 1	*Non-current Liabilities with Covenants (the "2022 Amendments")*[2]
Amendments to HKAS 1 and HKFRS Practice Statement 2	*Disclosure of Accounting Policies*[1]
Amendments to HKAS 8	*Definition of Accounting Estimates*[1]
Amendments to HKAS 12	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*[1]

1 Effective for annual periods beginning on or after 1 January 2023

2 Effective for annual periods beginning on or after 1 January 2024

3 No mandatory effective date yet determined but available for adoption

4 As a consequence of the 2022 Amendments, the effective date of the 2020 Amendments was deferred to annual periods beginning on or after 1 January 2024. In addition, as a consequence of the 2020 Amendments and 2022 Amendments, 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 to align the corresponding wording with no change in conclusion

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

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 and are not expected to have any significant impact on the Group's consolidated financial statements.

Amendments to HKFRS 16 specify the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction to ensure the seller-lessee does not recognise any amount of the gain or loss that relates to the right of use it retains. The amendments are effective for annual periods beginning on or after 1 January 2024 and shall be applied retrospectively to sale and leaseback transactions entered into after the date of initial application of HKFRS 16 (i.e., 1 January 2019). Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

Amendments to HKAS 1 Classification of Liabilities as Current or Non-current clarify the requirements for classifying liabilities as current or non-current, in particular the determination over whether an entity has a right to defer settlement of the liabilities for at least 12 months after the reporting period. 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. In 2022, the HKICPA issued the 2022 Amendments to further clarify that, among covenants of a liability arising from a loan arrangement, only those with which an entity must comply on or before the reporting date affect the classification of that liability as current or non-current. In addition, the 2022 Amendments require additional disclosures by an entity that classifies liabilities arising from loan arrangements as non-current when it has a right to defer settlement of those liabilities that are subject to the entity complying with future covenants within 12 months after the reporting period. The amendments are effective for annual periods beginning on or after 1 January 2024 and shall be applied retrospectively. Earlier application is permitted. An entity that applies the 2020 Amendments early is required to apply simultaneously the 2022 Amendments, and vice versa. The Group is currently assessing the impact of the amendments and whether existing loan agreements may require revision. Based on a preliminary assessment, the amendments are not expected to have any significant impact on the Group's consolidated 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 revisiting the accounting policy disclosures to ensure consistency with the amendments.

Amendments to HKAS 8 clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The 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 consolidated financial statements.

Amendments to HKAS 12 narrow the scope of the initial recognition exception in HKAS 12 so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognise a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability for temporary differences arising from these transactions. The 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 amendments are not expected to have any significant impact on the Group's consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

- 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Consolidation *(Continued)*

(a) Subsidiaries *(Continued)*

(i) Business combinations (Continued)

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.

(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 negative goodwill.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Consolidation *(Continued)*

(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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Consolidation *(Continued)*

(c) Joint ventures *(Continued)*

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.

2.5 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 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 2.10(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.

2.7 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 2.6 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.

2.8 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.8 Intangible assets *(Continued)*

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 and franchise rights as disclosed in Note 19.

2.9 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.

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 asset 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.9 Leases *(Continued)*

The Group as a lessee *(Continued)*

Right-of-use assets (Continued)

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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.9 Leases *(Continued)*

The Group as a lessee *(Continued)*

Lease liabilities (Continued)

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.

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. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 Impairment of non-financial assets *(Continued)*

(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.

2.11 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Financial assets *(Continued)*

Classification and subsequent measurement of financial assets *(Continued)*

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.

(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 is 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

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.

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)

2.11 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)

2.11 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)

2.12 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 and other perpetual instruments 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 consolidated 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 Group or the counterparty.

2.13 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.

2.14 Inventories

Inventories comprise coal, oil, energy storage equipment, 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)

2.15 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 remains 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.

2.16 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)

2.16 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 are 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)

2.17 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.

(c) Share-based payments

The Group operates a share option scheme for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including Directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services in exchange for equity instruments ("equity-settled transactions").

The cost of equity-settled transactions is recognized in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognized for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the consolidated income statement for a period represents the movement in the cumulative expense recognized as at the beginning and end of that period.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 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.

2.19 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.

2.20 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.

2.21 Revenue from contracts with customers

The Group recognizes revenue from sales of electricity to regional and provincial power grid companies, provision of power generation, subcontracting services and sales of energy storage equipment.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.21 Revenue from contracts with customers *(Continued)*

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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.21 Revenue from contracts with customers *(Continued)*

Principal versus agent *(Continued)*

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.

(iii) Sales of energy storage equipment

Revenue from the sales of energy storage equipment, at the point of time when control of the promised assets has been transferred to the buyer, provided that the Group maintains neither managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold.

2.22 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.

2.23 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. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.24 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 and franchise rights) 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 and franchise rights) 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 future sales volume, expected tariff rates, fuel costs (if applicable), staff costs, the discount rates, growth rate and the beneficial period for the favourable tariff contracts (of applicable) 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 2022, 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 "Thermal power 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 2022, the carrying amounts of property, plant and equipment, right-of-use assets, goodwill and other intangible assets (favourable tariff contracts and franchise rights) were RMB142,306,292,000, RMB6,893,878,000, RMB832,388,000 and RMB8,286,390,000 (2021 (restated): RMB129,187,137,000, RMB6,152,184,000, RMB1,083,293,000 and RMB934,800,000) respectively, of which the impairment of property, plant and equipment of RMB14,142,000 (2021: RMB1,004,000) and impairment of goodwill of RMB250,905,000 (2021: Nil) 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 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 2022, the provisions for Inundation Compensation were RMB1,971,993,000 (2021: RMB1,972,664,000). For the year ended 31 December 2022, management has reviewed and performed assessment on such provisions to reflect the current best estimate and no additional provisions (2021: Nil) 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 2022, the carrying amount of property, plant and equipment, other than construction in progress, was RMB135,670,822,000 (2021 (restated): RMB115,059,182,000).

4. TURNOVER, REVENUE AND SEGMENT INFORMATION

Revenue, representing turnover net of sales related taxes, recognized during the year is as follows:

	2022 RMB'000	2021 RMB'000 (restated)
Types of goods or services:		
Sales of electricity to regional and provincial power grid companies (note (a))	42,582,596	34,745,238
Provision of power generation (note (b))	210,273	151,861
Energy storage revenue (note (c))	896,260	579,604
	43,689,129	35,476,703
Timing of revenue recognition:		
Goods — at a point in time	43,587,414	34,897,099
Services — over time	101,715	579,604
	43,689,129	35,476,703

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) Energy storage revenue includes income from the project development and integration of energy storage power stations, sales of energy storage equipment, sales of stored electricity and leasing of electricity storage capacities.

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 2022							
	Thermal power 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	28,445,548	4,685,036	5,230,349	4,221,663	–	42,582,596	–	42,582,596
Provision of power generation	137,718	–	2,090	70,465	–	210,273	–	210,273
Energy storage revenue	–	–	–	–	896,260	896,260	–	896,260
	28,583,266	4,685,036	5,232,439	4,292,128	896,260	43,689,129	–	43,689,129
Segment results	730,885	1,117,060	2,665,410	2,131,527	43,219	6,688,101	–	6,688,101
Unallocated income	–	–	–	–	–	–	343,248	343,248
Unallocated gains	–	–	–	–	–	–	572,913	572,913
Operating profit	730,885	1,117,060	2,665,410	2,131,527	43,219	6,688,101	916,161	7,604,262
Finance income	7,714	14,474	8,010	39,173	855	70,226	83,398	153,624
Finance costs	(1,367,630)	(778,446)	(1,026,757)	(1,039,090)	(3,973)	(4,215,896)	(45,065)	(4,260,961)
Share of results of associates	(319,800)	4,606	59,770	30,333	–	(225,091)	69,858	(155,233)
Share of results of joint ventures	(119,377)	–	96,958	–	–	(22,419)	24,794	2,375
(Loss)/profit before taxation	(1,068,208)	357,694	1,803,391	1,161,943	40,101	2,294,921	1,049,146	3,344,067
Income tax (expense)/credit	(322,394)	(96,309)	(95,890)	(138,265)	(5,881)	(658,739)	10	(658,729)
(Loss)/profit for the year	(1,390,602)	261,385	1,707,501	1,023,678	34,220	1,636,182	1,049,156	2,685,338
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	1,880,414	1,278,812	5,836,779	10,511,035	455,444	19,962,484	370,000	20,332,484
Depreciation of property, plant and equipment	2,388,746	1,667,443	1,879,957	1,281,748	13,317	7,231,211	53,739	7,284,950
Depreciation of right-of-use assets	64,987	29,483	66,660	177,789	2,298	341,217	34,873	376,090
Amortization of other intangible assets	40,205	–	35,561	61,897	–	137,663	–	137,663
Loss/(gain) on disposal of property, plant and equipment, net	233	–	(33)	(936)	–	(736)	85	(651)
Impairment of property, plant and equipment	14,142	–	–	–	–	14,142	–	14,142
Impairment of goodwill	67,712	183,193	–	–	–	250,905	–	250,905
Gain on disposal of subsidiaries (pre-tax), net	(497,343)	–	–	(8,866)	–	(506,209)	(4,654)	(510,863)
Gain on remeasurement of remaining equity interests in associates after loss of control over subsidiaries	(154,337)	–	–	–	–	(154,337)	–	(154,337)
Gain on recognition of negative goodwill	–	–	–	–	–	–	(1,551,609)	(1,551,609)
(Reversal)/provision of impairment of amounts due from related parties and other receivables	(333)	(32,010)	2,220	246	–	(29,877)	2,097	(27,780)

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

	As at 31 December 2022							
	Thermal power 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	42,122,040	38,240,726	62,274,898	46,349,727	2,177,820	191,165,211	–	191,165,211
Goodwill	–	585,751	–	246,637	–	832,388	–	832,388
Interests in associates	2,243,623	23,930	781,586	422,586	–	3,471,725	1,983,457	5,455,182
Interests in joint ventures	129,037	–	644,667	39,653	–	813,357	387,657	1,201,014
	44,494,700	38,850,407	63,701,151	47,058,603	2,177,820	196,282,681	2,371,114	198,653,795
Equity instruments at FVTOCI	–	–	–	–	–	–	4,131,667	4,131,667
Deferred income tax assets	–	–	–	–	–	–	288,300	288,300
Other unallocated assets	–	–	–	–	–	–	8,331,202	8,331,202
Total assets per consolidated statement of financial position	44,494,700	38,850,407	63,701,151	47,058,603	2,177,820	196,282,681	15,122,283	211,404,964
Segment liabilities								
Other segment liabilities	(5,525,298)	(3,963,718)	(5,963,257)	(7,528,845)	(1,072,052)	(24,053,170)	–	(24,053,170)
Borrowings	(24,813,007)	(24,377,720)	(34,800,167)	(25,843,726)	(779,432)	(110,614,052)	(2,285,760)	(112,899,812)
	(30,338,305)	(28,341,438)	(40,763,424)	(33,372,571)	(1,851,484)	(134,667,222)	(2,285,760)	(136,952,982)
Deferred income tax liabilities	–	–	–	–	–	–	(2,275,328)	(2,275,328)
Tax payable	–	–	–	–	–	–	(370,396)	(370,396)
Other unallocated liabilities	–	–	–	–	–	–	(3,216,153)	(3,216,153)
Total liabilities per consolidated statement of financial position	(30,338,305)	(28,341,438)	(40,763,424)	(33,372,571)	(1,851,484)	(134,667,222)	(8,147,637)	(142,814,859)

4. TURNOVER, REVENUE AND SEGMENT INFORMATION (CONTINUED)

Segment information *(Continued)*

	Year ended 31 December 2021 (restated)							
	Thermal power 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	22,095,718	5,342,709	4,000,768	3,306,043	–	34,745,238	–	34,745,238
Provision of power generation	75,052	4,843	2,137	69,829	–	151,861	–	151,861
Energy storage revenue	–	–	–	–	579,604	579,604	–	579,604
	22,170,770	5,347,552	4,002,905	3,375,872	579,604	35,476,703	–	35,476,703
Segment results	(510,499)	1,982,626	2,519,319	1,611,922	63,413	5,666,781	–	5,666,781
Unallocated income	–	–	–	–	–	–	367,500	367,500
Unallocated expenses	–	–	–	–	–	–	(928,337)	(928,337)
Operating (loss)/profit	(510,499)	1,982,626	2,519,319	1,611,922	63,413	5,666,781	(560,837)	5,105,944
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	(2,193,672)	1,174,120	1,844,296	661,881	63,245	1,549,870	(511,627)	1,038,243
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	(2,101,429)	945,715	1,760,933	593,536	42,093	1,240,848	(564,552)	676,296
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	2,447,551	732,314	9,166,302	5,261,850	296,525	17,904,542	319,430	18,223,972
Depreciation of property, plant and equipment	2,151,655	1,532,352	960,688	1,035,735	54	5,680,484	41,417	5,721,901
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 (restated)							
	Thermal power 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	45,172,060	37,103,681	39,748,390	34,717,414	830,503	157,572,048	–	157,572,048
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
	47,390,152	37,892,884	41,057,683	35,160,432	830,503	162,331,654	1,279,186	163,610,840
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	47,390,152	37,892,884	41,057,683	35,160,432	830,503	162,331,654	12,914,334	175,245,988
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)*

All revenue from external customers is generated from the PRC.

As at 31 December 2022, except for cash and bank balances equivalent to RMB126,379,000 (2021: RMB284,818,000) 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 2022, the Group's external revenue amounting to RMB18,820,438,000 (2021: RMB18,843,414,000) was generated from three (2021: four) major customers, each of which accounted for 10% or more of the Group's external revenue.

For the year ended 31 December 2022, 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	17%	Thermal power electricity
Customer B	14%	Thermal power electricity, Wind power electricity and Photovoltaic power electricity
Customer C	13%	Thermal power electricity, Wind power electricity and Photovoltaic power electricity

5. OTHER INCOME

	2022 RMB'000	2021 RMB'000
Rental income	35,887	16,530
Hotel operations income	–	1,540
Income from provision of repairs and maintenance services	141,932	209,691
Dividend income (Note 49(a)(ii))	–	39,962
Income from provision of IT and other services	546,047	246,049
Others	23,184	–
	747,050	513,772

6. STAFF COSTS (INCLUDING DIRECTORS' EMOLUMENTS)

	2022 RMB'000	2021 RMB'000 (restated)
Wages, salaries and bonuses	2,408,883	2,236,368
Staff welfare	963,813	718,915
Share-based payment expenses (Note 33)	28,802	–
Pension costs — defined contribution plans	438,693	395,345
	3,840,191	3,350,628

7. OTHER GAINS AND LOSSES, NET

	2022 RMB'000	2021 RMB'000
Amortization of deferred income	21,359	34,092
Government subsidies	288,850	70,767
Gain on disposal of property, plant and equipment, net	651	1,270
Gain/(loss) on disposal of subsidiaries (pre-tax), net (Note 47(b))	510,863	(113,229)
Gain on disposal of assets and liabilities associated with a disposal group classified as held for sale	–	80,109
Gain on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate	–	242,283
Gain on remeasurement of remaining equity interests in associates after loss of control over subsidiaries (Note 47(b))	154,337	–
Gain on recognition of negative goodwill (Note 48)	1,551,609	–
Profits on sales of unused power production quota	1,648	209,555
Profits on sales of heat, trading of coal, coal by-products, spare parts and others	63,744	345,297
Profits on trading of electricity	56,302	17,905
Impairment of property, plant and equipment (Note 15)	(14,142)	(1,004)
Impairment of goodwill (Note 18)	(250,905)	–
Others	131,329	67,027
	2,515,645	954,072

8. OTHER OPERATING EXPENSES

	2022 RMB'000	2021 RMB'000 (restated)
Amortization of other intangible assets (Note 19)	137,663	54,873
Research and development expenses	228,469	209,991
Lease expenses	55,243	36,690
Reversal of impairment of amounts due from related parties and other receivables (Note 46.2(d)(iii))	(27,780)	(1,696)
Reservoir maintenance and usage fees	69,939	70,596
Power and heat generation costs	957,118	801,907
Cost of purchase of unused power production quota	2,227	10,944
Administrative and selling related expenses	521,054	530,460
Taxes and surcharges	374,084	330,379
Others	522,813	487,133
	2,840,830	2,531,277

9. OPERATING PROFIT

Operating profit is stated after charging/(crediting) the following:

	2022 RMB'000	2021 RMB'000 (restated)
Amortization of other intangible assets	137,663	54,873
Auditor's remuneration	7,358	6,943
Research and development expenses	228,469	209,991
Depreciation:		
— property, plant and equipment (Note 15)	7,284,950	5,721,901
— right-of-use assets (Note 16)	376,090	377,736
Lease expenses:		
— equipment	28,842	23,141
— leasehold land and buildings	26,401	13,549
Reversal of impairment of amounts due from related parties and other receivables	(27,780)	(1,696)
Reservoir maintenance and usage fees	69,939	70,596
Cost of purchase of unused power production quota	2,227	10,944

10. FINANCE INCOME AND FINANCE COSTS

	2022 RMB'000	2021 RMB'000
Finance income		
Interest income from bank deposits	46,550	23,406
Interest income from related parties (Note 49(a)(i))	84,075	26,861
Interest income from discounting effect on clean energy power price premium receivable (Note 26(b))	22,999	76,336
	153,624	126,603
Finance costs		
Interest expense on		
— bank borrowings	3,343,105	3,342,572
— borrowings from related parties (Note 49(b)(iii))	680,494	598,439
— other borrowings	368,947	250,114
— amounts due to related parties (Note 49(b)(iii))	4,836	16,948
— lease liabilities	104,100	172,266
— provisions for other long-term liabilities (Note 40)	104,082	104,054
	4,605,564	4,484,393
Less: amounts capitalized to property, plant and equipment	(337,528)	(579,651)
	4,268,036	3,904,742
Exchange gain, net	(7,075)	(43,242)
	4,260,961	3,861,500

The weighted average interest rate on capitalized borrowings is approximately 3.45% (2021: 3.82%) 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 2022 (2021: Nil).

The provision for PRC current income tax is calculated based on the statutory tax rate of 25% (2021: 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%, 15% or 20% (2021: 7.5%, 12.5% or 15%).

11. INCOME TAX EXPENSE (CONTINUED)

The amount of income tax recognized in the consolidated income statement represents:

	2022 **RMB'000**	2021 RMB'000
PRC current income tax		
Charge for the year	**707,591**	271,245
Under provision in prior years	**3,922**	5,192
	711,513	276,437
Deferred income tax		
(Credit)/charge for the year (Note 23(a))	**(52,784)**	85,510
	658,729	361,947

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:

	2022 **RMB'000**	2021 RMB'000 (restated)
Profit before taxation	**3,344,067**	1,038,243
Less: Share of results of associates	**155,233**	213,524
Share of results of joint ventures	**(2,375)**	119,280
	3,496,925	1,371,047
Calculated at the PRC statutory tax rate of 25% (2021: 25%)	**874,231**	342,762
Effect on tax concession	**(618,009)**	(529,610)
Income not subject to taxation	**(543,879)**	(12,988)
Expenses not deductible for taxation purpose	**99,315**	8,247
Tax losses with no deferred income tax assets recognized (Note 23)	**866,763**	668,424
Deductible temporary differences with no deferred income tax assets recognized (Note 23)	**11,627**	103,090
Utilization of tax losses previously not recognized (Note 23)	**(35,066)**	(38,099)
Utilization of deductible temporary differences previously not recognized (Note 23)	**(175)**	(185,071)
Under provision in prior years	**3,922**	5,192
Income tax expense	**658,729**	361,947

Share of income tax credit attributable to associates and joint ventures for the year ended 31 December 2022 of RMB80,922,000 (2021: RMB59,000,000) and RMB17,924,000 (2021: RMB28,231,000) respectively were included in the Group's share of results of associates and joint ventures respectively.

12. EARNINGS/(LOSS) PER SHARE

(a) Basic

Basic earnings/loss per share is calculated by dividing the profit/loss for the year attributable to ordinary shareholders of the Company by the weighted average number of shares in issue during the year.

	2022	2021 (restated)
Profit/(loss) for the year attributable to equity holders of the Company (RMB'000)	**2,648,051**	(256,257)
Profit for the year attributable to holders of other equity instruments (RMB'000)	**(167,211)**	(134,250)
Profit/(loss) for the year attributable to ordinary shareholders of the Company, used in the basic earnings/(loss) per share calculation (RMB'000)	**2,480,840**	(390,507)
Weighted average number of shares in issue (shares in thousands)	**11,147,639**	9,871,570
Basic earnings/(loss) per share (RMB)	**0.22**	(0.04)

(b) Diluted

For the year ended 31 December 2022, the computation of diluted earnings per share did not assume the exercise of the Company's share options as the exercise prices of these options were higher than the average market share price of the Company's shares during the year since dates of grant.

For the year ended 31 December 2021, the dilutive loss per share was same as basic loss per share as there was no dilutive potential ordinary shares outstanding during that year.

13. DIVIDENDS

	2022 RMB'000	2021 RMB'000
Final, proposed, dividend of RMB0.11 (2021: RMB0.05) per ordinary share	**1,360,717**	541,669
2021 final dividend paid — RMB0.05 (equivalent to HK$0.0616) per ordinary share	**541,669**	–
2020 final dividend paid — RMB0.13 (equivalent to HK$0.1556) per ordinary share	**–**	1,274,895
	541,669	1,274,895

At the Board meeting held on 23 March 2023, the Board recommended the payment of a final dividend for the year ended 31 December 2022 of RMB0.11 (equivalent to HK$0.1256 at the exchange rate announced by PBOC on 23 March 2023) per ordinary share (2021: RMB0.05 (equivalent to HK$0.0616) per ordinary share), totalling RMB1,360,717,000 (equivalent to HK$1,553,691,000) (2021: RMB541,669,000 (equivalent to HK$667,337,000)), which is based on 12,370,150,983 shares (2021: 10,833,386,321 shares) in issue on 23 March 2023 (2021: 17 March 2022).

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 2023.

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	Share-based payment expenses (note) RMB'000	Employer's contribution to pension plans RMB'000	Total RMB'000
Year ended 31 December 2022						
Executive Directors						
Mr. HE Xi[(1)]	–	540	446	318	93	1,397
Mr. GAO Ping[(2)]	–	458	167	318	113	1,056
Mr. TIAN Jun[(3)]	–	–	111	–	–	111
Non-executive Directors						
Mr. WANG Xianchun[(4)]	–	–	–	–	–	–
Mr. ZHOU Jie[(5)]	–	–	–	–	–	–
Mr. XU Zuyong[(6)]	–	–	–	–	–	–
Independent non-executive Directors						
Mr. LI Fang	177	166	–	–	–	343
Mr. YAU Ka Chi	177	166	–	–	–	343
Mr. HUI Hon Chung, Stanley[(8)]	177	158	–	–	–	335
	531	1,488	724	636	206	3,585

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[(7)]	–	–	–	–	–
Independent non-executive Directors					
Mr. LI Fang	164	156	–	–	320
Mr. YAU Ka Chi	164	156	–	–	320
Mr. HUI Hon Chung, Stanley[(8)]	82	98	–	–	180
Mr. KWONG Che Keung, Gordon[(9)]	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)*

(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. For the year ended 31 December 2022, the discretionary bonus represented the back pay performance bonus for year 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. XU Zuyong was appointed as a non-executive Director with effect from 25 February 2022. Mr. XU had agreed to waive his director fees during his directorship with the Company.

(7) 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.

(8) Mr. HUI Hon Chung, Stanley was appointed as an independent non-executive Director with effect from 3 June 2021.

(9) 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 (2021: two) Directors. The emoluments payable to the remaining three (2021: three) individuals during the year are as follows:

	2022 RMB'000	2021 RMB'000
Basic salaries, housing allowance, other allowances and benefits in kind	1,474	1,966
Discretionary bonuses	797	855
Share-based payment expenses (note)	668	–
Employer's contribution to pension plans	228	220
	3,167	3,041

Their emoluments fell within the following bands:

	Number of individuals	
	2022	2021
HK$1,000,001 to HK$1,500,000 (equivalent to RMB893,001 to RMB1,340,000 (2021: RMB818,000 to RMB1,227,000))	3	3

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	
	2022	2021
Nil to HK$1,000,000 (equivalent to RMB893,000 (2021: RMB818,000))	5	5
HK$1,000,001 to HK$1,500,000 (equivalent to RMB893,001 to RMB1,340,000 (2021: RMB818,001 to RMB1,227,000))	6	7

Note:

The remuneration in form of share-based payment expenses are the fair values of share options granted to executive Directors and eligible employees, which are determined at the respective dates of grant and expensed over the vesting period (unless the share options are forfeited before vesting), regardless of whether these share options are exercised or not during the year.

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 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
Effect of application of Amendments to HKAS 16 (Note 2.2)	–	–	469,850	–	–	–	29,053	498,903
At 1 January 2022 (restated)	26,362,406	29,359,770	82,705,611	10,477,960	7,560,304	524,442	14,207,112	171,197,605
Additions and transfer from prepayments	–	999	3,888	8,440	38,940	4,978	16,469,145	16,526,390
Acquisitions of subsidiaries (Note 48)	–	725,296	10,102,394	600,102	369,700	7,636	130,683	11,935,811
Disposals	–	(1,020)	(16,582)	(14,550)	(20,178)	(3,967)	(16,395)	(72,692)
Disposal of subsidiaries (Note 47(b))	–	(4,082,324)	(10,865,347)	(1,807,364)	(1,577,580)	(95,179)	(283,888)	(18,711,682)
Reclassified from right-of-use assets (Note 16)	–	8,921	243,028	–	39,028	–	–	290,977
Transfer between categories	6,272	1,807,890	21,394,085	402,814	178,166	19,198	(23,808,425)	–
At 31 December 2022	26,368,678	27,819,532	103,567,077	9,667,402	6,588,380	457,108	6,698,232	181,166,409
Accumulated depreciation and impairment losses								
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
Effect of application of Amendments to HKAS 16 (Note 2.2)	–	–	7,017	–	–	–	–	7,017
At 1 January 2022 (restated)	5,646,688	8,881,486	20,196,840	3,876,575	2,935,370	394,352	79,157	42,010,468
Depreciation charge for the year (Note 9)	913,746	1,008,678	4,520,508	421,539	363,095	57,384	–	7,284,950
Impairment loss recognized for the year (note (e))	–	–	–	–	–	–	14,142	14,142
Disposals (note (f))	–	(34)	(13,211)	(4,178)	(15,006)	(3,638)	(16,395)	(52,462)
Disposal of subsidiaries (Note 47(b)) (note (f))	–	(2,192,848)	(5,773,831)	(1,238,411)	(1,093,537)	(84,212)	(14,142)	(10,396,981)
At 31 December 2022	6,560,434	7,697,282	18,930,306	3,055,525	2,189,922	363,886	62,762	38,860,117
Net book value								
At 31 December 2022	19,808,244	20,122,250	84,636,771	6,611,877	4,398,458	93,222	6,635,470	142,306,292

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 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
Effect of application of Amendments to HKAS 16	–	–	(1,378)	–	–	–	(11,813)	(13,191)
At 1 January 2021 (restated)	26,403,174	27,906,392	62,738,677	9,777,518	6,779,039	509,946	15,283,681	149,398,427
Additions and transfer from prepayments (restated)	–	46,096	477,585	4,598	50,558	9,956	17,745,056	18,333,849
Acquisitions of subsidiaries	–	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 (restated)	26,362,406	29,359,770	82,705,611	10,477,960	7,560,304	524,442	14,207,112	171,197,605
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 (restated) (Note 9)	820,647	925,169	3,107,072	436,455	383,727	48,831	–	5,721,901
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 (restated)	5,646,688	8,881,486	20,196,840	3,876,575	2,935,370	394,352	79,157	42,010,468
Net book value								
At 31 December 2021 (restated)	20,715,718	20,478,284	62,508,771	6,601,385	4,624,934	130,090	14,127,955	129,187,137

15. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Notes:

(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 2022, the legal titles of certain properties of the Group with a net book value of RMB1,757,081,000 (2021: RMB2,707,254,000) 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 2022, certain property, plant and equipment of the Group with a net book value of RMB1,849,800,000 (2021: RMB386,243,000) were pledged as security for certain bank borrowings (Note 36(d)).

(d) For the year ended 31 December 2022, no additional provision was made to the cost of dam arising from review and assessment conducted during the year (2021: Nil).

(e) For the year ended 31 December 2022, management has performed impairment assessment on certain property, plant and equipment with impairment indication included in "Thermal power 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 "Thermal power 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 0% to 2% (2021: 1% to 12%) and from 7.29% to 8.81% (2021: 8.72% to 10.4%) 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 2022 (2021: Nil).

In addition, it was identified that the likelihood of the Group in obtaining necessary approval to continue construction in certain projects in "Thermal power electricity" segment (2021: "Wind power electricity") was remote as at 31 December 2022, as a result, the carrying amounts of these constructions in progress to the extent of RMB14,142,000 (2021: fully RMB1,004,000) (Note 7) was provided for as impairment and was recognized for the year ended 31 December 2022.

(f) During the year ended 31 December 2022, disposals of the Group's property, plant and equipment included impairment losses of RMB16,395,000 (2021: Nil), and disposal of subsidiaries included impairment losses of RMB141,744,000 (2021: RMB70,916,000), which were written back upon the disposal of corresponding property, plant and equipment. As at 31 December 2022, the accumulated impairment losses of property, plant and equipment amounted to RMB283,748,000 (2021: RMB427,745,000).

16. RIGHT-OF-USE ASSETS

	Leasehold lands RMB'000	Buildings RMB'000	Equipment RMB'000	Construction in progress RMB'000	Total RMB'000
Cost					
At 1 January 2022	2,972,331	419,324	3,185,676	244,431	6,821,762
Additions	498,025	83,096	4,382	204,708	790,211
Acquired on acquisitions of subsidiaries (Note 48)	821,203	2,158	34,121	–	857,482
Reclassified to property, plant and equipment (Note 15)	–	(9,221)	(365,646)	–	(374,867)
Disposal of subsidiaries (Note 47(b))	(217,902)	(3,634)	–	–	(221,536)
Early termination	–	(98,379)	–	–	(98,379)
At 31 December 2022	4,073,657	393,344	2,858,533	449,139	7,774,673
Accumulated depreciation					
At 1 January 2022	205,710	127,235	336,633	–	669,578
Depreciation charge for the year (Note 9)	120,376	72,448	183,266	–	376,090
Reclassified to property, plant and equipment (Note 15)	–	(300)	(83,590)	–	(83,890)
Disposal of subsidiaries (Note 47(b))	(38,372)	(756)	–	–	(39,128)
Early termination	–	(41,855)	–	–	(41,855)
At 31 December 2022	287,714	156,772	436,309	–	880,795
Net book value					
At 31 December 2022	3,785,943	236,572	2,422,224	449,139	6,893,878
For the year ended 31 December 2022					
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	–	26,206	28,052	–	54,258
Expenses relating to leases of low-value assets, excluding short-term leases of low value assets	–	195	790	–	985
Additions to right-of-use assets	1,319,228	85,254	38,503	204,708	1,647,693

16. RIGHT-OF-USE ASSETS (CONTINUED)

	Leasehold lands 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	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)

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 2022, 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 2022 and 2021, 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 equipment and machinery. These legal transfers do not satisfy the requirements of HKFRS 15 to be accounted for as sales of the equipment and machinery. During the years ended 31 December 2022 and 2021, 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 2022, the balance of prepayments for construction of power plants includes an amount of RMB1,397,007,000 (2021: RMB752,720,000), which was prepayments to related parties (companies controlled by SPIC other than SPIC Financial Company Limited ("SPIC Financial"), associates and non-controlling shareholders of subsidiaries) for construction of power plants.

18. GOODWILL

	2022 RMB'000	2021 RMB'000
Cost		
At 1 January	1,334,831	1,354,153
Attributable to disposal of a subsidiary	–	(19,322)
At 31 December	1,334,831	1,334,831
Accumulated impairment losses		
At 1 January	251,538	251,538
Impairment loss recognized for the year (Note 7)	250,905	–
At 31 December	502,443	251,538
Net book value		
At 1 January	1,083,293	1,102,615
At 31 December	832,388	1,083,293

Goodwill is allocated to the Group's CGU or groups of CGUs identified according to operating arrangement. The accumulated impairment losses relate to "Thermal power 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:

	Thermal power electricity RMB'000	Hydropower electricity RMB'000	Photovoltaic power electricity RMB'000	Total RMB'000
Cost				
At 31 December 2021	234,651	853,543	246,637	1,334,831
At 31 December 2022	234,651	853,543	246,637	1,334,831
Net book value				
At 31 December 2021	67,712	768,944	246,637	1,083,293
At 31 December 2022	–	585,751	246,637	832,388

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 "Thermal power electricity" segment, the growth rates in electricity sold and pre-tax discount rates used for value in use calculations range was 0% (2021: 0% to 2%) and at 8.63% (2021: 9.07%) 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% (2021: 0% to 2%) and at range from 6.73% to 8.5% (2021: 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% (2021: 0% to 7.2%) and at 9.3% (2021: 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, an aggregate impairment of RMB250,905,000 (2021: Nil) in "Thermal power electricity" segment and "Hydropower electricity" segment has been recognized against the carrying amount of goodwill for the year ended 31 December 2022 for the shortfall of the estimated discounted cash flow as compared to the amount expected.

19. OTHER INTANGIBLE ASSETS

	2022 RMB'000	2021 RMB'000
Cost		
At 1 January	1,097,600	1,097,600
Acquisitions of subsidiaries (Note 48)	7,490,945	–
Disposal of a subsidiary (Note 47(b))	(2,000)	–
At 31 December	8,586,545	1,097,600
Accumulated amortization		
At 1 January	162,800	107,927
Amortization charge for the year (Note 8)	137,663	54,873
Disposal of a subsidiary (Note 47(b))	(308)	–
At 31 December	300,155	162,800
Net book value		
At 1 January	934,800	989,673
At 31 December	8,286,390	934,800

Other intangible assets represent the carrying amount of the favourable tariff contracts and franchise rights acquired on the acquisitions of certain clean energy companies. These intangible assets have finite useful lives and are amortized on a straight-line basis over the period of 5 to 27 years (2021: 17 to 20 years).

The Group acquired the favourable tariff contracts and franchise rights of RMB7,490,945,000 on acquisitions of certain subsidiaries during the current year. Further details are disclosed in Note 48.

20. INTERESTS IN ASSOCIATES

	2022 RMB'000	2021 RMB'000
Cost of investment in associates	**5,568,076**	3,495,970
Share of undistributed post-acquisition reserves	**(112,894)**	30,585
	5,455,182	3,526,555

As at 31 December 2022, interests in associates include goodwill of RMB158,732,000 (2021: 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 2022 and 2021.

Dividends from associates for the year ended 31 December 2022 amounted to RMB23,817,000 (2021: RMB209,462,000).

The followings are the details of the associates as at 31 December 2022:

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/ RMB844,350,952	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/ RMB2,600,000,000	–	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
Shanghai Qiyuanxin Power Technology Co., Ltd. (上海啟源芯動力科技有限公司)	The PRC	RMB320,881,363/ RMB240,480,000	28.65%	–	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/ RMB113,062,500	–	11% (note)	Limited liability company	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
Wuhan Lvda New Energy Co., Ltd. (武漢綠達新能源有限公司)	The PRC	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	–	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/ RMB6,000,000	–	35%	Limited liability company	Provision of technical services
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/ RMB8,099,600	–	45%	Limited liability company	Generation and sale of electricity
China Power Investment Xinnongchuang Technology Co., Ltd.# (中電投新農創科技有限公司)	The PRC	RMB200,000,000	36%	–	Sino-foreign equity joint venture	Energy investment

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
Xinyuan Ronghe (Beijing) Power Co., Ltd. ("Xinyuan Ronghe")# (新源融合(北京)電力有限公司)	The PRC	RMB2,000,000,000/ RMB908,910,472	40%	-	Sino-foreign equity joint venture	Generation and sale of electricity
Beijing CPI Huizhi Technology Co., Ltd ("CP Huizhi")# (北京中電滙智科技有限公司)	The PRC	RMB20,000,000	49%	-	Sino-foreign equity joint venture	Provision of technical services
Chengde Huineng New Energy Technology Co., Ltd.^# (承德輝能新能源科技有限公司)	The PRC	RMB5,000,000/ RMB147,000,000	-	50%	Limited liability company	Generation and sale of electricity
Anhui Power Investment Xintuo Energy Development Co., Ltd.# (安徽電投新拓能源發展有限公司)	The PRC	RMB10,000,000	-	20%	Limited liability company	Generation and sale of electricity
State Power Investment (Haiyang) New Energy Development Co., Ltd.# (國電投(海陽)新能源發展有限公司)	The PRC	RMB564,000,000/ RMB1,200,000,000	-	47%	Limited liability company	Generation and sale of electricity
Wuhan Lvxi New Energy Co., Ltd.^# (武漢綠曦新能源有限公司)	The PRC	RMB379,701,500/ RMB364,701,500	-	20%	Sino-foreign equity joint venture	Generation and sale of electricity
Shanghai Minglu New Energy Co., Ltd.# (上海明綠新能源有限公司)	The PRC	RMB20,000,000	-	35%	Sino-foreign equity joint venture	Generation and sale of electricity
Huayuan Anneng (Tianjin) Energy Investment Partnership (Limited Partnership) ("Huayuan Anneng")^# (華源安能(天津)能源投資合夥企業(有限合夥))	The PRC	RMB1,526,000,000/ RMB215,000,000	-	16.38% (note)	Limited partnership	Energy investment
Diantou Lvdong Fusion New Energy Co., Ltd.^# (電投綠動融和新能源湖北有限公司)	The PRC	RMB500,000,000/ RMB21,500,000	-	35%	Sino-foreign equity joint venture	Generation and sale of electricity

^ Not commenced operation yet.
\# Newly set up or acquired in 2022.

Note:

The Group could exercise significant influence over Sichuan Energy Investment, Gui'an New District, Sujin Energy, Heze Lvyuan, Hunan Energy Big Data and Huayuan Anneng through its representative on their boards of directors, and therefore classified these six companies as associates.

20. INTERESTS IN ASSOCIATES (CONTINUED)

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	
	2022	2021
	RMB'000	RMB'000
Non-current assets	**7,078,818**	7,329,623
Current assets	**1,703,792**	2,321,564
Non-current liabilities	**(2,363,389)**	(2,872,197)
Current liabilities	**(3,390,388)**	(3,607,453)
Net assets	**3,028,833**	3,171,537

Summarized consolidated income statement and consolidated statement of comprehensive income

	Changshu Group	
	2022	2021
	RMB'000	RMB'000
Revenue	**7,996,099**	7,541,338
Loss and total comprehensive expense for the year	**(593,754)**	(446,050)
Interest on perpetual debts classified as equity	**(2,030)**	–
Dividend received from the associate	**–**	160,480

20. INTERESTS IN ASSOCIATES (CONTINUED)

Reconciliation of summarized unaudited financial information

Reconciliation of summarized unaudited financial information presented above to the carrying amount of interests in Changshu Group is as follows:

	Changshu Group	
	2022	2021
	RMB'000	RMB'000
Opening net assets	**3,171,537**	3,938,547
Loss and total comprehensive expense for the year	**(593,754)**	(446,050)
Capital invested by holders of other equity instruments	**451,050**	–
Dividend paid	**–**	(320,960)
Closing net assets	**3,028,833**	3,171,537
Group's share of net assets of associate, excluding perpetual debts	**2,575,753**	3,171,537
Interest in associate (at 50%) — At carrying amount	**1,287,877**	1,585,769

Aggregate information of associates that are not individually material

	2022	2021
	RMB'000	RMB'000
The Group's share of results and total comprehensive income for the year	**142,659**	9,501
Aggregate carrying amount of the Group's interests	**4,167,305**	1,940,786

21. INTERESTS IN JOINT VENTURES

	2022	2021
	RMB'000	RMB'000
Unlisted investments, at cost	**1,462,986**	1,690,212
Share of undistributed post-acquisition reserves	**(105,602)**	(104,898)
Less: Accumulated impairment (note)	**(156,370)**	(156,370)
	1,201,014	1,428,944

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 2022:

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	49%	–	Sino-foreign equity joint venture	Coal mining
Guangzhou Zhongdian Lixin Thermal Electric Co. Ltd. (廣州中電荔新熱電有限公司)	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	RMB1,300,000,000	–	40%	Limited liability company	Energy investment
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
Hubei Power Investment New Energy Investment Co., Ltd.# (湖北電投新能源投資有限公司)	The PRC	RMB250,000,000/ RMB75,343,410	–	40%	Limited liability company	Generation and sale of electricity
Ruihua (Shenzhen) Integrated Smart Energy Co., Ltd.^# (睿華(深圳)綜合智慧能源有限公司)	The PRC	RMB50,000,000	50%	–	Sino-foreign equity joint venture	Provide technical services

^ Not commenced operation yet.
# Newly set up in 2022.

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 2022 and 2021.

Dividend from a joint venture for the year ended 31 December 2022 amounted to RMB3,079,000 (2021: RMB23,126,000).

22. EQUITY INSTRUMENTS AT FVTOCI

	2022 RMB'000	2021 RMB'000
Unlisted equity investments in the PRC (note (a))	**495,112**	578,589
Listed equity securities in the PRC		
— Shanghai Electric Power Co., Ltd. ("Shanghai Power") (note (b))	**3,636,555**	4,657,406
	4,131,667	5,235,995

Notes:

(a) Unlisted equity investments mainly represent interests in certain unlisted companies which are principally engaged in financial services, coal production 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 2022 and 2021 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	RMB2,816,743,645	12.90%	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:

	2022 RMB'000	2021 RMB'000
Deferred income tax assets	**288,300**	714,348
Deferred income tax liabilities	**(2,275,328)**	(2,380,195)
Net deferred income tax liabilities	**(1,987,028)**	(1,665,847)

23. DEFERRED INCOME TAXES (CONTINUED)

Notes:

The comparative data in the analysis below includes those classified as part of the then disposal groups classified as held for sale.

(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 divided to held for sale RMB'000	Held for sale RMB'000	After divided to held for sale RMB'000
At 1 January 2022	(1,672,170)	158,341	(883,281)	196,895	459,354	1,393	73,621	(1,665,847)	-	(1,665,847)
Acquisition of subsidiaries (Note 48)	(234,911)	-	-	-	-	-	-	(234,911)	-	(234,911)
Credited/(charged) to profit or loss (Note 11)	72,692	(74,015)	-	(4,820)	(29,661)	687	87,901	52,784	-	52,784
Charged to other comprehensive income	-	-	256,222	-	-	-	-	256,222	-	256,222
Disposal of subsidiaries (Note 47(b))	37,408	-	-	(652)	(429,693)	-	(5,085)	(398,022)	-	(398,022)
Disposal of equity instruments at FVTOCI	-	-	2,746	-	-	-	-	2,746	-	2,746
At 31 December 2022	(1,796,981)	84,326	(624,313)	191,423	-	2,080	156,437	(1,987,028)	-	(1,987,028)
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)
Credited 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)

(b) These were deferred income tax on fair value changes of equity instruments at FVTOCI and debt instruments at FVTOCI and release on derecognition or disposal.

(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 2022, the Group had unrecognized tax losses to be carried forward against future taxable profits amounting to RMB8,599,888,000 (2021: RMB5,273,100,000), which will expire within 5 years.

(d) As at 31 December 2022, the Group had deductible temporary differences of RMB521,081,000 (2021: RMB475,273,000), 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

	2022 RMB'000	2021 RMB'000
Deductible value-added tax ("VAT") and other taxes	**2,844,592**	4,207,702
Accounts receivable (Note 26)	**2,402,163**	1,224,850
Amounts due from related parties (Note 28(a))	**600,000**	100,000
Others	**307,526**	381,397
	6,154,281	5,913,949

As at 31 December 2022, 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 RMB75,798,000 (2021: RMB188,803,000). Details are disclosed in Note 41.

25. INVENTORIES

	2022 RMB'000	2021 RMB'000
Coal and oil	**584,986**	1,288,406
Energy storage equipment, spare parts and consumables	**506,358**	180,152
	1,091,344	1,468,558

26. ACCOUNTS RECEIVABLE

	2022 RMB'000	2021 RMB'000
Accounts receivable from regional and provincial power grid companies (note (b))	**14,228,449**	8,753,405
Accounts receivable from other companies (note (b))	**697,615**	675,972
	14,926,064	9,429,377
Notes receivable (note (d))	**110,870**	158,355
	15,036,934	9,587,732
Analyzed for reporting purpose as:		
— Non-current (included in other non-current assets (Note 24)) (note (b))	**2,402,163**	1,224,850
— Current	**12,634,771**	8,362,882
	15,036,934	9,587,732

26. ACCOUNTS RECEIVABLE (CONTINUED)

Notes:

(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 2022 and 2021 was insignificant.

(b) The ageing analysis of the accounts receivable based on invoice date is as follows:

	2022 RMB'000	2021 RMB'000
Unbilled	2,402,163	1,224,850
1 to 3 months	12,523,901	8,204,527
	14,926,064	9,429,377

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 2022, accounts receivable from regional and provincial power grid companies include clean energy power price premium receivable of RMB2,402,163,000, 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 2023 (2021: obtained after 31 December 2022) 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 2022, the respective clean energy power price premiums were adjusted for this financing component based on an effective interest rate of 3.81% (2021: 4.01%) per annum, and the Group's revenue was adjusted by RMB109,328,000 (2021: RMB58,148,000) and interest income amounting to RMB22,999,000 (2021: RMB76,336,000) (Note 10) was recognized.

26. ACCOUNTS RECEIVABLE (CONTINUED)

Notes: (Continued)

(c) In December 2020, accounts receivable amounting to RMB950,000,000 were have 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 receivable and retained control of the underlying assets, and therefore, as at 31 December 2022 the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB37,525,000 as other receivables and the associated liabilities as other payables (2021: RMB75,050,000 as other non-current assets and the associated liabilities as other non-current liabilities).

In November 2021, accounts receivable amounting to RMB1,184,931,000 were transferred to SPIC for participating in its Asset Backed Notes Transaction (the "ABN Transaction"). In the subsidiaries acquired this year, accounts receivable amounting to RMB340,566,000 were also transferred to SPIC in November 2021 for participating in the same ABN Transaction. The Directors consider that the Group has neither transferred nor retained substantially all the risks and rewards of ownership of the accounts receivable and retained control of the underlying assets, and therefore, as at 31 December 2022 the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB75,798,000 (2021: 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 2022, notes receivable were bank acceptance notes issued by third parties and were normally with a maturity period of 360 days (2021: 360 days).

(e) As at 31 December 2022, certain of the bank borrowings and lease liabilities (Notes 36(d) and 39) (2021: certain of the bank borrowings, long-term borrowings from related parties, and lease liabilities) were secured by the rights on certain accounts receivable. The accounts receivable pledged under these debts as at 31 December 2022 amounted to RMB3,467,887,000 (2021: RMB2,568,225,000).

(f) Apart from certain clean energy power price premium receivables of RMB2,402,163,000 (2021: RMB1,224,850,000) 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.

	2022 RMB'000	2021 RMB'000
Deposits and other receivables	**2,334,105**	1,350,789
Prepayments	**3,347,064**	1,368,392
Deductible VAT	**1,016,231**	1,489,321
Provision under ECL	**(103,008)**	(99,736)
	6,594,392	4,108,766

As at 31 December 2022, prepayments, deposits and other receivables included prepayments to non-controlling shareholders of subsidiaries of RMB30,034,000 (2021: RMB78,496,000).

28. AMOUNTS DUE FROM/TO RELATED PARTIES

	2022 RMB'000	2021 RMB'000
Amounts due from related parties		
Amounts due from CPDL	14,120	14,120
Amounts due from CPI Holding	60,024	97,390
Amounts due from SPIC Financial	3,400	6,695
Amounts due from companies controlled by SPIC other than CPI Holding and SPIC Financial	1,153,263	117,816
Amounts due from associates (note (a))	4,509,905	1,633,233
Amounts due from joint ventures (note (b))	926,988	665,409
Amounts due from non-controlling shareholders of subsidiaries	30,035	100,496
Amounts due from SPIC	450	–
	6,698,185	2,635,159
Less: Amount that is expected to realize after 12 months shown under non-current assets (Note 24)	(600,000)	(100,000)
Amounts that is expected to realize within 12 months shown under current assets	6,098,185	2,535,159

	2022 RMB'000	2021 RMB'000
Amounts due to related parties		
Amounts due to CPI Holding (note (c))	139,053	110,409
Amounts due to SPIC Financial	38,524	33,523
Amounts due to companies controlled by SPIC other than CPI Holding and SPIC Financial	1,887,712	762,986
Amounts due to SPIC	99,381	42,650
Amounts due to associates	843,549	160,007
Amounts due to joint ventures	26,046	22
Amounts due to non-controlling shareholders of subsidiaries (note (d))	378,530	240,195
	3,412,795	1,349,792

28. AMOUNTS DUE FROM/TO RELATED PARTIES (CONTINUED)

Notes:

(a) The amounts due from associates are unsecured. Except for a balance of RMB355,080,000 (2021: RMB200,000,000) which is interest bearing at 3.23% (2021: 3.00%) per annum, a balance of RMB55,080,000 (2021: RMB55,080,000) which is interest bearing at 1.75% (2021: 1.75%) per annum, a balance of RMB518,250,000 (2021: Nil) which is interest bearing at 2.20% (2021: Nil) per annum, a balance of RMB270,000,000 (2021: Nil) which is interest bearing at 4.63% (2021: Nil) per annum and repayable within one year, the remaining balances are interest free and repayable on demand. A balance of RMB600,000,000 (2021: RMB100,000,000) which is interest bearing at 3.50% (2021: 3.50%) 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.

(c) The amounts due to CPI Holding are unsecured. Except for a balance of RMB106,440,000 (2021: RMB106,440,000) which is interest bearing at 1.75% (2021: 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 RMB165,183,000 (2021: RMB43,663,397).

(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

As at 31 December 2022, debt instruments at FVTOCI represent certain notes receivable issued by third parties and related parties, and were normally with maturity period within 360 days (2021: 360 days). Notes receivable discounted and endorsed to banks, suppliers and related parties of RMB598,134,000, RMB141,897,000 and RMB207,077,000 respectively (2021: RMB982,934,000, RMB381,679,000 and RMB345,958,000 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 2022, the restricted deposits of the Group are interest bearing from 0.25% to 0.35% (2021: 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

	2022 RMB'000	2021 RMB'000
Cash at banks and in hand (note (a))	3,333,269	1,232,849
Deposits at SPIC Financial (note (b))	894,830	533,783
	4,228,099	1,766,632
Denominated in:		
RMB	4,209,762	1,737,933
United States Dollar ("USD")	6,577	6,559
HK$	11,760	22,140
	4,228,099	1,766,632

Notes:

(a) The Group's cash at banks are interest bearing from 0.25% to 0.35% (2021: 0.30% to 0.35%) per annum.

(b) The Group's deposits at SPIC Financial are interest bearing at 1.38% (2021: 1.38%) per annum.

(c) The Group's cash and cash equivalents denominated in RMB of RMB4,101,720,000 (2021: RMB1,482,942,000) 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. SHARE CAPITAL

	2022 RMB'000	2021 RMB'000
Ordinary shares, issued and fully paid:		
12,370,150,983 (2021: 10,833,386,321) ordinary shares	24,508,986	20,418,001

	Number of ordinary shares	Share capital RMB'000
At 1 January 2021	9,806,886,321	17,268,192
Placing and subscription of shares	1,026,500,000	3,149,809
At 31 December 2021	10,833,386,321	20,418,001
Shares issued for acquisition of subsidiaries (note)	1,536,764,662	4,090,985
At 31 December 2022	12,370,150,983	24,508,986

Note:

In September and October 2022, the Company issued 451,503,136 ordinary shares and 1,085,261,526 ordinary shares, respectively, at the price of HK$4.40 per share under special mandate as consideration shares for the acquisition of equity interests in certain entities from China Power (New Energy) Holdings Limited ("CPNE"). The acquisition has been accounted for using the acquisition method, the fair value of these consideration shares, determined using the published closing price at the dates of share issues (HK$3.13 per share on 30 September 2022 and HK$2.84 per share on 26 October 2022 respectively), amounted to HK$4,495,348,000 (equivalent to RMB4,090,985,000 (Note 48)) in aggregate.

33. SHARE OPTION SCHEME

On 5 and 20 July 2022, the Directors announced that the Company has granted share options to certain eligible participants (the "Grantees"), subject to acceptance of the Grantees, under the Company's share option incentive scheme adopted on 15 June 2022 (the "Scheme"). The Scheme shall be valid from the grant date until the date when all share options have been exercised or cancelled and the maximum effective period of the Scheme shall not exceed 72 months. Grantees included the Directors, and employees of the Company or the Group's controlled subsidiaries. Each share option shall entitle the Grantees to subscribe for one new share of the Company at the exercise price. Details of the share options granted are set out below:

Date of grant	5 July 2022	20 July 2022
Exercise price (per share)	HK$4.82	HK$4.90
Number of share options granted	84,590,000	18,590,000
Exercise period	First exercise period (Percentage of share options exercisable: 33%) Trading days from 5 July 2024 to 4 July 2025 Second exercise period (Percentage of share options exercisable: 33%) Trading days from 5 July 2025 to 4 July 2026 Third exercise period (Percentage of share options exercisable: 34%) Trading days from 5 July 2026 to 4 July 2027	First exercise period (Percentage of share options exercisable: 33%) Trading days from 20 July 2024 to 19 July 2025 Second exercise period (Percentage of share options exercisable: 33%) Trading days from 20 July 2025 to 19 July 2026 Third exercise period (Percentage of share options exercisable: 34%) Trading days from 20 July 2026 to 19 July 2027
Closing price immediately before the date of grant (per share)	HK$4.76	HK$4.75

In 2022, no share options were exercised, lapsed or cancelled. The exercise prices and exercise periods of the Company's share options outstanding as at 31 December 2022 are as follows:

Number of share options	Exercise price (HK$ per share)	Exercise period
27,914,700	4.82	5 July 2024 to 4 July 2025
27,914,700	4.82	5 July 2025 to 4 July 2026
28,760,600	4.82	5 July 2026 to 4 July 2027
6,134,700	4.90	20 July 2024 to 19 July 2025
6,134,700	4.90	20 July 2025 to 19 July 2026
6,320,600	4.90	20 July 2026 to 19 July 2027

The movement of share options under the Scheme during the current year are as follows:

	2022	
	Weighted average exercise price (HK$ per share)	Number of share options
At 1 January	–	–
Granted during the year	**4.83**	**103,180,000**
At 31 December	**4.83**	**103,180,000**

33. SHARE OPTION SCHEME (CONTINUED)

The Company recognized a share-based payment expenses of RMB28,802,000 during the year ended 31 December 2022.

The fair value of equity-settled share options granted during the year was estimated as at the date of grant using a Black-Scholes model, taking into account the terms and conditions upon which the options were granted. The following table lists the key inputs to the model used:

	Date of grant	
	5 July 2022	20 July 2022
Estimated fair value (per share option)	HK$1.61	HK$1.56
Expected volatility	44.42%	44.83%
Risk-free interest rate	2.4455%	2.3805%
Expected life of share options	3.5 years	3.5 years
Exercise price (per share)	HK$4.82	HK$4.90
Closing share price (per share)	HK$4.69	HK$4.65

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.

On 15 November 2022, the Company and certain of its subsidiaries entered into the perpetual debt investment contracts with Bridge Trust Co., Ltd. ("Bridge Trust", a subsidiary of SPIC). The Group has received RMB5,608,720,000 perpetual debts with an initial interest rate ranging from 2.87% to 3.18% per annum and an initial base term of 3 years or 5 years.

In 2022, the profit attributable to holders of other equity instruments, based on the applicable interest rate, was RMB167,211,000 (2021: RMB134,250,000), and distribution of RMB134,250,000 (2021: RMB134,250,000) has been paid in 2022.

35. RESERVES

	Merger reserve (note (a)) RMB'000	Capital reserve (note (b)) RMB'000	FVTOCI reserve RMB'000	Exchange translation reserve RMB'000	Statutory reserves (note (c)) RMB'000	Share-based payment reserve RMB'000	Others RMB'000	Other reserves sub-total RMB'000	Retained earnings (note (d)) RMB'000	Total RMB'000
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
Effect of application of Amendments to HKAS 16 (Note 2.2)	–	–	–	–	–	–	–	–	245,562	245,562
At 1 January 2022 (restated)	306,548	1,916,940	2,488,202	28	1,973,464	–	389,286	7,074,468	5,562,399	12,636,867
Profit for the year	–	–	–	–	–	–	–	–	2,648,051	2,648,051
Profit attributable to holders of other equity instruments	–	–	–	–	–	–	–	–	(167,211)	(167,211)
Fair value gain on equity instruments at FVTOCI	–	–	(1,014,299)	–	–	–	–	(1,014,299)	–	(1,014,299)
Deferred income tax on fair value gain on equity instruments at FVTOCI	–	–	253,575	–	–	–	–	253,575	–	253,575
Fair value loss on debt instruments at FVTOCI	–	–	(1,619)	–	–	–	–	(1,619)	–	(1,619)
Deferred income tax on fair value loss on debt instruments at FVTOCI	–	–	405	–	–	–	–	405	–	405
Release on derecognition of debt instruments at FVTOCI	–	–	798	–	–	–	–	798	–	798
Release of deferred income tax on derecognition of debt instruments at FVTOCI	–	–	(199)	–	–	–	–	(199)	–	(199)
Exchange differences on translation of foreign operations	–	–	–	(28)	–	–	–	(28)	–	(28)
Share-based payment expenses (Note 33)	–	–	–	–	–	28,802	–	28,802	–	28,802
Transfer to statutory reserves	–	–	–	–	429,551	–	–	429,551	(429,551)	–
Disposal of interests in subsidiaries without loss of control	–	(23,095)	–	–	–	–	–	(23,095)	–	(23,095)
Transfer of reserves upon disposal of equity instruments at FVTOCI	–	–	(15,560)	–	–	–	–	(15,560)	15,560	–
2021 final dividend (Note 13)	–	–	–	–	–	–	–	–	(541,669)	(541,669)
At 31 December 2022	306,548	1,893,845	1,711,303	–	2,403,015	28,802	389,286	6,732,799	7,087,579	13,820,378

35. RESERVES (CONTINUED)

	Merger reserve (note (a)) RMB'000	Capital reserve (note (b)) RMB'000	FVTOCI reserve RMB'000	Exchange translation 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 31 December 2020	306,548	2,299,142	903,760	–	1,605,070	389,286	5,503,806	7,610,069	13,113,875
Effect of application of Amendments to HKAS 16	–	–	–	–	–	–	–	(13,874)	(13,874)
At 1 January 2021 (restated)	306,548	2,299,142	903,760	–	1,605,070	389,286	5,503,806	7,596,195	13,100,001
Loss for the year (restated)	–	–	–	–	–	–	–	(256,257)	(256,257)
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 (restated)	306,548	1,916,940	2,488,202	28	1,973,464	389,286	7,074,468	5,562,399	12,636,867

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 mainly 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 the certain subsidiaries and an associate, 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 these companies were based on the distributable reserves as reported in the statutory financial statements.

36. BANK BORROWINGS

Bank borrowings are analyzed as follows:

	2022 RMB'000	2021 RMB'000
Non-current		
Long-term bank borrowings		
— secured (note (d))	25,173,243	19,142,557
— unsecured (note (e))	44,539,773	46,454,396
	69,713,016	65,596,953
Less: Current portion of long-term bank borrowings	(7,500,830)	(10,666,540)
	62,212,186	54,930,413
Current		
Short-term bank borrowings		
— secured	705,007	1,080,087
— unsecured	8,520,954	10,165,064
Current portion of long-term bank borrowings	7,500,830	10,666,540
	16,726,791	21,911,691
	78,938,977	76,842,104

Notes:

(a) The carrying amounts of the Group's bank borrowings are denominated in the following currencies:

	2022 RMB'000	2021 RMB'000
RMB	78,695,701	76,560,357
Japanese Yen ("JPY")	243,276	281,747
	78,938,977	76,842,104

36. BANK BORROWINGS (CONTINUED)

Notes: (Continued)

(b) The repayment terms of the long-term bank borrowings are analyzed as follows:

	2022 RMB'000	2021 RMB'000
Within one year	**7,500,830**	10,666,540
Between one and two years	**7,987,257**	5,349,271
Between two and five years	**17,368,948**	13,607,748
Over five years	**36,855,981**	35,973,394
	69,713,016	65,596,953

(c) The effective interest rates per annum of the Group's bank borrowings are as follows:

	2022	2021
Short-term bank borrowings	**3.46%**	3.71%
Long-term bank borrowings (including current portion)	**4.07%**	4.20%

As at 31 December 2022 and 2021, the bank borrowings of the Group in fixed and floating rates are as follows:

	2022 RMB'000	2021 RMB'000
Fixed-rate borrowings	**15,654,251**	16,717,785
Floating-rate borrowings	**63,284,726**	60,124,319
	78,938,977	76,842,104

(d) As at 31 December 2022 and 2021, the bank borrowings of the Group are secured as follows:

	2022 RMB'000	2021 RMB'000
Secured by the equity of a non-controlling shareholder of a subsidiary	**169,240**	186,160
Secured by certain property, plant and equipment (Note 15(c))	**741,473**	114,620
Secured against the rights on certain accounts receivable (Note 26(e))	**24,967,537**	19,921,864

(e) As at 31 December 2022, bank borrowings amounting to RMB243,276,000 (2021: RMB281,747,000) were guaranteed by Hunan Provincial Finance Bureau.

(f) As at 31 December 2022, the Group had available unutilized banking facilities amounting to RMB26,292,730,000 (2021: RMB24,385,836,000).

(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 2022, the carrying amounts and fair values of long-term bank borrowings at fixed interest rates amount to RMB9,562,592,000 (2021: RMB9,875,299,000) and RMB9,511,833,000 (2021: RMB9,850,520,000) respectively. The fair values are calculated using cash flows discount rates from 1% to 5.39% (2021: 1% to 5.30%) and are within level 3 of the fair value hierarchy.

37. BORROWINGS FROM RELATED PARTIES

	2022 RMB'000	2021 RMB'000
Non-current		
Long-term borrowings from SPIC (note (b))	9,646,099	8,653,020
Long-term borrowings from SPIC Financial (note (c))	863,000	3,799,840
Long-term borrowings from CPI Holding	–	50,000
Long-term borrowings from other related parties (note (d))	790,463	379,800
	11,299,562	12,882,660
Less: Current portion of long-term borrowings from SPIC	(504,238)	(2,900,000)
Current portion of long-term borrowings from SPIC Financial	(180,000)	(1,425,000)
Current portion of long-term borrowings from other related party	(200,000)	–
	10,415,324	8,557,660
Current		
Short-term borrowings from SPIC (note (e))	1,500,000	–
Short-term borrowings from SPIC Financial (note (f))	1,150,000	1,130,000
Short-term borrowings from CPI Holding	–	200,000
Short-term borrowings from other related parties (note (g))	1,184,742	453,626
Current portion of long-term borrowings from SPIC (note (b))	504,238	2,900,000
Current portion of long-term borrowings from SPIC Financial (note (c))	180,000	1,425,000
Current portion of long-term borrowings from other related party (note (d))	200,000	–
	4,718,980	6,108,626
	15,134,304	14,666,286

Notes:

(a) The carrying amounts of the Group's borrowings from related parties are denominated in the following currencies:

	2022 RMB'000	2021 RMB'000
RMB	14,674,640	14,666,286
USD	459,664	–
	15,134,304	14,666,286

(b) The long-term borrowings from SPIC are unsecured, interest bearing from 3.35% to 5.50% (2021: 3.29% to 4.75%) per annum.

These borrowings are repayable as follows:

	2022 RMB'000	2021 RMB'000
Within one year	504,238	2,900,000
Between one and two years	820,000	830,000
Between two and five years	8,321,861	4,923,020
	9,646,099	8,653,020

37. BORROWINGS FROM RELATED PARTIES (CONTINUED)

Notes: (Continued)

(c) The long-term borrowings from SPIC Financial are unsecured, interest bearing from 3.29% to 4.27% (2021: 3.25% to 5.07%) per annum. As at 31 December 2021, RMB50,000,000 was secured against the rights on accounts receivable of a subsidiary and interest bearing at 4.42% per annum.

The repayment terms of these borrowings are analyzed as follows:

	2022 RMB'000	2021 RMB'000
Within one year	180,000	1,425,000
Between one and two years	180,000	800,000
Between two and five years	76,000	1,324,840
Over five years	427,000	250,000
	863,000	3,799,840

As at 31 December 2022 and 2021, the long-term borrowings from SPIC Financial in fixed and floating rate are as follows:

	2022 RMB'000	2021 RMB'000
Fixed-rate borrowings	383,000	2,545,000
Floating-rate borrowings	480,000	1,254,840
	863,000	3,799,840

(d) As at 31 December 2022, the long-term borrowings from other related parties were unsecured, interest bearing from 3.79% to 4.55% (2021: 4.41% to 4.46%) per annum.

(e) As at 31 December 2022, the short-term borrowings from SPIC are unsecured, interest bearing from 3.45% to 3.85% (2021: Nil) per annum.

(f) As at 31 December 2022, the short-term borrowings from SPIC Financial are unsecured, interest bearing from 3.45% to 4.27% (2021: 3.45% to 4.34%) per annum.

(g) As at 31 December 2022, the short-term borrowings from other related parties are unsecured, interest bearing from 2.85% to 4.35% (2021: 3.47% to 3.75%) per annum.

(h) As at 31 December 2022, the Group had available unutilized facilities from SPIC Financial amounting to RMB8,800,000,000 (2021: RMB10,000,000,000).

(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 2022, the carrying amounts and fair values of long-term borrowings from related parties at fixed interest rates amounted to RMB8,707,430,000 (2021: RMB11,577,820,000) and RMB8,673,439,000 (2021: RMB11,538,007,000) respectively. The fair values are calculated using cash flows with discount rates from 3.29% to 5.5% (2021: 3.29% to 4.75%) and are within level 3 of the fair value hierarchy.

38. OTHER BORROWINGS

	2022 RMB'000	2021 RMB'000
Non-current		
Medium-term notes issued by the Company (note (a))	13,000,000	7,000,000
Long-term other borrowings from third parties (note (b))	3,811,531	1,200,325
	16,811,531	8,200,325
Less: Current portion of medium-term notes issued by the Company	–	(2,000,000)
	16,811,531	6,200,325
Current		
Super & short-term commercial papers issued by a subsidiary	–	1,020,000
Super & short-term commercial papers issued by the Company (note (c))	2,000,000	1,500,000
Short-term other borrowing from a third party	15,000	100,000
Current portion of medium-term notes issued by the Company (note (a))	–	2,000,000
	2,015,000	4,620,000
	18,826,531	10,820,325

Notes:

(a) The balance includes:

(i) Four unsecured RMB denominated medium-term notes issued by the Company in June, July and September 2022 respectively, each of RMB2,000,000,000 for a term of three years, which are interest bearing at 3.00%, 2.99%, 2.87% and 2.71% per annum respectively.

(ii) Two unsecured RMB denominated medium-term notes issued by the Company in April and October 2021 respectively, each of RMB2,000,000,000 for a term of three years, which are interest bearing at 3.54% and 3.47% per annum respectively.

(iii) An unsecured RMB denominated green note of RMB1,000,000,000 issued by the Company in October 2021 for a term of three years, which is interest bearing at 3.39% per annum.

As at 31 December 2022, the medium-term note issued in September 2019 has been repaid.

As at 31 December 2022, the fair value of the medium-term note amounted to RMB12,307,846,000 (2021: RMB6,911,978,000), which was the quoted price in active market for identical liabilities and was within level 2 of fair value hierarchy.

As at 31 December 2022, the Company had no (2021: Nil) unutilized medium-term note facilities available.

(b) As at 31 December 2022, the balance is unsecured, interest bearing from 4.25% to 4.85% (2021: 4.05% to 5.30%) 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) The balance represents two unsecured RMB denominated super & short-term commercial papers of RMB1,000,000,000 each (2021: RMB500,000,000 and RMB1,000,000,000) issued by the Company in June and July 2022 (2021: August and November 2021) for the term of 270 days and 180 days respectively (2021: 210 days and 269 days), interest bearing at 2.10% and 1.75% (2021: 2.63% and 2.88%) per annum respectively.

As at 31 December 2022, the Company had no (2021: Nil) unutilized short-term note facilities available.

39. LEASE LIABILITIES

	2022 RMB'000	2021 RMB'000
Lease liabilities payable:		
Within one year	517,007	417,917
Between one and two years	655,015	657,406
Between two and five years	682,195	738,594
Over five years	1,852,435	1,778,469
	3,706,652	3,592,386
Less: Amounts payable within 12 months shown under current liabilities	(517,007)	(417,917)
Amounts payable after 12 months shown under non-current liabilities	3,189,645	3,174,469

The balance as at 31 December 2022 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 RMB1,168,356,000, of which RMB1,153,208,000 (2021: RMB1,270,534,000) are secured against the rights on certain accounts receivable (Note 26(e)) with interest rates ranging from 4.01% to 7% (2021: 4.01% to 7%) per annum. Interest rates for the remaining balances are ranging from 4.01% to 7% (2021: 4.01% to 7%) per annum.

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 RMB1,647,693,000 (2021: RMB1,142,331,000) (Note 16) and RMB1,149,668,000 (2021: RMB910,840,000) 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 2022 and 2021 is as follows:

	2022 RMB'000	2021 RMB'000
Non-current liabilities	**1,866,003**	1,868,232
Current liabilities (included in other payables and accrued charges) (Note 43)	**105,990**	104,432
	1,971,993	1,972,664

The movements of the provisions for inundation compensation for the years ended 31 December 2022 and 2021 are as follows:

	2022 RMB'000	2021 RMB'000
At 1 January	**1,972,664**	1,971,834
Interest expense (Note 10)	**104,082**	104,054
Payment	**(104,753)**	(103,224)
At 31 December	**1,971,993**	1,972,664

41. OTHER NON-CURRENT LIABILITIES

In December 2020, certain subsidiaries of the Group entered into several agreements in respect of the Asset Management Plan with Shenwan Hongyuan and transferred 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 had also committed that should any incident occur that disqualifies any receivables from the Asset Management Plan, SPIC would 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 receivable and retained control of the underlying assets. Considering that it would expire within one year, at 31 December 2022, the Group recognized the maximum loss exposure in prepayments, deposits and other receivable and other payables and accrued charges, respectively.

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. In the subsidiaries acquired this year, accounts receivable amounting to RMB340,566,000 had been also transferred to SPIC in November 2021 for participating in the same ABN Transaction. The Directors consider that the Group neither transferred nor retained substantially all the risks and rewards of ownership of the accounts receivable and retained control of the underlying assets. At 31 December 2022, the Group recognized the transferred assets to the extent of its continuing involvement amounting to RMB75,798,000 (2021: RMB113,753,000) as other non-current assets and the associated liabilities amounting to RMB75,798,000 (2021: RMB113,753,000) 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

	2022 RMB'000	2021 RMB'000
Accounts payable (note (a))	**2,490,043**	1,668,327
Bills payable (note (b))	**76,128**	167,695
	2,566,171	1,836,022

Notes:

(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:

	2022 RMB'000	2021 RMB'000
1 to 6 months	**2,267,580**	1,531,869
7 to 12 months	**187,697**	69,598
Over 1 year	**34,766**	66,860
	2,490,043	1,668,327

(b) As at 31 December 2022, bills payable are bills of exchange with maturity period ranged from 3 to 12 months (2021: 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

	2022 RMB'000	2021 RMB'000
Salaries and staff welfare payable	**263,051**	201,914
VAT payable	**289,722**	300,584
Other taxes payable	**373,311**	342,651
Repairs and maintenance expense payable	**64,874**	53,005
Insurance expense payable	**3,336**	5,113
Reservoir maintenance and usage fees payables	**20,524**	21,226
Interest payable	**391,752**	434,008
Current portion of provisions for other long-term liabilities (Note 40)	**105,990**	104,432
Consideration payable for acquisition of subsidiaries	**18,247**	16,851
Dividends payable to non-controlling shareholders of subsidiaries	**–**	74,746
Other payables and accrued operating expenses	**2,076,871**	698,937
	3,607,678	2,253,467

44. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of profit before taxation to cash generated from operating activities

The comparative data of those working capital changes included those classified as part of the disposal groups classified as held for sale as at 31 December 2020.

	2022 RMB'000	2021 RMB'000 (restated)
Profit before taxation	3,344,067	1,038,243
Share of results of associates	155,233	213,524
Share of results of joint ventures	(2,375)	119,280
Finance income	(153,624)	(126,603)
Finance costs	4,260,961	3,861,500
Dividend income	–	(39,962)
Depreciation of property, plant and equipment	7,284,950	5,721,901
Depreciation of right of use assets	376,090	377,736
Reversal of impairment of amounts due from related parties and other receivables	(27,780)	(1,696)
Impairment of property plant and equipment	14,142	1,004
Impairment of goodwill	250,905	–
Amortization of other intangible assets	137,663	54,873
Amortization of deferred income	(21,359)	(34,092)
Gain on disposal of property, plant and equipment, net	(651)	(1,270)
(Gain)/loss on disposal of subsidiaries (pre-tax), net	(510,863)	113,229
Share-based payment expenses	28,802	–
Gain on remeasurement of remaining equity interests in associates after loss of control over subsidiaries	(154,337)	–
Gain on recognition of negative goodwill	(1,551,609)	–
Gain on disposal of assets and liabilities associated with a disposal group classified as held for sale	–	(80,109)
Gain on transfer from assets and liabilities associated with a disposal group classified as held for sale to an associate	–	(242,283)
Operating cash flows before working capital changes	13,430,215	10,975,275
Increase in inventories	(45,921)	(770,943)
Increase in accounts receivable	(1,920,340)	(894,319)
Increase in prepayments, deposits and other receivables	(640,138)	(248,138)
Increase in amounts due from related parties	(2,959,854)	(795,675)
Decrease in debt instruments at FVTOCI	103,956	223,395
Increase in accounts and bills payables	1,605,673	723,709
Increase/(decrease) in other payables and accrued charges	957,022	(2,321,078)
Increase in amounts due to related parties	184,786	15,419
Increase in deferred income	38,716	2,892
Cash generated from operations	10,754,115	6,910,537
Interest paid	(4,483,253)	(4,149,811)
Tax paid	(545,248)	(1,212,800)
Net cash generated from operating activities	5,725,614	1,547,926

44. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Analysis of changes in financing during the year

	Bank borrowings and other borrowings RMB'000	Borrowings from related parties RMB'000	Lease liabilities RMB'000	Non-controlling interests RMB'000
At 31 December 2021	87,662,429	14,666,286	3,592,386	16,077,891
Effect of application of Amendments to HKAS 16 (Note 2.2)	–	–	–	246,324
Drawdown of bank borrowings	45,458,779	–	–	–
Repayment of bank borrowings	(45,086,454)	–	–	–
Drawdown of other borrowings	12,307,218	–	–	–
Repayment of other borrowings	(4,620,000)	–	–	–
Drawdown of borrowings from related parties	–	11,670,054	–	–
Repayment of borrowings from related parties	–	(10,288,043)	–	–
Payments for lease liabilities	–	–	(1,985,982)	–
Interest expense on lease liabilities (Note 10)	–	–	104,100	–
New finance leases (note (c)(iii))	–	–	235,662	–
Profit for the year attributable to non-controlling interests	–	–	–	37,287
Capital injections from non-controlling shareholders of subsidiaries	–	–	–	3,837,954
Fair value gain on financial instruments at FVTOCI attributable to non-controlling interests	–	–	–	(7,321)
Dividends paid to non-controlling interests	–	–	–	(488,142)
Acquisitions of subsidiaries (Note 48)	9,155,219	40,500	1,882,077	1,358,647
Disposal of interests in subsidiaries without loss of control (Note 47(a))	–	–	–	1,108,275
Disposal of interests in subsidiaries (Note 47(b))	(7,096,403)	(950,000)	(121,591)	(549,439)
Exchange gain, net	(15,280)	(4,493)	–	(16)
At 31 December 2022	97,765,508	15,134,304	3,706,652	21,621,460

44. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Analysis of changes in financing during the year *(Continued)*

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	Lease liabilities RMB'000	Non-controlling interests RMB'000
At 31 December 2020	74,229,271	15,749,670	3,880,729	12,392,110
Effect of application of Amendments to HKAS 16	–	–	–	683
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)(iii))	–	–	308,978	–
Profit for the year attributable to non-controlling interests (restated)	–	–	–	932,553
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 paid to non-controlling interests	–	–	–	(421,730)
Acquisition of non-controlling interests	–	–	–	(14,808)
Acquisitions of subsidiaries	–	469,300	308,484	47,904
Disposal of interests in a subsidiary without loss of control	–	–	–	2,969,746
Disposal of interests in subsidiaries	–	–	(19,913)	20,027
Disposal of assets and liabilities associated with a disposal group classified as held for sale	–	–	–	43,299
Transfer from assets and liabilities associated with a disposal group 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	16,324,215

(c) Major non-cash transactions

(i) As disclosed in Notes 32 and 48, for the year ended 31 December 2022, the Company allocated and issued 1,536,764,662 shares at aggregated amount RMB4,090,985,000 to CPNE as part of the consideration to acquire certain target companies.

(ii) For the year ended 31 December 2022, accounts payable and amounts due to related parties of RMB141,897,000 (2021: RMB381,679,000) and RMB207,077,000 (2021: RMB345,958,000) (Note 29) respectively have been settled through endorsement of notes receivable.

(iii) During the year ended 31 December 2022, 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 RMB235,662,000 (2021: RMB308,978,000) and lease liabilities of RMB235,662,000 (2021: RMB308,978,000).

45. COMMITMENTS

	2022 RMB'000	2021 RMB'000
Contracted but not provided for in respect of		
— property, plant and equipment	5,937,359	8,474,476
— capital contribution to associates	1,400,836	3,955,870
	7,338,195	12,430,346

46. FINANCIAL INSTRUMENTS

46.1 Categories of financial instruments

	2022 RMB'000	2021 RMB'000
Financial assets		
Equity investment at FVTOCI	4,131,667	5,235,995
Financial assets at amortized cost	28,375,278	15,360,680
Debt instruments at FVTOCI	108,972	213,660
	32,615,917	20,810,335
Financial liabilities		
Amortized cost	139,095,327	119,075,567

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.

(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, certain borrowings from related parties 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 2022, the Group was exposed to foreign exchange risk primarily with respect to bank borrowings which were denominated in JPY, borrowings from related parties which were denominated in USD, and cash and cash equivalents which were denominated in USD and HK$, details of which have been disclosed in Notes 36, 37 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 2022, if RMB had weakened/strengthened by 5% (2021: 5%) against JPY, with all other variables held constant, the Group's post-tax profit for the year would have been RMB9,123,000 lower/higher (2021: RMB10,565,000 lower/higher), mainly as a result of foreign exchange differences on translation of JPY denominated borrowings.

As at 31 December 2022, if RMB had weakened/strengthened by 5% (2021: 5%) against USD, with all other variables held constant, the Group's post-tax profit for the year would have been RMB17,484,000 lower/higher (2021: RMB246,000 lower/higher), mainly as a result of net foreign exchange differences on translation of USD denominated borrowings and bank deposits.

As at 31 December 2022, if RMB had weakened/strengthened by 5% (2021: 5%) against HK$, with all other variables held constant, the Group's post-tax profit for the year would have been RMB441,000 higher/lower (2021: RMB830,000 higher/lower), mainly as a result of foreign exchange differences on translation of HK$ 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 risks

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 associates and joint ventures, 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 2022, if the interest rates on bank borrowings and borrowings from related parties had been 50 basis points (2021: 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 RMB347,966,000 lower/higher (2021: RMB324,430,000 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 risks *(Continued)*

As at 31 December 2022, if the interest rates on cash at banks and deposits at SPIC Financial had been 50 basis points (2021: 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 RMB11,240,000 higher/lower (2021: RMB5,784,000 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:

	2022 RMB'000	2021 RMB'000
Interest income		
Cash and cash equivalents and restricted deposits	46,550	23,406
Amounts due from related parties	84,075	26,861
Discounting effect on clean energy power price premium receivable	22,999	76,336
Total interest income	153,624	126,603

Interest expense on financial liabilities not measured at FVTPL:

	2022 RMB'000	2021 RMB'000
Interest expense on financial liabilities at amortized cost	4,163,954	3,800,688

(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 2022, if the quoted market price of the listed equity investments held by the Group had increased/decreased by 10% to 30% (2021: 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 RMB272,742,000 to RMB818,225,000 (2021: RMB349,305,000 to RMB1,047,916,000) 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 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 for holding 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 2022, 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	
					2022 RMB'000	2021 RMB'000
Debt instruments at FVTOCI	29	A1	Note (i)	12m ECL	108,972	213,660
Financial assets at amortized cost:						
Amounts due from related parties	24 and 28	N/A	Note (ii)	12m ECL	6,698,185	2,635,159
				Lifetime ECL (credit impaired)	229,290	261,300
Restricted deposits	30	A1	Note (i)	12m ECL	77,955	20,368
Cash and cash equivalents	31	A1	Note (i)	12m ECL	4,228,099	1,766,632
Deposits and other receivables	27	N/A	Note (iii)	12m ECL	2,334,105	1,350,789
				Lifetime ECL (credit impaired)	35,296	33,286
Accounts receivable	26	A1	Note (iv)	Lifetime ECL (not credit impaired)	12,523,901	8,204,527
Notes receivable	26	A1	Note (iv)	12m ECL	110,870	158,355
Other non-current assets	24	A1	Note (v)	12m ECL	2,402,163	1,224,850

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
2022	**229,290**	**6,698,185**	**6,927,475**
2021	261,300	2,635,159	2,896,459

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
2022	**103,008**	**2,266,393**	**2,369,401**
2021	181,083	1,202,992	1,384,075

For the year ended 31 December 2022, the Group accrued RMB2,010,000 (2021: Reversed RMB1,696,000) (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 2022 were insignificant and therefore no allowance is provided for accounts receivable.

(v) Other non-current assets

For the year ended 31 December 2022, other non-current assets include clean energy power price premium of RMB2,402,163,000 (2021: RMB1,224,850,000). 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 2022, the net current liabilities of the Group amounted to RMB15,039,289,000. 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 2022, the Group had available unutilized facilities in writing from banks and from related parties amounted to approximately RMB35,092,730,000 as disclosed in Notes 36(f), 37(h) and 38(a) 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.

	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 2022						
Payables and accrued charges	**17,536,892**	**–**	**–**	**–**	**17,536,892**	**17,536,892**
Amounts due to related parties	**3,414,545**	**–**	**–**	**–**	**3,414,545**	**3,412,795**
Bank borrowings	**12,743,960**	**7,709,916**	**18,478,102**	**38,727,060**	**77,659,038**	**78,938,977**
Borrowings from related parties	**889,022**	**1,500,441**	**9,437,446**	**648,654**	**12,475,563**	**15,134,304**
Other borrowings	**2,084,664**	**14,058,715**	**–**	**4,432,351**	**20,575,730**	**18,826,531**
Lease liabilities	**537,687**	**708,464**	**829,995**	**2,437,677**	**4,513,823**	**3,706,652**
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

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.

	2022 RMB'000	2021 RMB'000 (restated)
Bank borrowings (Note 36)	78,938,977	76,842,104
Borrowings from related parties (Note 37)	15,134,304	14,666,286
Other borrowings (Note 38)	18,826,531	10,820,325
Lease liabilities (Note 39)	3,706,652	3,592,386
Less: Cash and cash equivalents (Note 31)	(4,228,099)	(1,766,632)
Net debt	112,378,365	104,154,469
Total equity	68,590,105	52,376,683
Total capital	180,968,470	156,531,152
Gearing ratio	62%	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)*

(a) Fair value of the Group's financial assets that are measured at fair value on a recurring basis:

Financial assets	Fair value 2022 RMB'000	Fair value 2021 RMB'000	Fair value hierarchy	Valuation technique and key inputs
Equity instruments at FVTOCI — Shanghai Power	**3,636,555**	4,657,406	Level 1	Quoted market prices at the end of reporting period (current bid price).
Equity instruments at FVTOCI — Unlisted equity investments in the PRC	**495,112**	578,589	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 (1.39) and price earning ratio (3.44) 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	**108,972**	213,660	Level 3	Discounted cash flow at a comparable discount rate of 3.65%.

(b) Reconciliation of level 3 fair value measurements — Financial assets at FVTOCI:

	2022 RMB'000	2021 RMB'000
At 1 January	**792,249**	978,699
Additions	**761,652**	1,460,458
Derecognition	**(947,108)**	(1,728,448)
Total (losses)/gains in other comprehensive income	**(2,709)**	81,540
At 31 December	**604,084**	792,249

Included in other comprehensive income is a loss of RMB2,709,000 (2021: Gain of RMB81,540,000) 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

In March 2022, the Company disposed of 80% of the interest in China Power (Suzhou) Shared Service Co., Ltd. ("Suzhou Shared Service") at a consideration of RMB33,520,000. In April 2022, one of the Group's subsidiaries, Wu Ling Power Corporation ("Wu Ling Power") received RMB24,450,000 and RMB40,620,000 respectively, to dispose of 30% of the interests of Wuling Alxa Right Flag Company Limited ("Wuling Alxa Right Flag") and 30% of Wuling Wuhai Electric Power Company Limited ("Wuling Wuhai"), respectively. Therefore, the Group recognized an increase of RMB93,366,000 in the non-controlling shareholders' equity and an increase of RMB5,224,000 in the other reserves of the Group.

On 20 September 2022, the Company and SPIC Qingneng (Beijing) New Energy Development Co., Ltd. ("the SPV") entered into four equity transfer agreements, pursuant to which the Company agreed to sell and the SPV agreed to acquire the entire equity interests of Datong China Power Photovoltaic Power Generating Company Limited ("Datong CP"), Zuoyun China Power Photovoltaic Power Generating Co., Ltd., Hunyuan China Power Photovoltaic Power Generating Co., Ltd. ("Hunyuan CP") and Ruicheng China Power Photovoltaic Power Generating Co., Ltd. ("Ruicheng CP") (together referred as the "Target Companies") for an aggregate consideration of RMB1,473,413,000. Upon completion, as the Company maintained the control and decision-making power of the Target Companies through its control over the SPV, their financial statements continued to be consolidated with the financial statements of the Group. Therefore, the Group recognized an increase of RMB1,014,909,000 in the non-controlling shareholders' equity and a decrease of RMB28,319,000 in the other reserves of the Group.

(b) Loss of control

On 19 September 2022, SPIC Anhui New Energy Co., Ltd. ("Auhui Company") (a wholly-owned subsidiary of the Company) entered into an equity transfer agreement with Pingdingshan Tuoer Trading Co., Ltd., pursuant to which Anhui Company agreed to sell 70% equity interest in Hefei Haihe Photovoltaic Energy Co., Ltd. ("Hefei Haihe"), at a consideration of RMB3,402,000. Upon completion of the target equity transfer, Hefei Haihe ceased to be a subsidiary of the Group.

On 21 October 2022, the Company entered into an equity transfer agreement with SPIC Digital Technology Co., Ltd. ("SPIC DiTech"), pursuant to which the Company agreed to sell, and SPIC DiTech agreed to acquire, 51% equity interest in CP Huizhi (a wholly-owned subsidiary of the Company), at a consideration of RMB25,752,000. Upon completion of the target equity transfer, CP Huizhi ceased to be a subsidiary and became an associate of the Group.

On 25 November 2022, Tianjin No. 2 Intermediate People's Court ruled that Tianjin Xingtaibao New Energy Science and Technology Development Co., Ltd. ("Tianjin Xingtaibao") was bankrupt.

On 26 December 2022, the Company entered into the equity transfer agreements with China Coal Power Co., Ltd. ("China Coal Power"), an independent third party, pursuant to which the Company agreed to sell, and China Coal Power agreed to purchase, 60% equity interest in Xinyuan Ronghe, a wholly owned subsidiary of the Company, at a consideration of RMB1,264,735,000. Xinyuan Ronghe was an investment vehicle which held 100% and 51% of equity interests of Pingdingshan Yaomeng Power Company Limited ("Yaomeng Power") and Huanggang Dabieshan Power Generation Company Limited ("Dabieshan Power"), respectively. Upon completion of the disposal on 26 December 2022, Xinyuan Ronghe, together with Yaomeng Power and Dabieshan Power, ceased to be subsidiaries and became associates of the Group.

47. DISPOSAL OF INTERESTS IN SUBSIDIARIES (CONTINUED)

(b) Loss of control *(Continued)*

	Xinyuan Ronghe RMB'000	CP Huizhi RMB'000	Hefei Haihe RMB'000	Tianjin Xingtaibao RMB'000
Non-current assets				
Property, plant and equipment	8,274,483	9,154	31,064	–
Right-of-use assets	179,530	683	2,195	–
Other intangible assets	–	–	–	1,692
Deferred income tax assets	435,430	–	–	–
Current assets				
Inventories	445,502	5,652	80	–
Accounts receivable	1,037,687	–	22,826	3,863
Prepayments, deposits and other receivables	484,124	44,152	2,357	2,790
Amounts due from related parties	1,106,195	–	–	–
Cash and cash equivalents	2,310	783	1,034	–
Non-current liabilities				
Deferred income	(19,781)	–	–	–
Bank borrowings	(3,382,361)	–	–	–
Borrowings from related parties	(500,000)	–	–	–
Lease liabilities	(75,160)	(455)	(41,883)	–
Deferred income tax liabilities	(37,408)	–	–	–
Current liabilities				
Accounts and bills payable	(1,644,649)	–	–	–
Other payables and accrued charges	(297,190)	(12,565)	(10,077)	(21,081)
Bank borrowings	(3,709,042)	(5,000)	–	–
Borrowings from related parties	(450,000)	–	–	–
Lease liabilities	(1,427)	–	(2,666)	–
Tax payable	(17,475)	(1,036)	–	–
Net assets/(liabilities)	1,830,768	41,368	4,930	(12,736)
Non-controlling interests	551,781	–	1,479	(3,821)
Equity attributable to owners of the respective company	1,278,987	41,368	3,451	(8,915)
Net assets/(liabilities) subject to disposal	767,392	21,098	3,451	(8,915)
Consideration	1,264,735	25,752	3,402	–
Gain/(loss) on disposal of subsidiaries (pre-tax) (Note 7)	497,343	4,654	(49)	8,915
Gain on remeasurement of remaining equity interests in associates after loss of control over subsidiaries (Note 7)	149,865	4,472	N/A	N/A
Total gain/(loss) on disposal	647,208	9,126	(49)	8,915
Net cash and cash equivalents received/(paid)	1,262,425	(783)	2,368	–

48. ACQUISITIONS OF SUBSIDIARIES

During the year ended 31 December 2022, the Group acquired certain equity interests in twenty-four entities (collectively referred to as "Acquired Entities") from China Power International New Energy Holding Limited ("CPINE"), CPNE and Guangxi Overseas in the form of paying cash and issuance of consideration shares. Each of CPNE, CPINE and Guangxi Overseas is an indirect non-wholly-owned subsidiary ultimately owned and controlled by SPIC. As such, the transactions were deemed as connected transactions. These acquisitions have been accounted for using the acquisition method when being acquired. All of the Acquired Entities were not individually material.

Consideration transferred

	2022 RMB'000
Cash paid	1,466,257
Issuance of consideration shares (Note 32)	4,090,985
Consideration payable as at 31 December 2022	758,973
	6,316,215

Assets and liabilities recognized at the date of acquisition

	2022 RMB'000
Non-current assets	
Property, plant and equipment	6,714,248
Right-of-use assets	750,086
Prepayments for construction of power plants	109,510
Other intangible assets	7,490,945
Other non-current assets	1,649,496
Current assets	
Cash and cash equivalents	618,772
Accounts receivable	2,375,274
Prepayments, deposits and other receivables	643,505
Amounts due from related parties	1,294,622
Inventories	27,837
Non-current liabilities	
Deferred income	(4,663)
Bank borrowings	(6,265,791)
Other borrowings	(318,988)
Lease liabilities	(21,642)
Deferred income tax liabilities	(234,911)
Other non-current liabilities	(736,379)
Current liabilities	
Construction costs payable	(1,462,122)
Other payables and accrued charges	(394,661)
Amounts due to related parties	(1,161,463)
Bank borrowings	(1,673,020)
Borrowings from related parties	(40,500)
Tax payable	(30,060)
Net identifiable assets acquired	9,330,095

48. ACQUISITIONS OF SUBSIDIARIES (CONTINUED)

Non-controlling interests

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 RMB1,356,687,000.

Negative goodwill arising on acquisition

	2022 RMB'000
Consideration transferred	6,316,215
Add: Non-controlling interests	1,356,687
Add: Associate transfer to subsidiary	105,584
Less: Net identifiable assets acquired	9,330,095
Gain on recognition of negative goodwill* (Note 7)	(1,551,609)

* The negative goodwill arose from the difference between the aggregate of the share-based part of the consideration and the cash consideration for acquisition of the Acquired Entities and the fair value of the acquired net assets, due to the stock market volatility of the Company's share price at the time of completion as compared to the time of entering into the agreements.

Net cash outflows arising on acquisition

	2022 RMB'000
Consideration paid in cash	1,466,257
Less: Cash and cash equivalents acquired	618,772
	847,485

During the year ended 31 December 2022, the Company acquired certain equity interests in seven entities (collectively referred to as "Other Acquired Entities") from third parties in form of paying cash consideration. These acquisitions have been accounted for using the acquisition method when being acquired. All of the Other Acquired Entities were not individually material.

Consideration transferred

	2022 RMB'000
Cash paid	1,015,936
Consideration payable, which has been accounted for as other payables as at 31 December 2022	1,396
	1,017,332

48. ACQUISITIONS OF SUBSIDIARIES (CONTINUED)

Assets and liabilities recognized at the date of acquisition

	2022 RMB'000
Non-current assets	
Property, plant and equipment	5,221,563
Right-of-use assets	107,396
Other non-current assets	81,223
Current assets	
Cash and cash equivalents	352,438
Accounts receivable	695,446
Prepayments, deposits and other receivables	603,453
Inventories	262
Non-current liabilities	
Bank borrowings	(882,420)
Lease liabilities	(1,860,435)
Current liabilities	
Construction costs payable	(2,490,230)
Other payables and accrued charges	(794,404)
Bank borrowings	(15,000)
Net identifiable assets acquired	1,019,292

Non-controlling interests

The non-controlling interests in Other Acquired Entities recognized at the acquisition date were measured by reference to the proportionate share of recognized amounts of net assets of the Other Acquired Entities and amounts to RMB1,960,000.

Net cash outflows arising on acquisition

	2022 RMB'000
Consideration paid in cash	1,015,936
Less: Cash and cash equivalents acquired	352,438
	663,498

49. RELATED PARTY TRANSACTIONS

The Group is controlled by CPI Holding, an intermediate holding company which directly holds approximately 22.9% (31 December 2021: 26.2%) of the Company's shares, and indirectly holds approximately 21.5% (31 December 2021: 24.6%) of the Company's shares through CPDL. In addition, SPIC International Finance (Hong Kong) Company Limited ("SPIC Finance HK"), a wholly-owned subsidiary of SPIC and also a fellow subsidiary of the Company, holds approximately 3.2% (31 December 2021: 3.6%) of the Company's shares. CPNE, an indirect non-wholly subsidiary of SPIC, holds approximately 13.5% (31 December 2021: Nil) of the Company's shares at 31 December 2022. SPIC, the beneficial owner of CPI Holding, SPIC Finance HK and CPNE, owned approximately 61.1% (31 December 2021: 54.4%) of the equity interest in the Company in aggregate as at 31 December 2022.

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.

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.

49. RELATED PARTY TRANSACTIONS (CONTINUED)

(a) Income

	Notes	2022 RMB'000	2021 RMB'000
Interest income from:	(i)		
— SPIC Financial		**34,584**	18,507
— associates		**49,491**	6,493
— non-controlling interests		**–**	1,861
Dividend income from Shanghai Power	(ii)	**–**	39,962
Rental income from:	(iii)		
— joint ventures		**1,092**	1,558
— non-controlling interests		**214**	–
Income from provision of repairs and maintenance services to:	(iii)		
— SPIC		**–**	94
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**68,847**	69,052
— associates		**6,143**	9,742
Income from provision of entrusted management services to:	(iii)		
— CPI Holding		**77,374**	70,326
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**23,672**	21,057
Income from provision of IT and other services to:	(iii)		
— SPIC		**1,585**	–
— CPI Holding		**1,590**	1,132
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**78,734**	56,524
— associates		**239,149**	25,371
— a joint venture		**495**	–
Sales of coal, coal by-products and spare parts to:	(iii)		
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**11,815**	20,795
— associates		**224,363**	173,396
— non-controlling interests		**311**	–
Sales of heat to:	(iii)		
— non-controlling interests		**36,883**	34,386
— a joint venture		**1,922**	–
Sales of unused power production quota to companies controlled by SPIC other than CPI Holding and SPIC Financial	(iii)	**–**	2,089
Gain on disposal of a subsidiary (pre-tax) (Note 47(b))	(iv)	**4,654**	1,242
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)		**–**	242,283
Gain on recognition of negative goodwill from acquisition of subsidiaries from SPIC other than CPI Holding and SPIC Financial (Note 48)		**1,551,609**	–
Gain on remeasurement of remaining equity interests in an associate after loss of control over a subsidiary (Note 47(b))	(iv)	**4,472**	–
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 was charged at interest rates from 0.30% to 5.66% (2021: 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) The Company disposed 51% equity interests of CP Huizhi to SPIC DiTech, and CP Huizhi became an associate of the Company.

(b) Expenses

	Notes	2022 RMB'000	2021 RMB'000
Purchases of coal, coal by-products and spare parts from:	(i)		
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**95,168**	105,808
— joint ventures		**44,102**	44,727
— non-controlling interests		**8,363,793**	7,608,441
Construction costs and other services fees to:	(ii)		
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**1,140,727**	744,785
— non-controlling interests		**498,183**	934,012
Interest expenses to:	(iii)		
— SPIC		**380,642**	348,903
— CPI Holding		**10,710**	34,640
— SPIC Financial		**243,335**	196,223
— an associate		**1,021**	539
— companies controlled by SPIC other than CPI Holding and SPIC Financial		**49,622**	35,082
— companies controlled by SPIC other than CPI Holding and SPIC Financial on lease liabilities		**56,256**	82,012
Acquisition of an associate from CPI Holding		**–**	18,010
Acquisition of subsidiaries from companies controlled by SPIC other than CPI Holding and SPIC Financial (Note 48)	(iv)	**5,769,083**	–
Acquisition of a subsidiary from a joint venture (Note 48)	(iv)	**547,132**	–

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 2.05% to 7% (2021: ranged from 1.85% to 7%) per annum.

(iv) In September 2022, the Company entered into equity transfer agreements with companies controlled by SPIC, other than CPI Holding and SPIC Financial, acquiring control rights of several subsidiaries, at a consideration of RMB5,769,083,000. On 31 October 2022, the Group entered into an equity transfer agreement with Guangxi Overseas, pursuant to which the Group acquired 79.67% of the equity interest of SPIC Guangxi Jinzishan Wind Power Co., Ltd. ("Jinzishan Wind Power"), at a consideration of RMB547,132,000.

49. RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Financial assistance provided by a related party

As disclosed in Note 34, the Company and certain of its subsidiaries entered into the Perpetual Debt Investment Contracts with Bridge Trust. For the year ended 31 December 2022, the Group received RMB5,608,720,000 perpetual debts.

(d) Year-end balances with related parties

Year-end balances with related parties are disclosed in Notes 17, 24, 27, 28, 31, 34 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 2022 and 2021, 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

	2022 RMB'000	2021 RMB'000
Fees, basic salaries, housing allowance, other allowances and benefits in kind, discretionary bonuses and other benefits	8,406	9,428
Employer's contribution to pension plans	837	758
Share-based payment expenses	2,578	–

50. PARTICULARS OF PRINCIPAL SUBSIDIARIES

The following is a list of the principal subsidiaries as at 31 December 2022 and 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
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/ RMB1,460,078,730	60%	-	Sino-foreign equity joint venture	Generation and sale of electricity
Dabieshan Power# (黃岡大別山發電有限責任公司)	The PRC	RMB1,667,486,000/ RMB1,659,305,896	51%	-	Sino-foreign equity joint venture	Generation and sale of electricity
Yaomeng Power# (平頂山姚孟發電有限責任公司)	The PRC	RMB2,102,335,500	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/ RMB10,185,453,632	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)	The PRC	RMB1,850,000,000/ RMB352,613,600	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	RMB947,187,856	-	100%	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/ RMB1,784,776,331	100%	-	Wholly foreign-owned enterprise	Generation and sale of electricity
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 CP (大同中電光伏發電有限公司)	The PRC	RMB680,430,000	-	100%	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
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 Co., Ltd. (中電(沈陽)能源投資有限公司)	The PRC	RMB500,000,000/ RMB424,050,000	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
China Power (Yantai) Energy Investment Co., Ltd. (中電(煙台)能源投資有限公司)	The PRC	USD220,000,000/ RMB518,896,800	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/ RMB1,197,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Ruicheng CP (芮城中電光伏發電有限公司)	The PRC	RMB200,000,000	–	100%	Limited liability company	Generation and sale of electricity
China Power Huainan Xiejiaji Photovoltaic Power Generating Company Limited (中電淮南謝家集光伏發電有限責任公司) (formerly known as 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%	Limited liability company	Generation and sale of electricity
China Power Integrated Smart Energy Co., Ltd (中電智慧綜合能源有限公司)	The PRC	RMB1,000,000,000/ RMB209,814,300	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 Power Generating Company Limited (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
Huaihua Yuanjiang Power Development Co., Ltd. (懷化沅江電力開發有限責任公司)	The PRC	RMB3,800,000,000	–	100%	Limited liability company	Generation and sale of electricity
China Power Changshu Thermoelectric Co., Ltd. (中電常熟熱電有限公司)	The PRC	RMB344,000,000/ RMB286,880,000	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	Proportion of ownership interest Held by subsidiaries	Type of legal entity	Principal activities
Wuling Shanshan Electric Power Co., Ltd. (五凌鄯善電力有限公司)	The PRC	RMB274,000,000	–	100%	Limited liability company	Generation and sale of electricity
Wuling Linxiang Electric Power Co., Ltd. (五凌臨湘電力有限公司)	The PRC	RMB279,000,000	–	100%	Limited liability company	Generation and sale of electricity
Wuling Xinshao Electric Power Co., Ltd. (五凌新邵電力有限公司)	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%	Limited liability company	Generation and sale of electricity
Wuling Jiangyong Electric Power Co., Ltd. (五凌江永電力有限公司)	The PRC	RMB100,000,000	–	70%	Limited liability company	Generation and sale of electricity
Wuling Shuangfeng Electric Power Co., Ltd. (五凌雙峰電力有限公司)	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
Wuling Buerjin Electric Power Co., Ltd. (五凌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	RMB2,200,000,000/ RMB1,604,000,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
SPIC Guangxi Changzhou Hydropower Development Co., Ltd. ("Changzhou Hydropower") (國家電投集團廣西長洲水電開發有限公司)	The PRC	RMB2,901,518,034	–	64.93%	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	RMB1,152,391,526/ RMB1,251,251,526	–	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/ RMB2,146,985,300	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Anqiu Hengtai New Energy Technology Co., Ltd. (安丘恒泰新能源科技有限公司)	The PRC	RMB331,820,000/ RMB331,819,316	–	51%	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
Anhui Company (國家電力投資集團安徽新能源有限公司)	The PRC	RMB631,000,000/ RMB627,539,300	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/ RMB240,100,000	–	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	RMB4,830,000,000/ RMB2,508,672,600	100%	–	Wholly foreign-owned enterprise	Investment on new energy power resources
Shayang Lvdong 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 New Energy 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 CP (渾源中電光伏發電有限公司)	The PRC	RMB178,815,700	–	100%	Limited liability company	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/ RMB839,907,200	–	100%	Limited liability company	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	–	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
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

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
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
SPIC Gushi New Energy Co., Ltd. (國家電投固始新能源有限公司)	The PRC	RMB324,000,000/ RMB301,007,553	–	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	–	100%	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	–	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/ RMB82,795,429	–	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/ RMB164,725,105	–	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/ RMB166,463,600	–	66%	Limited liability company	Generation and sale of electricity
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/ RMB135,731,953	–	90%	Limited liability company	Generation and sale of electricity
Xintai China Power 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%	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
Ruicheng Lvlong Clean Energy Co., Ltd. (芮城縣綠隆清潔能源有限公司)	The PRC	RMB192,000,000/ RMB189,117,647	–	100%	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/ RMB1,039,850,000	–	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/ RMB740,050,000	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	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	–	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
China Power Dafeng Wind Power Co., Ltd (中電大豐風力發電有限公司)	The PRC	RMB704,406,200/ RMB499,618,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Gansu China Power Wuwei Photovoltaic Power Generation Co., Ltd (甘肅中電武威光伏發電有限公司)	The PRC	RMB257,374,200/ RMB203,520,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Hubei China Power Chunyang Mountain Wind Power Co., Ltd (湖北中電純陽山風電有限公司)	The PRC	RMB233,970,000/ RMB149,500,000	100%	–	Wholly foreign-owned enterprise	Generation and sale of electricity
Gansu China Power Baiyin Photovoltaic Power Generation Co., Ltd (甘肅中電白銀光伏發電有限公司)	The PRC	RMB372,189,548/ RMB362,446,529	61%	–	Foreign equity joint venture	Generation and sale of electricity
Gansu China Power Jiuquan Third Wind Power Generation Co., Ltd (甘肅中電酒泉第三風力發電有限公司)	The PRC	RMB2,317,058,443/ RMB2,311,540,500	73%	–	Foreign equity joint venture	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
Jinzishan Wind Power (國家電投集團廣西金紫山風電有限公司)	The PRC	RMB523,012,000	–	94.89%	Limited liability company	Generation and sale of electricity
Guangxi Nanning Lvdong New Energy Investment Co., Ltd. (廣西南寧綠動新能源投資有限公司)	The PRC	RMB310,000,000/ RMB260,000,000	-	100%	Limited liability company	Generation and sale of electricity
Sichuan Jiuyuan Electric Power Development Co., Ltd. (四川九源電力開發有限責任公司)	The PRC	RMB320,000,000	-	100%	Limited liability company	Generation and sale of electricity
Hunan Wuling Lvneng Power Development Partnership (limited partnership) (湖南五凌綠能電力開發合夥企業(有限合夥))	The PRC	RMB2,267,297,400	-	20%	Limited partnership	Generation and sale of electricity
Daoxian Clean Energy Development Co., Ltd. (道縣清潔能源開發有限公司)	The PRC	RMB130,000,000	-	70%	Limited liability company	Generation and sale of electricity
China Power (Hubei) New Energy Co., Ltd. (中電(湖北)新能源有限公司)	The PRC	RMB1,433,100,000/ RMB278,690,000	70%	-	Sino-foreign equity joint venture	Generation and sale of electricity
China Power Clean Industry Venture Capital Fund (Tianjin) Partnership (limited partnership) (中電清潔產業創業投資基金(天津)合夥企業(有限合夥))	The PRC	RMB5,000,000,000/ RMB1,233,803,600	-	20%	Limited partnership	Investment on new energy power resources
Power Investment Qingneng (Beijing) New Energy Development Co., Ltd. (電投清能(北京)新能源發展有限責任公司)	The PRC	RMB6,250,000,000/ RMB1,542,254,500	-	100%	Limited liability company	Generation and sale of electricity
Xi'an Ruicheng Longtai New Energy Co., Ltd. (西安芮成隆泰新能源有限公司)	The PRC	RMB220,000,000/ RMB189,117,647	70%	-	Sino-foreign equity joint venture	Provision of technical services in relation to generation of electricity
Guyuan County Guangsheng Photovoltaic Power Generation Co., Ltd. (沽源縣光晟光伏發電有限公司)	The PRC	RMB428,000,000/ RMB310,000,000	-	100%	Limited liability company	Generation and sale of electricity
Haikou China Power Second Environmental Power Generation Co., Ltd. (海口中電第二環保發電有限公司)	The PRC	RMB184,650,000/ RMB175,000,000	100%	-	Wholly foreign-owned enterprise	Generation and sale of electricity
Shangqiu China Power Environmental Power Generation Co., Ltd. (商丘中電環保發電有限公司)	The PRC	RMB120,016,000/ RMB120,000,000	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	Proportion of ownership interest Held by subsidiaries	Type of legal entity	Principal activities
Yinchuan Jingqiao New Energy Co., Ltd. (銀川市京橋新能源有限公司)	The PRC	RMB173,920,000	-	100%	Limited liability company	Generation and sale of electricity
Qionghai China Power Environmental Power Generation Co., Ltd. (瓊海中電環保發電有限公司)	The PRC	RMB264,220,000/ RMB242,400,000	100%	-	Wholly foreign-owned enterprise	Generation and sale of electricity
Xinyuan Green Energy Power (Beijing) Co., Ltd. ("Xinyuan Green Power") (新源綠能電力(北京)有限公司)	The PRC	RMB2,000,000,000/ RMB1,722,265,200	100%	-	Wholly foreign-owned enterprise	Investment on new energy power resources
Zhidan County Ruijia Wind Power Co., Ltd. (志丹縣鋭佳風電有限公司)	The PRC	RMB10,000,000/ RMB97,210,000	–	100%	Limited liability company	Generation and sale of electricity
SPIC Hubei Power Sales Co., Ltd. (國家電投集團湖北售電有限公司)	The PRC	RMB1,268,000,000/ RMB1,094,923,400	–	100%	Limited liability company	Generation and sale of electricity
Ninghai Xindian Power Development Co., Ltd. (甯海新電電力開發有限公司)	The PRC	RMB250,000,000	–	100%	Limited liability company	Generation and sale of electricity
Fanzhi County Xiehe Wind Power Generation Co., Ltd. (繁峙縣協合風力發電有限公司)	The PRC	RMB160,000,000/ RMB62,500,000	–	100%	Limited liability company	Generation and sale of electricity

As disclosed in Note 47, the Group disposed equity interests in Dabieshan Power and Yaomeng Power and these companies became associates of the Group.

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	
		2022 RMB'000	2021 RMB'000	**2022 RMB'000**	2021 RMB'000 (restated)	**2022 RMB'000**	2021 RMB'000 (restated)
Wu Ling Power and its subsidiaries (collectively known as "Wu Ling Group")	The PRC	**37%**	37%	**216,199**	521,237	**5,908,020**	5,819,155
Changzhou Hydropower and its subsidiaries (collectively known as "Changzhou Group")	The PRC	**35.07%**	35.07%	**76,456**	74,191	**1,474,307**	1,397,851
Subsidiaries with individually immaterial non-controlling interests						**14,239,133**	9,107,209
						21,621,460	16,324,215

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	
	2022 RMB'000	2021 RMB'000 (restated)
Non-current assets	**61,826,807**	59,282,209
Current assets	**4,778,433**	2,294,187
Non-current liabilities	**(33,482,433)**	(29,880,812)
Current liabilities	**(11,113,641)**	(13,766,482)
Total equity	**22,009,166**	17,929,102
Non-controlling interests within Wu Ling Group	**(6,041,546)**	(2,201,655)
Equity attributable to equity holders of Wu Ling Power	**15,967,620**	15,727,447
Non-controlling interests of Wu Ling Power (at 37%)	**5,908,020**	5,819,155

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	
	2022 **RMB'000**	2021 RMB'000 (restated)
Revenue	**7,396,324**	7,499,623
Profit for the year	**796,088**	1,673,151
Profit attributable to the non-controlling interests of Wu Ling Group's subsidiaries	**(231,190)**	(335,053)
Profit attributable to the equity holders of Wu Ling Power	**564,898**	1,338,098
Profit attributable to the non-controlling interests of Wu Ling Power (at 37%)	**209,012**	495,096
Other comprehensive income for the year	**19,439**	70,678
Other comprehensive income attributable to the non-controlling interests of Wu Ling Group's subsidiaries	**(14)**	(27)
Other comprehensive income attributable to the equity holders of Wu Ling Power	**19,425**	70,651
Other comprehensive income attributable to the non–controlling interests of Wu Ling Power (at 37%)	**7,187**	26,141
Total comprehensive income for the year	**815,527**	1,743,829
Total comprehensive income attributable to the non-controlling interests of Wu Ling Group's subsidiaries	**(231,204)**	(335,080)
Total comprehensive income attributable to the equity holders of Wu Ling Power	**584,323**	1,408,749
Total comprehensive income attributable to the non-controlling interests of Wu Ling Power (at 37%)	**216,199**	521,237

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	
	2022	2021
	RMB'000	RMB'000
Dividends paid	**(200,075)**	(615,028)
Dividends paid to non-controlling interests	**(136,060)**	(1,231,248)
Net cash inflow from operating activities	**4,361,191**	3,883,021
Net cash outflow from investing activities	**(6,483,809)**	(6,754,099)
Net cash inflow from financing activities	**2,827,626**	4,956,504
Net increase in cash and cash equivalents	**368,873**	239,150
Cash and cash equivalents at 1 January	**307,589**	68,439
Cash and cash equivalents at 31 December	**676,462**	307,589

The financial information presented above is before inter-company eliminations.

(2) Changzhou Group

Summarized statement of financial position

	Changzhou Group	
	2022	2021
	RMB'000	RMB'000
Non-current assets	**5,252,038**	4,688,800
Current assets	**1,976,859**	2,162,993
Non-current liabilities	**(2,353,812)**	(2,136,070)
Current liabilities	**(704,994)**	(565,259)
Total equity	**4,170,091**	4,150,464
Non-controlling interests within Changzhou Group	**(16,050)**	(1,700)
Equity attributable to equity holders of Changzhou Hydropower	**4,154,041**	4,148,764
Non-controlling interests of Changzhou Hydropower	**1,474,307**	1,397,851

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	
	2022 RMB'000	2021 RMB'000
Revenue	**846,307**	870,554
Profit and total comprehensive income for the year	**218,010**	211,551
Total comprehensive income attributable to the equity holders of Changzhou Group	**218,010**	211,551
Total comprehensive income attributable to the non-controlling interests of Changzhou Group (at 35.07%)	**76,456**	74,191

Summarized statement of cash flows

	Changzhou Group	
	2022 RMB'000	2021 RMB'000
Dividends paid	**(138,267)**	(84,988)
Dividends paid to non-controlling interests	**(74,681)**	–
Net cash inflow from operating activities	**816,130**	198,284
Net cash (outflow)/inflow from investing activities	**(498,066)**	205,660
Net cash outflow from financing activities	**(102,218)**	(314,800)
Net increase in cash and cash equivalents	**2,898**	4,156
Cash and cash equivalents at 1 January	**5,809**	1,653
Cash and cash equivalents at 31 December	**8,707**	5,809

The financial information presented above is before inter-company eliminations.

51. CONTINGENT LIABILITIES

There are no material contingent liabilities of the Group at 31 December 2022.

52. EVENT AFTER THE REPORTING PERIOD

On 31 December 2022, the Company and Xinyuan Green Power, a wholly-owned subsidiary of the Company, entered into the capital injection agreements with CCB Financial Asset Investment Company Limited ("CCB Investment"), pursuant to which CCB Investment agreed to inject an aggregate amount of RMB2,000,000,000 into Xinyuan Green Power. Upon completion, Xinyuan Green Power will be held as to 54.56% by the Company and 45.44% by CCB Investment, and Xinyuan Green Power shall remain as a subsidiary of the Company.

53. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	As at 31 December	
	2022	2021
	RMB'000	RMB'000
ASSETS		
Non-current assets		
Property, plant and equipment	**21,030**	26,112
Right-of-use assets	**76,465**	74,462
Investments in subsidiaries	**34,237,685**	26,609,250
Interests in associates	**3,090,834**	1,958,722
Interests in joint ventures	**665,707**	640,707
Equity instruments at FVTOCI	**3,636,555**	4,657,406
Other non-current assets	**500,000**	14,367
Loans to subsidiaries	**1,300,000**	4,194,500
	43,528,276	38,175,526
Current assets		
Loans to subsidiaries	**5,103,996**	7,402,760
Prepayments, deposits and other receivables	**262,657**	176,258
Amounts due from related parties	**2,046,653**	1,412,172
Amounts due from subsidiaries	**707,032**	757,440
Dividends receivable	**149,241**	112,083
Cash and cash equivalents	**1,629,980**	576,156
	9,899,559	10,436,869
Total assets	**53,427,835**	48,612,395
EQUITY		
Share capital (Note 32)	**24,508,986**	20,418,001
Other equity instruments (Note 34)	**2,997,600**	2,997,600
Reserves (note)	**4,452,664**	5,538,301
Total equity	**31,959,250**	28,953,902

53. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

	As at 31 December	
	2022	2021
	RMB'000	RMB'000
LIABILITIES		
Non-current liabilities		
Bank borrowings	**–**	5,542,000
Other borrowings	**13,000,000**	5,000,000
Lease liabilities	**55,783**	63,574
Deferred income tax liabilities	**593,248**	852,402
	13,649,031	11,457,976
Current liabilities		
Other payables and accrued charges	**295,440**	261,854
Amounts due to related parties	**1,355,183**	340,473
Amounts due to subsidiaries	**2,425,234**	1,913,458
Bank borrowings	**529,000**	2,179,000
Borrowings from related parties	**1,200,000**	–
Other borrowings	**2,000,000**	3,500,000
Lease liabilities	**14,697**	5,732
	7,819,554	8,200,517
Total liabilities	**21,468,585**	19,658,493
Total equity and liabilities	**53,427,835**	48,612,395
Net current assets	**2,080,005**	2,236,352
Total assets less current liabilities	**45,608,281**	40,411,878

The statement of financial position was approved and authorized for issue by the Board on 23 March 2023 and is signed on its behalf by:

HE Xi
Director

GAO Ping
Director

53. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

Note:

Movements in the Company's reserves

	FVTOCI reserve RMB'000	Share-based payment reserve RMB'000	Retained earnings RMB'000	Total RMB'000
At 1 January 2022	**2,556,333**	**–**	**2,981,968**	**5,538,301**
Profit for the year	**–**	**–**	**327,118**	**327,118**
Profit attributable to holders of other equity instruments	**–**	**–**	**(134,250)**	**(134,250)**
Fair value loss on equity instruments at FVTOCI, net of tax	**(765,638)**	**–**	**–**	**(765,638)**
Share-based payment expenses	**–**	**28,802**	**–**	**28,802**
2021 final dividend	**–**	**–**	**(541,669)**	**(541,669)**
At 31 December 2022	**1,790,695**	**28,802**	**2,633,167**	**4,452,664**
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

The profit for the year attributable to ordinary shareholders of the Company is dealt with in the financial statements of the Company to the extent of RMB192,868,000 (2021: loss of RMB247,327,000).

Five-Year Financial and Operations Summary

	2022 RMB million	2021 RMB million (restated)	2020 RMB million	2019 RMB million	2018 RMB million (restated)
Revenue	**43,689.1**	35,476.7	28,427.7	27,763.3	23,175.6
Profit before taxation	**3,344.0**	1,038.2	3,826.1	2,714.2	2,069.9
Income tax expense	**(658.7)**	(361.9)	(900.6)	(513.0)	(432.7)
Profit for the year	**2,685.3**	676.3	2,925.6	2,201.2	1,637.2
Attributable to:					
Equity holders of the Company	**2,648.0**	(256.3)	1,708.3	1,284.4	1,098.4
Non-controlling interests	**37.3**	932.6	1,217.3	916.8	538.8
Basic earnings per share (RMB)	**0.22**	(0.04)	0.17	0.13	0.11
Dividend per share (RMB)	**0.110**	0.050	0.130	0.130	0.110
Total non-current assets	**180,519.2**	156,675.6	137,842.8	127,310.7	111,723.9
Total current assets	**30,885.7**	18,570.4	18,105.9	12,979.0	13,232.8
Total assets	**211,404.9**	175,246.0	155,948.7	140,289.7	124,956.7
Total current liabilities	**45,925.0**	45,535.8	43,277.9	35,535.2	29,721.1
Total non-current liabilities	**96,889.8**	77,333.5	66,880.9	59,621.3	52,386.6
Net assets	**68,590.1**	52,376.7	45,789.9	45,133.2	42,849.0
Equity attributable to equity holders of the Company	**46,968.6**	36,052.5	33,397.8	30,320.1	29,949.9
Non-controlling interests	**21,621.5**	16,324.2	12,392.1	14,813.1	12,899.1
Total equity	**68,590.1**	52,376.7	45,789.9	45,133.2	42,849.0
Consolidated installed capacity (MW)	**31,599.2**	28,931.9	26,845.8	23,698.7	21,439.2
Attributable installed capacity (MW)	**29,333.6**	24,960.8	23,878.2	21,113.2	19,731.6
Gross power generation (MWh)	**112,942,437**	104,926,234	91,902,510	87,134,871	74,101,429
Total electricity sold (MWh)	**108,170,802**	100,612,928	88,255,525	83,558,993	70,964,796
Net coal consumption rate (g/kWh)	**302.37**	301.16	303.31	301.82	302.41

"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
"CCB Investment"	建信金融資產投資有限公司 (CCB Financial Asset Investment Company Limited*), a subsidiary of China Construction Bank Corporation
"CG Code"	the Corporate Governance Code as set out in Appendix 14 of the Listing Rules, as amended from time to time
"Changshu Power Plant"	Jiangsu Changshu Electric Power Generating Company Limited, an associate of the Company
"Changzhou Hydropower"	國家電投集團廣西長洲水電開發有限公司 (SPIC Guangxi Changzhou Hydropower Development Co., Ltd.*), a subsidiary of the Company
"Chaoyang Power Station" or "CP Chaoyang"	China Power Chaoyang New Energy Company Limited, a subsidiary of the Company
"China Coal Power"	中煤電力有限公司 (China Coal Power Co., Ltd.*), a subsidiary of China Coal Group which is ultimately managed by the SASAC
"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"	中電國瑞供應鏈管理有限公司 (China Power Guorui Supply Chain Management Co., Ltd.*), a subsidiary of the Company
"CP Huayuan"	中電華元核電工程技術有限公司 (CP Huayuan Nuclear Power Engineering Technical Co., Ltd.*), a subsidiary of the Company
"CP Hua Chuang"	中電華創電力技術研究有限公司 (China Power Hua Chuang Electric Power Technology Research Company Limited*), a subsidiary of the Company
"CP Huizhi"	Beijing CPI Huizhi Technology Co., Ltd, an associate of the Company
"CP Jiaxian"	中電(郟縣)智慧能源有限公司 (China Power Jiaxian Intelligent Energy Company Limited*), a subsidiary of the Company
"CP Junan"	中電(莒南)電力有限公司 (China Power (Junan) Power Co., Ltd.*), a subsidiary of the Company
"CP Nongchuang"	中電投新農創科技有限公司 (China Power Investment Xinnongchuang Technology Co., Ltd.*), an associate 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
"CPI Xianrong"	中電投先融(天津)風險管理有限公司 (CPI Xianrong (Tianjin) Risk Management Co., Ltd*), an indirect subsidiary of SPIC
"CPINE"	中電國際新能源控股有限公司 (China Power International New Energy Holding Limited*), a subsidiary of CPNE and an associate of SPIC
"CPNE"	China Power (New Energy) Holdings Limited, a subsidiary of CPI Holding and an associate of SPIC
"Dabieshan Power Plant"	黃岡大別山發電有限責任公司 (Huanggang Dabieshan Power Company Limited*), an associate of the Company
"date of this annual report"	23 March 2023, the day this annual report was approved by the Board
"Director(s)"	director(s) of the Company
"Dongping Hydropower"	the hydropower plant project in Dongping of Wu Ling Power
"Fuxi Power Plant"	四川中電福溪電力開發有限公司 (Sichuan CPI Fuxi Power Company Limited), a subsidiary of the Company
"Group" or "We"	the Company and its subsidiaries from time to time
"Guangxi Company"	國家電投集團廣西電力有限公司 (SPIC Guangxi Power Company Limited*), a subsidiary of the Company
"Guangxi Nuclear Power"	中電投廣西核電有限公司 (CPI Guangxi Nuclear Power Co., Ltd.*), an indirect subsidiary of SPIC
"Guangxi Overseas"	廣西國電投海外能源投資有限公司 (Guangxi SPIC Overseas Energy Investment Co., Ltd.*), a joint venture of the Company
"GW"	gigawatt, that is, one billion watts
"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"	淮南礦業(集團)有限責任公司 (Huainan Mining Industry (Group) Company Limited*), a substantial shareholder of certain subsidiaries of the Company

"Hubei Company"	國家電投集團湖北綠動新能源有限公司 (SPIC Hubeilvdong New Energy Co., Ltd.*), a subsidiary of the Company
"installed capacity"	the manufacturers' rated power output of a generating unit or a power plant, usually denominated in MW
"Jilin Electric"	吉林電力股份有限公司 (Jilin Electric Power Co., Ltd.*), an associate of SPIC and listed on the Shenzhen Stock Exchange
"Jingyi ES-Tech"	山東京沂儲能科技有限公司 (Shandong Jingyi Energy Storage Technology Co., Ltd.*), a subsidiary of CPNE
"Jinzishan Wind Power"	國家電投集團廣西金紫山風電有限公司 (SPIC Guangxi Jinzishan Wind Power Limited*), a subsidiary of the Company
"Kezhou New Energy"	克州綠動新能源有限公司 (Kezhou Lvdong New Energy Company Limited*), 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
"Lingyun Energy"	五大連池市凌運能源有限公司 (Wudalianchi City Lingyun Energy Co., Ltd.*), a subsidiary of the Company
"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
"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
"Nanning New Energy"	廣西南寧綠動新能源投資有限公司 (Guangxi Nanning Lvdong New Energy Investment Co., Ltd.*), a subsidiary of the Company
"Nantong Energy"	南通新中電能源發展有限公司 (Nantong New CP Energy Development Co., Ltd.*), a subsidiary of the Company
"NDRC"	National Development and Reform Commission
"net coal consumption rate"	average consumption of standard coal for supplying 1 kWh power (deducting self-used power)
"PBOC"	中國人民銀行 (People's Bank of China*)
"Pingwei Power Plant"	Anhui Huainan Pingwei Electric Power Company Limited, 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"	中電(普安)發電有限責任公司 (China Power (Pu'an) Power Generating Company Limited*), a subsidiary of the Company
"Qiyuanxin Power"	上海啟源芯動力科技有限公司 (Shanghai Qiyuanxin Power Technology Co., Ltd.*), an associate of the Company
"RMB"	Renminbi, the lawful currency of the PRC
"SASAC"	the State-owned Assets Supervision and Administration Commission of the State Council
"Shandong Company"	國家電投集團山東能源發展有限公司 (SPIC Shandong Energy Development Co., Ltd.*), a subsidiary of the Company
"Shandong Engineering"	山東中電新能源工程有限公司 (Shandong China Power New Energy Engineering Co., Ltd.*), a subsidiary of the Company
"Shandong Institute"	山東電力工程諮詢院有限公司 (Shandong Institute Power Engineering Consulting Institute Corp., Ltd.*), an indirect subsidiary of SPIC
"Shandong Nuclear Power"	山東核電有限公司 (Shandong Nuclear Power Co., Ltd.*), an indirect subsidiary of SPIC
"Shanghai Heyun"	上海和運工程諮詢有限公司 (Shanghai Heyun Engineering Consulting Co., Ltd.*), an indirect subsidiary of SPIC
"Shanghai Power"	上海電力股份有限公司 (Shanghai Electric Power Co., Ltd.*), a company listed on the Shanghai Stock Exchange which the Company holds certain of its A shares for investment purpose
"Shaoyang New Energy"	五凌(邵陽縣)新能源有限公司 (Wuling (Shaoyang County) New Energy Co., Ltd.*), a subsidiary of the Company
"Share Incentive Scheme"	the share option incentive scheme approved and adopted by the Company at an extraordinary general meeting held on 15 June 2022. For details, please refer to the circular of the Company dated 27 May 2022
"Shouguang New Energy"	壽光電投昊邦新能源有限公司 (Shouguang Power Investment Haobang New Energy Co., Ltd.*), a subsidiary of the Company
"Sichuan Energy Investment"	四川能投發展股份有限公司 (Sichuan Energy Investment Development Co., Ltd.*), an associate of the Company
"SNI Chongqing"	國核電力規劃設計研究院重慶有限公司 (State Nuclear Electric Power Planning Design & Research Institute Chongqing Company Limited*), an indirect subsidiary of SPIC
"SPER Institute"	上海發電設備成套設計研究院有限責任公司 (Shanghai Power Equipment Research Institute Co., Ltd*), an indirect subsidiary of SPIC
"SPIC"	國家電力投資集團有限公司 (State Power Investment Corporation Limited*), the ultimate holding company of the Company

"SPIC Aluminum"	國家電投集團鋁業國際貿易有限公司 (SPIC Aluminum International Trading Co., Ltd.*), an indirect subsidiary of SPIC
"SPIC DiTech"	SPIC Digital Technology Co., Ltd, a subsidiary of SPIC
"SPIC Finance HK"	SPIC International Finance (Hong Kong) Company Limited, a subsidiary of SPIC
"SPIC Financial"	國家電投集團財務有限公司 (SPIC Financial Company Limited*), a subsidiary of SPIC
"SPIC (Materials)"	國家電力投資集團有限公司物資裝備分公司 (State Power Investment Corporation Limited Materials and Equipment Branch*), a branch company of SPIC
"SPICOI"	國家電力投資集團海外投資有限公司 (SPIC Overseas Investment Limited*), a subsidiary of SPIC
"standard coal"	coal with an energy content of 7,000 kilocalories per kilogram
"State Nuclear Institute"	國核電力規劃設計研究院有限公司 (State Nuclear Electric Power Planning Design & Research Institute Company Limited*), an indirect subsidiary of SPIC
"Sujin Energy"	蘇晉能源控股有限公司 (Sujin Energy Holding Company Limited*), an associate of the Company
"Wu Ling Power"	五凌電力有限公司 (Wu Ling Power Corporation*), a subsidiary of the Company
"Wuhu Power Plant"	蕪湖發電有限責任公司 (Wuhu Electric Power Generating Company Limited*), a subsidiary of the Company
"Xinyuan Green Power"	新源綠能電力(北京)有限公司 (Xinyuan Green Power (Beijing) Co., Ltd.*), a subsidiary of the Company
"Xinyuan Jinwu"	新源勁吾(北京)科技有限公司 (Xinyuan Jinwu (Beijing) Technology Co., Ltd.*), a subsidiary of the Company
"Xinyuan Ronghe"	新源融合(北京)電力有限公司 (Xinyuan Ronghe (Beijing) Power Co., Ltd.*), an associate of the Company
"Xinyuan Smart Storage"	新源智儲能源發展(北京)有限公司 (Xinyuan Smart Storage Energy Development (Beijing) Co., Ltd.*), a subsidiary of the Company
"Yaomeng Power Plant"	Pingdingshan Yaomeng Power Company Limited, an associate of the Company
"Yuanda EP Catalyst"	國家電投集團遠達環保催化劑有限公司 (SPIC Yuanda Environmental Protection Catalyst Co., Ltd.*), an indirect subsidiary of SPIC
"Yuanda EP Engineering"	國家電投集團遠達環保工程有限公司 (SPIC Yuanda Environmental Protection Engineering Co., Ltd.*), an indirect subsidiary of SPIC

* *For identification purpose only*

Useful Information for Investors

ANNUAL REPORT

This annual report has been posted on the websites at **www.chinapower.hk** and **www.hkexnews.hk** on 27 April 2023. Physical reports are sent to the shareholders of the Company who have selected to receive the printed version of corporate communication only.

ANNUAL GENERAL MEETING (AGM)

The Company's AGM will be held on 8 June 2023. Information regarding the business to be considered in the AGM is set out in the circular to the shareholders of the Company dated 27 April 2023 together with a proxy form.

INVESTOR CALENDAR

Closure of register of members for determining shareholders' eligibility to attend and vote at the AGM	5 June 2023 to 8 June 2023 (both days inclusive)
AGM date	8 June 2023
Ex-dividend date	12 June 2023
Closure of register of members for determining shareholders' entitlement to 2022 Final Dividend	14 June 2023 to 16 June 2023 (both days inclusive)
Record date for 2022 Final Dividend	16 June 2023
Proposed 2022 Final Dividend payable* ***RMB0.11 (equivalent to HK$0.1256) per ordinary share***	30 June 2023

* Subject to approval by shareholders of the Company at the AGM to be held on 8 June 2023.

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 8555
Fax: (852) 2865 0990
Email: chinapower.ecom@computershare.com.hk
Website: www.computershare.com/hk/en/online_feedback

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
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Wanchai, Hong Kong
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Fax: (852) 2802 3922
Email: ir@chinapower.hk
Website: www.chinapower.hk

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中國電力國際發展有限公司

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Tel: (86-10) 6260 1888
Fax: (86-10) 6260 1777