中国神华能源股份有限公司
CHINA SHENHUA ENERGY COMPANY LIMITED

(a joint stock limited company incorporated in the People's Republic of China with limited liability)

Stock Code: 01088

2021 Annual Report

STABILIZER OF ENERGY SUPPLY
PIONEER OF ENERGY REVOLUTION

Important Notice

I. The Board, Supervisory Committee and all Directors, Supervisors and senior management of the Company warrant that this report does not contain any misrepresentations, misleading statements or material omissions, and are jointly and severally liable for the authenticity, accuracy and completeness of the information contained in this report.

II. This report was approved at the twelfth meeting of the fifth session of the Board of the Company. 8 out of 8 Directors attended the meeting in person.

III. KPMG has issued a standard unqualified independent auditor's report in accordance with the Hong Kong Standards on Auditing on the Company's financial statements for the year 2021 prepared under the International Financial Reporting Standards.

IV. Wang Xiangxi, Chairman of the Company, Xu Shancheng, Chief Financial Officer, and Yu Yanling, person-in-charge of the Accounting Department, warrant the authenticity, accuracy and completeness of the financial statements contained in this report.

V. The Board proposed the payment of a final dividend in cash of RMB2.54 per share (inclusive of tax) for the year 2021 based on the total registered share capital on the equity registration date of the implementation of the equity distribution. The profit distribution proposal is subject to the approval by shareholders at the general meeting. According to the total share capital of 19,868,519,955 shares of the Company as at 31 December 2021, the final dividend totaling RMB50,466 million (inclusive of tax) will be paid.

VI. Disclaimer of forward-looking statements: The forward-looking statements in this report made on the basis of subjective assumptions and judgments on future policies and economic conditions, which are subject to risks, uncertainties and assumptions, may differ materially from the actual outcome. Such statements do not constitute actual commitments to investors. Investors should be aware that undue reliance on or use of such information may lead to risks of investment.

VII. Is there any situation of non-operating appropriation of funds by controlling shareholder(s) and its subsidiaries?: No

VIII. Is there any situation of violation of decision-making procedures for external guarantee provision?: No

IX. Whether more than half of the Directors cannot guarantee the authenticity, accuracy and completeness of the annual report disclosed by the Company?: No

X. Warning on major risks: impacted by the supply and demand of coal and power generation and the adjustment to industrial policies, the Group is exposed to some uncertainties on achieving the business targets for 2022. In addition, investors please note that the Company has disclosed risks including safe production and environmental protection, market competition, investment, engineering project management, international operation, macroeconomic fluctuations, integrated operation and policy etc. in the section headed "Director's Report".

Contents

Section I Definitions

Unless the context otherwise requires, the following terms used in this report have the following meanings:

China Shenhua/the Company	China Shenhua Energy Company Limited
The Group	The Company and its subsidiaries
China Energy	China Energy Investment Corporation Limited (國家能源投資集團有限責任公司)
China Energy Group	China Energy and its subsidiaries (excluding the Group)
China Guodian	China Guodian Group Co., Ltd. (中國國電集團有限公司)
Guodian Group	China Guodian and its subsidiaries
GD Power	GD Power Development Co., Ltd.
Shendong Coal	China Energy Shendong Coal Group Co., Ltd.
Shendong Power	Shenhua Shendong Power Co., Ltd.
Zhunge'er Energy	Shenhua Zhunge'er Energy Co., Ltd.
Baorixile Energy	China Energy Baorixile Energy Co., Ltd.
Beidian Shengli	Shenhua Beidian Shengli Energy Co., Ltd.
Shuohuang Railway	China Energy Shuohuang Railway Development Co., Ltd.
Railway Equipment	China Energy Railway Equipment Co., Ltd.
Trading Group	China Energy Trading Group Limited
Huanghua Harbour Administration	China Energy Huanghua Harbour Administration Co., Ltd.
Tianjin Harbour Administration	China Energy (Tianjin) Harbour Administration Co., Ltd.
Zhuhai Harbour Administration	China Energy Zhuhai Harbour Administration Co., Ltd.
Shipping Corporation	Guoneng Yuanhai Shipping Co., Ltd.
Baoshen Railway	China Energy Baoshen Railway Group Co., Ltd.
Baotou Energy	China Energy Baotou Energy Co., Ltd.
Yulin Energy	China Energy Yunlin Energy Co., Ltd.
Baotou Coal Chemical	China Energy Baotou Coal Chemical Co., Ltd.
Sichuan Energy	China Energy Sichuan Energy Co., Ltd.
Fujian Energy	Shenhua (Fujian) Energy Co., Ltd.

EMM Indonesia	PT.GH EMM INDONESIA
Zhunge'er Power	Power-generating division controlled and operated by Zhunge'er Energy
Shenmu Power	China Energy Shaanxi Shenmu Power Co., Ltd.
Taishan Power	China Energy Yudean Taishan Power Co., Ltd.
Cangdong Power	China Energy Hebei Cangdong Power Co., Ltd.
Jinjie Energy	China Energy Jinjie Energy Co., Ltd.
Dingzhou Power	China Energy Hebei Dingzhou Power Generation Co., Ltd.
Mengjin Power	China Energy Mengjin Thermal Power Co., Ltd.
Jiujiang Power	China Energy Shenhua Jiujiang Power Co., Ltd.
Huizhou Thermal	China Energy (Huizhou) Thermal Power Co., Ltd.
Beijing Gas-fired Power	China Energy Guohua (Beijing) Gas-fired Power Co., Ltd.
Shouguang Power	Shenhua Guohua Shouguang Power Generation Company Limited
Liuzhou Power	China Energy Guangtou (Liuzhou) Power Generation Co., Ltd.
Pembangkitan Jawa	PT. Shenhua Guohua Pembangkitan Jawa Bali
Yongzhou Power	China Energy Group Yongzhou Power Co., Ltd.
Shengli Energy	Shengli Energy Branch of the Company
Guangdong Power Sales Company	China Energy (Guangdong) Power Sales Co., Ltd.

Jiangsu Power Sales Company	China Energy Jiangsu New Energy Technology Development Co., Ltd. (formly Shenhua Guohua Jiangsu Power Sales Co., Ltd.)
Shandong Power Sales Company	Shenhua Shandong Power Sales Co., Ltd.
Shenhua Lease Company	Shenhua (Tianjin) Finance Lease Co., Ltd.
Beijing GD Power	Beijing GD Power Co., Ltd
Finance Company	China Energy Finance Co., Ltd.
The deconsolidation of Finance Company's financial statements	On 1 September 2020, the completion of transaction of China Energy Group subscribed additional registered capital of RMB7.5 billion in Finance Company at a consideration of RMB13.27 billion in cash, and the direct and indirect shareholding ratio of the Company in the Finance Company fell to 40%, and the Finance Company was no longer included in the consolidated scope of financial statements of the Company
Equity Transfer of Fuping Thermal Power	Shendong Power, a subsidiary of the Company, transferred 100% equity of China Energy Shaanxi Fuping Thermal Power Co., Ltd. to China Energy Guoyuan Power Co., Ltd. The equity transfer was completed on 7 January 2021
JORC	Australasian Code for Reporting of Mineral Resources and Ore Reserves
SSE	Shanghai Stock Exchange
HKEx	The Stock Exchange of Hong Kong Limited

Shanghai Listing Rules	Rules Governing the Listing of Stocks on SSE
Hong Kong Listing Rules	Rules Governing the Listing of Securities on the HKEx
China Accounting Standards for Business Enterprises	The latest Accounting Standards for Business Enterprises issued by the Ministry of Finance of the People's Republic of China and the related application guidance, interpretations and other related requirements
International Financial Reporting Standards	International Financial Reporting Standards issued by the International Accounting Standards Board
Articles of Association	Articles of Association of China Shenhua Energy Company Limited
EBITDA	Profit for the year + net financial costs + income tax + depreciation and amortization - share of profits and losses of associates
Gearing ratio	Total liabilities/total assets
Total debt to total equity ratio	[Long-term interest bearing debt + short-term interest bearing debt (including notes payable)]/[long-term interest bearing debt + short-term interest bearing debt (including notes payable) + total shareholder equity]
Shanghai-Hong Kong Stock Connect	A mutual access and connect mechanism for transactions in stock markets between SSE and HKEx
Shenzhen-Hong Kong Stock Connect	A mutual access and connect mechanism for transactions in stock markets between Shenzhen Stock Exchange and HKEx
RMB	Renminbi unless otherwise specified

Section II Company Profile and Major Financial Indicators

I. INFORMATION OF THE COMPANY

Chinese Name of the Company	中國神華能源股份有限公司
Short Name of Chinese Name of the Company	中國神華
English Name of the Company	China Shenhua Energy Company Limited
Abbreviation/Short Name of English Name of the Company	CSEC/China Shenhua
Legal Representative of the Company	Wang Xiangxi
Authorised Representatives of the Company under the Hong Kong Listing Rules	Wang Xiangxi, Huang Qing

II. CONTACTS AND CONTACT DETAILS

	Secretary to the Board	Representative of Securities Affairs
Name	Huang Qing	Sun Xiaoling
Address	22 Andingmen Xibinhe Road, Dongcheng District, Beijing (Postal Code: 100011)	22 Andingmen Xibinhe Road, Dongcheng District, Beijing (Postal Code: 100011)
Tel	(8610) 5813 3399	(8610) 5813 3355
Fax	(8610) 5813 1804/1814	(8610) 5813 1804/1814
E-mail	1088@csec.com	ir@csec.com

	Office of the Board of the Company	Hong Kong Office of the Company
Address	22 Andingmen Xibinhe Road, Dongcheng District, Beijing (Postal Code: 100011)	Room B, 54th Floor, Bank of China Tower, 1 Garden Road, Central, Hong Kong
Tel	(8610) 5813 1088/3399/3355	(852) 2578 1635
Fax	(8610) 5813 1804/1814	(852) 2915 0638

III. PARTICULARS

Registered Address of the Company	22 Andingmen Xibinhe Road, Dongcheng District, Beijing
Postal Code of Registered Address of the Company	100011
Change of Registered Address of the Company	N/A
Office Address of the Company	22 Andingmen Xibinhe Road, Dongcheng District, Beijing
Postal Code of Office Address of the Company	100011
Company Website	www.csec.com or www.shenhuachina.com
E-mail	ir@csec.com

IV. INFORMATION DISCLOSURE AND PLACE FOR DOCUMENT INSPECTION

Media for disclosure of annual report of the Company	China Securities Journal, Shanghai Securities News, Securities Times and Securities Daily
Stock exchange websites for disclosure of annual report of the Company	www.sse.com.cn and www.hkexnews.hk
Annual report is available at	SSE, Office of the Board of the Company and Hong Kong Office of the Company

V. BASIC INFORMATION ON SHARES

Type	Stock Exchange	Abbreviation	Stock Code
A Share	SSE	China Shenhua	601088
H Share	HKEx	China Shenhua	01088

VI. OTHER RELEVANT INFORMATION

Auditor engaged by the Company (China's mainland)	Name	KPMG Huazhen LLP
	Office Address	8th, Tower E2, Oriental Plaza, 1 East Chang An Avenue, Beijing
	Signing Auditors	Zhang Nan, Wang Xia
Auditor engaged by the Company (Hong Kong)	Name	KPMG (Public Interest Entity Auditor registered in accordance with the Financial Reporting Council Ordinance)
	Office Address	8th Floor, Prince's Building, 10 Chater Road, Central, Hong Kong
	Signing Auditors	Guen Kin Shing
Share Registrar and Transfer Office of the Company (A Share)	Name	China Securities Depository and Clearing Corporation Limited Shanghai Branch
	Office Address	188 Yanggao South Road, Pudong New Area, Shanghai
Share Registrar and Transfer Office of the Company (H Share)	Name	Computershare Hong Kong Investor Services Limited
	Office Address	Rooms 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong

VII. MAJOR ACCOUNTING DATA AND FINANCE INDEX

		2021	2020	Change %
Revenue	RMB million	**335,216**	233,263	43.7
Profit for the year	RMB million	**61,009**	43,984	38.7
Profit for the year attributable to equity holders of the Company	RMB million	**51,607**	35,849	44.0
Basic earnings per share	RMB/share	**2.597**	1.803	44.0
Net cash generated from operating activities	RMB million	**94,575**	81,289	16.3
Net cash generated from operating activities excluding the effect from Finance Company	RMB million	**94,575**	62,690	50.9
Return on total assets as at the end of the period	%	**10.0**	7.8	Increased by 2.2 percentage points
Return on net assets as at the end of the period	%	**13.6**	9.8	Increased by 3.8 percentage points
EBITDA	RMB million	**101,680**	79,018	28.7

		At the end of 2021	At the end of 2020	Change %
Total assets	RMB million	**610,597**	562,904	8.5
Total liabilities	RMB million	**161,376**	133,317	21.0
Total equity	RMB million	**449,221**	429,587	4.6
Equity attributable to equity holders of the Company	RMB million	**380,038**	364,203	4.3
Total share capital at the end of the period	RMB million	**19,869**	19,890	(0.1)
Equity attributable to equity holders per share	RMB/share	**19.13**	18.33	4.4
Gearing ratio	%	**26.4**	23.7	Increased by 2.7 percentage points
Total debt to total equity ratio	%	**12.4**	13.4	Decreased by 1.0 percentage point

VIII. DIFFERENCE IN ACCOUNTING DATA UNDER DOMESTIC AND OVERSEAS ACCOUNTING STANDARDS

Unit: RMB million

	Net profit attributable to equity holders of the Company		Net assets attributable to equity holders of the Company	
	2021	2020	**At the end of 2021**	At the end of 2020
Under China Accounting Standards for Business Enterprises	**50,269**	39,170	**376,875**	360,189
Adjustments for:				
Simple production maintenance, safety production and other related expenditure	**1,338**	(3,321)	**3,163**	4,014
Under International Financial Reporting Standards	**51,607**	35,849	**380,038**	364,203

Explanation on differences in domestic and overseas accounting standards:

Pursuant to the relevant regulations of the related government authorities in the PRC, the Group accrued provisions for simple production maintenance, safety production and other related expenditures, recognised as expenses in profit or loss and separately recorded as a specific reserve in shareholders' equity. On utilisation of the specific reserve as fixed assets within the stipulated scope, the full amount of accumulated depreciation is recognised at the same time when the cost of the relevant assets is recorded. Under International Financial Reporting Standards, these expenses are recognised in profit or loss as and when incurred. Relevant capital expenditure is recognised as property, plant and equipment and depreciated according to the relevant depreciation method. The effect on deferred tax arising from such difference is also reflected.

IX. MAJOR FINANCIAL DATA OF EACH QUARTER OF 2021

Unit: RMB million

	First quarter (January – March)	Second quarter (April – June)	Third quarter (July – September)	Fourth quarter (October – December)
Revenue	67,608	76,371	88,970	102,267
Profit for the period attributable to equity holders of the Company	11,864	14,636	14,777	10,330
Net cash generated from operating activities	19,614	20,605	27,287	27,069

In the fourth quarter, the decrease in profit for the period attributable to equity holders of the Company as compared to the previous three quarters was primarily due to the following reasons: (1) the cost expenditure occurred in the fourth quarter is higher than that in the first three quarters; (2) certain coal companies, subsidiaries of the Company, actively applied to the NDRC for recognition of preferential policies on enterprise income tax for the development of the Western region, and continued to calculate the income tax preferential rate of 15% of the development of the Western region in the first three quarters. As of the end of reporting period, certain coal companies have not yet obtained the recognition and approval documents from the NDRC, and adjusted to the rate of 25% for calculating the annual enterprise income tax, resulting in an increase in the Group's income tax in the fourth quarter; (3) the Group conducted impairment assessment on assets with impairment indications and accrued provisions for impairment of assets based on the assessment results; (4) the Company recognized a higher share of losses from associates in the fourth quarter.

Section III Chairman's Statement

Dear Shareholders:

As time goes by, we experienced a significant year of 2021. On behalf of the Board, I would like to take this opportunity to express our sincere gratitude to all shareholders for their concern and support in China Shenhua and present you with the 2021 annual report of China Shenhua.

2021 marked the 100th anniversary of the founding of the Communist Party of China (the "Party"). Under the guidance of Xi Jinping's "Thought on Socialism with Chinese Characteristics for a New Era", we studied in-depth the major achievements and historical experience of the Party over the past century, deeply comprehended the determining significance of "Two Confirmations", executed the great call of "Hard Work Making Socialism Realized (社會主義是幹出來的)", implemented the enterprise development strategy of "One Target, Three Models and Five Strategies, and Seven First-class", integrated advancement of the "Six New Opportunities", being green transformation, driving innovation, improving quality and efficiency, improving management, deepening reform, and Party building. We have also completed all targets and missions within the year, ultimately initiating high quality development of China's "14th Five-Year Plan". This year, the Company has achieved RMB51,607 million in profit for the year attributable to owners of the Company and basic earnings per share of RMB2.597. The closing gearing ratio was 26.4%, and the total market capitalization reached USD66.2 billion. In the S&P Global Platts Top 250 Global Energy Company Rankings (全球能源公司2021年度250強)"released by S&P Global Platts, the Company ranked 2nd, which is the highest ranked Chinese enterprise.

We tackled the responsibility and challenges of energy security and supply with great determination to protect thousands of families. The Company conscientiously carried out its responsibilities and missions as a listed central state-owned-enterprise, vigorously promoting the principle of "empowering society and boosting the economy", effectively overcoming the volatility of the coal market and impact of extreme weather, making full efforts to stabilize production, price, and expectations, and securing supply, heating, and people's livelihoods. We ensured the increase of coal production and supply, with production of 310 million tonnes, representing an increase of 5.3%, and coal sales of 480 million tonnes, representing an increase of 8.0%. We also seized opportunities to achieve consecutive material breakthroughs in resources, obtained the exploration rights certificate of the Xinjie Taigemiao Southern Area and achieved rights to high quality resources of the Xinjie Mining Area. The Company also improved the transportation efficiency of the "railway, port and shipping", with an increase of 6.2% in the transportation turnover of the self-owned railway. We strived to guarantee the stable and maximum generation of power, with an increase of 22.1% in power generation. We strictly implemented the agreed price under long-term cooperation of coal, and ensured the stabilization and security of energy supply.

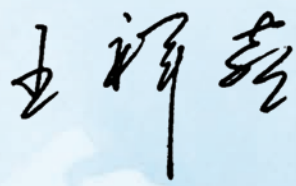
We accelerated the green and low-carbon transformation and assisted with achieving the Peak Carbon Dioxide Emissions and Carbon Neutrality. We solidly promoted the safe, green, intelligent and efficient development of the coal industry, adhered to the high-end orientation, diversification and low-carbonization of the coal chemical industry, expedited the research and development of coal-based biodegradable materials and other high-end products. We also made full use of our own land, resources and capital to speed up the deployment of new energy industries through multiple channels and forms, cooperated to construct the zero-carbon industrial parks and new energy bases, successively contributed capital to participate in the establishment of new energy industry funds and low-carbon development investment funds, and performed a significant role as pioneer in demonstrating and leading the reform of energy.

With ambitious momentum of innovation development, we empowered mines, power plants, railways, ports and chemical industry with technology. We strengthened the synergy of industry chain and launched the "Harmony Mining Operating System" with large-scale promotion and application of intelligent mines and intelligent coal mining working faces, as well as demonstrations of the driverless heavy truck. The first heavy-haul railway with a mobile blocking system in China commenced operation, and the first autonomous controllable intelligent decentralized control system was successfully applied. The world's first coal port to achieve intelligent control of the entire process of dumping, stacking, reclaiming and loading equipment was successfully completed and put into operation. The coordinated production and operations scheduling system, emergency command platform and ERP integrated industrial internet platform are fully online and operational, and driven by data in entering a new stage of high-quality development.

With persistent momentum of deepening reform, we fully promoted the establishment of a first-class enterprise, conducted capital operation, strengthened management of market capitalization, and carried out social responsibility. With persistence and caution, we protected the interests of medium to small-sized investors in continuing the distribution of proportional dividends. We continuously strengthened market capitalization management and optimized property rights management. We reinforced the results of poverty alleviation, comprehensively promoted rural revitalization, arranged assistance funds of RMB123 million, and continued to carry out co-development with local enterprises, territorial assistance, and other assistance and donations. We implemented the cooperation deployment of China's State-owned Assets Supervision and Administration Commission's ("SASAC") "central and local hundred pairs of enterprises" to develop the Northeast China, signed a strategic cooperation agreement, actively promoted the organization and implementation of the agreement, which contributed to the vigorous development of the Northeast China. We solidly promoted ESG governance and won the ESG Pioneer 50 Award (ESG先鋒50), the first batch of China ESG Demonstration Enterprises (首批中國ESG示範企業) and the CDP Water Safety Outstanding Performance Award (CDP水安全優秀表現獎).

Looking back to our achievements and gains in 2021, we are grateful to our great motherland, the great era, and every organization and person who contributed to the development of China Shenhua! 2022 is an important year to continue the "14th Five-Year Plan", and we will closely unite around the Central Party Committee with Comrade Xi Jinping as the core, firmly implement the series of important speeches and important instructions and spirits given by General Secretary Xi Jinping during the inspection of Yulin Chemical of China Energy Group and others. We will adhere to the working general keynote of prudent progress, highlight the working guidance of "prudence, synergy, empowerment and improvement", coordinate development and safety, accurately grasp the relationship between energy security and green transformation, synergy efficiency and costs reduction and efficiency enhancement, innovation drive and industrial upgrade, intensive development and optimization of deployment, strategy planning and long-term success. We will spare no efforts to ensure energy security, firmly promote green and low-carbon development, enhance enterprise technical innovation, highlight the leading and guarding role of high-quality building of the Party, live up to the investors' trusts and reliance, accelerate the establishment of a competitive first-class listed energy company in the world, and celebrate the 20th National People's Congress with practical actions.

Let us advance into the future together!



Wang Xiangxi
Chairman

Section IV Directors' Report


中国共产党成立100周年
国家能源集团
CHN ENERGY
HXD17140A
120km/h
国能朔黄铁路
首列重载移动闭塞列车

Overview of China Shenhua's Operating Results for the Year of 2021

Table 1 Business Targets

		Target for 2022	Actual amount in 2021	Change %
Commercial coal production	100 million tonnes	2.978	3.070	(3.0)
Coal sales	100 million tonnes	4.029	4.823	(16.5)
Power generation	100 million kWh	1,805	1,664.5	8.4
Revenue	RMB100 million	2,966	3,352.16	(11.5)
Cost of sales	RMB100 million	2,048	2,391.56	(14.4)
Selling, general and administrative and R&D expenses and net finance costs	RMB100 million	132	122.90	7.4
Changes in unit production costs of self-produced coal		Year-on-year increase of around 10%	Year-on-year increase of around 7.4%	

Table 2 Financial Indicators

		2021	2020	Change %
Revenue	RMB million	335,216	233,263	43.7
Profit for the year	RMB million	61,009	43,984	38.7
EBITDA	RMB million	101,680	79,018	28.7
Profit for the year attributable to equity holders of the Company	RMB million	51,607	35,849	44.0
Basic earnings per share	RMB/share	2.597	1.803	44.0
Net cash generated from operating activities	RMB million	94,575	81,289	16.3
Net cash generated from operating activities excluding Finance Company	RMB million	94,575	62,690	50.9

Table 3 Results of Each Segment

	Coal 2021 RMB million	Coal 2020 RMB million	Power 2021 RMB million	Power 2020 RMB million	Railway 2021 RMB million	Railway 2020 RMB million	Port 2021 RMB million	Port 2020 RMB million
Revenue from external customers	256,241	169,197	63,959	49,348	6,838	5,804	982	974
Inter-segment revenue	36,420	20,832	165	138	33,861	32,919	5,458	5,385
Sub-total of segment revenue	292,661	190,029	64,124	49,486	40,699	38,723	6,440	6,359
Segment cost of sales	(225,126)	(153,373)	(60,019)	(38,729)	(22,020)	(20,304)	(3,342)	(3,314)
Segment profit/(loss) from operations	59,125	29,832	3,010	7,976	16,310	16,636	2,720	2,678
	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million
Segment total assets	268,067	222,984	166,654	150,299	139,551	124,113	19,821	21,619
Segment total liabilities	(120,171)	(106,897)	(134,566)	(110,040)	(56,285)	(50,470)	(6,519)	(6,629)

	Shipping 2021 RMB million	Shipping 2020 RMB million	Coal chemical 2021 RMB million	Coal chemical 2020 RMB million	Unallocated items 2021 RMB million	Unallocated items 2020 RMB million	Eliminations 2021 RMB million	Eliminations 2020 RMB million	Total 2021 RMB million	Total 2020 RMB million
Revenue from external customers	1,321	1,747	5,851	5,165	24	1,028	-	–	335,216	233,263
Inter-segment revenue	4,874	1,365	-	–	297	825	(81,075)	(61,464)	-	–
Sub-total of segment revenue	6,195	3,112	5,851	5,165	321	1,853	(81,075)	(61,464)	335,216	233,263
Segment cost of sales	(5,018)	(2,755)	(4,754)	(4,675)	(44)	(28)	81,167	60,804	(239,156)	(162,374)
Segment profit/(loss) from operations	980	209	722	259	(2,951)	1,047	92	(660)	80,008	57,977
	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million	As at 31 December 2021 RMB million	As at 31 December 2020 RMB million
Segment total assets	8,065	6,410	8,864	8,938	446,069	424,257	(446,494)	(395,716)	610,597	562,904
Segment total liabilities	(514)	(257)	(2,425)	(2,950)	(176,717)	(154,901)	335,821	298,827	(161,376)	(133,317)

Table 4 Operation Data

		2021	2020	Change %
Commercial coal production	million tonnes	307.0	291.6	5.3
Coal sales	million tonnes	482.3	446.4	8.0
Transportation turnover of selfowned railway	billion tonne km	303.4	285.7	6.2
Loading volume at Huanghua Port	million tonnes	215.0	203.8	5.5
Loading volume at Shenhua Tianjin Coal Dock	million tonnes	46.4	45.4	2.2
Shipping volume	million tonnes	121.2	113.0	7.3
Shipment turnover	billion tonne nm	112.1	93.0	20.5
Gross power generation	billion kWh	166.45	136.33	22.1
Total power output dispatch	billion kWh	156.13	127.65	22.3
Polyethylene sales	thousand tonnes	332.8	356.9	(6.8)
Polypropylene sales	thousand tonnes	315.6	331.2	(4.7)

Table 5 Commercial coal production Volume

	2021 Million tonnes	2020 Million tonnes	Change %
Total production	307.0	291.6	5.3
By mines			
Shendong Mines	189.2	185.0	2.3
Zhunge'er Mines	66.8	62.2	7.4
Shengli Mines	25.2	21.1	19.4
Baorixile Mines	24.6	21.5	14.4
Baotou Mines	1.2	1.8	(33.3)
By regions			
Inner Mongolia	207.0	195.4	5.9
Shaanxi Province	95.5	93.2	2.5
Shanxi Province	4.5	3.0	50.0

Table 6 Power Business

Power plants	Power grid	Location	Gross power generation (100 million kWh)	Total power output dispatch (100 million kWh)	Average utilization hours (hours)	Standard coal consumption for power outpour dispatch (g/kWh)	Power tariff (RMB/MWh)	Total installed capacity as at 31 December 2020 (MW)	Increase/(decrease) in installed capacity for 2021 (MW)	Total installed capacity as at 31 December 2021 (MW)	Equity installed capacity as at 31 December 2021 (MW)
Zhunge'er Power	North China Power Grid	Inner Mongolia	36.3	32.9	5,504	347	299	660	–	660	381
Shendong Power	Northwest/North China/ Shaanxi Provincial Local Power Grid	Inner Mongolia	240.3	222.1	4,792	320	323	5,714	(700)	5,014	4,528
Shengli Energy	North China Power Grid	Inner Mongolia	9.4	8.4	712	352	278	-	1,320	1,320	1,320
Cangdong Power	North China Power Grid	Hebei	114.4	108.8	4,539	297	323	2,520	–	2,520	1,285
Dingzhou Power	North China Power Grid	Hebei	117.6	108.8	4,666	304	324	2,520	–	2,520	1,021
Taishan Power	South China Power Grid	Guangdong	267.1	252.4	5,218	307	394	5,120	–	5,120	4,096
Huizhou Thermal	South China Power Grid	Guangdong	38.0	34.3	5,760	307	371	660	–	660	660
Fujian Energy	East China Power Grid	Fujian	171.9	164.6	6,014	294	357	2,810	1,000	3,810	2,378
Jinjie Energy	North China Power Grid	Shaanxi	214.5	198.3	5,765	312	267	3,720	–	3,720	2,604
Shouguang Power	North China Power Grid	Shandong	109.8	104.7	5,434	275	357	2,020	–	2,020	1,212
Jiujiang Power	Central China Power Grid	Jiangxi	120.5	115.0	6,023	276	364	2,000	–	2,000	2,000
Sichuan Energy (coal-fired power)	Sichuan Power Grid	Sichuan	61.0	56.1	3,468	325	424	1,260	2,000	3,260	2,102
Mengjin Power	Central China Power Grid	Henan	48.8	45.6	4,068	303	295	1,200	–	1,200	612
Liuzhou Power	Guangxi Power Grid	Guangxi	40.8	38.7	5,826	314	366	700	–	700	490
Yongzhou Power	Hunan Power Grid	Hunan	10.6	10.2	664	280	467	–	2,000	2,000	1,600
EMM Indonesia	PLN	Indonesia	17.6	15.5	5,858	365	465	300	–	300	210
Total of coal-fired power plants/weighted average			**1,618.6**	**1,516.4**	**4,764**	**305**	**343**	**31,204**	**5,620**	**36,824**	**26,499**
Other power plants											
Beijing Gas Power	North China Power Grid	Beijing	38.5	37.7	4,057	193	565	950	-	950	950
Sichuan Energy (hydropower)	Sichuan Provincial Local Power Grid	Sichuan	7.4	7.2	5,921	/	224	125	-	125	62

Table 7 Cost of Sales of Coal Segment

	2021 RMB million	2020 RMB million	Change %
Cost of coal purchased	102,865	48,742	111.0
Raw materials, fuel and power	8,567	7,897	8.5
Personnel expenses	11,355	8,119	39.9
Repair and maintenance	3,114	2,756	13.0
Depreciation and amortization	6,624	5,318	24.6
Transportation charges	58,027	51,557	12.5
Others	19,724	19,453	1.4
Tax and surcharge	14,850	9,531	55.8
Total cost of sales	**225,126**	153,373	46.8

Table 8 Cost of Sales of Power Segment

	2021 Cost RMB million	2021 Power output dispatch 100 million KWh	2021 Unit cost RMB/MWh	2020 Cost RMB million	2020 Power output dispatch 100 million KWh	2020 Unit cost RMB/MWh	Change in unit cost
Cost of power output dispatch	54,340	1,561.3	348.1	35,246	1,276.5	276.1	26.1
Raw materials, fuel and power	41,686	1,561.3	267.0	24,827	1,276.5	194.5	37.3
Personnel expenses	3,277	1,561.3	21.0	2,307	1,276.5	18.1	16.0
Repair and maintenance	1,808	1,561.3	11.6	2,086	1,276.5	16.3	(28.8)
Depreciation and amortization	5,105	1,561.3	32.7	4,911	1,276.5	38.5	(15.1)
Others	2,464	1,561.3	15.8	1,115	1,276.5	8.7	81.6
Other operating costs	4,833			2,852			
Tax and surcharge	846			631			
Total cost of sales	**60,019**			38,729			

Table 9 Domestic Coal Sales Volume

		2021 Million tonnes	Proportion of domestic sales %	2020 Million tonnes	Change %
Domestic sales		476.2	100.0	444.3	7.2
By regions	Northern China	145.5	30.5	137.7	5.7
	Eastern China	178.9	37.6	180.4	(0.8)
	Central China and Southern China	80.0	16.8	76.6	4.4
	Northeast China	41.3	8.7	35.6	16.0
	Others	30.5	6.4	14.0	117.9
By usage	Thermal coal	387.8	81.4	356.3	8.8
	Metallurgy	18.5	3.9	23.2	(20.3)
	Chemical (including coal slurry)	63.0	13.2	60.2	4.7
	Others	6.9	1.5	4.6	50.0

Table 10 Capital Expenditure

	Plan for 2022 RMB100 million	Completion in 2021 RMB100 million
1. Coal segment	61.57	205.75
2. Power segment	171.86	168.76
Including: new energy business	50.22	0.33
3. Transportation segments	80.69	50.36
Including: Railway	64.87	39.79
Port	15.38	10.02
Shipping	0.44	0.55
4. Coal chemical segment	4.83	8.51
5. Others	7.16	0.39
Total	326.11	433.77

Table 11 Cost of Sales of Transportation and Coal Chemical Segments

	Railway 2021 RMB million	Railway 2020 RMB million	Railway Change %	Port 2021 RMB million	Port 2020 RMB million	Port Change %	Shipping 2021 RMB million	Shipping 2020 RMB million	Shipping Change %	Coal Chemical 2021 RMB million	Coal Chemical 2020 RMB million	Coal Chemical Change %
Cost of internal transportation business	16,953	15,871	6.8	2,606	2,463	5.8	3,922	1,156	239.3	/	/	/
Raw materials, fuel and power	2,686	2,372	13.2	378	365	3.6	423	231	83.1	2,423	2,475	(2.1)
Personnel expenses	5,078	4,185	21.3	422	344	22.7	17	3	466.7	361	311	16.1
Repair and maintenance	4,217	3,231	30.5	364	316	15.2	59	8	637.5	485	298	62.8
Depreciation and amortization	3,972	3,917	1.4	728	736	(1.1)	182	113	61.1	690	811	(14.9)
External transportation charges	615	665	(7.5)	/	/	/	2,996	671	346.5	/	/	/
Others	385	1,501	(74.4)	714	702	1.7	245	130	88.5	106	51	107.8
Cost of external transportation business	3,539	2,976	18.9	396	254	55.9	1,084	1,591	(31.9)	/	/	/
Prime business cost	20,492	18,847	8.7	3,002	2,717	10.5	5,006	2,747	82.2	4,065	3,946	3.0
Other operating costs	1,020	1,036	(1.5)	218	410	(46.8)	/	/	/	568	609	(6.7)
Tax and surcharge	508	421	20.7	122	187	(34.8)	12	8	50.0	121	120	0.8
Total cost of sales	22,020	20,304	8.5	3,342	3,314	0.8	5,018	2,755	82.1	4,754	4,675	1.7

Table 12 Coal Sales Price

		2021 Sales volume Million tonnes	2021 Percentage to total sales volume %	2021 Price (excluding tax) RMB/tonne	2020 Sales volume Million tonnes	2020 Percentage to total sales volume %	2020 Price (excluding tax) RMB/tonne	Change Sales volume %	Change Price (excluding tax) %
Total sales volume/average price (excluding tax)		482.3	100.0	588	446.4	100.0	410	8.0	43.4
(I)	Classify by contract pricing mechanism								
1	Sales through Trading Group	458.7	95.1	605	430.1	96.3	419	6.6	44.4
	(1) Annual long-term agreement	207.9	43.1	456	190.0	42.5	380	9.4	20.0
	(2) Monthly long-term agreement	196.2	40.7	765	163.5	36.6	465	20.0	64.5
	(3) Spot commodity	54.6	11.3	599	76.6	17.2	418	(28.7)	43.3
2	Direct sales through coal mine pit	23.6	4.9	263	16.3	3.7	176	44.8	49.4
(II)	Classify by internal and external customers								
1	Sales to external customers	416.8	86.4	599	394.0	88.2	416	5.8	44.0
2	Sales to internal power segment	61.2	12.7	532	47.7	10.7	374	28.3	42.2
3	Sales to internal coal chemical segment	4.3	0.9	366	4.7	1.1	322	(8.5)	13.7

Table 13 Coal Resources Reserve

Mines	Coal resources (under PRC standard) As at 31 December 2021 100 million tonnes	Coal resources As at 31 December 2020 100 million tonnes	Change %	Recoverable reserve (under PRC standard) As at 31 December 2021 100 million tonnes	Recoverable reserve As at 31 December 2020 100 million tonnes	Change %	Marketable reserve (under JORC standard) As at 31 December 2021 100 million tonnes	Marketable reserve As at 31 December 2020 100 million tonnes	Change %
Shendong Mines	153.9	156.0	(1.3)	87.2	88.9	(1.9)	42.7	44.4	(3.8)
Zhunge'er Mines	37.2	37.9	(1.8)	29.6	30.2	(2.0)	18.8	19.5	(3.6)
Shengli Mines	19.6	19.9	(1.5)	13.3	13.5	(1.5)	1.5	1.8	(16.7)
Baorixile Mines	13.3	13.5	(1.5)	11.1	11.3	(1.8)	11.3	11.6	(2.6)
Baotou Mines	0.5	0.5	-	0.3	0.3	-	-	-	/
Xinjie Mines	107.6	64.2	67.6	/	/	/	/	/	/
Others	-	4.8	(100.0)	/	/	/	/	/	/
Total of China Shenhua	332.1	296.8	11.9	141.5	144.2	(1.9)	74.3	77.3	(3.9)

Table 14 Seaborne Coal at Ports

	2021 Million tonnes	2020 Million tonnes	Change %
Self-owned ports	240.1	239.1	0.4
Huanghua Port	194.9	193.9	0.5
Shenhua Tianjin Coal Dock	45.1	45.2	(0.2)
Shenhua Zhuhai Coal Dock	0.1	-	/
Third-party ports	23.5	29.0	(19.0)
Total seaborne coal sales	263.6	268.1	(1.7)

Table 15 Railway Cargo Transportation Turnover

	2021 billion tonne km	2020 billion tonne km	Change %
Self-owned railways	303.4	285.7	6.2
Baoshen Railway	8.8	8.6	2.3
Shenshuo Railway	53.7	54.1	(0.7)
Ganquan Railway	0.6	1.1	(45.5)
Tahan Railway	-	–	/
Dazhun Railway	29.8	26.9	10.8
Bazhun Railway	2.8	1.7	64.7
Zhunchi Railway	12.2	9.9	23.2
Shuohuang-Huangwan Railway	193.4	183.4	5.5
Huangda Railway	2.1	–	/
State-owned railways	49.8	44.9	10.9
Total railway turnover	353.2	330.6	6.8

Table 16 Shipping Volume

	2021 Million tonnes	2020 Million tonnes	Change %
The Group's internal customers	88.8	43.0	106.5
External customers	32.4	70.0	(53.7)
Total of shipping volume	121.2	113.0	7.3

中国神华能源股份有限公司 CHINA SHENHUA ENERGY COMPANY LIMITED

主要資產分佈圖 Assets Distribution Map

2021

煤礦 COAL MINE

A1. 神東礦區 Shendong Mines
A2. 准格爾礦區 Zhunge'er Mines
A3. 勝利礦區 Shengli Mines
A4. 寶日希勒礦區 Baorixile Mines
A5. 包頭礦區 Baotou Mines
A6. 新街台格廟勘查區（前期工作階段） Xinjie Taigemiao Exploration Area (preliminary work in progress)

鐵路 RAILWAY

C1. 神朔鐵路 Shenshuo Railway
C2. 朔黃鐵路 Shuohuang Railway
C3. 黃萬鐵路 Huangwan Railway
C4. 大准鐵路 Dazhun Railway
C5. 包神鐵路 Baoshen Railway
C6. 巴准鐵路 Bazhun Railway
C7. 甘泉鐵路 Ganquan Railway
C8. 准池鐵路 Zhunchi Railway
C9. 黃大鐵路 Huangda Railway
C10. 塔韓鐵路 Tahan Railway

電廠 POWER

B1. 滄東電力 Cangdong Power
B2. 定州電力 Dingzhou Power
B3. 准能電力 Zhunge'er Power
B4. 神東電力 Shendong Power
B5. 北京燃氣 Beijing Gas Power
B6. 錦界能源 Jinjie Energy
B7. 台山電力 Taishan Power
B8. 惠州熱電 Huizhou Thermal
B9. 孟津電力 Mengjin Power
B10. 四川能源 Sichuan Energy
B11. 福建能源 Fujian Energy
B12. 南蘇EMM EMM Indonesia
B13. 壽光電力 Shouguang Power
B14. 柳州電力 Liuzhou Power
B15. 九江電力 Jiujiang Power
B16. 印尼爪哇 Indonesia Java
B17. 永州電力 Yongzhou Power
B18. 勝利能源 Shengli Energy

港口 PORT

D1. 黃驊港 Huanghua Port
D2. 天津煤碼頭 Tianjin Coal Dock
D3. 珠海煤碼頭 Zhuhai Coal Dock

航運 SHIPPING

E1. 航運公司 Shipping Company

煤化工 COAL CHEMICAL

F1. 包頭煤化工 Baotou Coal Chemical

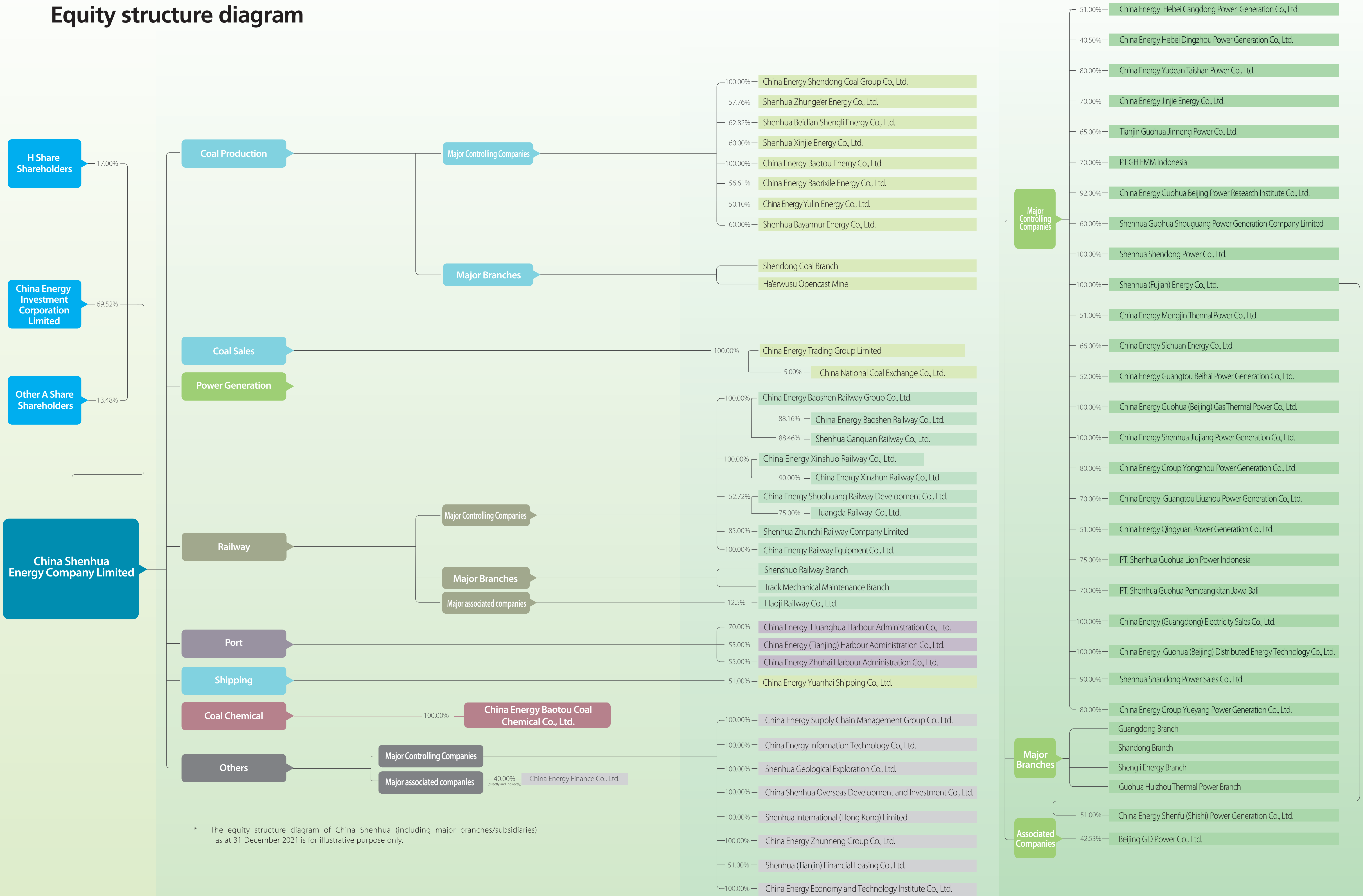
註： ① 於2021年12月31日之分佈圖，僅做示意
② 以審圖號GS(2016)1600號地圖為基礎編制

Note: ① This map as at 31 December 2021 is for illustrative purpose only.
② Prepared on the basis of the map with the approval number of GS(2016)1600.

圖例 Legend

省界線 Provincial Boundary
國有或地方鐵路線 State-owned or Local Railway
自有運營鐵路 Self-owned Railway (in operation)
自有礦區 Self-owned mines
准班輪航線 Quasi-liner Shipping Route

Equity structure diagram



* The equity structure diagram of China Shenhua (including major branches/subsidiaries) as at 31 December 2021 is for illustrative purpose only.

I. DISCUSSION AND ANALYSIS ON OPERATION RESULTS

The year 2021 is an extraordinary year in China's history of energy industry. No other year has witnessed more attention from the central government, more intensive adjustment of policies and more volatile changes of the market. In the face of the risky and challenging task of supply guarantee and the complex and austere business situation, the Company resolutely implemented the work requirements of the CPC Central Committee on "Stability in Six Areas" and "Six Priorities", adhered to the mission of "becoming the ballast for energy supply and the pioneer in energy revolution", earnestly fulfilled its political and social responsibilities as a central state-owned enterprise, realised the compatibility and mutual promotion of energy supply and production and operation, and maintain a high level of integrated operation to achieve the annual operation targets in a sound manner.

The Group recorded a profit before tax for the year of RMB79,170 million (2020: RMB59,362 million), representing a year-on-year increase of 33.4%; a profit for the year attributable to equity holders of the Company of RMB51,607 million (2020: RMB35,849 million), and basic earnings per share of RMB2.597/share (2020: RMB1.803/share), representing a year-on-year increase of 44.0%.

		Actual amount for 2021	Target for 2021	Proportion of Completion %	Actual amount for 2020	Year-on-year change %
Commercial coal production	100 million tonnes	**3.070**	2.84	108.1	2.916	5.3
Coal sales	100 million tonnes	**4.823**	4.76	101.3	4.464	8.0
Power generation	100 million kWh	**1,664.5**	1,350	123.3	1,363.3	22.1
Revenue	RMB100 million	**3,352.16**	2,426	138.2	2,332.63	43.7
Costs	RMB100 million	**2,391.56**	1,704	140.3	1,623.74	47.3
Sales, general and administration, and R&D expenses and net finance costs	RMB100 million	**122.90**	125	98.3	114.44	7.4
Changes in unit production costs of self-produced coal	/	**Year-on-year increase of approximately 7.4%**	Year-on-year increase of approximately 5%	/	Year-on-year increase of 3.6%	/

II. INDUSTRY IN WHICH THE COMPANY OPERATED DURING THE REPORTING PERIOD[1]

1. Macroeconomic environment

2021 was a year of milestone in the history of China. In the face of the complicated domestic and international situation and various risks and challenges, the CPC Central Committee, with Comrade Xi Jinping at its core, has taken overall control with calm response. With the concerted efforts of the whole country, China has maintained its global leading position in economic development and COVID-19 prevention and control, accelerated the development of national strategic scientific and technological strengths, enhanced the resilience and advantages of industrial chain, deepened reform and opening up, powerfully and effectively guaranteed people's livelihood, and continued to promote ecological civilisation construction, achieving a good start to the "14th Five-Year Plan". The gross domestic product (GDP) for the year increased by 8.1% year-on-year, with an average growth of 5.1% in two years.

2. Coal market environment

(1) China's thermal coal market

In 2021, as the economy gradually recovered, global energy demand increased significantly, and coal continued to play an important role in ensuring China's energy security. China's coal demand has grown more than expected, and the domestic coal market supply was tight in some periods and regions, and prices fluctuated greatly. As of the end of 2021, the price index of Bohai Bay thermal coal (5,500 kcal) was RMB737/tonne, increasing by RMB152/tonne compared with the end of the previous year; the annual average price was RMB673/tonne, representing a year-on-year increase of RMB124/tonne, or 18.4%.

	2021	Year-on-year change %
Sizable industrial raw coal production volume *(100 million tonnes)*	40.7	4.7
Coal import *(100 million tonnes)*	3.2	6.6
National coal transportation volume by railway *(100 million tonnes)*	25.8	8.8

1 The macroeconomic and industry-related contents in this report are for reference only and does not constitute any investment advice. The Company has used its best endeavours to ensure the accuracy and reliability of information in this section, but does not assume any liability or provide any form of guarantee for the accuracy, completeness or validity of all or part of its content. If there is any error or omission, the Company does not assume any liability. The content in this section may contain certain forward-looking statements based on subjective assumptions and judgments of future political and economic developments; therefore there may exist uncertainties in these statements. The Company does not undertake any responsibility for updating the information or correcting any subsequent error that may appear. The opinions, estimates and other data set out herein can be amended or withdrawn without further notice. The data contained in this section are mainly derived from sources such as the National Bureau of Statistics, National Energy Administration, China Coal Market Network, China Coal Resources Network, China Electricity Council and China Coal Transportation & Sales Society etc.

In respect of the supply side, in the first three quarters, domestic coal enterprises have coordinated the prevention and control of COVID-19 and increased production to ensure supply, and maintained growth of coal production. Affected by factors such as safety, environmental protection, and tightening production capacity supervision policies, coal production was released slowly. In the fourth quarter, under the policy of ensuring energy supply, the main production areas implemented emergency capacity expansion and production increase, resulting in rapid growth of coal output and increase in imported coal. In 2021, the sizable industrial raw coal production volume nationwide reached 4,070 million tonnes, representing a year-on-year increase of 4.7%. The raw coal production volume in Inner Mongolia, Shanxi, Shaanxi and Xinjiang accounted for 79.9% of the national total, representing an increase of approximately 1.6 percentage points over the previous year. Among them, the raw coal production of Shanxi was 1,190 million tonnes, representing a year-on-year increase of 10.5%; the raw coal production of Inner Mongolia was 1,040 million tonnes, representing a year-on-year increase of 2.7%; the raw coal production of Shaanxi was 700 million tonnes, representing a year-on-year increase of 2.7%; and the raw coal production of Xinjiang was 320 million tonnes, representing a year-on-year increase of 18.3%. The total import volume of coal throughout the year amounted to 320 million tonnes, representing a year-on-year increase of 6.6%

In respect of the demand side, domestic coal consumption has grown significantly. Total consumption of coal of the nation represented a year-on-year increase of approximately 4.6%. In particular, the consumption of coal by the power industry increased by 10.0%, accounting for approximately 56.4% of the national total; the consumption of coal by the steel industry decreased year-on-year by 8.2%, and the coal consumption in the building materials and chemical industries increased by 10.2% and 6.9%, respectively.

(2) International thermal coal market

In 2021, the global coal-fired power generation reached an all-time high, and coal consumption was approximately 7,900 million tonnes, representing a year-on-year increase of 6%. Global coal production gradually recovered, with total coal output increased by approximately 4.3%[1] year-on-year, and major coal-producing countries such as China, India, the United States, Indonesia and Russia achieved output growth. There were differences in the pace of the recovery of coal supply and demand, as well as factors such as the general rise in global commodity prices, weather, and rising shipping prices, which have led to periods of tight energy supply and sharp fluctuations in coal prices. The spot price of Newcastle NEWC thermal coal rose to a high of US$253.55/tonne during the year and dropped to US$165.86/tonne at the end of the year, representing an increase of 98.1% as compared to the end of the previous year.

3. Power market environment

In 2021, China's electricity demand grew rapidly. China's national power consumption reached 8,312.8 billion kWh, representing a year-on-year increase of 10.3%, or a two-year average of 7.1%. The power generation of sizable power plants nationwide was 8,112.2 billion kWh, representing a year-on-year increase of 8.1%, or a two-year average of 5.4%. Among them, thermal power generated 5,770.3 billion kWh, representing a year-on-year increase of 8.4%, and accounting for 71.1% of the national total. The average utilization hours of power generation equipment of power plants with the capacity of 6,000 kW and above nationwide was 3,817 hours, increasing by 60 hours year-on-year. Among them, the average utilization hours of thermal power equipment was 4,448 hours, increasing by 237 hours year-on-year. The average utilization hours of hydropower were 3,622 hours, representing a year-on-year decrease of 203 hours.

The installed capacity of renewable energy increased significantly, and the proportion of the installed capacity of thermal power decreased. In 2021, the newly added power generation capacity in China was 176.29 GW , including 46.28 GW of thermal power, accounting for 26.3% of the total newly added, and 102.50 GW of wind power and solar power, accounting for 58.1% of the total newly added. By the end of 2021, the total installed capacity in China was 2,380 GW, an increase of 7.9% over the end of last year. Among them, thermal power was 1,300 GW, accounting for 54.6% of the total, which was 2.0 percentage points lower than that at the end of last year.

The depth and breadth of power system reform were increasing. In 2021, the National Development and Reform Commission issued the "Notice on Further Deepening the Market-oriented Reform On Grid Electricity Price of Coal-fired Power Generation", requiring all coal-fired power generation to enter the electricity market, and to form on-grid tariff through market transactions within the range of "benchmark price + upward/downward fluctuation". With the increasingly fierce competition in the electricity market, the market environment was more complex. The market electricity accumulated trading volume of all trading center across the whole country is 3,778.7 billion kWh, representing a year-on-year increase of 19.3%, and accounting for 45.5% of the total electricity consumption of the whole society; the medium and long-term power direct trading volume of the electricity market is 3,040.46 billion kWh, representing a year-on-year increase of 22.8%.

1 International Energy Agency (IEA), "Coal 2021" Annual Report.

III. BUSINESSES ENGAGED IN BY THE COMPANY DURING THE REPORTING PERIOD

The Company was established in Beijing in November 2004, and was listed on the HKEx in June 2005 and on the SSE in October 2007. The Group is principally engaged in the production and sale of coal and electricity, railway, port and shipping transportation, and coal-to-olefins businesses.

The Group owns high-quality coal resources in Shendong Mines, Zhunge'er Mines, Shengli Mines and Baorixile Mines, etc.. In 2021, the Group realized commercial coal production of 307.0 million tonnes and the sales of coal of 482.3 million tonnes. The Group controls and operates high capacity clean coal-fired power generators with great parameters, and the Group controled and operated power generators with an installed capacity of 37,899 MW by the end of 2021, with a total power output dispatch of 156.13 billion kWh in 2021. The Group controls and operates a network of concentric transportation railways around the major coal production bases in western Shanxi, northern Shaanxi and southern Inner Mongolia and "Shenshuo – Shuohuang Line", a major channel for coal transportation from western to eastern China, as well as Huanghua-Dajiawa Railway, a new energy channel in Bohai Rim. The total length of railways controlled and operated by the Group has increased to 2,408 km. The transportation turnover of the self-owned railway reached 303.4 billion tonnes km all year. The Group also controls and operates a number of ports and terminals (approximately 270 million tonnes/year shiploading capability in aggregate), such as Huanghua Port, possesses the shipping transportation team comprising its own vessels with approximately 2.18 million tonnes of deadweight capacity and conducts coal-to-olefins businesses with approximately 0.6 million tonnes/year of production capacity. During the reporting period, the Group made no significant change in the scope of its principal businesses.

The integrated operation mode of "production-transportation (railway, port and shipping)-conversion (power generation and coal chemical industry)" formed by the Group on the basis of coal products has the advantages of complete chain, high efficiency, safety and stability, and low-cost operation. The Group's technology in coal exploitation and production safety has secured a leading position in the global market, and that of clean coal-fired power generation and heavy-haul railway transportation has secured a leading position in the domestic market.

IV. ANALYSIS ON CORE COMPETITIVENESS DURING THE REPORTING PERIOD

The core competitiveness of the Group is mainly:

(I) **Unique operation and profitability model:** The Group has a large and efficient operation of coal and power generation business, and possesses a large-scale integrated transportation network consisting of railways, ports and ships, forming a core competitive advantage of integrated development of coal, power, transportation and coal-to-chemical industry, one-stop operation of production, transportation and sales, in-depth cooperation and effective synergy among various industrial sectors.

In 2021, the Company adhered to market orientation, strengthened resource organization and transportation scheduling, fully developed its advantages of resources and scale in the integration of the full industrial chain of coal, power, coal chemicals and transportation, guaranteed the safe and stable supply of energy, and continuously improved the benefit-creation capability of the value chain, in order to continuously strengthen the overall competitiveness.

(II) **Coal reserves:** The Group possesses an abundant pool of high-quality coal resources which are suitable for modern high-output and high-efficient mining. The coal reserves of the Group is among the top of listed coal companies in China.

(III) **Management team focusing on principal businesses and advanced business concepts:** The management team of China Shenhua has profound knowledge and management experience in the industry, attaches great importance to enhancement of the Company's capabilities in value creation, conducts operation with a focus on the principal businesses of the Company, and persistently focuses on clean generation, clean transportation and clean conversion in the energy sector.

(IV) **Industrial technology and innovation capabilities:** China Shenhua strengthens its industrial technology and innovation capabilities continuously. The Group's technology in green coal exploitation and production safety has secured a leading position in the global market, and that of clean coal-fired power generation and heavy-haul railway transportation has secured a leading position in domestic market. China Shenhua has basically established an integrated operation model of utilizing scientific and technological from decision-making, systematic management, research and development to commercialization of achievements and a technological innovation-driven development model.

In 2021, the Group focused on promoting the research of intelligent technology in coal mine, intelligent operation and maintenance technology of heavy-haul railway infrastructure, comprehensive energy-saving technology of coal-fired generating units, etc. During the reporting period, China Shenhua was granted a total of 754 patents, including 199 invention patents.

V. MAJOR OPERATION RESULTS DURING THE REPORTING PERIOD

(I) Analysis on Principal Businesses

1. Changes in the major items in the consolidated statement of profit or loss and consolidated statement of cash flows

Unit: RMB million

Items	2021	2020	Change %
Revenue	335,216	233,263	43.7
Operating costs	(239,156)	(162,374)	47.3
Research and development costs	(2,499)	(1,362)	83.5
Other gains and losses	(955)	(194)	392.3
Credit impairment loss	(2,561)	(524)	388.7
Other income	893	778	14.8
Interest income	2,492	1,684	48.0
Finance costs	(2,583)	(2,263)	14.1
Share of results of associates	(874)	947	(192.3)
Income tax expense	(18,161)	(15,378)	18.1
Net cash inflows from operating activities	94,575	81,289	16.3
Of which: Net cash inflows from operating activities of Finance Company	/	18,599[Note]	/
Net cash inflows from operating activities excluding the effect of Finance Company	94,575	62,690	50.9
Net cash (outflows)/inflows in investing activities	(6,844)	32,048	(121.4)
Net cash outflows in financing activities	(43,731)	(42,079)	3.9

Note: As Finance Company provides financial services including deposits and loans for entities other than the Group, the item represents the cash flows of deposits and loans and interest, fees and commission generated from this business from January to August 2020.

2. Analysis on revenue and costs

(1) Factors affecting the revenue

The revenue of the Group in 2021 recorded a year-on-year increase. The main reasons for the increase are:

① with strong market demand for coal and rising coal prices, the Group's coal sales volume and average sales price increased by 8.0% and 43.4% year-on-year, respectively;

② with the growth in domestic electricity demand, the Group has actively leveraged its integrated operation advantages to ensure the coal supply of power plants, and several new generating units have been put into operation successively from 2021 onwards, resulting in a year-on-year increase of 22.3% in the Group's power output dispatch;

③ The Group integrated shipping resources, improved the scale and intensification of shipping business, and ensured effective energy supply. The shipping volume increased by 7.3% year-on-year, and freight rate increased;

④ Affected by international oil prices and other factors, the sales prices of polyethylene and polypropylene increased by 21.7% and 13.9% year-on-year, respectively.

Major operating indicators	Unit	**2021**	2020	Change for 2021 compared with that for 2020 %	2019
(I) Coal					
1. Commercial coal production	Million tonnes	**307.0**	291.6	5.3	282.7
2. Coal sales	Million tonnes	**482.3**	446.4	8.0	447.1
Of which: Self-produced coal	Million tonnes	**312.7**	296.0	5.6	284.8
Purchased coal	Million tonnes	**169.6**	150.4	12.8	162.3
(II) Transportation					
1. Transportation turnover of self-owned railway	Billion tonne km	**303.4**	285.7	6.2	285.5
2. Loading volume at Huanghua Port	Million tonnes	**215.0**	203.8	5.5	199.7
3. Loading volume at Shenhua Tianjin Coal Port	Million tonnes	**46.4**	45.4	2.2	44.7
4. Shipping volume	Million tonnes	**121.2**	113.0	7.3	109.8
5. Shipment turnover	Billion tonne nautical miles	**112.1**	93.0	20.5	89.6
(III) Power generation					
1. Gross power generation	Billion kWh	**166.45**	136.33	22.1	153.55
2. Total power output dispatch	Billion kWh	**156.13**	127.65	22.3	144.04
(IV) Coal chemical					
1. Sales of polyethylene	Thousand tonnes	**332.8**	356.9	(6.8)	319.0
2. Sales of polypropylene	Thousand tonnes	**315.6**	331.2	(4.7)	302.3

(2) Analysis of costs

Unit: RMB million

Breakdown of cost items	**Amount for 2021**	**Percentage to operating costs for 2021** %	Amount for 2020	Percentage to operating costs for 2020 %	Year-on-year change in amount %
Cost of purchased coal	**102,865**	**43.0**	48,742	30.0	111.0
Raw materials, fuel and power	**23,696**	**9.9**	19,501	12.0	21.5
Personnel expenses	**21,285**	**8.9**	16,066	9.9	32.5
Repair and maintenance	**10,722**	**4.5**	9,124	5.6	17.5
Depreciation and amortization	**18,093**	**7.6**	16,647	10.3	8.7
Transportation charges	**18,764**	**7.8**	15,076	9.3	24.5
Tax and surcharge	**16,502**	**6.9**	10,926	6.7	51.0
Others	**27,229**	**11.4**	26,292	16.2	3.6
Total operating sales	**239,156**	**100.0**	162,374	100.0	47.3

The operating costs of the Group in 2021:

① The main reasons for the year-on-year increase in the cost of purchased coal: the year-on-year increase in the sales volume of purchased coal and the unit purchase cost;

② The main reasons for the year-on-year increase in raw materials, fuel and power costs: the increase in power generation and coal purchase price;

③ The main reasons for the year-on-year increase in labor costs: the increase in the number of production personnel and the increase in salary and social security contributions;

④ The main reasons for the year-on-year increase in repair and maintenance costs: the Group carried out track replacement overhaul for some railway sections and postponed the construction of some maintenance projects affected by the epidemic in the same period of last year

⑤ The main reasons for the year-on-year increase in transportation costs: the increase in vessel rental charges in shipping business;

⑥ The main reasons for the year-on-year increase in taxes and surcharges: the increase in income and the increase in resource taxes and other taxes.

Unit: RMB million

Operating costs by business segment (before elimination on consolidation)

By business segment	Breakdown of cost items	2021	2020	Change %
Coal	Cost of purchased coal, raw materials, fuel and power, personnel expenses, repairs and maintenance, depreciation and amortisation, transportation charges, other operating costs, and taxes and surcharges	225,126	153,373	46.8
Power	Raw materials, fuel and power, personnel expenses, repairs and maintenance, depreciation and amortisation, other operating costs, and taxes and surcharges	60,019	38,729	55.0
Railway	Cost of internal transportation business (raw materials, fuel and power, personnel expenses, repairs and maintenance, depreciation and amortisation, external transportation charges, and other expenses), Cost of external transportation business, other operating costs, and taxes and surcharges	22,020	20,304	8.5
Port	Cost of internal transportation business (raw materials, fuel and power, personnel expenses, repairs and maintenance, depreciation and amortisation, and other expenses), Cost of external transportation business, other operating costs, and taxes and surcharges	3,342	3,314	0.8
Shipping	Cost of internal transportation business (raw materials, fuel and power, personnel expenses, repairs and maintenance, depreciation and amortisation, external transportation charges, and other expenses), Cost of external transportation business, and taxes and surcharges	5,018	2,755	82.1
Coal chemical	Raw materials, fuel and power, Personnel expenses, repairs and maintenance, depreciation and amortisation, other costs, other operating costs, and taxes and surcharges	4,754	4,675	1.7

(3) *Principal businesses by industry segment*

The major business model of the Group is the integrated coal industry chain: i.e. coal production → coal transportation (railway, port and shipping) → conversion of coal (power generation and coal chemical), and there are business intercourses between each segment. The percentages of gains (before elimination on consolidation) from operations of coal, power, transportation and coal chemical segments of the Group were 71%, 4%, 24% and 1% in 2021 respectively (2020: 52%, 14%, 34% and 0%).

Major business by industry segments in 2021 (before eliminations on consolidation)

Business segment	Revenue	Operating costs	Gross profit margin	Increase/ decrease in operating revenue as compared with previous year	Increase/ decrease in operating costs as compared with previous year	Increase/decrease in gross profit margin as compared with previous year
	RMB million	*RMB million*	*%*	*%*	*%*	
Coal	292,661	(225,126)	23.1	54.0	46.8	Increased by 3.8 percentage points
Power generation	64,124	(60,019)	6.4	29.6	55.0	Decreased by 15.3 percentage points
Railway	40,699	(22,020)	45.9	5.1	8.5	Decreased by 1.7 percentage points
Port	6,440	(3,342)	48.1	1.3	0.8	Increased by 0.2 percentage points
Shipping	6,195	(5,018)	19.0	99.1	82.1	Increased by 7.5 percentage points
Coal chemical	5,851	(4,754)	18.7	13.3	1.7	Increased by 9.2 percentage points

(4) *Analysis of the production and sales volume of major products*

Major products	Unit	Production	Sales volume	Inventory at the end of the period	Year-on-year increase/ decrease in production volume	Year-on-year increase/ decrease in sales volume	Increase/ decrease as compared with the beginning of the year in inventory
					%	*%*	*%*
Coal	million tonnes	307.0	482.3	24.3	5.3	8.0	23.4
Power	billion kWh	166.45	156.13	/	22.1	22.3	/

(5) *Major customers*

In 2021, the total revenue from the top five customers of the Group amounted to RMB135,554 million, accounting for 40.4% of the total revenue of the Group, including the revenue of the Group from its largest customer of RMB107,461 million, accounting for 32.1% of the total revenue of the Group. The largest customer of the Group was China Energy and its subsidiaries, the controlling shareholder of the Company. The Group mainly sells coal products and provides coal transportation service to China Energy Group.

Except for the above, as far as the Board of the Company is aware, none of the Directors of the Company, their close associates or shareholders holding more than 5% of shares of the Company has any interest in the top five customers of the Group. The Group has maintained long-term cooperative relationship with the top five customers. The Company is of the view that such cooperative relationship would not cause material risk to the business of the Group.

(6) *Major suppliers*

In 2021, the total procurement from the top five suppliers of the Group amounted to RMB37,394 million, accounting for 16.8% (less than 30%) of the total procurement for the year, among which, the procurement from its largest supplier amounted to RMB20,614 million, representing 9.3% of the total procurement for the year.

3. Expenses and other items of income statement

(1) The main reason for the year-on-year increase in R&D expenses: the increase in R&D expenses of projects such as smart mines.

(2) Other gains and losses during the reporting period were aggregated as losses, mainly: as at the end of the reporting period, certain coal subsidiaries conducted impairment assessment on production equipment and spare tools and spare parts with indications of impairment, and made provision for impairment according to the impairment assessment results.

(3) The credit impairment losses during the reporting period, are mainly: as at the end of the reporting period, the Group conducted impairment test on the receivables with long ages, and made bad debt provision according to the impairment test results.

(4) The main reason for the year-on-year increase in other income: the increase in government subsidies related to daily activities obtained by the Group.

(5) The main reasons for the year-on-year increase in interest income: an increase in the average balance of deposits of the Group with financial institutions other than Finance Company; and deconsolidation of Finance Company, the interest income incurred from the deposits which was deposited by the Group in the Finance Company would no longer be offset on a consolidated basis.

(6) The main reasons for the year-on-year increase in financial costs: deconsolidation of Finance Company, the interest expenses of the Finance Company would no longer be offset by the Group ; and the increase in the average loan balance of the Group led to an increase in interest expenses.

(7) The main reason for the year-on-year decrease in the profit and loss attributable to associates: the year-on-year decrease in the Company's investment income from power associates.

(8) The main reason for the year-on-year increase in income tax: the increase of pre-tax profit of the Group this year.

4. **Research and development expenditure**

(1) ***Research and development expenditure***

Unit: RMB million

Expensed research and development expenditure in the period	2,499
Capitalised research and development expenditure in the period	848
Total research and development expenditure	3,347
Percentage of total research and development expenditure to revenue *(%)*	1.0
Ratio of capitalised research and development expenditure *(%)*	25.3

In 2021, the research and development expenditure of the Group amounted to RMB3,347 million (2020: RMB2,149 million), representing a year-on-year increase of 55.7%; the research and development expenditure accounted for 1.0% of the revenue (2020: 0.9%), representing a year-on-year increase of 0.1 percentage point, which was mainly due to the Group's increasing research and development expenditure, strengthening scientific and technological innovation capability, actively carrying out collaborative innovation of "Industry-University-Research" and facilitating the transformation and upgrade of the Company under the guidance of innovation-driven development strategy and surrounding the three major areas of coal green development, coal clean utilization and coal clean transformation.

During the reporting period, the R&D projects carried out by the Group mainly include: research on technologies and equipment related to smart mines; demonstration project of high-efficiency and low-emission coal-fired boiler, CO_2 capture and storage project after combustion in coal-fired power plant, research and application of key technology innovation of smart power plant based on CPS, and research on the detection and application of heavy-haul railway based on geographic spatio-temporal big data technology, research on the expanding test and engineering application research project of mobile blocking of heavy-haul railway, research on the key technologies of all-weather automatic control of stacking and reclaiming under complex working conditions in coal port, etc..

(2) Research and development personnel

Number of research and development personnel in the Group	2,619
Ratio of research and development personnel to the total number of persons *(%)*	3.4

Educational structure of research and development personnel

Category of educational structure	**Number**
Doctoral candidate	34
Master degree candidate	286
Undergraduate	1,819
Junior college	404
High School and below	76

Age structure of research and development personnel

Category of age structure	**Number**
Under 30 years old (excluding 30 years old)	394
30–40 years old (including 30 years old, excluding 40 years old)	1,110
40–50 years old (including 40 years old, excluding 50 years old)	567
50–60 years old (including 50 years old, excluding 60 years old)	548
60 years old and above	0

The Company is committed to highlighting scientific research practice, building a career platform, introducing and training a group of leading scientific and technological talents, young scientific and technological backbones, high-level innovation teams and outstanding engineers. As of the end of 2021, the Company has 1 national key laboratory, 1 academician expert workstation, 6 post-doctoral expert workstations, and takes the lead in undertaking 7 national key R&D projects.

5. Cash flow

The Group formulated capital management policies that aimed to achieve maximized interests for the shareholders and maintained a sound capital structure as well as reducing the costs of capital under the premise of safeguarding the operation on an on-going basis, and the capital was invested in accordance with the policy of the Company.

(1) Net cash inflow from operating activities: net cash inflow in 2021 was RMB94,575 million (net cash inflow in 2020: RMB81,289 million), representing a year-on-year increase of 16.3%; excluding the influence of Finance Company, the net cash inflow generated from operating activities of the Group increased by 50.9% year-on-year, mainly due to the increase of cash inflow caused by the increase of income.

(2) Net cash outflow in investing activities: net cash outflow in 2021 was RMB6,844 million (net cash outflow in 2020: RMB32,048 million), representing a year-on-year change of 121.4%, which was mainly attributable to the due recovery of bank financial products held by the Company in the previous year and the increase in cash expenditure for the construction of long-term assets,such as fixed assets, intangible assets, etc. during the year.

(3) Net cash outflow in financing activities: net cash outflow in 2020 was RMB43,731 million net cash outflow in (net cash outflow in 2020: RMB42,079 million), representing a year-on-year increase of 3.9%, which was mainly attributable to the increase in dividends paid by the Group.

(II) Explanation on Significant Change of Profit Caused by Non-principal Business

☐ Applicable ✔ Not applicable

(III) Analysis on Assets and Liabilities

1. Assets and liabilities

Unit: RMB million

Items	Amount at the end of the year	Percentage of total assets at the end of the year %	Amount at the end of the previous year	Percentage of total assets at the end of the previous year %	Change of the amount at the end of the year compared to the end of the previous year %	Main reasons for changes
Property, plant and equipment	**263,656**	**43.2**	238,198	43.7	10.7	The completion of and operation of Huangda Railway and certain power generation projects
Construction in progress	**26,201**	**4.3**	39,845	6.1	(34.2)	The completion of and operation of Huangda Railway and certain power generation projects , and the transfer to property, plant and equipment
Exploration and evaluation assets	**4,000**	**0.7**	0.0	0.0	N/A	The obtaining of the coal investigation and exploration permit by Taigemiao South Area of Xinjie Mining Area
Intangible assets	**4,651**	**0.8**	3,888	0.7	19.6	The purchase of coal capacity replacement indicators made by the Group, and the increase in intangible assets made by the Group
Right-of-use assets	**22,240**	**3.6**	18,597	3.3	19.6	The increase of land use right assets related to Huangda Railway
Other non-current assets	**28,089**	**4.6**	35,890	6.4	(21.7)	The obtaining of the coal investigation and exploration permit by Taigemiao South Area of Xinjie Mining Area, and the transfer of relevant prepayment of resources to exploration and evaluation assets for accounting

Items	Amount at the end of the year	Percentage of total assets at the end of the year %	Amount at the end of the previous year	Percentage of total assets at the end of the previous year %	Change of the amount at the end of the year compared to the end of the previous year %	Main reasons for changes
Deferred tax assets	**3,568**	**0.6**	2,856	0.5	24.9	Provision for credit impairment loss and asset impairment loss for relevant assets
Accounts and bills receivable	**13,607**	**2.2**	11,759	2.1	15.7	Increase in coal and electricity sales receivables
Restricted bank deposits	**4,479**	**0.7**	3,391	0.6	32.1	Increase in provision for mine environmental treatment and restoration fund
Time deposits with original maturity over three months	**1,701**	**0.3**	11,186	2.0	(84.8)	Maturity of certain time deposits
Cash and cash equivalents	**156,706**	**25.7**	112,880	20.1	38.8	Increase in net cash inflow generated from operating activities; maturity of certain time deposits
Assets classified as held for sale	**294**	**0.0**	2,783	0.5	(89.4)	The completion of equity delivery of Fuping Thermal Power; mainly are assets classified as held for sale related to the Watermark project during the reporting period
Accounts and bills payables	**35,216**	**5.8**	28,980	5.1	21.5	Increase in project funds, equipment and materials payable of power plants under construction
Accrued expenses and other payable	**29,109**	**4.8**	18,949	3.4	53.6	Increase in taxes payable such as resource tax and value-added tax; increase in the payroll payable
Income tax payable	**9,028**	**1.5**	6,313	1.1	43.0	Increase in provision in provision for unpaid enterprise income tax
Contract liabilities	**6,864**	**1.1**	5,256	0.9	30.6	Increase in provision in advance coal payments due to the increase in coal sales and average sale price
Long-term payables	**8,025**	**1.3**	2,661	0.5	201.6	The recognition of long-term payables for mining rights after reassessment of the mining rights of certain mines
Lease liabilities	**1,510**	**0.2**	606	0.1	149.2	Increase in equipment leasing

2. Offshore assets

As of 31 December 2021, the total offshore assets of the Group (including Hong Kong, Macau and Taiwan) amounted to RMB26,795 million, representing 4.4% of total assets, which were mainly composed of the power generation assets in Indonesia, and assets from U.S. dollar-denominated bonds issued in Hong Kong, the PRC.

3. Restrictions on main assets

The Group is free from seizure and detention of main assets. As at the end of the reporting period, the balance of the restricted assets of the Group was RMB5,294 million, among which, security deposits for bank acceptance bills, relevant deposits related to port operations, deposit for letter of credit and mine geographical environment governance recovery fund amounted to RMB4,479 million in total; other restricted assets mainly consisted of fixed assets secured and guaranteed for acquiring bank borrowings.

4. Distributable reserves to shareholders

As of 31 December 2021, the distributable reserves of the Company to shareholders were RMB179,811 million.

(IV) Operation Results by Business Segment

1. Coal segment

(1) Production, operation and construction

The majority of the coal products produced and sold by the Group were thermal coal. In 2021, the Group continuously optimised the production organisation and operation, further strengthened the safety and environmental management of coal mines, ensured stable and high output of coal mines, and fully guaranteed the coal supply. The annual output of commercial coal was 307.0 million tonnes (2020: 291.6 million tonnes), representing a year-on-year increase of 5.3%. The roadway development at underground mines reached 444 thousand meters (2020: 426 thousand meters), representing a year-on-year increase of 4.2%, of which, the roadway development at Shendong Mines was 428 thousand meters.

The approval of land acquisition for coal mining carried out in an orderly manner. The approval for grassland acquisition and occupation of 667 hectares of continuous production land of Beidian Shengli No. 1 open-cut mine has been obtained; the pre-approvals of construction land for Baorixile open-cut mine's 600 hectares, Heidaigou open-cut mine's 321 hectares and Haerwusu open-cut mine's 289 hectares of continuation land for excavation site have been obtained.

Steady progress has been made in the acquisition of mining rights. Shenhua Xinjie Energy Co., Ltd, the holding subsidiary of the Company, has obtained the detailed exploration license of coal resources in Taigemiao south area of Dongsheng Coal Field in Inner Mongolia issued by the Ministry of Natural Resources. The acquisition of the surrounding resource certificates of Shangwan Mine, Bulianta Mine and Wanli No. 1 Mine of Shendong Mines is proceeding in an orderly manner; the continuation of mining licenses for Shenshan open-cut mine and Shuiquan open-cut mine has been completed.

The Group has independently operated railway transportation for collection and distribution channels. These channels are centralised and distributed in the rim of self-owned core mines, and can satisfy the transportation needs in the core mines.

(2) Sales of coal

The coal sold by the Group is mainly self-produced coal. In order to fulfill the needs of customers and adequately make use of railways transportation, the Group also purchased the coal from third parties in the surrounding areas of the self-owned mines and railways for blending to produce different kinds and levels of coal products and sell them to external customers. The Group implemented specialised division management. Production enterprises are responsible for production of coal, the railway, port and shipping companies of the Company are mainly responsible for transportation of coal, and the Trading Group of the Company is mainly responsible for sales of coal. Customers are involved in different industries, such as power, metallurgy, chemical and construction materials.

In 2021, the Group made full use of the advantages of the integrated industrial chain, actively organised purchased coal sources, coordinated transportation and inventory management, and ensured supply and increased supply for customers. During the year, sales volume of coal of the Group reached 482.3 million tonnes (2020: 446.4 million tonnes), representing a year-on-year increase of 8.0%. Of them, the sales volume of domestic seaborne coal was 262.9 million tonnes, accounting for 31.1% of the coal transportation volume of 845 million tonnes in national major ports; the sales volume for the top five external coal customers was 191.3 million tonnes, accounting for 39.7% of the total coal sales volume; in particular, the sales volume of China Energy Group, the largest customer, was 167.2 million tonnes, representing 34.7% of the total coal sales volume. The top five external coal customers are mainly electrical, chemical and coal trading companies.

In 2021, as the coal market demand was strong and coal prices rose, the average coal sales price of the Group was RMB588/tonne (exclusive of tax, the same below) (2020: RMB410/tonne), representing a year-on-year increase of 43.4%.

The production and sales of each kind of coal of the Group in 2021 are set out below:

Types of coal	Production *Million tonnes*	Sales volume *Million tonnes*	Sales income *RMB million*	Sales cost *RMB million*	Gross profit *RMB million*
Thermal coal	307.0	482.3	283,722	206,929	76,793
Others [Note]	/	0.0	12	12	0
Total	307.0	482.3	283,734	206,941	76,793

Note: The Group sold 9,300 tonnes of coking coal in 2021.

As coal products were in great variety with a large sales volume, and some of self-produced coal products were transported and sold together with purchased coal, the Group cannot present the revenue, cost of sales and gross profit by source of coal (self-produced coal and purchased coal).

The coal sales of the Group in 2021 is set out below:

① By contract pricing mechanisms

	2021			2020			Changes	
	Sales volume *Million tonnes*	Proportion of total sales *%*	Price (exclusive of tax) *RMB/ tonne*	Sales volume *Million tonnes*	Proportion of total sales *%*	Price (exclusive of tax) *RMB/ tonne*	Sales volume *%*	Price (exclusive of tax) *%*
I. Sales through Trading Group	458.7	95.1	605	430.1	96.3	419	6.6	44.4
1. Annual long-term contracts	207.9	43.1	456	190.0	42.5	380	9.4	20.0
2. Monthly long-term contracts	196.2	40.7	765	163.5	36.6	465	20.0	64.5
3. Spot commodity	54.6	11.3	599	76.6	17.2	418	(28.7)	43.3
II. Direct sales from pit head	23.6	4.9	263	16.3	3.7	176	44.8	49.4
Total sales volume/average price(exclusive of tax)	482.3	100.0	588	446.4	100.0	410	8.0	43.4

Note: The above is the summary of the sales of coal products with different calorific values of the Group.

② By internal and external customers

	2021			2020			Changes	
	Sales volume	Proportion of total sales	Price (exclusive of tax)	Sales volume	Proportion of total sales	Price (exclusive of tax)	Sales volume	Price (exclusive of tax)
	Million tonnes	*%*	*RMB/ tonne*	*Million tonnes*	*%*	*RMB/ tonne*	*%*	*%*
Sales to external customers	416.8	86.4	599	394.0	88.2	416	5.8	44.0
Sales to internal power segment	61.2	12.7	532	47.7	10.7	374	28.3	42.2
Sales to internal coal chemical segment	4.3	0.9	366	4.7	1.1	322	(8.5)	13.7
Total sales volume/average price(exclusive of tax)	482.3	100.0	588	446.4	100.0	410	8.0	43.4

③ By sales regions

	2021			2020			Changes	
	Sales volume	Proportion of total sales	Price (exclusive of tax)	Sales volume	Proportion of total sales	Price (exclusive of tax)	Sales volume	Price (exclusive of tax)
	Million tonnes	*%*	*RMB/ tonne*	*Million tonnes*	*%*	*RMB/ tonne*	*%*	*%*
I. Domestic sales	476.2	98.8	588	444.3	99.5	410	7.2	43.4
(I) Self-produced coal and purchased coal	450.8	93.5	585	429.5	96.2	411	5.0	42.3
1. Direct arrival	187.9	39.0	442	162.1	36.3	317	15.9	39.4
2. Seaborne	262.9	54.5	687	267.4	59.9	468	(1.7)	46.8
(II) Sales of domestic trading coal	12.3	2.6	795	9.7	2.2	353	26.8	125.2
(III) Sales of imported coal	13.1	2.7	509	5.1	1.1	418	156.9	21.8
II. Export sales	0.7	0.1	850	0.7	0.2	556	0.0	52.9
III. Overseas sales	5.4	1.1	589	1.4	0.3	435	285.7	35.4
Total sales volume/average price (exclusive of tax)	482.3	100.0	588	446.4	100.0	410	8.0	43.4

(3) ***Production safety***

In 2021, the Group took multiple measures to ensure coal mine production safety. The Group fully carried out the three-year special rectification action for production safety to ensure generally stable situation of production safety, conducted safety supervision to ensure the implementation of the safety system, as well as upgrading the equipment and facilities of the emergency rescue base to improve safety guarantee capability. In 2021, the fatality rate per million tonnes of raw coal output in the coal mines of the Group was 0.00597, which was below the national average of 0.044.

Efforts in ensuring production safety of coal mine are detailed in the 2021 ESG Report of the Company.

(4) ***Coal resources***

As at 31 December 2021, under the PRC Standard, the Group had coal reserves amounting to 33.21 billion tonnes, representing an increase of 3.53 billion tonnes as compared with that of the end of 2020, mainly due to the acquisition of coal exploration permit in Taigemiao South Area of Xinjie Mine; and recoverable coal reserve amounting to 14.15 billion tonnes, representing a decrease of 0.27 billion tonnes as compared with that of the end of 2020. The Group's marketable coal reserve amounted to 7.43 billion tonnes under the JORC Standard, representing a decrease of 300 million tonnes as compared with that of the end of 2020.

In 2021, the Group's coal exploration expenses (which were incurred before the conclusion of feasibility study and represented the expenses related to exploration and evaluation of coal resources) amounted to approximately RMB4.001 billion (2020: RMB0.022 billion), which was mainly attributable to the acquisition of detailed coal exploration permit in Taigemiao South Area of Xinjie Mine; the Group's relevant capital expenditure of coal mine development and exploration amounted to approximately RMB12.717 billion (2020: RMB3.152 billion), which was mainly attributable to the reassessment of mining rights in Shengli and Baorixile mining areas, and the construction expenditure of the second panel project in Guojiawan coal mine.

Unit: 100 million tonnes

Mines	Coal reserve (under the PRC Standard)	Recoverable coal reserve (under the PRC Standard)	Proved reserve (under the PRC Standard)	Marketable coal reserve (under the JORC Standard)
Shendong Mines	153.9	87.2	17.8	42.7
Zhunge'er Mines	37.2	29.6	12.7	18.8
Shengli Mines	19.6	13.3	0.2	1.5
Baorixile Mines	13.3	11.1	2.3	11.3
Baotou Mines	0.5	0.3	0.1	0.0
Xinjie Mines	107.6	/	/	/
Total	332.1	141.5	33.1	74.3

Characteristics of the commercial coal produced in the Group's major mines are as follows:

No.	**Mines**	**Major types of coal**	**Calorific value of major commercial coal products** *kcal/kg*	**Sulphur Content** *%*	**Ash content** *average, %*
1	Shendong Mines	Long flame coal/ non-caking coal	5,000–5,800	0.2–0.6	5–48
2	Zhunge'er Mines	Long flame coal	4,000–5,300	0.4–0.5	17–33
3	Shengli Mines	Lignite	2,500–3,100	0.7–1.5	17–38
4	Baorixile Mines	Lignite	3,300–3,500	0.1–0.3	13–17
5	Baotou Mines	Long flame coal/non-caking coal	3,800–5,000	0.3–1.0	20–45

Note: The above calorific value, sulphur content and ash content of major commercial coal products produced by each mine may be inconsistent with the characteristics of the commercial coal products produced by individual mine and those of the commercial coal products sold by the Company due to geological conditions and production process.

(5) Operating results

① The operating results of the coal segment of the Group before elimination on consolidation

		2021	2020	Change %	Main reasons for changes
Revenue	RMB million	**292,661**	190,029	54.0	Increase in coal sales volume and average sales price
Operating costs	RMB million	**(225,126)**	(153,373)	46.8	Increase in the sales volume and unit production cost of self-produced coal; increase in the sales volume and unit purchase cost of purchased coal
Gross profit margin	%	**23.1**	19.3	Increased by 3.8 percentage point	
Profit from operations	RMB million	**59,125**	29,832	98.2	
Profit margin from operations	%	**20.2**	15.7	Increased by 4.5 percentage points	

② The sales gross profit of the coal products of the Group before elimination on consolidation

	2021				2020			
	Revenue	Costs	Gross profit	Gross profit margin	Revenue	Costs	Gross profit	Gross profit margin
	RMB million	*RMB million*	*RMB million*	*%*	*RMB million*	*RMB million*	*RMB million*	*%*
Domestic	279,974	(203,561)	76,413	27.3	182,082	(139,976)	42,106	23.1
Export and overseas	3,760	(3,380)	380	10.1	999	(828)	171	17.1
Total	283,734	(206,941)	76,793	27.1	183,081	(140,804)	42,277	23.1

③ Unit production cost of self-produced coal

Unit: RMB/tonne

	2021	2020	Change %	Main reasons for changes
Unit production cost of self-produced coal	149.9	139.6	7.4	
Raw materials fuel and power	28.2	27.1	4.1	Rising electricity prices in West Inner Mongolia Region lead to the rise of electricity charge
Personnel expenses	36.6	27.8	31.7	Increase in the number of employees; increase in salary and social security contributions
Repairs and maintenance	10.1	9.4	7.4	Increase in daily repair and maintenance costs and overhaul of some equipment of open-cut mines
Depreciation and amortisation	22.2	18.8	18.1	Increase in purchase of coal mine production equipment
Other costs	52.8	56.5	(6.5)	

Other costs consist of the following three components: (1) expenses directly related to production, including coal preparation and processing expenses, and mining engineering expenses, etc., accounting for 63%; (2) auxiliary production expenses, accounting for 18%; (3) land requisition and surface subsidence compensation, environmental protection expenses and tax, accounting for 19%.

④ Cost of coal purchased from third parties

The coal purchased from third parties and sold by the Company includes coal purchased from the surrounding areas of the self-owned mines and railways, domestic trading coal, imported and re-exported coal.

In 2021, the sales volume of purchased coal by the Group was 169.6 million tonnes (2020: 150.4 million tonnes), representing a year-on-year increase of 12.8%, accounting for 35.2% of the Group's total sales volume (2020: 33.7%). The costs of coal purchased from third parties for the year were RMB102,865 million (2020: RMB48,742 million), representing a year-on-year increase of 111.0%.

2. Power segment

(1) Production and operations

In 2021, the Group made every effort to ensure the coal supply of coal-fired power plants, strictly controlled the number of non-stop units and ensured the safety and stability of power supply. The Group accelerated the construction and operation of new units with large capacity, high parameters and ultra-low emissions, and further optimized the layout of power business. The Group realised a total power output dispatch of 156.13 billion kWh throughout the year, accounting for 1.9% of 8,312.8 billion kWh[1] of the total power consumption of the society in the corresponding period, of which the market-based trading power reached 98.06 billion kWh, accounting for 62.8% of the total power output dispatch.

The Group promoted the development of its new energy business by participating in the establishment of industrial investment funds and developing new energy projects. The Beijing Guoneng New Energy Industrial Investment Fund and the Beijing Guoneng Green and Low-carbon Development Investment Fund, which the Company has participated in, have successively invested in wind power and photovoltaic projects in Shanxi, Jiangsu, Zhejiang, Hubei and Hunan. The Company has entered into a strategic cooperation agreement with the Hohhot Municipal Government and other partners to participate in the development and construction of new energy projects, such as photovoltaic, wind power and geothermal energy in the "zero carbon" industrial parks and "zero carbon" urban construction in Hohhot. Open-pit Dump Disposal Photovoltaic Project (150 MW) of Beidian Shengli, a subsidiary of the Group, and distributed photovoltaic power generation projects located in Guangdong, Fujian and Shandong are currently progressing in an orderly manner.

1 Source: China Electricity Council

(2) Power consumption and power tariffs

Power type/operation location	Power generation *(billion KWh)* 2021	2020	Change %	Power output dispatch *(billion kWh)* 2021	2020	Change %	Power tariff *(RMB/MWh)* 2021	2020	Change %
(I) coal-fired power	**161.86**	131.85	22.8	**151.64**	123.27	23.0	**343**	327	4.9
Hebei	**23.20**	22.84	1.6	**21.76**	21.43	1.5	**323**	320	0.9
Shaanxi	**32.29**	26.07	23.9	**29.66**	23.88	24.2	**274**	277	(1.1)
Guangdong	**30.52**	21.68	40.8	**28.67**	20.21	41.9	**391**	365	7.1
Fujian	**17.19**	14.34	19.9	**16.46**	13.74	19.8	**357**	347	2.9
Inner Mongolia	**8.86**	7.59	16.7	**8.01**	6.90	16.1	**301**	224	34.4
Henan	**4.88**	4.41	10.7	**4.56**	4.12	10.7	**295**	301	(2.0)
Sichuan	**6.10**	3.96	54.0	**5.61**	3.60	55.8	**424**	382	11.0
Chongqing	**8.89**	5.64	57.6	**8.50**	5.40	57.4	**372**	360	3.3
Shandong	**10.98**	10.21	7.5	**10.47**	9.72	7.7	**357**	343	4.1
Guangxi	**4.08**	3.20	27.5	**3.87**	3.04	27.3	**366**	309	18.4
Jiangxi	**12.05**	10.33	16.7	**11.50**	9.86	16.6	**364**	363	0.3
Hunan	**1.06**	/	/	**1.02**	/	/	**467**	/	/
Indonesia (overseas)	**1.76**	1.58	11.4	**1.55**	1.37	13.1	**465**	523	(11.1)
(II) Gas-fired power	**3.85**	3.84	0.3	**3.77**	3.75	0.5	**565**	563	0.4
Beijing	**3.85**	3.84	0.3	**3.77**	3.75	0.5	**565**	563	0.4
(III) Hydropower	**0.74**	0.64	15.6	**0.72**	0.63	14.3	**224**	232	(3.4)
Sichuan	**0.74**	0.64	15.6	**0.72**	0.63	14.3	**224**	232	(3.4)
Total	**166.45**	136.33	22.1	**156.13**	127.65	22.3	**348**	334	4.2

(3) Installed capacity

At the end of the reporting period, the total installed capacity of power generation of the Group reached 37,899MW, among which, the total installed capacity of coal-fired power generators was 36,824MW, accounting for 2.8% of the total installed capacity of thermal power generators of the society (being 1.3 billion kW[1]).

Unit: MW

Power type	Total installed capacity as at 31 December 2020	Installed capacity increased/ (decreased) during the reporting period	**Total installed capacity as at 31 December 2021**
Coal-fired power	31,204	5,620	**36,824**
Gas-fired power	950	0	**950**
Hydro power	125	0	**125**
Total	32,279	5,620	**37,899**

In 2021, the changes of the Group's installed capacity for coal-fired power generating units are as follows:

Unit	**Location**	**Increase/ (decrease) of installed capacity** *MW*	**Description**
Unit 1 and Unit 2 of Sichuan Energy Jiangyou Coal Reserves Power Generation Integration Project	Sichuan	2,000	The operation of new units
Unit 1 and Unit 2 of Phase I of Hunan Yongzhou Power Plant Project	Hunan	2,000	The operation of new units
Unit 1 and Unit 2 of Inner Mongolia Shengli Power Plant of Shengli Energy Phase I project	Inner Mongolia	1,320	The operation of new units
Unit 1 of Fujian Energy Luoyuan wan Port Power Generation & storage Project	Fujian	1,000	The operation of new units
Fuping Thermal Power of Shendong Power	Shaanxi	(700)	Equity transfer
Total	–	5,620	–

1 Source: China Electricity Council

As of the end of 2021, the generating units under construction and approved but not yet constructed by the Group are as follows:

Project	Location	Planned installed capacity
Fujian Luoyuanwan Port Power Generation & Storage Project	Fujian	2×1,000MW
Guangxi Beihai Thermal Power Plant Project	Guangxi	2×1,000MW
Guangdong Qingyuan Power Plant Phase I	Guangdong	2×1,000MW
Huizhou Phase II Gas-fired Cogeneration Unit Project	Guangdong	2×400MW
Hunan Yueyang Power Plant Project	Hunan	2×1,000MW

(4) *Utilisation rate of power generation equipment*

The average utilisation hours of coal-fired generators of the Group reached 4,764 hours for the year of 2021, representing a year-on-year increase of 352 hours and 178 hours more than the national average utilisation hours (being 4,586 hours[1]) of coal-fired generating units with the installed capacity of 6,000KW and above.

Power type	Average utilisation hours *(Hour)*			Power consumption rate of power plant *(%)*		
	2021	2020	Change %	**2021**	2020	Change
Coal-fired power (includes gangue-fired power plants)	**4,764**	4,412	8.0	**5.48**	5.73	Decreased by 0.25 percentage points
Gas-fired power	**4,057**	4,045	0.3	**1.50**	1.67	Decreased by 0.17 percentage points
Hydro power	**5,921**	5,124	15.6	**0.28**	0.30	Decreased by 0.02 percentage points
Weighted average	**4,749**	4,403	7.9	**5.37**	5.59	Decreased by 0.22 percentage points

1 Source: China Electricity Council

(5) Market transaction of power

	2021	2020	Change %
Total volume of power in market-based transactions (billion kWh)	**98.06**	67.54	45.2
Total volume of on-grid power (billion kWh)	**156.13**	127.65	22.3
Percentage of the power in market-based transactions (%)	**62.8**	52.9	Increased by 9.9 percentage points

(6) Operation results of the power sales business

In 2021, the Group owns three power sales companies located in Shandong, Jiangsu and Guangdong, respectively. The principal operation model is to make profit through the price difference between sales and purchase of electricity. The value-added services mainly include transformer preventive testing, insulation testing, energy-saving diagnosis, electricity data collection, etc.. The power output dispatch of purchased electricity sold by the above three power sales companies throughout the year was 20.97 billion kWh, and the corresponding electricity sales revenue and electricity purchase cost of the purchased electricity are RMB7,241 million and 7,467 million, respectively.

No.	Province of the power sales companies	Power output dispatch *Billion kWh*		Average selling price of power (exclusive of tax) *RMB/MWh*		Unit electricity purchase cost (exclusive of tax) *RMB/MWh*	
		2021	2020	**2021**	2020	**2021**	2020
1	Shandong	**4.58**	0.69	**346**	339	339	339
2	Guangdong	**4.28**	1.06	**363**	371	404	379
3	Jiangsu	**12.11**	4.76	**339**	367	346	342

In November 2021, the Company transferred all its shares in Jiangsu Power Sales Company, and Jiangsu Power Sales Company was no longer consolidated to the consolidated financial statements of the Group.

(7) Capital Expenditure

In 2021, the total capital expenditure of the power segment was RMB16,876 million, mainly for the following items:

Unit: RMB Million

No.	Name of Project	The investing amount for the reporting period	Percentage of accumulative amount in project to the total budget as of the end of the reporting period %
1	Hunan Yongzhou Project Phase I (2×1,000MW)	4,298	93
2	Construction of Inner Mongolia Shengli Power Plant Phase I (2×660MW)	3,077	86
3	Fujian Luoyuanwan Port Power Generation & Storage Project Construction (2×1,000MW)	2,727	71
4	Guangxi Beihai Power Plant Project (2×1,000MW)	2,520	48
5	Sichuan Jiangyou Coal Reserves & Power Generation Project (2×1,000MW)	1,637	92

(8) Operation results

① The operation results of the power segment of the Group before elimination on consolidation

		2021	2020	Change %	Main reasons for changes
Revenue	RMB million	64,124	49,486	29.6	Increase in power output dispatch
Operating costs	RMB million	(60,019)	(38,729)	55.0	increase in coal purchase price; increase in output dispatch
Gross profit margin	%	6.4	21.7	Decreased by 15.3 percentage points	
Profit from operations	RMB million	3,010	7,976	(62.3)	
Profit margin from operations	%	4.7	16.1	Decreased by 11.4 percentage points	

② Revenue and costs from the power output dispatch of the Group before elimination on consolidation

Unit: RMB million

	Revenue from power output dispatch			Cost of power output dispatch				
Power type	2021	2020	Change %	2021	Percentage to total costs of power output dispatch in 2021 %	2020	Percentage to total costs of power output dispatch in 2020 %	Change in 2021 over 2020 %
Coal-fired power	54,458	42,188	29.1	52,066	95.8	33,084	93.9	57.4
Gas-fired power	2,132	2,111	1.0	2,165	4.0	2,074	5.9	4.4
Hydro power	162	146	11.0	109	0.2	88	0.2	23.9
Total	56,752	44,445	27.7	54,340	100.0	35,246	100.0	54.2

The Group's costs of sale of power output dispatch is mainly comprised of such costs as raw materials, fuel and power, personnel expenses, repair and maintenance, depreciation and amortisation and other costs. The unit cost of power output dispatch of the Group in 2021 was RMB348/MWh (2020: RMB276/MWh), representing a year-on-year increase of 26.1%, mainly due to the rise of coal purchase price.

The power segment consumed a total of 59.8 million tonnes of China Shenhua's coal, accounting for 83.8% of the total coal consumption (being 71.4 million tonnes), representing a year-on-year increase of 1.2 percentage points, primarily due to the Group's integrated operation advantages to ensure the coal supply of power plants.

③ Costs of power output dispatch of coal-fired power plants of the Group before elimination on consolidation

	2021		2020		
	Costs	**Percentage**	Costs	Percentage	Change in cost
	RMB million	***%***	*RMB million*	*%*	*%*
Raw materials, fuel and power	**39,944**	**76.7**	23,103	69.9	72.9
Personnel expenses	**3,195**	**6.1**	2,265	6.8	41.1
Repairs and maintenance	**1,688**	**3.2**	1,989	6.0	(15.1)
Depreciation and amortisation	**4,932**	**9.5**	4,742	14.3	4.0
Others	**2,307**	**4.5**	985	3.0	134.2
Total cost of power output dispatch of coal-fired power plant	**52,066**	**100.0**	33,084	100.0	57.4

The cost of power output dispatch of coal-fired power plant increased by 57.4% year-on-year. Among them, the year-on-year growth of materials, fuel and power was mainly due to the increase in the purchase price of coal and the increase in output dispatch, while the increase in labor costs was mainly due to the continuous operation of a number of newly-added generating unit and the increase in related power production personnel since 2021, and the increase in salary and social security payment.

3. Railway segment

(1) Production and operations

In 2021, the railway segment of the Group closely cooperated with coal production and transportation, and optimised the transportation organization to ensure efficient and smooth transportation channels; maximised the railway transportation capacity by adding 20,000 tonne trains, reducing the turnover time and opening special lines. During the year, the turnover volume of self-owned railways reached 303.4 billion tonne km (2020: 285.7 billion tonne km), representing a year-on-year increase of 6.2%. The railway logistics business has become more abundant, and the utilisation rate and efficiency of dead-head haulage have been continuously improved. During the year, the transportation volume of non-coal goods such as iron ore, manganese ore and chemicals reached 18.7 million tonnes, and the reverse transportation volume reached 16.3 million tonnes. The Company accelerated the cultivation of capacity of Huangda Railway, opened three temporary loading and unloading lines in Binzhou Logistics Park, and achieved interconnection between Dispatching Railways connecting Dongying, Yiyang Railway and Dalailong Railway. Huangda Railway has a transportation capacity of over 15 million tonnes, and has completed 11.1 million tonnes of coal transportation volume throughout the year.

(2) Operation results

The operation results of the railway segment of the Group before elimination on consolidation are as follows:

		2021	2020	Change %	Main reasons for changes
Revenue	RMB million	**40,699**	38,723	5.1	Increase in railway transportation turnover
Operating costs	RMB million	**(22,020)**	(20,304)	8.5	Increase in railway transportation turnover; increase in repair and maintenance costs due to track replacement overhaul for some railway sections and postponed construction of some maintenance projects affected by the pandemic in the same period of last year
Gross profit margin	%	**45.9**	47.6	Decreased by 1.7 percentage points	
Profit from operations	RMB million	**16,310**	16,636	(2.0)	
Profit margin from operations	%	**40.1**	43.0	Decreased by 2.9 percentage points	

In 2021, the unit transportation cost in the railway segment was RMB0.068/tonne km (2020: RMB0.066/tonne km), representing a year-on-year increase of 3.0%.

4. Port segment

(1) Production and operations

In 2021, the Group's port segment maintained stable and efficient operation, providing a strong guarantee for the increase in coal production and supply, and accelerated the transformation to safe, efficient and green modern coal ports, with the intelligent level of the port and the efficiency of car dumping and ship loading, clean operating technologies such as dust control in the port area, and the sewage treatment and recycling capabilities, etc. all ranking among the leaders in the industry. During the year, the accumulated loading volume of coal at Huanghua Port and Shenhua Tianjin Coal Terminal was 261.4 million tonnes (2020: 249.2 million tonnes), representing a year-on-year increase of 4.9%, both reaching the highest level in history. Among them, the seaborne coal volume of Huanghua Port has ranked first in China's ports for three consecutive years, and the total labor productivity and other indicators led in the country.

(2) Operation results

The operation results of the port segment of the Group before eliminations on consolidation are as follows:

		2021	2020	Change %	Main reasons for changes
Revenue	RMB million	**6,440**	6,359	1.3	Increase in volume of port operation
Operating costs	RMB million	**(3,342)**	(3,314)	0.8	
Gross profit margin	%	**48.1**	47.9	Increased by 0.2 percentage point	
Profit from operations	RMB million	**2,720**	2,678	1.6	
Profit margin from operations	%	**42.2**	42.1	Increased by 0.1 percentage point	

The unit transportation cost in the port segment was RMB10.7/tonne in 2021 (2020: RMB10.1/tonne), representing a year-on-year increase of 5.9%, mainly due to the increase in personnel expenses, repair and maintenance costs.

5. Shipping segment

(1) *Production and operations*

In 2021, the domestic coal transportation demand was strong, but the transportation capacity of the shipping market was relatively scarce. The shipping segment of the Group aimed at ensuring supply and creating efficiency, took advantage of the synergy of the industrial chain, and improved the turnover efficiency of ship loading and unloading, optimized the allocation of transport capacity and route layout, and made every effort to ensure the transportation of power plants. The shipping volume of the Group for the year was 121.2 million tonnes (2020: 113.0 million tonnes), representing a year-on-year increase of 7.3% while shipment turnover amounted to 112.1 billion tonne nautical miles (2020: 93.0 billion tonnes nautical miles), representing a year-on-year increase of 20.5%.

(2) *Operation results*

The operation results of the shipping segment of the Group before eliminations on consolidation are as follows:

		2021	2020	Change %	Main reasons for changes
Revenue	RMB million	**6,195**	3,112	99.1	Increase in shipping volume and average freight rates
Operating costs	RMB million	**(5,018)**	(2,755)	82.1	Increase in shipping volume; increase in vessel rental charges
Gross profit margin	%	**19.0**	11.5	Increased by 7.5 percentage points	
Profit from operations	RMB million	**980**	209	368.9	
Profit margin from operations	%	**15.8**	6.7	Increased by 9.1 percentage points	

In 2021, the unit transportation cost of the shipping segment was RMB0.045/tonne nautical mile (2020: RMB0.030/tonne nautical mile), representing a year-on-year increase of 50.0%, mainly due to the increase in vessel rental charges.

6. Coal chemical segment

(1) Production and operations

The coal chemical business of the Group comprises the coal-to-olefins project of Baotou Coal Chemical (Phase I). Its main products consist of polyethylene (with production capacity of approximately 300,000 tonnes/year) and polypropylene (with production capacity of approximately 300,000 tonnes/year) and minor byproducts including industrial sulfur, mixed C5, industrial propane, mixed C4, industrial methanol, etc..

In 2021, the international oil price continued to rise, driving the price of domestic polyolefin products to fluctuate upward. The price rise of upstream raw materials such as coal and methanol led to an increase in the production cost of polyolefin products. Baotou Coal Chemical made overall arrangements for production, scientifically allocated product plans, continuously improved process technology, planned to promote the development of new products, and achieved good business performance. Throughout the year, the coal-to-olefins facilities had maintained stable and consecutive operation for 7,904 hours, and the annual accumulative excellent product rates of polyethylene and polypropylene products reached 95.19% and 99.12% respectively; due to the renovation of coal olefin facilities as planned, the output of polyolefin products reached 644.5 thousand tonnes (2020: 700.5 thousand tonnes), representing a year-on-year decrease of 8.0%; the operating profits of coal chemical segment reached RMB722 million, representing a year-on-year increase of 178.8%.

The green operation level of coal-to-olefins facilities continued to improve. In 2021, the discharge of waste water, waste gas and waste residue has reached the standard, and the comprehensive energy consumption per unit of polyolefin has reached the lowest level since the operation of the facilities.

The environmental impact report of Baotou coal-to-olefins upgrade and demonstration project has been approved by the Ministry of Ecology and Environment, and other preliminary work has been proceeding in an orderly manner.

The sales of polyethylene and polypropylene products of the Group in 2021 are as follows:

	2021		2020		Change	
	Sales volume	**Price**	Sales volume	Price	Sales volume	Price
	Thousand tonnes	***RMB/ tonne***	*Thousand tonnes*	*RMB/ tonne*	*%*	*%*
Polyethylene	**332.8**	**6,641**	356.9	5,459	(6.8)	21.7
Polypropylene	**315.6**	**6,853**	331.2	6,015	(4.7)	13.9

(2) Operation results

The operation results of the coal chemical segment of the Group before eliminations on consolidation are as follows:

		2021	2020	Change %	Main reasons for changes
Revenue	RMB million	**5,851**	5,165	13.3	Increase in the price of polyolefin products
Operating costs	RMB million	**(4,754)**	(4,675)	1.7	
Gross profit margin	%	**18.7**	9.5	Increased by 9.2 percentage points	
Profit from operations	RMB million	**722**	259	178.8	
Profit margin from operations	%	**12.3**	5.0	Increased by 7.3 percentage points	

(3) Unit production cost of major products

	2021		2020		Change	
	Production volume	**Unit production cost**	Production volume	Unit production cost	Production volume	Unit production cost
	Thousand tonnes	***RMB/ tonne***	*Thousand tonnes*	*RMB/ tonne*	*%*	*%*
Polyethylene	**332.0**	**5,447**	360.4	5,079	(7.9)	7.2
Polypropylene	**312.5**	**5,320**	340.1	4,970	(8.1)	7.0

The main reason for the year-on-year decrease in the Group's polyolefin products production in 2021 was that the coal-to-olefins facilities of Baotou Coal Chemical were overhauled for over a month as planned, resulting in a decrease in production. The year-on-year increase in the unit production costs of polyolefin products was mainly due to the increase in the coal procurement price and increase in the unit fixed cost led by lower production.

In 2021, the coal of a total of 4.3 million tonnes consumed by the coal chemical segment was all the coal sold within the Group (including China Shenhua self-produced coal and purchased coal).

(V) Operations by Region

Unit: RMB million

	2021	2020	Change %
Foreign transaction revenue from domestic market	**324,488**	227,539	42.6
Foreign transaction revenue from overseas market	**10,728**	5,724	87.4
Total	**335,216**	233,263	43.7

Note: the revenue from foreign transactions is divided by the location of customers receiving services and purchasing products.

The Group is mainly engaged in the production and sales of coal and electricity, railway, port and fleet transportation, coal-to-olefins and other businesses in China. In 2021, the foreign transaction revenue from the domestic market was RMB324,488 million, accounting for 96.8% of the Group's revenue; the foreign transaction revenue from overseas markets was RMB10,728 million, representing an increase of 87.4% year-on-year, mainly due to the increase of coal re-export trade volume and the increase of the income of Indonesia's South Sumatra No.1 Project.

In 2021, the Group steadily carried out international operation. EMM Indonesia and Indonesia Java have scientifically and effectively responded to the epidemic, overcome adverse factors such as shortage of production personnel and unstable fuel supply, safely organized production and realized no reduction of unit load; Indonesia's South Sumatra No.1 actively communicated the project progress with Indonesia's State Grid Corporation, strived to overcome the impact of the epidemic and promoted the project construction. The two units are expected to be put into production by 2023 and 2024 respectively.

(VI) Analysis on Investments

In 2021, the equity investments of the Company amounted to RMB10,945 million (2020: RMB3,400 million), representing a year-on-year increase of 221.9%, mainly due to the increase of capital for the Company's subsidiaries in coal, power and transportation segments, the acceleration of project construction, the establishment of new energy companies and the participation in the establishment of new energy industrial investment funds, and the acceleration of the development of new energy business.

1. Material investment in equity interest

☐ Applicable ✔ Not applicable

2. Material investment in non-equity interest

☐ Applicable ✔ Not applicable

3. Financial assets at fair value

During the reporting period, the financial assets at fair value held by the Group were mainly the non-tradable equity investments that have no significant impact on the investees, as well as bank acceptances proposed to be used for discounting or endorsement.

Unit: RMB million

Name of items	Opening balance at the beginning of the period	**Closing balance at the end of the period**	Change for the current period	Change of profit for the current period
Other investments in equity instruments	1,845	**2,174**	329	0
financing receivables	/	**376**	376	0
Total	1,845	**2,550**	705	0

(VII) Disposal of Material Assets and Equity Interest

☐ Applicable ✔ Not applicable

(VIII) Analysis on Major Holding and Associated Companies

1. Major subsidiaries

Unit: RMB million

No.	Company	Registered capital	Total assets	Net assets	Net profit attributable to the equity holders of the parent company			
		As at 31 December 2021			2021	2020	Change %	Main reasons for changes
1	Shendong Coal	4,989	46,235	32,468	19,967	10,528	89.7	Increase in sales volume and average price of coal
2	Shuohuang Railway	15,231	43,959	35,330	7,755	7,668	1.1	
3	Jinjie Energy	2,278	13,116	10,132	3,827	2,959	29.3	Increase in sales volume and average price of coal, and increase in power output dispatch
4	Zhunge'er Energy	7,102	46,957	37,156	2,499	1,291	93.6	Increase in sales volume and average price of coal
5	Trading Group	1,889	32,570	10,128	2,273	1,835	23.9	Increase in sales volume of coal
6	Baorixile Energy	1,169	11,934	6,091	1,655	790	109.5	Increase in sales volume and average price of coal
7	Huanghua Harbour Administration	6,790	13,817	11,300	1,586	1,542	2.9	
8	Beidian Shengli	2,925	10,006	6,194	1,415	743	90.4	Increase in sales volume and average price of coal
9	Yulin Energy	2,420	6,618	4,965	1,410	522	170.1	Increase in sales volume and average price of coal
10	Baotou Energy	2,633	8,765	7,046	1,235	515	139.8	Increase in average price of coal

Notes:

(1) The financial information of the major subsidiaries in the above table was prepared in accordance with the China Accounting Standards for Business Enterprises. The data have not been audited or reviewed.

(2) Shendong Coal recorded a revenue of RMB84,288 million and a profit from operations of RMB26,673 million in 2021.

(3) Shuohuang Railway recorded a revenue of RMB22,008 million and a profit from operations of RMB10,420 million in 2021.

2. Major companies in which the Company has invested

Please refer to the section headed "Material Related/Connected Transactions" of this report for details of Financial Company.

(IX) Structured Vehicle Controlled by the Company

☐ Applicable ✔ Not applicable

(X) Compliance with Relevant Laws and Regulations

So far as the Board and management of the Company are aware, the Group has complied in all material aspects with the relevant laws and regulations that are related to the business and operation of the Group. In 2021 there was no material breach of or non-compliance with the applicable laws and regulations by the Group.

(XI) Relationship with Stakeholders

For details of remuneration and training of the Group's employees, please refer to the "Employees" section in this report.

The Group attaches great emphasis on good relationships with stakeholders such as customers, suppliers and other business partners to achieve its long-term goals. Accordingly, the management of the Group have kept good communication, promptly exchanged ideas and shared business updates with them when appropriate. For details, please refer to the 2021 ESG Report of the Company.

In 2021, there was no material dispute between the Group and its stakeholders.

(XII) Scientific and Technological Innovation

Under the guidance of the innovation-driven development strategy, the Group focuses on the three major areas of green coal development, clean coal utilisation and clean coal transformation, and develops technologies for intelligent and efficient coal mining, green and environmental protection of coal mines, smart transportation, smart and green ports and clean, efficient and smart power generation, resulting in remarkable achievements in scientific and technological innovation.

Intelligent and efficient coal mining. The Group's coal mining technology and equipment are in a leading position in the industry. In recent years, China Shenhua has implemented 27 key scientific and technological innovation projects of "Smart Mines", and has mastered key core technologies such as integrated intelligent management and control platforms, intelligent coal mining, intelligent tunneling, self-driving mining trucks, coal mining robots, visual remote control and mobile inspection. As of the end of the reporting period, the Group has built 26 intelligent long-wall working faces, 4 smart roadway development working faces, 6 intelligent coal preparation plants, 2 self-driving truck projects in open-cut mines, and has developed and applied more than 140 coal mining robots of 21 kinds in five categories. Baode Mine has adopted new-generation information technologies such as 5G and industrial Internet to build intelligent unmanned mines, intelligent coal mining working face, intelligent and rapid tunneling working face, unattended fixed positions, and only more than ten employees working in a single shift. Shangwan Coal Preparation Plant has realised the functions of unattended designated areas and big data intelligent analysis of operation status. The Harmony OS Mining Operating System was jointly built with Huawei, which can realize functions such as safe storage of coal mine production data, real-time interconnection of equipment, whole-process collection of massive data and centralised intelligent storage. The Heidaigou Open-cut Mine has realised a total of 18 self-driving trucks in 3 working faces to operate in groups at the same time. The Baorixile Coal Mine has built the world's first 5G+ self-driving truck marshalling demonstration project in the extreme cold condition in open-cut mine. The smartness of coal mines has greatly improved the production safety level and operational efficiency of coal mines of the Group.

Green and environmental protection technology in coal mines. The Group actively explored the coordinated development path of coal production and resources and environmental protection, and mainly conducted researches on the protection and comprehensive utilization of water resources, the reduction and restoration of surface ecology, and the recovery of co-associated resources. A series of problems such as storage, supply and safety of underground water in coal mines have been solved by the application of underground coal mine reservoir technology. Currently, 35 underground reservoirs have been built in Shendong Mines with 90 million m^3 of supplied water for the year. The Group has established the ecological restoration technology system for large-scale coal-fired power generation base in the eastern grassland area and the demonstration projects in Baorixile and Beidian Shengli, with comprehensive restoration area of dumping site reaching more than 22,540 mu and the vegetation coverage increasing by more than 37%, which ensures the ecological security of coal-fired power generation base in eastern grassland area.

Heavy-haul railway technology. The Group has introduced in a mobile blocking solution for heavy-haul railways based on LTE-R (Railroad Broadband Wireless Communication Technology), which greatly increases the operating density of trains, shortens the interval between consecutive departures of 10,000-tonne trains and improves the transportation capacity of the railway. The Group has developed an intelligent locomotive driving system suitable for heavy-haul railways, which comprehensively improves the safety of heavy-haul train transportation, the efficiency of line transportation and the response efficiency for emergency, and forms a completely independent intellectual property system. The Group has also carried out research on hydrogen powered equipment for heavy-haul railways, and developed the first high-power hydrogen powered shunting locomotive and catenary operating vehicle in China.

Smart and green port. Through technological innovation and intelligent development, the ports owned by the Group have accelerated their transformation into modern coal ports featuring safety, efficiency and green. Huanghua Port has built the world's first coal port with intelligent management and control of the whole process equipment of "dumping, stacking, reclaiming and loading", and the loading and unloading efficiency has been significantly improved. Huanghua Port has developed and applied clean production technologies such as the complete set of dust suppression technology, the automatic control system of water content in the discharge of car dumpers and the intelligent green ecological system for bulk cargo ports. In 2021, the average total suspended particulate concentration (TSP) in the Huanghua Port was only 90.7 $\mu g/m^3$, representing a year-on-year decrease of 16.7%. The Huanghua Port won the title of "Asia Pacific Green Port" under the 2021 Asia Pacific Green Port Award Scheme (GPAS). Tianjin Coal Terminal has built the world's first intelligent loading system for bulk materials based on ship-shore digital twin technology, and the average berth time for a single ship reduced by 8%. Tianjin Coal Terminal has further implemented the upgrading of the water system, which significantly improves the sewage treatment capacity and increases the amount of recycled sewage. Zhuhai Port has realized the unmanned operation of the single machine in the coal yard, and completed the transformation of the remote operation for the ship loader.

Treatment of flue gas in coal-fired power plants. The technology of carbon capture, utilization and storage of coal power flue gas (CCUS technology) includes two parts: carbon capture and utilization and storage. Relying on No. 1600MW subcritical coal-fired generation units of Jinjie Energy, the Group has built the largest whole-flow demonstration project of carbon capture and storage after combustion in coal-fired power plant in China. The CO_2 capture rate of the project is greater than 90%. The purity of the CO_2 product is more than 99.5%. After liquefaction, the CO_2 variables are around -19℃ and 2.1MPa, and all the key indicators meet the design requirements. .

(XIII) Donations

During the reporting period, the Group made external donations of approximately RMB389 million.

VI. THE COMPANY'S OUTLOOK FOR FUTURE DEVELOPMENT

(I) Industry Structure and Trend

The year 2022 is a vital year in the development of China's businesses. The risks and challenges encountered through the development have increased significantly, but the fundamentals of the long-term economic improvement will be unchanged. The Chinese government will aim at a GDP growth of approximately 5.5%, adhere to the principle of stability and seek progress while maintaining stability, continue to implement prudent and effective macro policies, continue to stimulate the vitality of market entities, focus on smoothing the national economic cycle, and take multiple measures to keep the economy operating within a reasonable range.

For the coal industry, economic growth will support a slight increase in coal consumption, which is still dominated by electricity. The coal supply capacity will increased on a year-on-year basis, coal imports are expected to remain basically stable, and coal supply can meet the needs of domestic consumption. Affected by seasonal fluctuations, emergencies and other factors, coal supply in some regions and some periods of time would be tight. With the stricter supervision on medium-and long-term coal contracts, the coverage ratio of coal under long-term contracts will be further increased. It is expected that the coal market will be stabilized in 2022, the average price will be decreased, fluctuating narrowly in a reasonable range.

For the power industry, the electricity consumption of the whole country is expected to continue to grow in 2022, and the power supply pattern will be further optimized under the transformation of clean and low-carbon energy. The installed capacity of non-fossil energy will maintain a relatively rapid growth, and the development of thermal power will be cleaner and more flexible. The electricity market will still focus on medium and long-term transactions and actively carry out spot electricity pilot projects. The on-grid price of coal-fired power will fluctuate within a wide range along with the changes in the market supply and demand and the coal price.

(II) Development Strategy of the Company

In 2021, coal power supply in China highlighted the importance of energy security. It is necessary to give full play to the role of coal in ensuring the energy supply and the role of coal power in ensuring the basic guarantee and systematic adjustment in the construction of a new power system. In the long run, the national goal of realizing the peak of carbon emission and carbon neutrality has put forward new and higher requirements for the high-quality development of the energy industry. The Group's coal and coal power assets accounted for a relatively high proportion, and large carbon dioxide emissions from thermal power plants and coal chemical enterprises with high-intensity made the Group face not only the pressure of transformation and upgrading of the traditional coal-based energy industry, but also the enormous challenges brought by technological breakthroughs in the new energy industry.

The Group will adhere to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, stick to the new development concept, fully implement the new strategy of "Four Revolutions and One Cooperation" for energy security, and implement the national "1+N" policy system for realizing the peak of carbon emission and carbon neutrality, earnestly carry out the comprehensive development strategy of "One Target, Three Models and Five Strategies, and Seven First-class", accelerate the construction of a clean, low-carbon, safe and efficient modern energy system, consolidate the core advantages of integrated operation, ensure the safe and stable supply of energy, and promote the construction of green mines, green transportation, green power plants and green chemicals facilities. The Group will speed up the clean and efficient mining and utilization of coal to improve the comprehensive efficiency of energy utilization, build clean and high-efficient generating units to strengthen the transformation of heating, energy saving and flexibility, focus on the research and development and application of intelligent heavy-haul railway transportation technology and intelligent integrated operation technology to develop large-scale logistics business and improve the safe, sophisticated and efficient management level and comprehensive profitability level in the transportation segment, and promote the high-end, diversified and low-carbon development of coal chemical industry to develop high value-added products such as new coal-based materials. It will also leverage the advantages of high-level platform and strong financial position as a listed company, strengthen the cooperation with local government and enterprises, give play to the role of industrial funds, promote the steady and sustainable development of new energy business, and study investment opportunities in strategic emerging industries such as energy storage, hydrogen energy, biomass energy projects and venture capital, so as to lay a solid foundation for the industrial upgrading and transformation of the Company.

(III) Business Plan for 2022

1. Business targets for 2022

Item	Unit	Target of 2022	Actual amount in 2021	Increase/ (decrease) %
Commercial coal production	100 million tonnes	2.978	3.070	(3.0)
Coal sales	100 million tonnes	4.029	4.823	(16.5)
Gross power generation	100 million kWh	1,805	1,664.5	8.4
Revenue	RMB100 million	2,966	3,352.16	(11.5)
Operating costs	RMB100 million	2,048	2,391.56	(14.4)
Selling, general and administrative and R&D expenses and net finance costs	RMB100 million	132	122.90	7.4
Percentage change of unit production cost of the self-produced coal	/	Year-on-year increase of approximately 10%	Year-on-year increase of 7.4%	/

The above business targets are subject to factors including changes in scope of consolidated financial statements, risks, uncertainties and assumptions. The actual outcome may differ materially from these statements. Such statements do not constitute actual commitments to investors. Investors should be aware that undue reliance on or use of such information may lead to investment risks.

2. Capital expenditure plan for 2022

Unit: RMB100 million

	Target of 2022	Actual amount in 2021
1. Coal segment	**61.57**	205.75
2. Power segment	**171.86**	168.76
Of which: new energy business	**50.22**	0.33
3. Transportation segments	**80.69**	50.36
Of which: Railway	**64.87**	39.79
Port	**15.38**	10.02
Shipping	**0.44**	0.55
4. Coal chemical segment	**4.83**	8.51
5. Others	**7.16**	0.39
Total	**326.11**	433.77

Total capital expenditure of the Group in 2021 amounted to RMB43.377 billion, which were mainly used for the expenses in the payment of the mining rights and the purchase for the mining equipment; the power generation projects under construction, such as Phase I of Hunan Yongzhou Project and Phase I of Inner Mongolia Shengli Power Plant; the purchase of general and special railway equipment and construction of Huangda Railway; and coal-to-olefin upgrading demonstration project, Baotou Coal Chemical wastewater desalination standard discharge transformation and other technical transformation projects.

Based on the principles of strict control of investment and focusing on quality and efficiency, the Board of the Company approved a total planned capital expenditure of 2022 of RMB32.611 billion (excluding equity investment), including:

(1) Among the capital expenditures of the coal segment, RMB1.670 billion will be used in new construction as well as renovation and expansion projects (including the purchase of infrastructure-related equipment); RMB1.264 billion will be used in technical renovation for equipment purchase; RMB3.035 billion will be used in technical renovation for non-equipment purchases. The major investment projects include: Technical transformation projects of various mines in Shendong Mines, production system optimization project of Shengli No. 1 open-pit coal mine, preliminary preparation of Xinjie No. 1 well in Taigemiao Area of Xinjie Mining Area, etc..

(2) Among the capital expenditure of the power segment, RMB9.682 billion will be used in new construction projects (including the purchase of related equipment); RMB0.319 billion will be used in technical renovation in environmental protection; RMB2.085 billion will be used in technical renovation in non-environmental protection. The major investment projects include: Guangdong Qingyuan Power Plant Phase I Project, Guangxi Beihai Power Plant Project, Hunan Yueyang power plant projects, etc.

The capital expenditure of new energy business will be mainly used for the photovoltaic power generation project of Shengli Energy Open-pit dump in Xilinhot, Inner Mongolia, distributed photovoltaic power generation projects built in mining areas, along railways and ports, and the investment reserves of new energy projects of branches in Guangxi and Guangdong.

(3) The capital expenditure of the railway segment will be mainly used for the purchase of railway locomotives, Shenshuo 300 million tonnes capacity expansion and reconstruction project, etc.

(4) The capital expenditure of port business will be mainly used for Guangxi Beihai No. 1 and No. 2 Wharf projects, Huanghua Port coal port No. 3 and No. 4 general bulk cargo wharf projects and ore loading projects, etc.

(5) The capital expenditure of the coal chemical segment will be mainly used for Baotou coal-to-olefin upgrading demonstration project, Bayannaoer 1.2 million tonnes of tamping coke and comprehensive utilization project.

The capital expenditure plans of the Group in 2022 are subject to the development of business plans (including potential acquisitions), progress of capital projects, market conditions, outlook for future operation environment and the obtaining of the requisite permissions and approval documents. Unless required by laws, the Company shall not assume any responsibilities for updating the data of its capital expenditure plans. The Company intends to finance its capital expenditures by cash generated from operating activities, short-term and long-term borrowings, and other debt and equity financing.

(IV) Major Risks and Countermeasures

Investors should be aware that although the Company has reviewed and listed the major risks, and adopted relevant countermeasures, there is no absolute guarantee that all adverse impact could be eliminated due to the limitation of various factors.

1. Risk of safety production and environmental protection

The Group has established the production safety targets of preventing major production safety accidents as well as effectively curbing general accidents to achieve "zero deaths". Although the Group has been sustaining stable performance in safe production for its coal mines, there are uncertainties in the course of production safety. Given the facts that national policies on energy-saving and environmental protection have been further tightened, that operating costs of enterprises are increased due to the levy of environmental tax, and that the demand for better ecological environment puts more stringent requirements on the development and operation of enterprises, the constraints on energy-saving, emission reduction and environmental protection are further imposed on the Group.

To cope with the risks of production safety for coal mines, the Group will strengthen the implementation of the safety production risk prevention and control management system, inspections and treatments and assessment of significant risks, reinforce the safety production training and emergency rescue management, put into full play the advantages of informatisation, innovate the mechanism of safety supervision, promote the safety management ability, and consolidate the production safety fundamentals.

To cope with the risks of environmental protection, the Group continues to strengthen environmental monitoring, strictly adheres to the ecological red line, vigorously promotes the construction of green mines, focuses on the strategy of clean energy development, and takes the efficient use of clean coal as the core. The Group spares no efforts in constructing ecological civilization through continuously strengthening its soft and hard power of environmental protection and the brand image building of ultra-low emissions in coal power on an on-going basis. The Group continues to identify hidden environmental dangers, further improves the environmental management system and strengthens the remediation of potential issues and environmental emergency management, actively adapt to the new policy, new requirements and new indicators of "Dual Control" of total energy consumption and energy intensity in order to achieve energy-saving and emission reduction targets as well as to prevent severe environmental pollution incidents.

2. Risk of market competition

In 2021, the energy supply was tight, the industry concentration continued to increase, the market fluctuated at a high level, and the market competition intensified. As reforms of the electricity market accelerated, the proportion of power transactions continued to increase; the market competition intensified, and the transaction scale and price were uncertain. The country has increased the construction of cross-provincial and cross-region coal transportation railway channels, and local coal transportation railways have been putting into operation or under expansion. The coal transportation capacity will be gradually released, and the transportation formats tends to be diversified.

In response to the risks of market competition, the Group will improve the accuracy of the pre-judgment to coal market, strictly implement long-term contracts, enhance quality control, optimize the structure of coal products, increase brand advantage on an ongoing basis, strengthen the development of new markets, maintenance of existing markets and construction of interchange bases, and deepen the comprehensive coordination of production, transportation, sales, storage and use. The Group will also further conduct quality improvement and efficiency enhancement in the power industry and conduct risk prevention and control, ensure production safety and participate in power market transactions in compliance with laws and regulations. The Company will actively participate in investment in coal transportation channels through national railways, increase the collection and distribution capacity of self-owned railways and keep improving the core competitiveness of transportation of the Company. The Group will also deepen synergy and efficiency improvement, promote model innovation, enhance customer service capabilities, increase market share, further consolidate integration advantages, and maximize the competitive advantages of the Company.

3. Investment risk

The ecological and environmental constraints are tightening, and the policy of carbon peak and carbon neutrality are forcing deep energy conservation and clean and low-carbon development. New energy will usher in extraordinary and leapfrog development, and investment efforts and scale will continue to increase. Some investment projects may have design defects, and unclear follow-up operation plans. There are uncertainties in market and policy, which may affect the investment returns of the projects

To cope with investment risks, the Group will continue to optimise its investment management system, strengthen the quality management in the early stage of projects, strictly control the political risk, efficiency, environmental protection, procedures and accountability of project investment, highlight the risk management and control of major projects, and strengthen on-site investigation of key projects; continue to focus on investment plans, expand effective investment, reasonably control the pace of project investment, and strengthen the investigation and supervision of the implementation of investment plans; actively, orderly and standardly carry out post-project evaluation work to improve the benefits of investment.

4. Risk of project management

The overall progress of the Group's existing projects is stable, however, there are uncertainties in the construction of specific projects, which includes risks arising from safety incidents due to the inadequate fulfillment of safety responsibilities and the lack of safety awareness of some of the construction workers; risks of prolonged construction period, delayed construction period and increased investment due to insufficient project risk prediction and insufficient capacity of the design unit.

To cope with the risk of project management, the Group continuously strengthens its construction safety management, enforces its administration in safety emergency plans and eliminates major and more severe safety incidents. Strict control of project design and settlement will be implemented, and construction cost control at the early stage will be strengthened. The Group keeps track timely, monitors the construction of project construction, and formulates effective measures to reduce or eliminate the impact of the prolong of construction period.

5. Risk of international operations

The international political situation is increasingly complicated, and the world is entering a period of turbulence and change. Different countries have complex political, economic and social environments, as well as diverse legal systems, religious beliefs and cultural customs. Affected by fluctuations in exchange rates, stricter environmental protection requirements, and intensified trade conflicts among certain countries, the future international trades and economic situations may experience ups and downs as well as fluctuations. Together with the highly competitive energy market worldwide and the continuous spread of the COVID-19 pandemic around the world, there are certain uncertainties in the Group's international operations.

To cope with the risk of international operations, the Group will further carry out overseas resource evaluation, operation performance evaluation and technology assessment based on sound information collection, analysis and research prior to making any decision on overseas project investment so as to ensure economic and technological feasibility. The Group will actively respond to the impact of the COVID-19 pandemic on overseas business, strengthen overseas risk screening, regularly monitor the overseas legal compliance risks, and take multiple measures to prevent and resolve risks. Furthermore, the Company will strengthen the cultivation and introduction of interdisciplinary talents; actively and steadily implement the "Going Global" strategy in accordance with the requirements of coordinating the overall domestic and international situation.

6. Risk of macroeconomic fluctuations

The industry in which the Group operates is closely correlated to the prosperity of the macro economy. Currently, China's economic development is facing the triple pressure of demand contraction, supply shock and weakening expectations, and due to the impact of the COVID-19 pandemic and various uncertain factors and with complex and severe external environment, the year-on-year growth rate of major indicators such as industrial added value, investment in fixed asset and social retail consumption continues to decline, and the economic downward pressure is still relatively large. Besides, the reform and innovation in the energy sector will have a significant impact on the Group's development strategy.

To cope with the risk of macroeconomic fluctuations, the Group will further strengthen the studies on macro-control policy and relevant industrial trends, constantly strengthen the core advantages of integrated operation based on the basic national conditions where coal is in a dominant position, vigorously promote technological innovation to ensure the clean and efficient utilisation of coal, explore and develop high-end, diversified and low-carbon coal chemical products, promote the optimal combination of coal and new energy, accelerate the large-scale development of new energy, study and deploy the development of industries such as energy storage, hydrogen energy, pumped storage and biomass energy, and promote the high-quality and sustainable development of the Company.

7. Risk of integrated operations

The Group's advantages in integrated operation of coal, power, transportation and coal chemical come along with the risks arising from the interruption of individual parts of the entire integrated chain. In case of poor organisation or coordination or a discontinuation of any part, the balance and high efficiency of integrated operations will be affected and the impact may adversely affect the Group's business results.

To cope with the risk of integrated operations, the Group will take an array of measures based on production safety, including, focusing on the comprehensive coordination and balance of integrated operations, paying close attention to the resources continuation, strengthening scientific scheduling and plan management, improving railway collection and distribution system, strengthening the coordination of power grid, and strengthening the production and operation management, expanding the coverage of integrated operations as much as possible, and continuously enhancing the resilience of integrated industrial chain, value chain and supply chain.

8. Policy risk

The business activities of the Group are affected by the national industrial control policies. Establishing the goal of "carbon peak and carbon neutrality", the country has put forward new and higher requirements for the high-quality development of the energy industry. The Group will continue to deepen the supply-side structural reform of the coal industry, actively promote the elimination of outdated production capacity in the coal industry, accelerate the release of high-quality production capacity, and realize the transformation of old and new development drivers. The above policies may affect the Company's industrial layout, the approval of new expansion projects, and the reform of operation and management mode.

To cope with the risk of changes in industrial policies, the Group will strengthen the research on the latest national industrial policies and regulations, enhance policy coordination, pay close attention to the window of policy opportunities for resource continuation, correctly understand and grasp the requirements of carbon peak and carbon neutrality. The gradual withdrawal from traditional energy should be based on the safe and reliable replacement of new energy. The Group will reasonably match the investment scale of each industry, accelerate the development of renewable energy while firmly promoting the clean and efficient utilization of coal, and promote industrial upgrading and structural adjustment.

VII. REASONS AND CASES OF FAILURE OF DISCLOSURE IN ACCORDANCE WITH GUIDELINES BY THE COMPANY DUE TO NON-APPLICABLE GUIDELINES OR SPECIAL REASONS

☐ Applicable ✔ Not applicable

VIII. PERFORMANCE OF THE BOARD AND ITS SPECIAL COMMITTEES

Please refer to the section headed "Corporate Governance and Corporate Governance Report".

IX. OTHERS

Please see the section headed "Significant Events" for management contracts; please see the section headed "Corporate Governance and Corporate Governance Report" for permitted indemnity provision, interests and dividends of Directors and Supervisors in significant transactions, arrangements or contracts; please see the section headed "Changes in Share Capital and Shareholders" for repurchase of listed securities.

Section V Corporate Governance and Corporate Governance Report

I. CORPORATE GOVERNANCE

The Company has established a relatively sound corporate governance structure and a smooth operating mechanism, and there are no material differences from the laws, administrative regulations and CSRC's regulations on the governance of listed companies.

The Board is responsible for implementing good corporate governance of the Company. The Company has been in compliance with the requirements of corporate governance policies as set out in Appendix 14 of the Hong Kong Listing Rules to establish its own system of corporate governance.

The convening, voting and disclosure procedures of board meetings of the Company, rules of procedure of the Board and procedures for nomination and appointment of Directors are in compliance with relevant requirements. Being a standing decision-making body of the Company, the Board is accountable to the shareholders' general meeting, and exercises function and power in accordance with the requirements of article 136 of the Articles of Association and relevant applicable regulatory requirements. Being a standing executive body of the Company, operating management comprising senior management including the chief executive officer, is accountable to the Board and exercises function and power in accordance with the requirements of article 156 of the Articles of Association and relevant applicable regulatory requirements. The Articles of Association sets out the respective duties of the Chairman of the Board and the chief executive officer in detail. The Chairman of the Board and the chief executive officer are held by different personnel.

During the year ended 31 December 2021, the Company has been in full compliance with the provisions of principle and codes and most of the recommended best practices as specified therein. For the terms of functions and powers of the Board and the Board Committees under the Corporate Governance Code, please refer to the Articles of Association, Rules of Procedure of the Board and the Board Committees, which have been published on the websites of the stock exchanges where the Company is listed and on the Company's website. During the reporting period, the Company has made one amendment to the Articles of Association. For details, please refer to the H Share Announcements of the Company dated 28 March and 25 June 2021 and the A Share Announcements of the Company dated 27 March and 26 June 2021.

The Board of the Company has set out the board diversity policy for members of the Board, which was set out in the terms of reference of the nomination committee of the Board of the Company and has been disclosed. When selecting the candidates in accordance with the board diversity policy of the Company, the Board will use a series of diversified terms, including but not limited to gender, age, culture and educational background, race, skills, knowledge and professional experience as standard, and will determine in conjunction with the characteristics and role of the personnel. As at the end of the reporting period, the Board of the Company consisted of 8 Directors, including 2 Executive Directors, 2 Non-Executive Director, 3 Independent Non-Executive Directors and 1 Employee Director. Directors are from various domestic and overseas industries, and the composition of the members features diversity. Each Director's knowledge base and field of expertise are professional and complementary in the overall board structure, which guarantees the scientific decision-making of the Board.

II. ENSURANCE OF INDEPENDENCE OF LISTED COMPANY BY CONTROLLING SHAREHOLDERS

(I) Measures of Ensurance of Independence of Listed Company by Controlling Shareholders

China Energy Group, the controlling shareholder of the Company, complies with the principles of honesty and credibility, exercises the rights and obligations of shareholders in accordance with the law. When China Energy Group nominated candidates for directors or supervisors, it shall follow the conditions and procedures stipulated in laws and regulations and the Articles of Association. In the event of consideration of the related transactions with controlling shareholders at the Board and general meeting, the connected Directors and controlling shareholders shall abstain from voting. There are potential peer competitions between the coal business and other business of China Energy Group and the major business of the Company and China Energy Group has taken measures to avoid peer competitions, as defined below.

Save as disclosed above, China Shenhua has an independent and complete business system as well as a market-oriented self-operation capability The Company is independent from its controlling shareholder in terms of business, personnel, assets, organization, finance and other aspects.

(II) Avoidance of Competition

There are potential peer competitions between the coal business and other business of China Energy Group and the main business of the Company.

To further formulate the performance of the Non-competition Agreement, the Resolution on the Performance of Non-competition Undertaking was approved at the 45th meeting of the second session of the Board on 27 June 2014 and the Announcement on the Performance of Non-competition Undertaking was disclosed to public. The Company disclosed that it will gradually commence the acquisition of 14 assets of the former Shenhua Group Corporation Limited and its subsidiaries as planned ("Original Undertaking Assets") (For details, please refer to the H shares announcement dated 27 June 2014 and the A shares announcement dated 28 June 2014). The Company completed acquisitions of 100% equity of Ningdong Power, 100% equity of Xuzhou Power and 51% equity of Zhoushan Power in 2015.

Being the parent company subsequent to the restructuring, China Energy merged with China Guodian by the way of absorption. As approved in the 2018 first extraordinary general meeting of the Company, the Company entered into the Supplemental Agreement to the Existing Non- Competition Agreement with China Energy. It is agreed by both parties that other than the amendments in the Supplemental Agreement to the Existing Non-Competition Agreement, the clauses of the Existing Non-competition Agreement will not be changed.

Pursuant to the Supplemental Agreement to the Existing Non-competition Agreement, within five years after the completion of China Energy merging with China Guodian by the way of absorption, the Company will discretionally exercise the options and the pre-emptive rights to acquire the assets within the retained businesses, and will no longer implement the 2014 Non-competition Undertakings. The retained businesses refer to (1) original undertaking assets (excluding the completed acquisition of three equity assets by the Company in 2015) other than the assets of conventional power generation business, and (2) the unlisted businesses held by China Guodian which directly or indirectly compete with the main businesses of the Company (excluding the relevant assets that China Guodian undertook to inject into its subsidiary Inner Mongolia Pingzhuang Energy Co., Ltd. in 2007). For details, please refer to the H share announcement of the Company dated 1 March 2018 and the A shares announcement of the Company dated 2 March 2018.

The Company, as an integration platform of the coal business of China Energy Group, will, pursuant to the agreements set out in the Non-competition Agreement and its supplemental agreement, discretionally exercise the options and the pre-emptive rights to any business opportunities and assets which may pose potential competition, thereby gradually reducing peer competition.

III. GENERAL MEETINGS

1. Shareholders' Rights

As owners of the Company, the shareholders of the Company are entitled to the rights as stipulated in laws, administrative regulations and the Articles of Association. The shareholders' general meeting is the highest authoritative body of the Company, through which shareholders can exercise their rights. The controlling shareholder takes part in the Company's operations and decision-makings through shareholders' general meetings and the Board.

Pursuant to Articles 66, 69 and 75 of the Articles of Association, shareholders may submit written request to the Board for the convening of extraordinary general meetings or class meetings and submit proposals to the Company at general meetings. Upon providing the Company with written evidence of the class and number of shares of the Company held, and following verification of the shareholders' identity by the Company, shareholders are entitled to inspect the relevant information of the Company or obtain the Articles of Association, the register of shareholders, minutes of general meetings, resolutions of meetings of the Board and the Supervisory Committee, regular reports and financial and accounting reports, etc.

The Company has formulated an effective shareholder communication policy: on the basis of information disclosure in strict compliance with the listing rules of the place where it is listed, the Company has set up a telephone, fax and email address for investor relations, and uses the e-interactive platform of the Shanghai Stock Exchange to respond to shareholders' questions in a timely manner and receive opinions from shareholders; regularly hold performance presentation through video and online text communication to provide shareholders with opportunities to communicate with the management of the Company on a regular basis; the Company has a full-time investor relations staff member responsible for shareholder communications in the department responsible for Board affairs. The Company has established effective communication channels with shareholders through such information disclosure system and investor reception system.

2. Convening of general meetings during the reporting period

Meetings	Date	The designated website for publishing the voting results	Date of disclosure of the voting results	Resoulutions
2020 Annual General Meeting				All the 10 resolutions were considered and approved at the AGM by a combination of on-site voting by poll and internet voting.
2021 First A Shareholders Class Meeting	25 June 2021	The website of the SSE	26 June 2021	Resolution on Granting the Board the General Mandate to Repurchase H Shares was considered and approved at the A Shareholders Class Meeting by a combination of on-site voting by poll and internet voting.
2021 First H Shareholders Class Meeting		The website of the HKEx	25 June 2021	Resolution on Granting the Board the General Mandate to Repurchase H Shares was considered and approved at this H Shareholders Class Meeting by way of on-site voting by poll.
2021 First Extraordinary General Meeting	22 October 2021	The website of the SSE The website of the HKEx	23 October 2021 22 October 2021	All 2 resolutions were considered and approved at the EGM by a combination of on-site voting by poll and internet voting.

All the resolutions tabled at the general meeting above were passed.

The Company accepted registration of shareholders' attendance, and arranged a special session for the shareholders' effective consideration of proposals at the meeting. Shareholders actively participated in the meeting and were entitled to exercise their various rights, such as the right to know, the right of speech, the right to question and the right to vote. Directors, Supervisors and senior management of the Company attended the meeting. Arranging special Q&A sessions in the meetings enabled interactions between shareholders and the management.

The Company's shareholders' representative, Supervisors' representative, witness lawyers and the representative of Computershare Hong Kong Investor Services Limited acted as scrutineers at the general meetings. The PRC legal advisor of the Company issued the legal opinion. Representatives of the auditors attended the Annual General Meeting.

IV. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

(I) Changes in shareholding and remuneration of Directors, Supervisors and senior management

1. Directors, Supervisors and senior management as at the end of the reporting period

Unit: RMB ten thousand

						Remuneration paid (before tax)				Social insurance, housing funds and corporate annuities paid by the Company					
	Employees'						Performance remuneration (including emoluments)								
Name	Positions	Gender	Age	Date of Appointment (from the first Appoint-ment date)	Scheduled expiration of term of office	Basic remunera-tion		Including: performance remuneration for the previous year	Subtotal 1	Basic healthcare, unemployment, work-related injury, maternity insurance and housing provident funds	Retirement plan: basic pension insurance and corporate annuities	Subtotal 2	Other monetary income	Total remuneration before tax	Whether to receive compensation from related parties of the Company
Wang Xiangxi	Chairman and Executive Director	Male	59	21 June 2019	28 May 2023	-	-	-	-	-	-	-	-	-	Yes
Xu Mingjun	Executive Director Secretary of the Party Committee and Executive Vice President	Male	58	29 May 2020 29 November 2018	28 May 2023 –	31.30	91.90	51.20	**123.20**	7.71	13.90	**21.61**	-	**144.81**	No
Jia Jinzhong	Non-Executive Director	Male	58	29 May 2020	28 May 2023	-	-	-	-	-	-	-	-	-	Yes
Yang Rongming	Non-Executive Director	Male	56	25 June 2021	28 May 2023	-	-	-	-	-	-	-	-	-	Yes
Yuen Kwok Keung	Independent Non-Executive Director	Male	57	29 May 2020	28 May 2023	-	30.00	-	**30.00**	-	-	-	-	**30.00**	No
Bai Chong-En	Independent Non-Executive Director	Male	58	29 May 2020	28 May 2023	-	30.00	-	**30.00**	-	-	-	-	**30.00**	No
Chen Hanwen	Independent Non-Executive Director	Male	53	29 May 2020	28 May 2023	-	30.00	-	**30.00**	-	-	-	-	**30.00**	No

	Employees'					Remuneration paid (before tax)				Social insurance, housing funds and corporate annuities paid by the Company					
							Performance remuneration (including emoluments)								
Name	Positions	Gender	Age	Date of Appointment (from the first Appoint-ment date)	Scheduled expiration of term of office	Basic remunera-tion		Including: performance remuneration for the previous year	Subtotal 1	Basic healthcare, unemployment, work-related injury, maternity insurance and housing provident funds	Retirement plan: basic pension insurance and corporate annuities	Subtotal 2	Other monetary income	Total remuneration before tax	Whether to receive compensation from related parties of the Company
Wang Xingzhong	Employee' Representative Director	Male	53	29 May 2020	28 May 2023	25.04	82.80	47.84	**107.84**	7.71	12.28	**19.99**	-	**127.83**	No
	Executive Vice President and Member of the Party Committee			30 December 2019	–										
Luo Meijian	Chairman of the Supervisory Committee	Male	57	29 May 2020	28 May 2023	–	–	–	**–**	–	–	**–**	–	**–**	Yes
Zhou Dayu	Supervisor	Male	56	17 June 2016	28 May 2023	–	–	–	**–**	–	–	**–**	–	**–**	Yes
Zhang Changyan	Employees' Representative Supervisor	Male	51	2 December 2019	28 May 2023	–	38.66	38.66	**38.66**	–	–	**–**	–	**38.66**	Yes
Lv Zhiren	Chief Executive Officer and Deputy Secretary of the Party Committee	Male	57	29 December 2021	–	2.61	3.39	0.00	**6.00**	0.64	1.26	**1.90**	–	**7.90**	No
Huang Qing	Secretary of the Board and Member of the Party Committee	Male	56	6 November 2004	–	31.30	82.61	47.91	**113.91**	7.71	13.79	**21.50**	–	**135.41**	No
Yang Xiangbin	Deputy Secretary of the Party Committee	Male	56	6 April 2021	–	18.78	26.22	0.00	**45.00**	5.76	9.53	**15.29**	**–**	**60.29**	No
Li Zhiming	Executive Vice President and Member of the Party Committee	Male	53	26 March 2021	–	20.87	29.13	0.00	**50.00**	6.41	10.10	**16.51**	–	**66.51**	No
Xu Shancheng	Chief Financial Officer and Member of the Party Committee	Male	57	28 December 2018	–	25.04	73.62	38.66	**98.66**	7.71	13.11	**20.82**	–	**119.48**	No
Cui Weishan	Member of the Party Committee and Secretary of the Disciplinary Committee	Male	55	17 November 2021	–	2.09	2.91	0.00	**5.00**	0.64	1.08	**1.72**	–	**6.72**	No
Total						157.03	521.24	224.27	**678.27**	44.29	75.05	**119.34**	–	**797.61**	

Notes:

(1) The remuneration package of Directors and Supervisors for 2021 is subject to approval by the Company at the 2021 annual general meeting; the remuneration package of the senior management was approved by the Board.

(2) The remuneration received from the Company covers the year of 2021 or the period from the commencement of term of office of the Company during 2021.

(3) None of the personnel mentioned above hold any shares in the Company during the term of service in 2021.

(4) The 2019 annual general meeting of the Company approved that term of service of the fifth session of the Board and the Supervisory Committee is three years (29 May 2020 to 28 May 2023). The terms of office in the above table are identical to the dates of appointment by the general meeting or the Board. If there are no dates of appointment by the general meeting or the Board, the terms of office are identical to the dates of appointment by the Party Organisations.

(5) The ages were calculated as of 31 December 2021.

2. Directors, Supervisors and senior management resigned during the reporting period

Unit: RMB ten thousand

Name	Positions	Gender	Age	Date of appointment (from the first appoint -ment date)	Scheduled expiration of term of office	Remuneration paid (before tax): Basic remunera -tion	Remuneration paid (before tax): Performance remuneration (including emoluments)	Remuneration paid (before tax): Performance remuneration (including emoluments): Including: performance remuneration for the previous year	Subtotal 1	Social insurance, housing funds and corporate annuities paid by the Company: Basic healthcare, unemployment, work-related injury, maternity insurance and housing provident funds	Social insurance, housing funds and corporate annuities paid by the Company: Retirement plan: basic pension insurance and corporate annuities	Subtotal 2	Other monetary income	Total remuneration before tax	Remark
Yang Jiping	Executive Director	Male	51	29 May 2020	16 November 2021	20.87	78.33	51.20	**99.20**	5.16	9.20	**14.36**	–	**113.56**	No
	Chief Executive Officer and Deputy Secretary of the Party Committee			23 August 2019											
Yang Suping	Member of the Party Committee and Secretary of the Disciplinary Committee	Female	56	21 June 2018	23 August 2021	16.69	71.15	47.84	**87.84**	5.16	8.35	**13.51**	–	**101.35**	No
Total						37.56	149.48	99.04	**187.04**	10.32	17.55	**27.87**	–	**214.91**	

Notes:

(1) The remuneration package of Directors for 2021 is subject to approval by the Company at the 2021 annual general meeting; the remuneration package of the senior management was approved by the Board.

(2) None of the personnel mentioned above holds any shares in the Company during the term of service in 2021.

(3) The ages were calculated as of 31 December 2021.

(II) Details of current and resigned Directors, Supervisors and members of senior management of the Company during the Reporting Period

1. Brief biography

(1) Directors in office as at the end of the reporting period

Name	Biographical details
 **Wang Xiangxi** Chairman and Executive Director	Born in August 1962, male, Chinese, a member of the Communist Party and a senior engineer. Mr. Wang received a master's degree of Engineering in Mining Engineering from Department of Resources and Materials Engineering of Jiaozuo Institute of Technology in 2003. Mr. Wang has extensive experience in economic management, laws and regulations as well as management in coal industry. Mr. Wang has been serving as the Chairman and Executive Director of the fifth session of the Board of the Company since May 2020, the Chairman and Executive Director of the fourth session of the Board of the Company from June 2019 to May 2020, as well as the secretary of the Leading Party Members' Group and chairman of China Energy Group since March 2019. From July 2017 to March 2019, he served as a member of the standing committee of the Party Committee, secretary of the provincial committee of political and legal affairs of Hubei Province. From June 2017 to July 2017, he served as a member of the standing committee of the Party Committee, secretary general and member of the Leading Party Members' Group of the provincial government, secretary and director of the Leading Party Members' Group of the provincial government office of Hubei Province. From July 2012 to June 2017, he served as secretary general and member of the Leading Party Members' Group of the provincial government, secretary and director of the Leading Party Members' Group of the provincial government office of Hubei Province. Prior to the foregoing, Mr. Wang had also served in various positions, including the secretary of Municipal Party Committee and director of the Standing Committee of the Municipal People's Congress of Suizhou, Hubei Province, deputy secretary of Municipal Party Committee, mayor of Jingzhou, Hubei Province, director and secretary of the Leading Party Members' Group of Hubei Quality and Technical Supervision Bureau, deputy director and member of the Leading Party Members' Group of Hubei Provincial Economic and Trade Commission, director and secretary of the Leading Party Members' Group of the Coal Industry Management Office of Hubei Province, deputy director and member of the Leading Party Members' Group of Hubei Coal Industry Department.

Name	Biographical details
 **Xu Mingjun** Executive Director, Secretary of the Party Committee and Executive Vice President	Born in October 1963, male, Chinese, a member of the Communist Party of China, a graduate of postgraduate program and a senior political engineer. Mr. Xu has extensive experience in corporate management. Mr. Xu has served as the Executive Director of the fifth session of the Board of the Company since May 2020, the secretary of the Party Committee of the Company since September 2018, and the executive vice president of the Company since November 2018. Mr. Xu has served as the assistant to the general manager of China Energy concurrently from May 2018 to October 2019, and assistant to general manager of former China Guodian, secretary to the Leading Party Group, secretary to the Party Committee and Executive Vice President of GD Power, assistant to Chief Executive Officer of the China Energy and secretary to the Party Committee and Executive Vice President of GD Power from May 2016 to September 2018. From October 2008 to May 2016, he successively served as the chief of political work office, a member and a deputy secretary to the Party Committee directly under China Guodian, the secretary to the board of directors, the assistant to the general manager and the head of general office of former China Guodian. Prior to the foregoing, Mr. Xu had served in various capacities, including the director of people work division of the Departmental Party Committee of the State Bureau of Coal Industry, the deputy director of labour union working division, deputy director of general division of people work department and a director-level investigator and researcher under the Central Enterprise Working Committee, the director of news division and assistant inspector of the bureau of publicity under the State-owned Assets Supervision and Administration Commission of the State Council, a deputy secretary of prefectural committee in Tacheng, Xinjiang, a deputy inspector of the bureau of publicity under the SASAC.

Name	Biographical details
 **Jia Jinzhong** Non-executive Director	Born in July 1963, male, Chinese, a member of the Communist Party, a professor-level senior engineer, and received a master's degree of engineering. Mr. Jia has been engaged in railway transportation production management. Mr. Jia has served as the Non-executive Director of the fifth session of the Board of the Company since May 2020, and the chief economist of China Energy Investment Corporation Limited since May 2018. Mr. Jia served as vice president of the Company from March 2017 to September 2019, and as the deputy general manager, standing deputy general manager, secretary of the Party Committee, chairman of the board of Shuohuang Railway Development Co., Ltd. from June 2005 to March 2017. Prior to the foregoing, Mr. Jia successively served as deputy section head of Yuanping Train Depot of Taiyuan Railway Branch, deputy director of Taiyuan West Railway Station of Taiyuan Railway Branch, manager of Yuanping Branch of Shuohuang Railway Development Co., Ltd., secretary of the Party Committee and manager of Suning Branch of Shuohuang Railway Development Co., Ltd.

Name	Biographical details
 **Yang Rongming** Non-executive Director	Born in May 1965, male, Chinese, a member of the Communist Party of China, and a professorate senior engineer. Mr. Yang has extensive experience in coal enterprise management. He graduated from the Mining Engineering Department of Fuxin Mining Institute in 1990, majoring in mining engineering. In 2010, he received a master's degree in engineering from Shandong University of Science and Technology. In 2016, he received a postgraduate degree and a doctorate degree in engineering from Liaoning Technical University. Mr. Yang has served as the Non-executive Director of the fifth session of the Board of the Company since June 2021, the director of coal and transportation industry management department of China Energy Group since December 2020. From May 2018 to December 2020, he served as secretary of the Party Committee and chairman of Shenhua Zhunneng Group Co., Ltd.. From May 2009 to May 2018, he served as deputy general manager, general manager and deputy secretary of Party Committee of Shenhua Shendong Coal Group Co., Ltd., director, general manager and deputy secretary of Party Committee of Shenhua Xinjie Energy Co., Ltd., secretary of the Party Committee, director and chairman (legal representative) of Yulin Shenhua Energy Co., Ltd.. Prior to the foregoing, Mr. Yang had served as deputy head of Liuta Mine, Shenhua Group Wanli Coal Company Limited, manager of Shuozhou Branch, assistant to the general manager and deputy general manager of Wanli Coal Branch of China Shenhua Energy Company Limited.

Name	Biographical details
 **Yuen Kwok Keung** Independent Non-executive Director	Born in June 1964, male, Chinese, Senior Counsel, Hong Kong Grand Bauhinia Medal, and Justice of the Peace. Dr. Yuen received a master of laws degree from City University of Hong Kong in 1997 and an honorary doctor of laws degree from Hong Kong Shue Yan University in 2018. Dr. Yuen has extensive legal experience. Dr. Yuen has served as the Independent Non-executive Director of the fifth session of the Board of the Company since May 2020 and is a senior barrister with Temple Chambers. Dr. Yuen is also a committee member of the International Commercial Expert Committee of the International Commercial Court of the Supreme People's Court of the People's Republic of China, a council member of the Hong Kong International Arbitration Centre and a member of the Exchange Fund Advisory Committee concurrently. Dr. Yuen served as Secretary for Justice of the HKSAR (2012–2018), Recorder of the High Court (2006–2012), a member of the Judicial Officers Recommendation Commission (2009–2018), chairman of the Hong Kong Bar Association (2007–2009), a non-official member of the Advisory Committee on Corruption of the Independent Commission Against Corruption (2009–2012), and a non-executive director of Mandatory Provident Fund Schemes Authority (2010–2012).

Name	Biographical details
 **Bai Chong-En** Independent Non-executive Director	Born in October 1963, male, Chinese. Dr. Bai received a Ph.D. in Mathematics from the University of California, San Diego in 1988, and a Ph.D. in Economics from Harvard University in 1993. Dr. Bai has extensive experience in economic management, finance and corporate governance. Dr. Bai has served as the Independent Non-executive Director of the fifth session of the Board of the Company since May 2020. Dr. Bai has been the dean of the School of Economics and Management of Tsinghua University since 2018 and Mansfield Freeman chair professor since 2004. Dr. Bai currently also serves as the vice president of the tenth session of Society of Public Finance of China and a member of the Academic Committee of the Council, vice president of China Association of Labour Economics. Dr. Bai has served as department chair of department of economics, associate dean and executive associate dean of School of Economics and Management of Tsinghua University, and associate professor at the School of Economics and Finance of the University of Hong Kong, independent director of China CITIC Bank Corporation Limited, and member of the Executive Committee of the International Economic Association.

Name	Biographical details
 **Chen Hanwen** Independent Non-executive Director	Born in January 1968, male, Chinese and a member of the Communist Party. Dr. Chen graduated from Accounting Department of School of Economics of Xiamen University in 1997 with a doctorate degree in economics. Dr. Chen has extensive experience in auditing, internal control, accounting theory and methods. Dr. Chen has published many papers in the international A-class accounting journals Journal of Accounting Research and Contemporary Accounting Research, as well as authoritative journals in China, such as Economic Research and Management World, and presided over 2 key projects of the National Science Foundation (國家自然科學基金). Dr. Chen has served as the Independent Non-executive Director of the fifth session of the Board of the Company since May 2020. Dr. Chen is a professor of Nanjing Audit University, and he also serves as chair professor at China Business Executives Academy, Dalian and executive director of the China Auditing Society concurrently. Dr. Chen serves as an external supervisor of Bank of Communications Co., Ltd. and an independent director of Beijing Tri-Prime Gene Pharmaceutical Co., Ltd., and independent director of Shenwan Hongyuan Securities Co., Ltd. Prior to the foregoing, Dr. Chen had served as a distinguished professor of Huiyuan, University of International Business and Economics, a first-level professor at the International Business School, a professor and a doctoral tutor of the Accounting Department of the International Business School, and a national second-level professor, and the deputy dean of the Graduate School, the deputy dean of the School of Management, the director, professor, and doctoral tutor of the Accounting Department of Xiamen University.

Name	Biographical details
 **Wang Xingzhong** Employee Director, Executive Vice President and Member of the Party Committee	Born in April 1968, male, Chinese, a member of the Communist Party and a professor-level senior engineer. Mr. Wang has extensive experience in railway transport operation and management. He graduated from the Shanghai Railway Institute (上海鐵道學院) in 1989, majoring in railway engineering and obtained the master academic qualification and a Ph.D. degree in engineering from China Academy of Railway Sciences (中國鐵道科學研究院) in 2011. Mr. Wang has served as the Employee Director of the fifth session of the Board of the Company since May 2020, and an executive vice president and a member of the Party Committee of the Company since December 2019. Mr. Wang served as the director and deputy secretary of operating management center of transport industry of China Energy and the Company from May 2018 to December 2019, and the general manager of transport management department of former Shenhua Group Corporation and the Company from February 2015 to May 2018. From June 2013 to February 2015, he successively served as deputy secretary of the Party Committee and chairman of Shenhua Baoshen Railway Group Co., Ltd.. Prior to the foregoing, Mr. Wang successively served as deputy secretary of the Party Committee, chairman and general manager of Shenhua Baoshen Railway Group Co., Ltd., chairman of Shenhua Ganquan Railway Co., Ltd., and the deputy general manager of Shenhua Zhunge'er Energy Co., Ltd and general manager of Dazhun Railway Company.

(2) Existing supervisors as at the end of the reporting period

Name	Biographical details
 **Luo Meijian** Chairman of Supervisory Committee	Born in May 1964, male, Chinese, a member of the Communist Party, and Ph. D in Management, senior economist. Mr. Luo has served as the Chairman of Supervisory Committee of the Company since May 2020, and since November 2021 the secretary of the Party Committee of Guodian Power Development Co., Ltd., and since December 2021 the deputy general manager and the director of Guodian Power Development Co., Ltd.. Mr. Luo has served as a director of the Organization and Personnel Department (Human Resources Department) of China Energy from June 2018 to November 2021. From March 2017 to June 2018, he served as the general manager of Human Resources Department at former Shenhua Group Corporation and the Company. From March 2015 to March 2017, he served as the secretary of the Party Committee and standing deputy president of former Shenhua Management College, the standing deputy president of former Shenhua Group Corporation Communist Party School and the deputy general manager of Human Resources Department of former Shenhua Group Corporation and the Company. From May 2013 to March 2015, he served as director of human resources department, deputy president of the Party School and deputy secretary of the Party Committee of China Commercial Aircraft Corporation Limited. Prior to the foregoing, Mr. Luo had served as secretary of the Party Committee and disciplinary committee secretary of Shenhua Science and Technology Development Co., Ltd., deputy general manager of Human Resources Department of former Shenhua Group Corporation and the Company, the deputy president and member of the Party Committee of China Shenhua Coal Liquefaction and Chemical Company Limited, and deputy director, director of Education Bureau of the Organisation Department of the Central Committee of the Communist Party.

Name	Biographical details
 **Zhou Dayu** Supervisor	Born in October 1965, male, Chinese, a member of the Communist Party and a researcher. Mr. Zhou obtained a bachelor's degree in National Economic Management at Peking University in 1986 and a master's degree in International Finance at Peking University in 2001. Mr. Zhou has served as the Supervisor of the fifth session of the Supervisory Committee of the Company since May 2020, and a director of the Materials and Procurement Supervision Department of the China Energy since March 2020. Mr. Zhou has served as a Supervisor of the fourth session of Supervisory Committee of the Company from June 2017 to May 2020 and a Supervisor of the third session of Supervisory Committee of the Company from June 2016 to June 2017, the Director of the Industrial Coordination Department of China Energy from May 2018 to March 2020, the General Manager of the Capital Operation Department of former Shenhua Group Corporation and the Company from March 2016 to May 2018, and the General Manager of the Business Administration Department of former Shenhua Group Corporation and the Company from November 2009 to March 2016. Prior to the foregoing, Mr. Zhou had successively held the post of the deputy General Manager and General Manager of the Planning Department and a Deputy Director of the Policy and Law Research Office of Shenhua Group Corporation.

Name	Biographical details
 **Zhang Changyan** Employee's Supervisor	Born in August 1970, male, Chinese, a member of the Communist Party and a senior economist. Mr. Zhang graduated from Xi'an Jiaotong University in 1993, majoring in electrical engineering and received a master's degree of Business Administration from Tsinghua University in 2001. Mr. Zhang has been serving as the Employees' Representative Supervisor of the fifth session of the Supervisory Committee since May 2020, and the chairman (legal representative), secretary to the Party Committee of National Energy Group Media Center Co., Ltd. since February 2022. Mr. Zhang has been serving as the chairman (legal representative) and secretary to the Party Committee of China Energy Fujian Energy Co., Ltd. and Shenhua Fujian Energy Co., Ltd. from December 2020 to February 2022, the Employees' Representative Supervisor of the fourth session of the Supervisory Committee from December 2019 to May 2020, the deputy secretary to the Party Committee of the Company from August 2019 to December 2020 and General Legal Adviser of the Company from December 2019 to January 2021. From May 2018 to August 2019, he served as the secretary and a deputy director of the coal industry operation and management center of China Energy. From January 2012 to May 2018, he served as the director of the coal and chemical management department of the former China Guodian. Prior to the foregoing, Mr. Zhang served as the general manager and deputy secretary of the Leading Party Members' Group of Guodian Anhui Power Co., Ltd., group leader of the preparatory team of Guodian Anhui Power Co., Ltd., deputy general manager and a member of the Leading Party Members' Group of the East China Branch of former China Guodian, and the deputy general manager of Guodian East China New Energy Investment Co., Ltd..

(3) Senior management in office as at the end of the reporting period

For the biographical details of Xu Mingjun, Secretary to the Party committee and deputy general manager, Wang Xingzhong, deputy general manager and member of the Party committee, please refer to the biographical details of Directors. The biographical details of other senior management are as follows:

Name	Biographical details
 **Lv Zhiren** Chief Executive Officer, Deputy Secretary of the Party Committee	Born in November 1964, male, Chinese, a member of the Communist Party and a senior engineer. Mr. Lv has extensive work experience in corporate management. He graduated from School of Economics and Management of Beijing Union University in 1987, majoring in National Economic Management and obtained an EMBA degree from Shanghai University of Finance and Economics in 2005. Mr. Lv has served as the Chief Executive Officer of the Company since December 2021, and deputy secretary of the Party Committee of the Company since November 2021. Mr. Lv served as secretary to the Party Committee of Guodian Power Development Co., Ltd. from September 2018 to November 2021, deputy general manager of Guodian Power Development Co., Ltd. from September 2018 to December 2021, director of Guodian Power Development Co., Ltd. from February 2020 to December 2021, director, secretary to the Party Committee and deputy general manager of Beijing GD Power Co., Ltd. from February 2019 to December 2021, deputy president of the Company from March 2017 to September 2018, general manager of the Strategic Planning Department of the former Shenhua Group Corporation Limited and the Company from November 2009 to March 2017, and general manager of the Strategic Planning Department of the Company from November 2004 to November 2009. Prior to the foregoing, Mr. Lv had served as deputy director of the General Division of the Planning Department, deputy director and director of the Annual Planning Division of the Planning Department, and deputy manager of the Planning Department of the former Shenhua Group Corporation Limited.

Name	Biographical details
 **Huang Qing** Secretary of the Board, Member of the Party Committee and the General Counsel	Born in November 1965, male, Chinese, a member of the Communist Party and a senior engineer. Mr. Huang obtained a board secretary certification from the Shanghai Stock Exchange in 2004. Mr. Huang is a fellow of the Hong Kong Institute of Chartered Secretaries and a senior visiting scholar of the Eisenhower Foundation. Mr. Huang received a master's degree from Guangxi University in 1991. Mr. Huang has served as Secretary of the Board of the Company and Company Secretary of the Company since November 2004, a member of the Party Committee of the Company since June 2018, the General Counsel of the Company since January 2021, the Vice Chairman of Beijing GD Power Co., Ltd. since March 2019. Prior to the foregoing, Mr. Huang had served in various capacities, including Secretary to the Chairman of former Shenhua Group Corporation, Deputy Director of the General Office of former Shenhua Group Corporation, Deputy General Manager of Hubei Provincial Railway Company and Secretary to the Deputy Governor of the Hubei provincial government.

Name	Biographical details
 **Li Zhiming** Executive Vice President and Member of the Party Committee	Born in January 1968, male, Chinese, a member of the Communist Party and a senior engineer. Mr. Li has extensive experience in management of coal enterprises. He graduated from Heilongjiang Institute of Mining and Technology in 1990, majoring in industrial and civil construction and obtained a master's degree of Engineering from China University of Mining and Technology in 2002. Mr. Li has served as a member to the Party Committee of the Company since February 2021, an executive vice president of the Company since March 2021, general manager, deputy secretary of the Party Committee, chairman (legal representative) and secretary of the Party Committee of Shenhua Beidian Shengli Energy Co., Ltd., and standing deputy general manager, general manager, secretary of the Party Committee and Executive Director of the Shengli Energy Branch of the Company from December 2015 to December 2020, deputy general manager of the engineering management department of the former Shenhua Group Corporation Limited and the Company from September 2013 to December 2015, deputy general manager of Shenhua Zhunge'er Energy Co., Ltd. from December 2007 to September 2013. Prior to the foregoing, Mr. Li had served as assistant to the general manager, director of executive office, and deputy director of the transportation and sale division of Shenhua Zhunge'er Energy Co., Ltd., and deputy manager of the trading company and other positions.

Name	Biographical details
 **Xu Shancheng** Chief Financial Officer and Member of the Party Committee	Born in March 1964, male, Chinese, a member of the Communist Party and a senior accountant. Mr. Xu has extensive experience in financial management. He obtained a master's degree in Economics from Renmin University of China in 2001. Mr. Xu has served as the Chief Financial Officer and a member to the Party Committee of the Company since December 2018, a Non-executive Director of China Energy Finance Co., Ltd. since August 2016 and the Chairman of the board of supervisors of Beijing GD Power Co., Ltd. since March 2019. Mr. Xu has served as the chairman of Shenhua (Tianjin) Finance Lease Co., Ltd. from August 2016 to September 2020, the secretary and deputy officer of the financial property department of China Energy from May 2018 to December 2018, the general manager of the financial department of the Company and former Shenhua Group Corporation Limited from August 2016 to May 2018, the deputy general manager and chief financial officer of Beijing Guohua Power Company Limited, and Guohua Power Branch of the Company from March 2015 to August 2016, the deputy general manager and chief financial officer of former Shenhua Guoneng Group Co., Ltd. and Shenhua Shendong Power Co., Ltd. from December 2012 to March 2015. Prior to the foregoing, Mr. Xu held the post of the head of financial department of Electric Power Industry Bureau of Hebei Province (Company), manager of financial department of North China Power Group Company, chief accountant of Qinghai Electric Power Company (Bureau), chief accountant of North China Grid Company, deputy officer of Social Insurance Management Center of State Grid Corporation of China (Grid Corporate Annuity Management Center) and a member of the Leading Party Group, deputy general manager, chief accountant and other positions of State Grid Energy Development Co. Ltd..

The Company resolutely implemented the new requirements of political construction in the new era, and strengthened the overall leadership of the Party. The Company has revised and improved the Articles of Association and rules and regulations of the Company, institutionalized the Party Committee research and discussion as a pre-procedure of major decision-making, and organically integrated the Party leadership with the improvement of corporate governance. Xu Mingjun served as the Secretary of the Party Committee of the Company; Lv Zhiren and Yang Xiangbin served as the deputy secretary to the Party Committee; Huang Qing, Wang Xingzhong, Li Zhiming and Xu Shancheng served as members of the Party Committee, and Cui Weishan served as a member of the Party Committee and the secretary to the Disciplinary Committee.

Name	Biographical details
 **Yang Xiangbin** Deputy Secretary of the Party Committee	Born in October 1965, male, Chinese, a member of the Communist Party, a certified public accountant and a senior accountant. Mr. Yang obtained an MBA degree from the Open University of Hong Kong in 2011. Mr. Yang has served as deputy secretary of the Party Committee of the Company since April 2021, director of the Capital Operation Department of the China Energy from May 2018 to March 2021, director of the Capital and Asset Management Department of China Guodian Corporation from May 2016 to May 2018, secretary to the Party committee, director and deputy general manager of Inner Mongolia Pingzhuang Coal Industry (Group) Co., Ltd., director and vice chairman of Inner Mongolia Pingzhuang Energy Co., Ltd. from December 2013 to May 2016, deputy director of the financial property department and deputy director of the Financial Management Department of China Guodian Corporation from December 2006 to December 2013. Prior to the foregoing, Mr. Yang had served as deputy director and director of the Budget Office of the financial property department of China Guodian Corporation, director of the Budget Office of the Finance Department of Heilongjiang Power Company Limited and other positions.

Name	Biographical details
 **Cui Weishan** Member of the Party Committee and Secretary of the Disciplinary Committee	Born in February 1966, male, Chinese, a member of the Communist Party. Mr. Cui graduated from the Department of Measurement and Control of National College of Defense Technology in 1986, majoring in Remote Radio Telemetry and obtained the master academic qualification from the Party School of the CPC (中央黨校) in 2011, majoring in International Politics. Mr. Cui has served as a member of the Party Committee and secretary of the Party Committee of the Company since November 2021, deputy leader (director level) of the inspection team of the Party group of China Energy Group from May 2018 to November 2021, director of the Inspection Work Office of the party disciplinary inspection group of the former Shenhua Group Corporation Limited from January 2012 to May 2018, director of the Discipline Inspection and Supervision Department of the former Shenhua Group Corporation Limited and the supervisory department of the Company from May 2010 to January 2012.

The Directors and Supervisors of the Company have performed their duties in accordance with the requirements of the Articles of Association, Rules of Procedure of the Board Meeting and Rules of Procedure of the Supervisory Committee Meeting of the Company. Under the decision and authorization of the Board, the senior management is responsible for business operation of the Company. Lv Zhiren, Chief Executive Officer and Deputy Secretary to the Party Committee, is responsible for the Board and exercises his responsibilities as general manager in accordance with the requirements of the Articles of Association. Mr. Lv is responsible for administration and management, production and operation and auditing affairs; Xu Mingjun, secretary to the Party committee and executive vice president, is in charge of Party building, establishment of integrity, ideology and politics, cadre talents, organization of work, news propaganda, united front, labour union and groups and construction of corporate culture affairs; Huang Qing, secretary of the Board, member of the Party committee and general counsel, is responsible for Board affairs, Supervisory Committee's work, and is in charge of investor relations management, corporate management, legal affairs, material procurement and international business affairs;Yang Xiangbin, deputy secretary to the Party Committee assisted the secretary to the Party Committee in Party building, establishment of integrity, ideology and politics, organization of work, news propaganda, united front, labour union, groups and construction of corporate culture affairs and is responsible for trade union work; Wang Xingzhong, executive vice president and member of the Party committee, is in charge of Company's scientific and technological information and production and operation management of transportation industry affairs; Li Zhiming, executive vice president and member of the Party committee, is in charge of Company's development planning and production and operation management of coal industry affairs; Xu Shancheng, chief financial officer and member to the Party committee, is in charge of Company's financial operation, cost control, capital operation, and property rights management. Mr. Cui Weishan, member of Party committee and secretary of the Disciplinary Committee, is responsible for Company's discipline inspection and the building of Party style and anti-corruption government.

2. Positions held in the shareholders of the Company

Category	Name	Name of shareholder	Positions	Commencement of term of office	Expiry of term of office
Directors of China Shenhua	Wang Xiangxi	China Energy	Chairman and Secretary to the Leading Party Members' Group	2019–03	–
	Yang Jiping	China Energy	Director of Operating Management Centre of Coal Industry	2019–08	2020–03
		China Energy	Director of Operating Management Centre of Transportation Industry	2019–12	2020–03
	Jia Jinzhong	China Energy	Senior Business Officer	2021–07	–
			Chief Economist	2018–05	2021–07
Supervisors of China Shenhua	Luo Meijian	GD Power Development Co., Ltd.	Secretary to the Party Committee	2021–11	–
			Executive vice president	2021–12	–
			Director	2021-12	–
		China Energy	Director of Organization and Personnel Department (Human Resources Department)	2018–06	2021–11
	Zhou Dayu	China Energy	Director of the Materials and Procurement Supervision Department	2020–03	–
			Director of the Industrial Coordination Department	2018–05	2020–03
	Zhang Changyan	National Energy Group Media Center Co., Ltd.	Chairman (legal representative) and Secretary to the Party Committee	2022-02	–
		China Energy Fujian Energy Co., Ltd.	Chairman (legal representative) and Secretary to the Party Committee	2020–12	2020–02
Senior Management of China Shenhua	Huang Qing	Beijing GD Power	Vice Chairman	2019–03	–
	Xu Shancheng	Beijing GD Power	Chairman of the supervisory committee	2019–03	–
		China Energy Finance Co., Ltd.	Non-Executive Director	2016–08	–

3. Positions held in other entities

Name	Name of other entities	Positions	Commencement of term of office	Expiry of term of office
Yuen Kwok Keung	Temple Chambers	Senior Counsel	2018-05	–
	International Commercial Court of the Supreme People's Court of the People's Republic of China	Member of the International Commercial Expert Committee	2018-08	–
	Hong Kong Exchange Fund Advisory Committee	Member	2018-09	–
	Hong Kong International Arbitration Centre	Council Member	2018-10	–
Bai Chong-En	School of Economics and Management of Tsinghua University	Dean	2018-08	–
	School of Economics and Management of Tsinghua University	Professor	2004-07	–
	National Center of Fiscal and Tax Policy Research at Tsinghua University	Director	2008-08	
	Society of Public Finance of China	Vice President of the Tenth Session and a Member of the Academic Committee of the Council	2019-10	–
	China Association of Labour Economics	Vice President	2016-11	–
	International Economic Association	Member of the Executive Committee	2014-06	2021-06
Chen Hanwen	Nanjing Audit University	Professor and Doctoral Supervisor	2021-07	–
	Shenwan Hongyuan Securities Co., Ltd.	Independent Director	2021-05	–
	Bank of Communications Co., Ltd.	External Supervisor	2019-06	–
	Beijing Tri-Prime Gene Pharmaceutical Co., Ltd.	Independent Director	2018-11	–
	China Business Executives Academy, Dalian	Chair Professor	2013-01	–
	China Auditing Society	Executive Director	2005-07	–
	International Business School of University of International Business and Economics	Professor and Doctoral Tutor of the Accounting Department	2015-06	2021-07
	University of International Business and Economics	Distinguished Professor of Huiyuan	2017-05	2021-07
	International Business School of University of International Business and Economics	First-level Professor	2018-01	2021-07
	Xiamen Bank Co., Ltd.	Independent Director	2018-01	2021-01

(III) REMUNERATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Decision-making procedures	The remuneration package of Directors and Supervisors of the Company was submitted to the general meeting for approval after consideration and approval by the Remuneration Committee of the Board and the Board, and the remuneration package of senior management was submitted to the Board for approval after consideration and approval by the Remuneration Committee of the Board.
Basis for determination	The remuneration package of relevant Directors and Supervisors was proposed by the Company in accordance with international and domestic practices and with reference to the remuneration of directors and supervisors of large-scale listed companies in China. The remuneration package of senior management of the Company was formulated by the Company in accordance with relevant provisions on the administration of the annual remuneration of the senior management and annual performance assessment.
Actual payment of remuneration	Please refer to "Changes in shareholding and remuneration of Directors, Supervisors and senior management" in this section
Total remuneration actually obtained as at the end of the reporting period	Please refer to "Changes in shareholding and remuneration of Directors, Supervisors and senior management" in this section

(IV) CHANGES OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT OF THE COMPANY

Name	Position	Particulars of changes	Reason for the change
Li Zhiming	Executive Vice President	Appointed	Appointed by the sixth meeting of the fifth session of the Board
Yang Rongming	Non-Executive Director	Elected	Elected by the 2020 Annual General Meeting
Yang Jiping	Executive Director and Chief Executive Officer	Resigned	Job change
Lv Zhiren	Chief Executive Officer	Appointed	Appointed by the tenth meeting of the fifth session of the Board

Yang Xiangbin has served as the Deputy Secretary of the Party Committee of the Company since April 2021. Yang Suping resigned as member of the Party Committee and the Secretary to the Disciplinary Committee of the Company since August 2021. Cui Weishan has served as member of the Party Committee and the Secretary of the Disciplinary Committee of the Company since November 2021.

(V) SANCTION FROM SECURITIES REGULATORY AUTHORITIES IN THE LAST THREE YEARS

☐ Applicable ✔ Not applicable

(VI) OTHERS

During the reporting period, none of the Directors, Supervisors and senior management of the Company held shares of the Company, and none of the change in shareholding of the Company shall be disclosed pursuant to the Administrative Rules Concerning the Holding and Change of Shares held by Directors, Supervisors and Senior Management of A Listed Company promulgated by the CSRC.

As of 31 December 2021, none of the Directors, Supervisors or chief executives of the Company held any shares of the Company, nor did they have any interest or short position in the shares or underlying shares of the Company or of any of its associated corporations within the meaning of Part XV of the SFO (Chapter 571 of the Laws of Hong Kong) required, pursuant to section 352 of the SFO, to be recorded in the register which shall be kept by the Company, or to be notified to the Company and the HKEx pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

The securities transactions of the Directors of the Company have been carried out in accordance with the "Model Code for Securities Transactions by Directors of Listed Issuers" (the "Model Code") set out in Appendix 10 of the Hong Kong Listing Rules. The Model Code is also applicable to the Supervisors and senior management of the Company. The Directors, Supervisors or senior management have confirmed that they have fully complied with the Model Code in 2021 or during their respective terms of office.

All the Directors and Supervisors have provided relevant training records to the Company and have participated in training programs in accordance with relevant requirements by regulatory authorities. The Secretary to the Board of the Company has participated in training programs for more than 15 hours in accordance with relevant requirements.

When considering any matters or transactions at any board meeting, the Directors are required to declare any direct or indirect interests and recluse themselves where appropriate. Saved as their own service contracts, the Financial Service Agreement for 2021–2023 signed on 26 March 2021, the Mutual Coal Supply Agreement for 2021–2023 and the Mutual Supplies and Services Agreement for 2021–2023, signed between the Company and China Energy on 27 August 2021, and the related/connected transactions with the controlling shareholder China Energy and its subsidiaries disclosed by the Company, none of the Directors and Supervisors of the Company has any material personal interests, directly or indirectly, in material contracts, transactions or arrangements entered into by the Company or any of its subsidiaries in 2021 and subsisting during or at the end of the year; The directors and Supervisors of the Company have confirmed that they and their associates have not entered into any connected transaction with the Company and its subsidiaries.

The Company has entered into service contracts with all of its Directors and Supervisors. None of the Directors or Supervisors has entered into or proposed to enter into any service contract with members of the Group which cannot be terminated by the Group within one year without any compensation (other than the statutory compensation). The Company has maintained appropriate liability insurance for its Directors, Supervisors and senior management. Directors of the Company are entitled to be indemnified for the verification and inspection costs, individual investigation costs, tax liabilities and loss prevention expenses incurred by or relating to the execution and performance of duties subject to the applicable laws and under the coverage of directors liability insurance taken out by the Company for the Directors. These provisions are valid during the period ended 31 December 2021 and remain to be valid as at the date of this report.

Other than their working relationships in the Company, none of the Directors, Supervisors or senior management has any financial, business or family relationship or any relationship in other material aspects with each other. As of 31 December 2021, the Company had not granted any equity securities or warrants to its directors, supervisors and senior management or their respective spouses or children under the age of 18.

V. BOARD OF DIRECTORS

(I) Board Meetings

Number of Board meetings held during the year	5
Including: Number of meetings held on-site	0
Number of meetings held by correspondence	0
Number of meetings held on-site with correspondence	5

In 2021, the Board of the Company held a total of 5 meetings, at which all the proposals were considered and approved. Details of the meetings are as follows:

No.	Name	Date	Methods	Meeting Resolutions
1	The 6th meeting of the fifth session of the Board	26 March 2021	On-site with correspondence	All 19 resolutions were considered and approved, please refer to the H Share announcement of the Company dated 26 March 2021 or A Share announcement dated 27 March 2021 for details
2	The 7th meeting of the fifth session of the Board	23 April 2021	On-site with correspondence	All 7 resolutions were considered and approved, please refer to the H Share announcement of the Company dated 23 April 2021 or A Share announcement dated 24 April 2021 for details
3	The 8th meeting of the fifth session of the Board	27 August 2021	On-site with correspondence	All 11 resolutions were considered and approved, please refer to the H Share announcement of the Company dated 27 August 2021 or A Share announcement dated 28 August 2021 for details
4	The 9th meeting of the fifth session of the Board	22 October 2021	On-site with correspondence	All 3 resolutions were considered and approved, please refer to the H Share announcement of the Company dated 22 October 2021 or A Share announcement dated 23 October 2021 for details
5	The 10th meeting of the fifth session of the Board	29 December 2021	On-site with correspondence	All 6 resolutions were considered and approved, please refer to the H Share announcement of the Company dated 29 December 2021 or A Share announcement dated 30 December 2021 for details

(II) PERFORMANCE OF DUTIES OF THE DIRECTORS

1. Directors in office as at the end of the period

Name of Director	Independent Director or not	Attendance at Board meetings: Required attendance at Board meetings this year	Attendance in Person	Attendance by correspondence	Attendance by proxy	Absence	Absent at two consecutive meetings in person or not	Attendance	Attendance at general meetings/ required attendance
Wang Xiangxi	No	5	5	1	0	0	No	5/5	4/4
Xu Mingjun	No	5	4	1	1	0	No	4/5	4/4
Jia Jinzhong	No	5	5	0	0	0	No	5/5	4/4
Yang Rongming	No	3	3	0	0	0	No	3/3	1/1
Yuen Kwok Keung	Yes	5	5	5	0	0	No	5/5	0/4
Bai Chong-En	Yes	5	5	1	0	0	No	5/5	4/4
Chen Hanwen	Yes	5	5	0	0	0	No	5/5	4/4
Wang Xingzhong	No	5	5	0	0	0	No	5/5	4/4

Note: In the above table, the attendance rate of the Board = number of attendances in person/number of required attendances at Board meetings; the attendance rate of the general meeting = number of attendances in person/number of required attendances at general meetings. The same below.

2. Directors resigned during the reporting period

Name of Director	Independent Director or not	Attendance at Board meetings: Required attendance at Board meetings this year	Attendance in Person	Attendance by correspondence	Attendance by proxy	Absence	Absent at two consecutive meetings in person or not	Attendance	Attendance at general meetings
Yang Jiping	No	4	4	0	0	0	No	4/4	4/4

The Company safeguards the conditions for directors to carry out their work and actively adopts the suggestions and opinions put forward by the directors. The Company's "Procedure Rules for the Board" and "Independent Directors System" provide institutional guarantees for directors to perform their duties; the departments designated to undertake the affairs of the Board, the affairs of independent directors and the work of the Independent Board Committee assist directors in carrying out research, attending meetings and expressing opinions.

In 2021, the Board of Directors of the Company held 5 meetings and considered 46 resolutions, and disclosed the voting results of all resolutions in a timely manner. If the resolution of the Board meeting has any interest in any director or any associate of the director, or the director has an associated/connected relationship with the enterprise involved in the resolution of the Board meeting, the associated/connected director shall abstain from voting. All directors acted in good faith, prudently and diligently in the interest of the Company as a whole in the performance of their duties and effectively performed their management, operation and decision-making powers over the Company.

3. Performance of duties of Independent Directors

The fifth session of the Board of the Company has three Independent Non-Executive Directors: Yuen Kwok Keung, Bai Chong-En and Chen Hanwen, among whom Chen Hanwen is an accounting professional.

The Company has received written confirmation from each of the Independent Non-Executive Directors confirming their independence. The Company is of the view that all of the Independent Non-Executive Directors are independent. The number and background of the Independent Directors are in compliance with the requirements of the listing rules of the places of listing.

During the reporting period, the Independent Directors of the Company strictly complied with the requirements of relevant laws and regulations, the Articles of Association of the Company, relevant rules of procedure of meetings and the Independent Directors system of the Company. They maintained their independence as Independent Directors, performed their functions of supervision, participated in the formation of various important decisions of the Company and reviewed regular reports and financial reports of the Company. Therefore, the Independent Directors of the Company played an important role in the regulated operation of the Company and protected the legitimate interests of minority shareholders.

For the attendance of independent Directors at Board meetings and general meetings, please refer to the section of "Performance of duties of the Directors".

(III) Dissenting views of Directors on matters of the Company:

☐ Applicable ✔ Not applicable

(IV) Implementation of resolutions passed at the general meetings by the Board

General Meeting	Subject Matter	Status
2020 Annual General Meeting	To approve the Report of the Board of Directors of China Shenhua Energy Company Limited for the Year 2020	–
	To approve the Report of the Supervisory Committee of China Shenhua Energy Company Limited for the Year 2020	–
	To approve the Financial Report of China Shenhua Energy Company Limited for the Year 2020	–
	To approve the profit distribution plan of the Company for the year 2020	Completed
	To approve the remuneration package of Directors and Supervisors for the year 2020	Completed
	To approve the appointment of KPMG Huazhen LLP and KPMG as the PRC and the international auditors of the Company for the year of 2021, respectively	For details of remuneration, please see the section headed "Significant Events" of this report
	To approve the Company to enter into the Financial Services Agreement with China Energy Finance Co., Ltd. for 2021 to 2023	For details, please see the section headed "Significant Events" of this report

General Meeting	Subject Matter	Status
	To approve the election of Yang Rongming as Non-executive Directors of the fifth session of the Board of the Company	Executed
	To approve the reduction of the registered capital of the Company to RMB19,868,519,955 and the amendments to the Articles of Association of the Company	Executed
	To approve the general mandate of the Board to repurchase H Shares	Executed
2021 First A Shareholders Class Meeting	To approve the general mandate of the Board to repurchase H Shares	Executed
2021 First H Shareholders Class Meeting	To approve the general mandate of the Board to repurchase H Shares	Executed
2021 First Extraordinary General Meeting	To approve the Company to enter into the Mutual Coal Supply Agreement for 2021 to 2023 with China Energy and the annual caps for the transactions contemplated thereunder for 2021 to 2023	Executed
	To approve the Company to enter into the Mutual Supplies and Services Agreement for 2021 to 2023 with China Energy and the annual caps for the transactions contemplated thereunder for 2021 to 2023	Executed

VI. THE PERFORMANCE OF DUTIES OF THE COMMITTEES UNDER THE BOARD DURING THE REPORTING PERIOD

(I) Composition of the committees

As at the end of the reporting period, the Company has established five committees under the Board, and the details are as follows:

The fifth session of the Board committees	
Strategy Committee	Wang Xiangxi (Chairman), Jia Jinzhong
Audit Committee	Chen Hanwen (Chairman), Yuen Kwok Keung, Bai Chong-En
Remuneration Committee	Yuen Kwok Keung (Chairman), Chen Hanwen, Xu Mingjun
Nomination Committee	Bai Chong-En (Chairman), Chen Hanwen, Xu Mingjun
Safety, Health and Environment Committee	Yang Rongming, Wang Xingzhong

(II) The duties and performance of duties of the committees

During the reporting period, each committee under the Board did not express any dissenting views in performing their duties. The performance of duties of each committee is set out as follows:

1. Strategy Committee

The major duties of the Strategy Committee: to conduct research on the Company's development strategies and investment plans; to conduct research and provide consideration opinions to the Board of Directors on matters such as adjustment to the main business, negative list of investment projects, investment and financing, asset restructuring, transfer of property rights, capital operation and reform and reorganisation, which require decisions to be made by the Board of Directors; and other duties and powers authorised by the Board.

In 2021, the Strategy Committee of the Board held 2 meetings by way of consideration in writing. All proposals at the meetings were approved and all members attended the meetings.

Date	Meeting content	Important opinions and suggestions
20 August 2021	To consider the proposal on the formulation of Measures for the Administration of Strategic Planning of China Shenhua Energy Company Limited (Trial)	Agreed
27 December 2021	To consider the proposal on the adjustment to the Company's investment plan for the year 2021	Agreed

2. Audit Committee

The principal duties of the Audit Committee are to supervise and assess the work of the external audit institutions; to propose to employ or replace the external auditor; to supervise and evaluate the effectiveness of the internal audit work; to coordinate the internal audit and the external audit; to audit the financial information of the Company and its disclosure; to supervise and evaluate the risk management and internal control of the Company; and other matters authorized by laws and regulations, the Articles of Association and the Board.

During the reporting period, the Audit Committee fulfilled its duties strictly in accordance with the Rules of Procedure of Meetings of the Audit Committee of the Board, Rules on Work of the Audit Committee of the Board and Rules on Work of Annual Reports of the Audit Committee of the Board of the Company.

In 2021, the Audit Committee convened 6 meetings. All proposals at the meetings were approved and all members attended all meetings in person.

Convening date	Meeting content	Important opinions and suggestions
16 March 2021	To consider the proposals on the Company's 2020 financial report (draft), 2020 internal control evaluation report (draft), etc.	Agreed
23 March 2021	(1) To consider the proposals on the Company's 2020 internal control audit report, 2020 internal control evaluation report, 2020 financial report, 2020 ESG report, 2020 profit distribution plan, the report of performance of duties of the Audit Committee of the Board for 2020, the key points of the Company's internal audit for 2021, the capital budget and debt financing plan for 2021, and the entering into the Financial Service Agreement for 2021 to 2023 between the Company and China Energy Finance Co., Ltd.; (2) To review the internal audit report of the Company for 2020; (3) To listen to the Company's report on the implementation of the continuing connected transaction agreement for 2020 and the annual audit work by the auditor KPMG;	Agreed. China Shenhua shall maintain the principles of fairness and full disclosure during the implementation of the Financial Services Agreement; and shall consider the future sustainable development and strategic planning of the Company while safeguarding the interests of minority shareholders when formulating profit distribution plans.
21 April 2021	(1) To consider the proposals on the Company's financial report for the first quarter of 2021, the renewal of the external auditor for 2021, the changes in accounting policies, the external donation budget for 2021, etc.; (2) To listen to the Company's report on the independent financial adviser's opinion letter on the Financial Services Agreement and KPMG's report on the 2020 management proposal	Agreed

Convening date	Meeting content	Important opinions and suggestions
18 June 2021	To review the Company's interim review work plan for the year 2021	Agreed
24 August 2021	(1) To consider the proposals on the Company's semi-annual financial report for 2021, the signing of the Mutual Coal Supply Agreement for 2021 to 2023 and the Mutual Supplies and Services Agreement for 2021 to 2023, entered into between the Company and China Energy, participating in the investment in the establishment of the Guoneng Green and Low-Carbon Development Investment Fund, and the work plan for internal control evaluation for 2021; (2) To review the internal audit report of the Company for the first half of 2021; (3) To listen to KPMG's report on the interim review	Agreed. It is recommended that China Shenhua establish a management system related to fund investments to effectively prevent risks in fund operations.
18 October 2021	(1) To consider the proposals on the Company's financial report for the third quarter of 2021 and the capital increase to China Energy Xinshuo Railway Co., Ltd.; (2) To listen to the Company's reports on important accounting estimates and judgments, the supervision and implementation of matters reflected in the 2020 management proposal, the evaluation of the Company's internal control, and KPMG's report on the 2021 audit work plan	Agreed. China Shenhua shall do a good job of asset evaluation for the part that the debtor repays with assets, so as to be scientifically sound and to ensure the interests of the Company to the maximum extent.

The Audit Committee has performed required procedures for the preparation of the 2021 annual report and internal control report of the Company:

(1) On 24 August 2021, the Audit Committee reviewed the internal control assessment plan for the year 2021; on 18 October 2021, the Audit Committee reviewed the Company's plans for the audit work for the year 2021 and determined the schedule of the Company's 2021 audit.

(2) On 16 March 2022, the Audit Committee reviewed the 2021 Assessment Report on Internal Control (Draft) and 2021 Financial Statements (Draft) of China Shenhua prepared by the Company.

(3) On 22 March 2022, the Audit Committee listened to KPMG's report on the audit work in 2021, and discussed the scope of audit work and audit procedures, key audit matters and key concerns, auditor independence and other matters that require management attention; reviewed the 2021 financial statements and internal control audit report, and assessed the effectiveness of the internal control over financial statements; reviewed the report on internal control and the ESG report for the year 2021 and agreed to submit such reports to the Board for consideration.

(4) During the process of reappointing auditors for 2021 and 2022, the Audit Committee carefully considered the relevant resolutions, evaluated KPMG's performance of duties in 2020 and 2021, and reviewed relevant integrity records and qualification certificates. The Audit Committee believes that KPMG has the professional ability, experience and qualifications to provide audit services for the Company, has the corresponding investor protection ability and independence, maintains an independent, objective and prudent professional attitude in the audit work, has standardized and effective audit procedures, which enables to meet the Company's annual audit work requirements. The Audit Committee agreed that KPMG continues to serve as the auditor of the Company, and recognized the annual audit fee.

The Audit Committee discussed separately with the external auditors and no inconsistency was found in the briefings by the management.

3. Remuneration Committee

The principal duties of the Remuneration Committee are to make recommendations to the Board on formulation of the remuneration plan or proposal for Directors, Supervisors, Chief Executive Officer and other senior management, including but not limited to the criteria, procedures and the major systems of performance assessment, key incentive and punishment plans and systems; to study the assessment standards for Directors, supervisors, Chief Executive Officer and other senior management, and examine the performance of duties by Directors, supervisors, Chief Executive Officer and other senior management of the Company and carry out annual performance assessment on them; to supervise the implementation of the remuneration system of the Company, review and approve the remuneration determined by performance in accordance with the Company's objectives determined by the Board; to exercise the following duties as authorized by the Board: to determine the specific remuneration of all the Executive Directors, Supervisors, Chief Executive Officer and other senior management, including non-monetary benefits, pension rights and compensation; to review and approve the payment of compensation to Executive Directors, supervisors, Chief Executive Officer and other senior management in relation to the loss or termination of their duties or appointment, so as to ensure that such compensation is determined in accordance with the related terms of the contract; to review and approve the compensation arrangements involved in the dismissal or removal of Directors due to their improper conduct, so as to ensure that such arrangements are determined in accordance with the related terms of the contract; to make recommendations to the Board on the remuneration of the Non-Executive Directors; to ensure that none of the Directors or any of their associates determines their own remunerations; and to execute other matters as authorized by the Board.

In 2021, the Remuneration Committee held 1 meeting by way of consideration in writing. All proposals at the meeting were approved and all members attended the meeting. During the reporting period, the Remuneration Committee reviewed the remuneration management system of the Company and the remuneration level for Directors, Supervisors and senior management for the relevant period. The Remuneration Committee is of the view that the Company has established a relatively complete remuneration management system, which embodies the value concept of listed companies centered on economic benefits as well as the political, social and economic responsibilities of state-owned holding companies. The Remuneration Committee agrees to various remuneration management system of the Company.

Date	Meeting content	Important opinions and suggestions
15 March 2021	To consider proposals on the remuneration of Directors, Supervisors and senior management of the Company for the year 2020 and the performance of duties of the Remuneration Committee of the Board for the year 2020	Agreed

4. Nomination Committee

The principal duties of the Nomination Committee are to formulate the Board diversity policy, regularly review the structure, size and diversity of the Board, and to make recommendations to the Board with regard to any proposed changes; to assess and verify the independence of independent Non-Executive Directors; to develop standards, procedures and systerms for selection of Directors, Chief Executive Officer and other senior officers, and make recommendations to the Board, taking into account the Company's corporate strategy and the combination of skills, knowledge, experience and diversity needed in the future; to extensively seek for qualified candidates of Directors, Chief Executive Officer and other senior management; to examine the aforementioned candidates and make recommendations; to nominate candidates for members of the Board Committees (other than members of the Nomination Committee and the Chairman of any Board Committee); to draft development plans for Chief Executive Officer, other senior management and key reserve talents; to review the board diversity policy where appropriate, and review the quantitative objectives set up by the Board to implement the Board diversity policy and their progress of achievement, as well as to disclose the results of review in the Corporate Governance Report annually; to make recommendations to the Board on the appointment or re-appointment of Directors, general managers and other senior management and succession planning; and to carry out any other matters as authorized by the Board.

In 2021, the Nomination Committee held 3 meetings by way of consideration in writing. All proposals at the meetings were approved and all members attended all meetings.

Date	**Meeting content**	**Important opinions and suggestions**
23 March 2021	To consider the proposals on the appointment of Li Zhiming as Deputy General Manager of the Company and the nomination of Yang Rongming as the candidate for Non-executive Director of the fifth session of the Board of the Company	Agreed
23 August 2021	To consider the proposal on the nomination of members of the Safety, Health and Environment Committee of the fifth session of the Board	Agreed
27 December 2021	To consider the proposals on the appointment of Lv Zhiren as the Chief Executive Officer of the Company and the nomination of Lv Zhiren as the candidate for Executive Director of the fifth session of the Board of the Company	Agreed

5. Safety, Health and Environment Committee

The principal duties of the Safety, Health and Environment Committee are to supervise the implementation of safety, health, environmental protection and ESG working plans of the Company; to make recommendations to the Board or the Chief Executive Officer on material issues in respect of safety, health, environmental protection and ESG working of the Company, including but not limited to employee development, climate change, biodiversity and water resources management; to inquire into the material incidents and responsibilities regarding the Company's production, operations, property assets, staff or other facilities, as well as to review and supervise the resolution of such incidents; to review the Company's annual ESG report; to review the Statement of the Board disclosed in the Company's annual ESG report; to supervise and review the identification, evaluation and management process of the matters related to the Company's ESG activities and the progress of related objectives; and other issues as authorized by the Board.

In 2021, the Safety, Health and Environment Committee held 2 meetings by way of consideration in writing. All proposals at the meetings were approved and all members attended all meetings.

Date	Meeting content	Important opinions and suggestions
23 March 2021	To consider the proposal on the amendments to the Rules of Procedures of Meetings of the Safety, Health and Environmental Committee of the Board of China Shenhua Energy Company Limited and the proposal on the 2020 ESG Report of China Shenhua Energy Company Limited	Agreed
24 May 2021	To consider the proposals on ESG work of the Company and key points of work for the year 2021	Agreed

VII. SUPERVISORY COMMITTEE'S REPORT

The Supervisory Committee of the Company had, based on the attitude of being responsible to all shareholders, performed their supervisory duties faithfully and carried out their work proactively and effectively to protect the lawful interests of the Company and its shareholders in accordance with the relevant requirements under the Company Law of the People's Republic of China and the Articles of Association.

(I) PERFORMANCE OF DUTIES OF THE SUPERVISORY COMMITTEE

During the reporting period, in compliance with the requirements of the Articles of Association and the Rules of Procedures of Meetings of the Supervisory Committee, the Supervisory Committee of the Company conducted strict supervisions on the lawful operations, financial position and the performance of duties of the Board and the management of the Company, and did not have any dissenting view over the matters supervised by the Supervisory Committee during the reporting period.

In 2021, the Supervisory Committee of the Company held four meetings in total.

Meeting	Date	Venue	Method of meeting	Attendance of Supervisors	Subject matter	Poll results
The fourth meeting of the fifth session of the Supervisory Committee	26 March	Beijing	On-site	All	Proposal of the 2020 Financial Report of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of the 2020 Profit Distribution Plan of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of the 2020 Annual Report of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of the 2020 ESG Report of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of the 2020 Assessment Report on Internal Control of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of the 2020 Supervisory Committee's Report of China Shenhua Energy Company Limited	Passed unanimously

Meeting	Date	Venue	Method of meeting	Attendance of Supervisors	Subject matter	Poll results
The fifth meeting of the fifth session of the Supervisory Committee	23 April	Beijing	On-site	All	Proposal of the 2021 First Quarterly Financial Report of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of change of accouting policy of the Company	Passed unanimously
					Proposal of the 2021 First Quarterly Report of China Shenhua Energy Company Limited	Passed unanimously
The sixth meeting of the fifth session of the Supervisory Committee	27 August	Beijing	On-site	All	Proposal of the 2021 Interim Financial Report of China Shenhua Energy Limited	Passed unanimously
					Proposal of the 2021 Interim Report of China Shenhua Energy Company Limited	Passed unanimously
The seventh meeting of the fifth session of the Supervisory Committee	22 October	Beijing	On-site	All	Proposal of the 2021 Third Quarterly Financial Report of China Shenhua Energy Company Limited	Passed unanimously
					Proposal of the 2021 Third Quarterly Report of China Shenhua Energy Company Limited	Passed unanimously

(II) INDEPENDENT OPINION OF THE SUPERVISORY COMMITTEE ON THE LAWFUL OPERATION OF THE COMPANY

The Supervisory Committee is of the opinion that the Board and the management of the Company have acted in strict accordance with the Company Law, the Articles of Association and relevant regulations of the jurisdiction where the Company is listed, performed their duties with integrity and diligence and conscientiously implemented the resolutions of, and exercised the power granted by the general meetings; and that the decisions and operations are in compliance with the laws and regulations and the Articles of Association. During the reporting period, the Supervisory Committee is not aware of any act committed by the Board and the management of the Company during their performance of duties which were in breach of laws, regulations and the Articles of Association or prejudicial to the interests of the Company.

(III) INDEPENDENT OPINION OF THE SUPERVISORY COMMITTEE ON THE FINANCIAL POSITION OF THE COMPANY

The Supervisory Committee is of the opinion that the financial statements of the Company give an objective, true and fair view of the financial position and the operating results of the Company in all material aspects and are true and reliable with its regulated financial audit and sound internal control system. The financial report for 2021 has been audited by KPMG Huazhen LLP and KPMG in accordance with China Accounting Standards for Business Enterprises and International Financial Reporting Standards, each of whom had issued a standard unqualified audit report.

(IV) INDEPENDENT OPINION OF THE SUPERVISORY COMMITTEE ON CONNECTED TRANSACTIONS OF THE COMPANY

After careful review of the connected transactions of the Company in 2021, the Supervisory Committee is of the opinion that all:

In 2021, under the influence of the macro environment, the market price and the supply of coal have increased significantly. In order to fulfill its social responsibilities as a listed company and to meet the requirements of the State to ensure supply, the Company faced challenges brought by the conflict between the constraints of the annual cap on coal supply to the China Energy by the Company in 2021 and the soaring coal supply and price. However, the Company strictly implemented the pricing principle of the Mutual Coal Supply Agreement, and did not reduce the selling price of coal to the China Energy in order to avoid reaching the 2021 annual cap, and the final transaction amount in 2021 increased to RMB96.776 billion. The Company has achieved good financial returns and ensured that the interests of the minority shareholders of the Company were not damaged while ensuring the supply. In this regard, the Company has convened the Board meeting for consideration and approval as well as making disclosure, which shall be subject to submission to the general meeting for consideration and approval.

Save as mentioned above, connected transactions in relation to China Energy, finance company and connected transactions in which GD Power Development Co., Ltd., China Longyuan Power Group Corporation Limited, China Energy Group Capital Holdings Limited and Guoneng (Beijing) Private Equity Fund Management Co., Ltd. jointly established a fund, are necessary for the routine operation of the Company. The relevant considerations are in accordance with prevailing market principle and the transactions are carried out in strict compliance with the principles of fairness, equality and openness under the statutory decision-making procedures. The connected transactions carried out are in accordance with the applicable rules and requirements of the listing rules, and the disclosure of information is standardized and transparent. The Supervisory Committee is not aware of any act prejudicial to the interest of the Company.

(V) INDEPENDENT OPINION OF THE SUPERVISORY COMMITTEE ON THE MAJOR ACQUISITION AND DISPOSAL OF ASSETS OF THE COMPANY

There were no major acquisition and disposal of assets of the Company.

(VI) INDEPENDENT OPINION OF THE SUPERVISORY COMMITTEE ON THE SELF-ASSESSMENT REPORT ON INTERNAL CONTROL OF THE COMPANY

The self-assessment report on internal control of the Company has truthfully reflected the establishment and implementation of the internal control of the Company and its internal control system is sound and effective.

(VII) INDEPENDENT OPINION OF THE SUPERVISORY COMMITTEE ON THE ESTABLISHMENT AND IMPLEMENTATION OF THE MEASURES ON INSIDER MANAGEMENT

The insider management system of the Company is sound and comprehensive, effective in its implementation and able to keep all insider information confidential.

The Supervisory Committee of the Company will continue to perform its duties with due care to facilitate the standardized operation of the Company and to safeguard the lawful interests of the Company and its shareholders in strict compliance with the Company Law and the Articles of Association.

VIII. EMPLOYEES

(I) Employees as at the end of 2021

Number of current employees of the headquarter of the Company *(number of person)*	223
Number of current employees of the branches/subsidiaries of the Company *(number of person)*	77,649
Total number of current employees of the Group *(Number of person)*	**77,872**
Number of retired employees in respect of which the Company and subsidiaries bore cost *(number of person)*	12,640

Function

Category of Function	**Number of person**
Operation and repair	46,754
Management and administration	12,811
Finance	1,537
Research and development	2,619
Technical support	8,809
Sales and marketing	584
Others	4,758
Total	**77,872**

Education Level

Category of Education Level	**Number of person**
Postgraduate and above	3,496
University graduate	32,366
College graduate	20,354
Specialized secondary school graduate	8,707
Graduate of technical school, high school and below	12,949
Total	**77,872**

(II) Remuneration policy

The Company has formulated a remuneration policy comprising salary and performance assessment. The remuneration policy is competitive within the industry and is favoring the frontline employees.

(III) Training program

The Company has established a training system with different levels and channels to provide the employees with appropriate training in job skills, safe production and group management etc. During 2021, the accrued capital used for training was approximately RMB226 million. The number of attendances in training was approximately 1.1950 million with training hours of approximately 8.0528 million hours in aggregate. For details, please refer to the 2021 ESG Report of the Company.

(IV) Outsourced Work in 2021

Total number of working hours of outsourced work	107.24 million hours
Total remuneration paid for outsourced work	RMB4,537 million

IX. PROFIT DISTRIBUTION POLICY DURING THE REPORTING PERIOD

(I) Formulation, implementation or adjustment of cash dividend policy

In accordance with the requirements of the relevant laws and regulations and the Articles of Association, the profit distribution policy of the Company shall maintain continuity and stability and take full consideration of achieving reasonable returns for investors. The Company shall give priority to profit distribution in cash dividends. The profit distribution policy of the Company complies with the Opinions of the State Council on Further Improving the Quality of Listed Companies (《國務院關於進一步提高上市公司品質的意見》) and the Guideline on Encouragement of Cash Dividend Distribution of Listed Companies announced by the CSRC.

Pursuant to the Articles of Association, the profit distribution of the Company shall be made based on the profit for the year attributable to equity holders of the Company in the consolidated financial statements prepared under the China Accounting Standards for Business Enterprises and the International Financial Reporting Standards, whichever is lower. Annual profit distribution in cash shall be no less than 35% of the net profit for the year attributable to equity holders of the Company subject to the relevant conditions.

In order to implement the Securities Law of the PRC, strengthen the protection of investors' legitimate rights and interests, and respond to the demands of investors, especially minority shareholders, as approved on the 2019 AGM of the Company and in line with the Article of Association, the profit distributed by the Company in cash from 2019 to 2021 shall not be less than 50% of the net profit attributable to shareholders of the Company realized in that year.

(II) Special description for cash dividend policy

Whether it complies with the provisions of the Articles of Association or the requirements of the proposals of the general meeting	Yes
Whether the criteria and percentage of dividends are clear and unambiguous	Yes
Whether the relevant decision procedures and mechanism are complete	Yes
Whether Independent Directors have performed their duties and responsibilities and played their full role	Yes
Whether small and medium shareholders have adequate opportunities to express the opinions and concerns, and whether their legitimate rights are fully protected	Yes

(III) Cash dividend scheme/plan

1. Cash dividend scheme for 2021

Net profit attributable to equity holders of the Company for 2021 under the China Accounting Standards for Business Enterprises amounted to RMB50,269 million, with basic earnings per share of RMB2.530/share; profit attributable to equity holders of the Company for 2021 under the International Financial Reporting Standards amounted to RMB51,607 million, with basic earnings per share of RMB2.597/share. As at 31 December 2021, the profit available for distribution to shareholders of the Company under the China Accounting Standards for Business Enterprises amounted to RMB179,811 million.

The Board proposed the payment of a final dividend in cash of RMB2.54 per share (inclusive of tax) for the year 2021 based on the total share capital registered on the equity registration date of implementing equity distribution. According to the total share capital of 19,868,519,955 shares of the Company as at 31 December 2021, the final dividend totals RMB50,466 million (inclusive of tax), accounting for 97.8% of the profit for the year attributable to equity holders of the Company under the International Financial Reporting Standards, or 100.4% of the net profit for the year attributable to equity holders of the Company under the China Accounting Standards for Business Enterprises.

	Profit distribution scheme/plan for the recent three years (including the reporting period)			
	Dividend per 10 shares (inclusive of tax) *RMB*	Amount of cash dividend (inclusive of tax) *RMB million*	Net profit attributable to equity holders of the Company in the consolidated financial statements of the respective dividend year in accordance with China Accounting Standards for Business Enterprises *RMB million*	Percentage to the net profit attributable to equity holders of the Company in the consolidated financial statements *%*
Final dividend for the year 2021 (Proposed)	25.4	50,466	50,269	100.4
Final dividend for the year 2020	18.1	35,962	39,170	91.8
Final dividend for the year 2019	12.6	25,061	43,250	57.9

2. The above final dividend plan for the year 2021 is in compliance with the requirement of the Articles of Association and endorsed by the Independent Directors and approved by the Board. When recommending the plan for the year 2021, the Board has attended to and considered the opinions and concerns of the shareholders of the Company. The Company will hold the 2021 annual general meeting on Friday, 24 June 2022 to consider the relevant resolutions, including the above dividend plans as proposed by the Board.

3. The final dividend for the year 2021, which is denominated and declared in RMB, will be paid in RMB to holders of the Company's A shares, including holders of the Company's A shares through the Northbound Trading Link of the Shanghai-Hong Kong Stock Connect, hereinafter referred to as the "Northbound Shareholders", and holders of the Company's H shares through the Southbound Trading Link (including Shanghai and Shenzhen markets, hereinafter referred to as the "Southbound Shareholders"). Dividends to holders of the Company's H shares, except the Southbound Shareholders, are paid in HKD. The dividend paid in HKD is calculated according to the exchange rate based on the average benchmark rate of RMB against HKD, as published by the Bank of China five business days preceding the date of declaration of such dividend.

   In accordance with the preliminary arrangement of profit distribution plan for year 2021 and the 2021 annual general meeting of the Company, the final dividend for the year 2021 for the Company's H shareholders is estimated to be distributed on or about 24 August 2022.

4. Pursuant to the Articles of Association:

(1) After the SSE is closed in the afternoon on Tuesday, 21 June 2022, the shareholders of A shares of the Company and its proxies of shareholders as registered in the China Securities Depository and Clearing Corporation Limited Shanghai Branch are entitled to attend and vote at the 2021 annual general meeting of the Company;

(2) According to the relevant regulations of China Securities Depository and Clearing Corporation Limited Shanghai Branch and market practice adopted for final dividend distribution for A shares, the Company will publish a separate announcement on implementation of equity distribution in respect of the distribution of final dividend for the year 2021 to holders of A shares after the 2021 annual general meeting to determine the record date, ex-rights date and dividend distribution date for the distribution of final dividend for the year 2021 to holders of A shares.

5. The arrangement of temporary closure of the register of members of H shares of the Company:

		Temporary closure of the register of members			
No.	**Corresponding Rights**	**First Day (inclusive)**	**Last Day (inclusive)**	**The last day for registering members**	**The Company's share registrar for H shares**
1	Attending and voting at the 2021 annual general meeting	Tuesday, 21 June 2022	Friday, 24 June 2022	4:30 p.m. on Monday, 20 June 2022	Computershare Hong Kong Investor Services Limited
2	Entitled to the final dividend for the year 2021	Friday, 1 July 2022	Friday, 8 July 2022	4:30 p.m. on Monday, 30 June 2022	Computershare Hong Kong Investor Services Limited

6. In accordance with the provision of Enterprise Income Tax Law of the PRC and its implementation regulations and the State Taxation Administration of the PRC (Guo Shui Han [2008] No. 897), the Company is required to withhold and pay enterprise income tax at the rate of 10% on behalf of the non-resident enterprise shareholders whose names appear on the register of members for H shares of the Company when distributing final dividends. The Company shall withhold and pay enterprise income tax in respect of the final dividend for the year 2021 of the Company for the non-resident enterprise shareholders whose name would appear on the register of members for H shares of the Company on 8 July 2022.

7. According to Guo Shui Han [2011] No. 348 issued by the State Taxation Administration, the Company shall distribute cash dividends to the individual shareholders whose names appear on the register of members for H shares, and has obligations to withhold and pay individual income tax for dividend payable. The individual shareholders of H shares are entitled to the relevant preferential tax treatment pursuant to the provisions in the tax agreements entered into between their countries of residence and China or the tax arrangements between China's mainland and Hong Kong (Macau).

If the individual shareholders of the H shares who are Hong Kong or Macau residents or residents of the countries which have an agreed tax rate of 10% with China, the Company shall withhold individual income tax at a rate of 10%. If the individual shareholders of the H shares are residents of countries which have an agreed tax rate of less than 10% with China, the Company shall withhold individual income tax on behalf of them in accordance with relevant provisions required by the Announcement of the State Taxation Administration in relation to the Administrative Measures on Preferential Treatment Entitled by Non-resident Taxpayers under Tax Treaties (No. 35 Announcement of the State Taxation Administration in 2019). If the individual shareholders of the H shares are residents of countries which have an agreed tax rate of over 10% but less than 20% with China, the Company shall withhold the individual income tax on behalf of them at the agreed actual rate. In case the individual shareholders of the H shares are residents of countries which have not entered into any tax agreement with China, or the agreed tax rate with China is 20% or otherwise, the Company shall withhold the individual income tax at a rate of 20%.

The Company shall use the registered address (hereinafter referred to as "registered address") as recorded in the register of members of H shares on 8 July 2022 as the criterion in determining the residence of the individual shareholders of H shares who are entitled to receive the final dividend for the year 2021 of the Company, and withhold and pay individual income tax accordingly. If the residence of the individual shareholders of H shares is inconsistent with the registered address, such shareholders shall notify the Company's share registrar for H shares at or before 4:30 p.m. on 30 June 2022 with the relevant evidence at Computershare Hong Kong Investor Services Limited of 17M Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong.

8. With respect to the Southbound Shareholders, according to the relevant requirements of China Securities Depository and Clearing Corporation Limited, China Securities Depository and Clearing Corporation Limited Shanghai Branch and Shenzhen Branch shall receive cash dividends distributed by the Company as the nominee of the Southbound Shareholders for Shanghai market and Shenzhen market, respectively and distribute such cash dividends to the relevant Southbound Shareholders through its depository and clearing system.

According to the relevant provisions under the "Notice of MOF, SAT and CSRC on the Tax Policies for Shanghai-Hong Kong Stock Connect Pilot Programme" (Cai Shui [2014] No. 81) and the "Notice of MOF, SAT and CSRC on the Tax Policies for Shenzhen-Hong Kong Stock Connect Pilot Programme" (Cai Shui [2016] No. 127) under the Ministry of Finance, State Administration of Taxation of China and CSRC, the Company shall withhold individual income tax at the rate of 20% with respect to dividends received by individual investors in China's mainland for investing in H-shares listed on the HKEx through Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect. The dividends and bonuses earned by securities investment funds in China's mainland investing in shares listed on the HKEx through Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect shall be withheld on a individual income tax basis. The Company is not required to withhold income tax on dividends derived by enterprise investors in China's mainland, and such enterprises shall report the income and make tax payment by themselves. The record date and the relevant arrangements of dividend distribution for Southbound Shareholders are the same as that of the Company's shareholders of H shares.

9. The Company assumes no responsibility arising from any delayed or inaccurate determination of the status of the shareholders or any dispute over the mechanism of withholding. Shareholders should consult their tax advisers regarding China's mainland. Hong Kong and other tax implications of owning and disposing of the Company's H shares.

10. Pursuant to the Articles of Association, the Company is entitled to forfeit the dividends which have been declared for more than six years but yet to be claimed, subject to compliance with relevant Chinese laws and administrative regulations. Shareholders are advised to collect the dividends distributed by the Company in a timely manner.

X. THE SHARE OPTIONS INCENTIVE PLAN, EMPLOYMENT STOCK OWNERSHIP SCHEME OR OTHER EMPLOYEE INCENTIVE SITUATION OF THE COMPANY AND THEIR IMPACTS

☐ Applicable ✔ Not applicable

XI. Appraisal Mechanism for Senior Management, and the Establishment and Implementation of the Incentive Mechanism during the Reporting Period

The Company adheres to the principle of unity between motivation and discipline in the appraisal of its senior management officers, and establishes a remuneration mechanism that matches operational performance, risk-taking and responsibility, to fully mobilise the enthusiasm of senior management officers. Senior management officers will be appraised at the end of the period based on the achievement of relevant indicators with annual remuneration upon the approval of the Board in accordance with the appraisal results.

XII. EVALUATION MECHANISM FOR THE SENIOR MANAGEMENT DURING THE REPORTING PERIOD, AND THE ESTABLISHMENT AND IMPLEMENTATION OF INCENTIVE SCHEME

The Company adheres to the principle in combination of incentive and discipline in the evaluation of senior management, establishes a remuneration mechanism that matches operational performance, undertaking of risks and responsibility, and fully mobilises the enthusiasm of senior management. The performance evaluation of senior management is conducted at the end of the period based on the completion of relevant metrics, and the annual remuneration will be paid in accordance with the evaluation results after the approval of the Board.

XII. ESTABLISHMENT AND IMPLEMENTATION OF INTERNAL CONTROL SYSTEM DURING THE REPORTING PERIOD

The Company has established a risk-oriented internal control system. The internal control and risk management procedures of the Company include risk assessment and reporting at the beginning of the year, quarterly major risk monitoring, daily system risk review and specialized supervision and inspection on internal control, and annual internal control evaluation, forming an integrated closed-loop management system. Also, a hierarchical work organizational structure comprising the Board and the Audit Committee, the functional departments of the headquarters and the subsidiaries and branches of the Company was established to safeguard the effective operation of internal control and risk management. The Board is responsible for risk management and internal monitoring and control systems, and is accountable for reviewing the effectiveness of such systems. The Board conducts review on risk management and internal monitoring and control systems once a year. The Board considers that the risk management and internal monitoring and control systems of the Group were effectively operated in 2021.

It is the responsibility of the Board of the Company to establish a sound internal control system effectively implement it and evaluate its effectiveness, and make bona fide disclosure on the Self-assessment Report on Internal Control in accordance with the relevant national laws and regulations and the Enterprise Internal Control Normative System. The Supervisory Committee is responsible for the supervision on the internal control system established and implemented by the Board, while the management of the Company is responsible for the organization and guidance of the daily operation of internal control within the Company.

The objectives of the internal control of the Company are to provide reasonable assurance on lawful operation and management, asset safety and the truthfulness and completeness of financial reports and relevant information, to enhance operation efficiency and effectiveness, and to facilitate the implementation of development strategies. As there are inherent limitations on internal control, assurance can only be provided for the above objectives to a certain reasonable extent. In addition, there are certain risks in predicting the effectiveness of future internal control based on the results of assessment on internal control given to the inappropriate internal control or the loosened level of compliance with policies and procedures on internal control that may be resulted by changes in different circumstances.

An internal control supervision and inspection mechanism was formed to conduct evaluation on internal control on annual basis. Procedures for internal control evaluation include: formulating a proposal for internal control evaluation, establishing a working committee of internal control inspection, conducting self-evaluation on internal control, conducting evaluation on internal control by inspectors, communicating and identifying deficiencies in internal control, rectifying deficiencies in internal control and preparing report on internal control. The Company has evaluated the effectiveness of internal control for 2021 in accordance with the aforementioned procedures.

The 2021 Work Plan for Internal Control Evaluation of the Company was considered and approved by the Audit Committee under the Board, and the 2021 Work Report on Internal Control Evaluation was considered and approved by the Board. The Board and the Audit Committee of the Company are of the view that such inspection and supervision mechanism is able to evaluate the effectiveness of internal control and risk management operation of the Company.

According to the evaluation, during the reporting period, all businesses and matters involving major risks have been included in the scope of evaluation, and internal control system has been established for and effectively implemented on major businesses and matters, which accomplished the objectives of internal control of the Company.

As presented in the 2021 Report on Internal Control Evaluation of the Board, no material defects were found in the internal control of financial reporting as at the base date of the Report on Internal Control Evaluation, pursuant to the identification of material defects in the internal control over the financial reporting of the Company. The Board is of the opinion that the Company has maintained effective internal control over its financial reporting in all material aspects in accordance with the requirements under the Enterprise Internal Control Normative System and relevant regulations and its supplementary guidelines as well as other regulatory requirements on internal control. Based on the identification of material defects in the internal control over nonfinancial reporting of the Company, no material defects were identified by the Company in the internal control over non-financial reporting as at the base date of the Report on Internal Control Evaluation. Nothing that would affect the evaluation result of the effectiveness of internal control occurred from the base date of the Report on Internal Control Evaluation to the date of issuance of the Report on Internal Control Evaluation.

Regarding the treatment and publishing of inside information, the Company has formulated internal systems such as the Administrative Measures for the Insider Information and Insider Registration and the Administrative Measures for Information Disclosure and Internal Report for Material Matters, which stipulated, among others, the scope of insider information and insiders, reporting process, registration and filing, and prohibited behaviors. The scope of insiders is under strict control so as to eliminate the risk of insider information leakage.

Material defects in the internal control during the reporting period:

☐ Applicable ☑ Not applicable

XIII. MANAGEMENT CONTROL OVER SUBSIDIARIES

The Company exercises effective control over its subsidiaries in major areas and key areas through the establishment of rules and regulations, supervision and evaluation, and information technology construction. In terms of management and control structure according to the provisions of the Articles of Association of its subsidiaries, the Company reviews resolutions involving the appointment and removal and evaluation of personnel, the appointment of Directors, Supervisors and senior management and the establishment of organization to be submitted to the general meeting, the board of Directors and the Supervisory Committee of the subsidiaries for consideration, and exercised nominations rights and voting rights in accordance with the provisions of the Articles of Association of the subsidiaries. In terms of finance, the Company has established an integrated and efficient financial information system and formulated relevant financial accounting systems to standardize the accounting of its subsidiaries and branches and promote the improvement of the quality of accounting information. In terms of business, the Company fully promotes the digital and intelligent control, realizes integrated business centralized control through the production and operation collaborative dispatching information system, and strengthens the efficient collaboration among various subsidiaries and business segments. In terms of internal control, the Company inspects and evaluates the effectiveness of the internal control of its subsidiaries, and supervises and inspects the rectification of internal control deficiencies. In terms of related transaction, the Company formulates the management system and defines the procedures of management, review and approval, supervision and inspection of related transactions of its subsidies. In terms of information disclosure, the Company formulates a system in relation to information disclosure, internal report for material Matters and inside information management to standardize the information disclosure work standards of the Group, and clarifies the organization and duties of information disclosure work, to ensure that information disclosure is in compliance with the law.

XIV. DESCRIPTION OF SELF-ASSESSMENT REPORT ON INTERNAL CONTROL AND AUDIT REPORT ON INTERNAL CONTROL

KPMG Huazhen LLP, engaged by the Company, has issued the standard unqualified Audit Report on Internal Control. The Audit Report on Internal Control is of the opinion that as at 31 December 2021, China Shenhua had maintained effective internal control over its financial reporting in all material aspects in accordance with the Basic Standard for Enterprise Internal Control and the relevant requirements. The above audit opinions are in line with the opinions set out in the Selfassessment Report of the Board.

Please refer to the relevant announcement disclosed by the Company on the website of the SSE on 26 March 2022 for the 2021 Report on Internal Control Evaluation and Audit Report on Internal Control.

XV. RECTIFICATION OVER SELF-EXAMINATION PROBLEMS IN TARGETED CAMPAIGN ON GOVERNANCE OF LISTED COMPANIES

At the beginning of 2021, according to the relevant requirements of the CSRC, the Company conducted self-examination and self-correction on its corporate governance for the three years from 2018 to 2020. As a result of the self-examination, the Company did not violate the relevant provisions of the Company Law and the Securities Law in respect of the operation and decision-making of organization, controlling shareholders and related parties, construction of internal control system and information disclosure.

I. ENVIRONMENTAL INFORMATION

(I) Environmental protection information of the companies and their significant subsidiaries classified as the key pollutant discharge units as published by the competent environmental protection authorities of the PRC

1. Information on pollutant discharge

As at 31 December 2021, 26 subsidiaries of the Group were categorized as national major pollution source under supervision (including waste gas, wastewater and hazardous solid waste pollution source enterprises), mainly coal-fired power plants, coal chemical plants and coal preparation plants, etc. which are located in places including Inner Mongolia, Shaanxi, Hebei, Fujian and Guangdong.

The main pollutants emitted by waste gas exhausting enterprises are sulfur dioxide, nitrogen oxides and soot, which are emitted to the atmosphere through the chimneys. Waste gas exhausting enterprises are mainly public thermal power plants, etc, coal-to-chemical captive power plants, heating boilers for mines and coking plants. Emission standards implemented include Emission Standards for Air Pollutants Produced by Thermal Plants (GB13223–2011), Emission Standards for Air Pollutants Produced by Boilers (GB13271–2014) and Emission Standards for Pollutants Produced by Coking Chemical Industry (GB16171– 2012).

The main pollutants discharged by wastewater discharging enterprises are chemical oxygen demand (COD), which are discharged to the surface water through the sewage outfall of the enterprises. Wastewater enterprises are mainly coal mines and coal-to-chemical enterprises. The emission standard implemented was the Comprehensive Emission Standards for Sewage (GB8978–1996).

The table below sets forth the emissions from enterprises under the state's key supervision and control of pollution sources (waste gas) under the Group in 2021:

Company	Major pollutant	Total Emissions *(tonnes)*	Average emission concentration *(mg/Nm³)*	Total approved Emissions *(tonne/year)*	Number of discharge ports	Distribution of discharge ports	Discharge method	Excessive emissions *hours*	Operation rate of pollution prevention facilities *(%)*
Power Plant of Guoneng Yili Energy Co., Ltd.	SO_2	583	34.79	3,200	4	Each unit has one discharge port.	Organised continuous discharge	1	100
	NO_X	1,626	97.07	3,200				0	100
	Soot	63	3.74	480				1	100
Jinjie Energy (Power Plant)	SO_2	1,375	15.69	2,458	3	Two units share one discharge port.	Organised continuous discharge	0	100
	NO_X	2,467	29.14	4,422.18				0	100
	Soot	264	2.99	884.45				0	100
Taishan Power	SO_2	1,596	17.12	4,780	6	Units 1 and 2 share one discharge port; Units 3-7 share one discharge port.	Organised continuous discharge	0	100
	NO_X	2,840	30.45	9,560				0	100
	Soot	133	1.42	1,620				0	100

Company	Major pollutant	Total Emissions *(tonnes)*	Average emission concentration *(mg/Nm³)*	Total approved Emissions *(tonne/year)*	Number of discharge ports	Distribution of discharge ports	Discharge method	Excessive emissions *hours*	Operation rate of pollution prevention facilities *(%)*
Guoneng Shenfu (Shishi) Power Generation Co., Ltd.	SO_2	950	22.32	3,675	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	1,944	45.76	3,675				0	99.91
	Soot	186	4.41	309				3	100
Baotou Coal Chemical	SO_2	239	16.54	2,810.22	2	The flue gas of the thermoelectric boiler system shares one discharge port, and a separate discharge port is set for the off gas of the sulfur recovery facilities.	Organised continuous or intermittent discharge	0	100
	NO_X	505	45.43	1,451.39				0	100
	Soot	73	5.92	428.75				0	100
Cangdong Power	SO_2	495	10.74	1,842.65	4	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	1,024	22.3	2,632.36				0	99.92
	Soot	78	1.68	292.06				0	100
Dingzhou Power	SO_2	483	10.6	1,814.31	4	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	957	23.04	2,591.87				0	100
	Soot	73	1.76	521.86				0	100
Sichuan Energy Jiangyou Power Plant	SO_2	149	31.86	2,427	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	381	81.91	1,320				11	99.88
	Soot	44	9.74	383				0	100
Guoneng Chongqing Wanzhou Electric Power Co., Ltd.	SO_2	716	20.36	1,000	2	Each unit has one discharge port.	Organised continuous discharge	0	97.91
	NO_X	1,428	41.23	1,500				0	72.6
	Soot	78	2.37	200				0	100
Huizhou Thermal	SO_2	454	26.9	501.52	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	660	38.91	716.46				0	100
	Soot	22	1.3	71.65				0	100
Mengjin Power	SO_2	437	22.18	1,079	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	810	40.07	1,542				0	100
	Soot	55	2.65	308				0	100
Dianta Power Plant of Shendong Power	SO_2	156	15.22	1,031.81	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	319	30.57	1,474.02				3	99.86
	Soot	23	2.77	294.80				0	100
Shouguang Power	SO_2	418	13.4	1,347.50	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	966	31.2	1,925				0	100
	Soot	38	1.25	192.50				0	100

Company	Major pollutant	Total Emissions *(tonnes)*	Average emission concentration *(mg/Nm³)*	Total approved Emissions *(tonne/year)*	Number of discharge ports	Distribution of discharge ports	Discharge method	Excessive emissions *hours*	Operation rate of pollution prevention facilities *(%)*
Jiujiang Power	SO_2	477	12.8	2,805	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	1,049	29.97	3,014				0	100
	Soot	28	0.79	1,065				0	100
Zhunge'er Power	SO_2	317	21.38	3,840	2	One discharge port each for Phase I and Phase II.	Organised continuous discharge	0	100
	NO_X	544	38.9	3,840				0	100
	Soot	43	3.06	576				0	100
Fujian Jinjiang Thermal Power Co., Ltd.	SO_2	65	16.6	182	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	172	43.21	260				0	99.95
	Soot	6	1.75	52				0	100
Guoneng Jiangyou Thermal Power Co., Ltd.	SO_2	122	110.4	2,400	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	352	32.41	1,200				19	99.86
	Soot	58	5.45	348				0	100
Liuzhou Power	SO_2	154	14.26	3,727.20	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	390	37.63	1,863.60				0	100
	Soot	30	2.89	559				0	100
Guoneng Shenfu (Longyan) Power Generation Co., Ltd.	SO_2	252	20.41	358	1	The units share one discharge port.	Organised continuous discharge	2	100
	NO_X	529	42.92	839				39	99.45
	Soot	30	3.11	360				1	100
Shendong Power Daliuta Thermal Power Plant	SO_2	1	10.15	47.32	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	27	22.67	67.6				20	100
	Soot	0.2	2	13.52				0	100
Shendong Power Guojiawan Power Plant	SO_2	42	2.88	420	1	The units share one discharge port.	Organised continuous discharge	0	100
	NO_X	421	28.59	600				3	100
	Soot	8	0.55	120				0	100
Shenmu Power	SO_2	28	9.06	189	1	The units share one discharge port.	Organised continuous discharge	2	100
	NO_X	77	27.43	270				3	99.5
	Soot	4	6.66	54				0	100
Bayan Nur Energy	SO_2	21	18.93	75	1	There is one discharge port at the coke oven chimney.	Organised continuous discharge	17	99.65
	NO_X	303	266.68	750				3	99.65
	Soot	8	6.66	45				0	99.65
Shengli Energy	SO_2	85	17.5	1,016.4	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	217	42	1,271				0	100
	Soot	7	2.7	290.4				0	100
Yongzhou Power	SO_2	34	18.53	895	2	Each unit has one discharge port.	Organised continuous discharge	0	100
	NO_X	107	35.5	1080				0	100
	Soot	4	1.2	110				0	100

The table below sets forth the emissions from enterprises under the state's key supervision and control of pollution sources (COD) under the Group in 2021:

Company	Major pollutant	Total Emissions *tonnes*	Average emission concentration *mg/Nm³*	Total approved Emissions *tonne/year*	Number of discharge ports	Distribution of discharge ports	Discharge method	Excessive emissions *hours.*	Operation rate of pollution prevention facilities *%*
Baotou Coal Chemical	COD	107.36	32.7	150	1	One external sewage outlet	Continuous discharge	0	100
Jinjie Energy (coal mine)	COD	141.41	6.54	–	3	Outlet of well water treatment plant for the main shaft; Zaoshaogou forced outlet; Hezegou forced outlet	Continuous or intermittent discharge	0	100
Daliuta Coal Mine of Shendong Coal	COD	27.26	4.31	54.45	1	Outlet of well water treatment plant for the main shaft	Continuous or intermittent discharge	0	100

In 2021, the total emission of major enterprises under the state's key supervision and control of pollution sources (solid and hazardous waste) of the Group is as follows: 1,731.4 tonnes from Baotou Coal Chemical, 16.2 tonnes from Liuzhou Power, all of which are disposed in compliance with the laws and regulations with no external discharge.

Investors should be aware that the above data are from self-monitoring of the Company, which are not confirmed by the local environmental protection regulatory authorities and may be different from the final data determined by the local environmental protection regulatory authorities.

With regard to the provisions under the existing laws, the management believes that there is no contingent risk in relation to environmental protection that may bring material and adverse effect to the financial position and operating results of the Group. Contingent liabilities which may arise in the future cannot be accurately predicted.

2. Construction and operation of pollution prevention and control facilities

During the reporting period, the Group was well-equipped with pollution prevention and control facilities that were under stable operation. Except for fume temperature which failed to meet the operation conditions of desulfurization facility in a short term during start-stop of coal-fired units, annual operation rate of pollution prevention and control facilities reached 100%. In terms of waste water prevention and control, the Group built distributed underground reservoirs. Mine water was used for production, living and ecological engineering after natural purification by gangue in goaf areas. All enterprises were equipped with sewage treatment plants or facilities, in order to achieve comprehensive treatment and utilization of production and domestic sewage. In terms of waste gas prevention and control, limestone gypsum wet desulfuration was employed by coal-fired power plants and boilers; LNBs and SCR were applied for denitration; electrostatic precipitator and wet dust collectors were applied for removing soot. Hydrogen sulfide gas generated from chemicals was emitted after treatment by two-stage Claus + exhaust gas hydrogenation technology. In terms up to the standard of coal dust prevention and control, coal yard was fully closed or was equipped with wind-proof and dust suppressing wall and spraying facility. Coals were solidified before shipment. In terms of solid waste, general solid wastes such as coal gangue, furnace ash and desulphurization gypsum, were utilized for power generation, brickmaking, etc. All hazardous solid wastes were collected and stored at temporary warehouse, and were disposed of and transferred in compliance with the relevant requirements. Soundproof door, soundproof window and efficient composite sound barrier and other facilities were installed for reducing noise.

3. Environmental effect appraisal of construction project and other administrative approvals on environmental protection

In terms of construction project, the Group carried out simultaneously three management measures, being environmental impact appraisal and energy conservation appraisal, soil conservation inspection and acceptance, as well as environmental protection inspection and acceptance. The environmental impact appraisal, as well as environmental protection inspection and acceptance of construction completion, water environmental protection inspection and acceptance and other relevant tasks have been conducted, respectively, in accordance with the law. Pollutants discharge licence of national major pollution source under supervision enterprises are as follows:

Company Name	Drainage Permit Number	Issuing Authority	Date of Acquisition	Expiry Date	Description of License Changes in 2021
Power Plant of Guoneng Yili Energy Co., Ltd.	91150621797172626N001P	Erdos Ecological Environment Bureau	12 June 2020	12 June 2025	Renewal
Jinjie Power	91610806755247976C001P	Yulin Ecological Environment Bureau	27 May 2020	26 May 2025	Change
Taishan Power	91440781727840297A	Jiangmen Ecological Environment Bureau	20 April 2020	31 May 2025	Change
Guoneng Shenfu (Shishi) Power Generation Co., Ltd.	91350581052340074H001P	Quanzhou Ecological Environment Bureau	23 June 2020	22 June 2025	Change of Company name
Baotou Coal Chemical	911502000783949434001P	Baotou Ecological Environment Bureau	27 June 2020	30 June 2025	Change
Cangdong Power	911309117356054492001P	Cangzhou Ecological Environment Bureau	18 September 2021	17 September 2026	Reapply

Company Name	Drainage Permit Number	Issuing Authority	Date of Acquisition	Expiry Date	Description of License Changes in 2021
Dingzhou Power	911130000601110408T001P	Department of Ecology and Environment of Hebei Province	21 June 2020	20 June 2025	Renewal
Sichuan Energy Jiangyou Power Plant	915107817729546807001P	Mianyang Ecological Environment Bureau	4 December 2020	5 years	Change of Company name
Guoneng Chongqing Wanzhou Electric Power Co., Ltd.	91500101050356427B001P	Chongqing Wanzhou District Ecological Environment Bureau	10 March 2020	22 March 2025	Change of Company name
	91500101050356427B002Q	Chongqing Wanzhou Ecological Environment Bureau	24 July 2020	23 July 2023	Change of Company name
Huizhou Thermal	91441300669838702N001P	Huizhou Ecological Environment Bureau	6 August 2020	31 May 2025	Change of Company name
Mengjin Power	91410000674137417P001P	Luoyang Ecological Environment Bureau	17 January 2022	16 January 2027	Change
Dianta Power Plant of Shendong Power	916108069239349286001P	Yulin Ecological Environment Bureau	26 May 2020	26 May 2025	Renewal
Shouguang Power	91370783695434656X001P	Weifang Ecological Environment Bureau	7 September 2021	6 September 2026	Renewal
Jiujiang Power	91360429573617139E001P	Jiujiang Ecological Environment Bureau	8 July 2020	24 October 2025	Renewal
Zhunge'er Power	9115000070125242XH001P	Erdos Ecological Environment Bureau	13 June 2020	12 June 2025	Renewal
Fujian Jinjiang Thermal Power Co., Ltd.	91350582766182784B001P	Quanzhou Ecological Environment Bureau	24 June 2020	22 June 2025	Change
Guoneng Jiangyou Thermal Power Co., Ltd.	91510781749716818XL001P	Mianyang Ecological Environment Bureau	4 December 2020	5 years	Change of Company name
Liuzhou Power	914502230790828611001P	Administrative Approval Bureau of Liuzhou	22 June 2020	21 June 2025	Renewal
Guoneng Shenfu (Longyan) Power Generation Co., Ltd.	91350800665064105M001P	Longyan Ecological Environment Bureau	29 June 2020	30 June 2025	Change of Company name
Shendong Power Daliuta Thermal Power Plant	91610000710924961H001P	Yulin Ecological Environment Protection Bureau	15 June 2020	18 June 2025	Renewal
Shendong Power Guojiawan Power Plant	916108226879560162001P	Yulin Ecological Environment Bureau	26 May 2020	26 May 2025	Renewal
Shenmu Power	91610806758848611Y001P	Yulin Ecological Environment Bureau	30 June 2020	18 June 2025	Renewal
Bayan Nur Energy	91150824566931138J001P	Bayan Nur Ecological Environment Bureau	21 December 2020	21 December 2025	Change
Shengli Energy	91152500664096746A	Xilin Gol League Ecological Environment Bureau	2 July 2021	1 July 2026	Newly acquired
Yongzhou Power	91431100064229496R001R	Yongzhou Ecological Environment Bureau	28 October 2021	27 October 2026	Newly acquired
Daliuta Coal Mine of Shendong Coal	91610821770043971N013V	Yulin Ecological Environment Bureau	21 July 2020	20 July 2023	Change
	91610821770043971N014V	Yulin Ecological Environment Bureau	23 July 2020	12 July 2023	Change

4. Emergency plan for unexpected environmental incidents

During the reporting period, the Company has formulated their emergency plans for unexpected environmental incidents and conducted regular drills. The emergency preparation plans for environmental emergencies in national major pollution source under supervision enterprises are as follows:

Company Name	Filing Authority	Record Number
Power Plant of Guoneng Yili Energy Co., Ltd.	Dalate Banner Branch of Erdos Ecological Environment Bureau	150621-2022-002-M
Jinjie Power	Shenmu Ecological Environment Bureau	610821-2020-094L
Taishan Power	Jiangmen Ecological Environment Bureau	440781-2021-0019-M
Guoneng Shenfu (Shishi) Power Generation Co., Ltd.	Fujian Shishi Environmental Protection Bureau	350581-2021-054-M
Baotou Coal Chemical	Jiuyuan District Branch of Baotou Ecological Environment Bureau	150207-2020-027-H
Cangdong Power	Bohai New District Branch of Cangzhou Ecological Environment Bureau	130962-2022-009-M
Dingzhou Power	Dingzhou Ecological Environment Bureau	139001-2019-087-M
Sichuan Energy Jiangyou Power Plant	Mianyang Jiangyou Ecological Environment Bureau	510781-2021-15-M
Guoneng Chongqing Wanzhou Electric Power Co., Ltd.	Chongqing Wanzhou Ecological Environment Bureau	500102021070005
Huizhou Thermal	Huizhou Ecological Environment Bureau	441301-2020-036-H
Mengjin Power	Mengjin Branch of Luoyang Ecological Environment Bureau	410322-2021-186-M
Dianta Power Plant of Shendong Power	Shenmu Branch of Yulin Ecological Environment Bureau	610821-2021-066L
Shouguang Power	Shouguang Branch of Weifang Ecological Environment Bureau	370783-2019-224M
Jiujiang Power	Jiujiang Hukou Ecological Environment Bureau	360429-2019-012-M
Zhunge'er Power	Zhunge'er Banner Branch of Erdos Ecological Environment Bureau	150622-2021-195-L
Fujian Jinjiang Thermal Power Co., Ltd.	Quanzhou Jinjiang Ecological Environment Bureau	350582-2019-059-M
Guoneng Jiangyou Thermal Power Co., Ltd.	Mianyang Jiangyou Ecological Environment Bureau	510781-2021-15-M
Liuzhou Power	Liuzhou Luzhai Ecological and Environmental Protection Bureau	450223-2020-012-M
Guoneng Shenfu (Longyan) Power Generation Co., Ltd.	Longyan Xinluo Ecological Environment Bureau	350802-2020-036-L
Shendong Power Daliuta Thermal Power Plant	Shenmu Branch of Yulin Ecological Environment Bureau	610821-2021-136-M
Shendong Power Guojiawan Power Plant	Fugu Branch of Yulin Ecological Environment Bureau	610822-2018-053-M
Shenmu Power	Shenmu Branch of Yulin Ecological Environment Bureau	610821-2021-050L
Bayan Nur Energy	Urad Zhongqi Environmental Protection Bureau	150824-2020-07-M
Daliuta Coal Mine of Shendong Coal	Shenmu Environmental Protection Bureau	610821-2019-012-L

5. Environment self-monitoring plan

The Group standardized the management of the online environmental protection monitoring system, and formulated the Administration Measures for the Online Environmental Protection Monitoring System (Trial) (《環保在線監測系統管理辦法(試行)》) in accordance with the relevant national standards and administrative regulations for online monitoring of pollution source. All subsidiaries of the Company have completed the preparation of their self-monitoring plans. All the data in relation to wastewater and exhaust gas from automatic monitoring and entrusted monitoring were uploaded to the monitoring platform of the local environmental protection department according to the monitoring frequency and time limit for publication as determined in the monitoring plan. During the reporting period, all facilities were under normal operation.

6. Administrative penalties for environmental problems during the reporting period

Unit Name	Date	Penalty No.	Fine Amount *RMB0,000*	Reason for penalty
Jinjie Power	27 August 2021	Shan K Shen Mu Huan Fa [2021] 139	1	Part of the gangue in the waste dump was not covered.

7. Environmental protection tax payment and environmental pollution liability insurance

During the reporting period, the enterprises of the Group whose pollution source were under key supervision and control of the State paid environmental protection tax in accordance with the Environmental Protection Tax Law of the People's Republic of China, and were entitled to tax reduction or exemption in accordance with laws and regulations.

Total actual payment of environmental protection tax *(RMB0,000)*	Amount of environmental protection tax paid by tax item *(RMB0,000)*			
	Air pollutant	Water pollutant	Solid waste	Noise
5,958.59	5,860.64	97.95	0	0

During the reporting period, the total amount of environmental pollution liability insurance insured by the national major pollution source under supervision enterprises of the Group was RMB867 million.

(II) Environmental issues of companies other than those classified as the key pollutant discharging units

1. Administrative penalties for environmental problems

Unit Name	Date	Penalty No.	Fine Amount *RMB0,000*	Reason for Penalty
Baotou Energy Lijiahao mine	11 January 2021	Dong Huan Ze Gai Zi [2021] No. 1	10	The industrial slag account was not established, which was not reported.
	11 January 2021	Dong Huan Ze Gai Zi [2021] No. 2	10	Paint buckets were stored in the temporary storage of hazardous wastes, which were not reported.
Shenshuo Railway Branch	9 March 2021	Shaan K Huan Fa [2021] No. 23	10	During the shutdown of online monitoring facilities from October 29 to November 10, 2020, manual monitoring was not performed and monitoring data were not reported as required.
Shendong Coal Mine Comprehensive Branch	24 June 2021	Shaan K Huan Fa [2021] No. 119	20	The construction project was put into operation before acceptance.
Shendong Coal Halagou Mine	1 July 2021	Shaan K Shen Mu Huan Fa [2021] No. 118	20	Online waste liquid was mixed with other sundries for storage.
Equipment Maintenance Center of Shendong Coal	9 August 2021	Shaan K Shen Mu Huan Fa [2021] No. 119	20	The supporting materials department of the No. 3 Plant of the Maintenance Center "put into operation without testing".
Shipping Company	9 August 2021	Hai Shi Fa Zi [2021] 160800005411	0.2	The disposal of pollutants of the ship was not recorded truthfully
Baotou Energy Shuiquan open pit mine	24 August 2021	Bao Huan Fa 150221 [2021] No. 14	4	700 tonnes of raw coal was piled up in the open air, and no effective dust prevention measures such as closed enclosures or coverings were taken.
Baotou Energy Shenshan open pit mine	31 August 2021	E Huan Zhun Fa [2021] No. 80	10	The waste oil drums in the temporary storage of hazardous waste were not provided with hazardous waste identification marks as required.
Shendong Coal Shigetai Mine	7 September 2021	Shaan K Shen Mu Huan Fa [2021] No. 152	10	Dumped gangue.
Baotou Energy Shenshan open pit mine	5 December 2021	E Huan Zhun Fa [2021] No. 181	30	The ammonia nitrogen and phosphate of domestic sewage exceeded the standard.
Shendong Coal Halagou Mine	28 December 2021	Shaan K Shen Mu Huan Fa [2021] No. 196	20	Hazardous wastes were not stored, utilized and disposed of in accordance with national environmental protection standards.

2. Other environmental information

During the reporting period, all subsidiaries of the Group, except the enterprises whose pollution sources were under key supervision and control of the state, implemented environmental protection responsibilities according to the unified requirements of the Company, regularly carried out special environmental protection monitoring and hidden danger investigation and treatment, built and operated pollution control facilities, carried out land reclamation and vegetation restoration, and minimized the impact of production on the environment.

During the reporting period, total emission of major pollutants of the Group are as follows:

	Sulfur dioxide *0,000 tonnes*	**Nitrogen oxide** *0,000 tonnes*	**Soot** *0,000 tonnes*	**Chemical oxygen demand (COD)** *tonnes*	**Hazardous solid waste** *tonnes*
Enterprises whose pollution sources were under key supervision and control of the state	0.96	2.01	0.14	276	1,748
Enterprises whose pollution sources were under key supervision and control of China Shenhua	0.05	0.06	0.02	41	0
Other enterprises	0.17	1.35	0.03	147	4,455
Total	**1.18**	**3.42**	**0.19**	**464**	**6,203**

The environmental information contained in the 2021 Report on Environment, Social Responsibility and Corporate Governance of the Company, which was disclosed simultaneously with this Report, was independently verified by KPMG Huazhen LLP and a limited assurance report was issued.

(III) Actions taken by the Company to protect ecology, prevent pollution and fulfill environmental responsibilities

1. Environmental policy and implementation

The Group resolutely implements the decisions and arrangements of the CPC Central Committee and the State Council on ecological civilization construction and ecological environment protection, abides by the Environmental Protection Law and other national laws and regulations, practises the development concept of "lucid waters and lush mountains are invaluable assets", and regards ecological environment protection as the basic premise and rigid constraint for business development. The Group actively promotes pollution prevention and ecological treatment, strengthens the comprehensive utilization of mine water and other resources, and promotes the transformation of mining areas from ecological restoration to ecological optimization. The Group will promote the optimization and upgrade of industrial structure, optimize the integrated operation efficiency of coal and electricity, develop and build clean and renewable energy, implement energy conservation and emission reduction measures, control the intensity of greenhouse gas emissions, and explore the path of "carbon neutrality".

2. Environmental protection measures and achievements

In 2021, the Group continued to carry out in-depth pollution prevention and control, comprehensively promoted the construction of green mines, green transportation, green power and green chemicals, and made remarkable achievements.

The coal segment strictly observed the red line of ecological protection, carried out the construction of green mines, continuously promoted the treatment of mine collapse, land reclamation of open-pit mines, stripping, storage and utilization of construction topsoil, strengthens the coordinated protection and treatment of various ecological elements of mountains, rivers, forests, fields, lakes and grasses, and protected and improved the local ecological environment. At the end of 2021, the balance of the accrued reclamation expenses of the Group was RMB6.754 billion, and 14 coal mines were listed in the national green mine list and 6 coal mines were listed in the provincial green mine list. The annual utilization rate of mine (pit) water was 73.7%, and the comprehensive utilization of coal gangue was 26,506,300 tonnes.

The transport segment continued to implement the closed transformation of railway loading platform and silo construction, and sprayed dust suppressants in strict accordance with regulations. Construction of 1,205 tunnel dust monitoring devices started on Xinshuo Railway, and ground hardening and installation of dust-proof nets were completed in 6 freight yards on Shuohuang Railway. It continued to promote the green transformation and development of coal port. Huanghua Port has built an ecological water circulation system with a water storage capacity of 1.2 million square meters. Zhuhai Port has built a new 530m^3/h coal-bearing sewage treatment station. The sewage recovery rate of its own ports has reached 100%. Huanghua Port won the honorary title of "Asia-Pacific Green Port in 2021" at the Asia-Pacific Smart Port Development Forum sponsored by Asia-Pacific Port Services Network (APSN). The shipping segment strengthened the emission reduction of pollutants to meet the standards, promoted the transformation of shore power equipment and the application technology of electric heating of fuel oil of ships, and promoted the development of green and low-carbon cycle.

The power segment continued to carry out dust prevention and control, boiler adaptability, capacity expansion, energy saving and other technical transformation to reduce air pollutants and carbon emissions. Conventional coal-fired power generation units have achieved 100% ultra-low emission in 2019. In 2021, the average standard coal consumption of coal-fired power generation units of the Group was 305 g/kWh, a decrease of 2 g/kWh compared with the same period of last year. The comprehensive treatment of wastewater from power plants has been promoted, and Jinjie Power Plant and other units have achieved zero wastewater discharge.

Each production unit of Baotou Coal Chemical has maintained safe operation, and in 2021, it completed the transformation of desalination of discharged wastewater up to standard and the transformation of ultra-low emission of thermoelectric boilers.

(IV) Measures and effects taken to reduce carbon emissions during the Reporting period

The Group actively responded to the challenge of climate change. During the reporting period, it continued to take effective measures to promote the implementation of the Company's goal of realizing carbon dioxide emission capacity to reach the peak in 2025, actively exploring effective paths and striving to achieve carbon neutrality by 2060".

1. Energy structure transformation. The Group adopts a dual-wheel driving strategy with construction, production and operation as one driver and equity investment as well as M&A as another, and combines centralized base and distributed operation to accelerate the development of new energy industry. In 2021, the Company participated in the establishment of Beijing Guoneng New Energy industrial Investment Fund and Beijing Guoneng Green and Low-carbon Development Investment Fund, successively investing in wind power and photovoltaic projects in Shanxi, Jiangsu, Zhejiang, Lianghu and other places. By the end of 2021, the Group has put into operation 19 new energy construction projects, with a total installed capacity of 72,900 KW.

2. Innovation and application of energy conservation and emission reduction technology. The Group has implemented the requirements of energy conservation into the whole cycle and process of coal mining, transportation and transformation, and continuously improved the energy consumption index by improving the operational efficiency of the industrial chain, strengthening technological upgrading and transformation, comprehensive energy development and utilization and the application of clean energy.

3. Research and application of carbon capture technology. In 2021, the demonstration project of the whole process of carbon dioxide capture and storage after combustion in Jinjie Energy Coal-fired Power Plant was officially put into operation. During the reporting period, the device operated normally, and all key indicators met the design requirements, providing technical support for China's coal-fired power plants to achieve "near zero emission".

4. Implementation of ecological management and increase of carbon sink. The Group continues to carry out ecological restoration, promote the construction of green enterprises and ecological forests, and improve the greening coverage of the communities. In 2021, the Group added 92.56 million square meters of green area.

5. Active integration into the construction of carbon market. In 2021, the Group successfully completed the first performance cycle of the national carbon market, and its thermal power plants owned by thermal power enterprises and chemical enterprises achieved 100% performance, with a transaction quota of 2.28 million tonnes, a transaction of 40,000 tonnes of CCER (China Certified Emission Reductions) and a transaction volume of RMB86 million.

II. DETAILS OF THE COMPANY'S ACTIVE FULFILLMENT OF SOCIAL RESPONSIBILITIES

Please refer to the 2021 Report on Environment, Social Responsibility and Corporate Governance of the Company, which was disclosed simultaneously with this Report.

III. DETAILS OF THE COMPANY'S EFFORTS TO CONSOLIDATE AND EXPAND THE ACHIEVEMENTS OF POVERTY ALLEVIATION AND RURAL REVITALIZATION

In 2021, China Shenhua resolutely implemented General Secretary Xi Jinping's decision-making arrangements on poverty alleviation and rural revitalization and the spirit of the National Summary Commendation Conference on Poverty Alleviation, strictly implemented the rural revitalization work plan for 2021, consolidated the achievements of poverty alleviation in three targeted assistance counties of Mizhi County and Wubu County in Shaanxi Province, Butuo County in Sichuan Province and one designated assistance county of Nierong County in Tibet Autonomous Region ("four counties"), and the subsidiaries and branches jointed hands with local people and offered assistance to targed regions to promote the vigorous development of rural characteristic industries, compulsory education, ecological environment, health care and other undertakings, and promote rural revitalization steadily.

In 2021, China Shenhua invested a total of approximately RMB123 million in four counties, implementing 20 projects such as education assistance, medical and health assistance, drinking water safety assistance, infrastructure construction, industrial assistance, ecological assistance and Party building assistance, training 3,414 skilled talents and grass-roots cadres, introducing RMB0.7 million of external funds, and spending more than RMB29.9 million through purchasing and selling agricultural products. In addition, its 16 subsidiaries have made 35 aid donations, such as joining hands with local people for shard development and offering assistance to targeted regions , with a total investment of about RMB132.62 million.

In 2021, China Shenhua Rural Revitalization Practice Case was selected as the Excellent Practice Case of Rural Revitalization of Beijing Association of Listed Companies. Sichuan Energy and the Company's assistance working group in Butuo County won the title of "Sichuan Province Advanced Collective for Poverty Alleviation", Hu Xiaoming, a poverty-relief cadre, was awarded the title of "National Advanced Individual for Poverty Alleviation" by the CPC Central Committee and the State Council, and Yang Fachao, a poverty-relief cadre, was awarded the title of "Sichuan Province Advanced Individual for Poverty Alleviation" by the CPC Sichuan Provincial Committee and the Sichuan Provincial Government.

Section VII Significant Events

I. PERFORMANCE OF COMMITMENT

Background of Commitment	Type of Commitment	Party Making the Commitment	Commitment	Date and Duration of Commitment	Any Time Limit for Commitment	Timely and Strict Performance of Commitment	Detailed reasons shall be specified if commitment is not fulfilled in time	Further steps shall be specified if commitment is not fulfilled in time
Commitment in relation to initial public offering	Non-competition	China Energy	The two parties entered into "Non-competition Agreement" on 24 May 2005 and a "Supplemental Agreement to the Existing Non-Competition Agreement" on 1 March 2018. The Company is an integrated platform which is responsible for the coal business and affiliated to China Energy, China Energy has committed not to compete with the Company in respect of the Company's principal businesses (coal exploration, mining, processing, sales; production and sales of comprehensive utilization of coal products; development and management of coal products; railway transportation; port transportation; the industry and ancillary service related to the business aforementioned) whether inside or outside of the PRC, and granted the Company options and pre-emptive rights to acquire and be transferred any business opportunities and assets which may pose potential competition.	24 May 2005, long-term	Yes	Yes, in progress	N/A	N/A

II. NON-OPERATING APPROPRIATION OF FUNDS BY CONTROLLING SHAREHOLDER(S) AND OTHER RELATED PARTIES DURING THE REPORTING PERIOD

☐ Applicable ✔ Not applicable

III. GUARANTEES IN VIOLATION OF REGULATIONS

☐ Applicable ✔ Not applicable

IV. AUDIT OPINIONS AND OTHER EXPLANATIONS

(I) Explanation from the Board and the Supervisory Committee for the "non-standard audit report" issued by the auditors

☐ Applicable ✔ Not applicable

(II) The Company's analysis and explanation about the reasons for and impact of changes in accounting policies, accounting estimates or accounting method

In order to further strengthen cost management and provide more reliable and relevant accounting information, the Company adjusted the accounting policy for repair costs related to the Group's coal, power generation, transportation (including railway, port and shipping, the same below) and coal chemical businesses under China Accounting Standards for Business Enterprises with effect from 1 January 2021. In other words, the relevant repair costs previously charged to administrative expenses were adjusted to be accounted for as production costs, and the financial statements prepared in accordance with China Accounting Standards for Business Enterprises for the comparable periods was restated using the retrospective adjustment method. These changes in accounting policy has no material impact on other items in the financial statements for 2020 and prior years, the operating results and retained earnings at the beginning of the current year.

The aforesaid changes in accounting policies have no impact on the Group's financial statements prepared in accordance with IFRS.

(III) The Company's analysis and explanation about the reasons for and impact of correction to material previous errors

☐ Applicable ✔ Not applicable

V. APPOINTMENT AND REMOVAL OF AUDITORS

Name of Domestic Auditors of the Company	KPMG Huazhen LLP
Remuneration of Domestic Auditors of the Company *(RMB million)*	7.15
Term of Auditing of Domestic Auditors of the Company *(year)*	3
Name of International Auditors of the Company	KPMG
Remuneration of International Auditors of the Company *(RMB million)*	1.4
Term of Auditing of International Auditors of the Company *(year)*	3

On 25 June 2021, KPMG Huazhen LLP and KPMG were appointed as the domestic and international (Hong Kong) auditors of the Company respectively for 2021 at the Company's 2020 Annual General Meeting. Saved as disclosed above, the Company did not replace auditors in any year of the last three years.

	Name	Remuneration
Internal Control Auditor	KPMG Huazhen LLP	RMB0.95 million

In 2021, the above two auditors did not serve as the external auditors of subsidiaries of the Company.

VI. INSOLVENCY OR RESTRUCTURING RELATED MATTERS

☐ Applicable ✔ Not applicable

VII. MATERIAL LITIGATION AND ARBITRATION

☐ Applicable ✔ Not applicable

As at the end of the reporting period, the Group was not involved in any material litigation or arbitration. As far as the Group was aware, the Group did not have any material litigation or claim which was pending or threatened against the Group.

As at 31 December 2021, the Group was the plaintiff, defendant or the party of certain non-material litigations and arbitration. The management of the Company believes that any possible legal liability which may be incurred from the aforesaid cases will not have any material impact on the financial position of the Group.

VIII. SANCTIONS AND RECTIFICATIONS IMPOSED ON THE LISTED COMPANY AND ITS DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, CONTROLLING SHAREHOLDER, DE FACTO CONTROLLER AND OFFEROR

☐ Applicable ✔ Not applicable

IX. EXPLANATION FOR CREDIT OF THE COMPANY AND ITS CONTROLLING SHAREHOLDER AND DE FACTO CONTROLLER

☐ Applicable ✔ Not applicable

After enquiring National Enterprise Credit Information Publicity System, neither the Company nor China Energy, the controlling shareholder of the Company, was included in the list of enterprises with serious illegal and dishonest acts.

X. MATERIAL RELATED PARTY/CONNECTED TRANSACTIONS

(I) Related party/Connected transactions during the daily operation

The Audit Committee of the Board of the Company shall perform the duties of control and daily management of related party/connected transactions of the Company. The Company has a related party/connected transaction team under the direct supervision of the Chief Financial Officer, which is responsible for the management of related party/connected transactions; and has established a business process, which properly delineates the responsibilities of the Company, its subsidiaries and branches in the management of related party/connected transactions. The Company has also established routine examinations, reporting systems and accountability systems in the subsidiaries and branches of the Company, as to ensure the related party/connected transactions conduct in accordance with the terms of framework agreement.

As of the end of the reporting period and during the reporting period, the continuing related party/connected transaction agreements entered into by the Company include:

1. Non-exempt continuing related party/connected transactions between the Group and China Energy Group

China Energy holds 69.52% equity interest in the Company, and is the related party (connected person) of the Company. On 21 June 2019, as approved at the 2018 general meeting of the Company, the Company and China Energy entered into the Mutual Coal Supply Agreement ("Former Mutual Coal Supply Agreement"), Mutual Supplies and Services Agreement ("Former Mutual Supplies and Services Agreement") for 2020–2022 and set the annual caps of transactions contemplated under the related party/connected transactions mentioned above for each year from 2020 to 2022 on 22 March 2019. Both agreements are effective until 31 December 2022. Due to the rising price and increased demand for coal and services, on 22 October 2021, as approved at the 2021 first extraordinary general meeting of the Company, the Company and China Energy entered into the Mutual Coal Supply Agreement (the "New Mutual Coal Supply Agreement"), Mutual Supplies and Services Agreement (the "New Mutual Supplies and Services Agreement") for 2021–2023 and set the annual caps of transactions contemplated under the relevant related party/connected transactions for each year from 2021 to 2023 on 27 August 2021. The Former Mutual Coal Supply Agreement and the Former Mutual Supplies and Services Agreement will terminate from the effective date of New Mutual Coal Supply Agreement and New Mutual Supplies and Services Agreement, respectively. Except for the term of the Agreement, there are no significant changes to the main contents and pricing policies of New Mutual Coal Supply Agreement and New Mutual Supplies and Services Agreement, as compared to Former Mutual Coal Supply Agreement and Former Mutual Supplies and Services Agreement. (For details and pricing policies for Former Mutual Coal Supply Agreement and Former Mutual Supplies and Services Agreement, please refer to the H share announcement dated 22 March 2019, A share announcement dated 23 March 2019, and the 2020 annual report of the Company)

Finance Company is held as to 60% of equity interest by China Energy, the controlling shareholder of the Company, and is a related party (connected person) of the Company. As being considered and approved by the fifth meeting of the fifth session of the Board of the Company, the 2021 Financial Services Agreement (the "Former Financial Services Agreement") entered into by the Company and the Finance Company on 29 December 2020 has become effective on 1 January 2021 and shall remain in force until 31 December 2021. On 25 June 2021, as approved at the 2020 general meeting, the Company and Finance Company renewed the Financial Services Agreement (the "New Financial Services Agreement) for 2021–2023 and the caps of transactions contemplated under the relevant related party/connected transactions from 2021 to 2023, and the Former Financial Services Agreement terminated at the same time. (For details, please refer to the H share announcement dated 26 March 2021 and A share announcement dated 27 March 2021)

A. The New Mutual Coal Supply Agreement entered into by the Company and China Energy

On 27 August 2021, the Company entered into the New Mutual Coal Supply Agreement with China Energy. The New Mutual Coal Supply Agreement is effective from 1 January 2021 and will expire on 31 December 2023. Pursuant to the New Mutual Coal Supply Agreement, the Group and China Energy Group mutually supply coal.

The pricing policy for mutual coal supply under the New Mutual Coal Supply Agreement sets out below: the supply price under the Agreement is calculated by the product of the unit price RMB/tonne multiplied by the actual weight. The unit price of coal shall be determined by both parties after arm's length negotiations with reference to the market price and conditions and the following factors, provided that the transaction terms shall not be less favourable than those provided by independent third parties:

(1) The national industrial policy as well as industry and market conditions in the PRC;

(2) The specified guidelines issued by National Development and Reform Commission of the People's Republic of China (NDRC) in relation to the coal purchase prices (if any);

(3) The current trading coal prices of the local coal exchange or market in the PRC, i.e., the coal price with the same quality that is offered to or offered by independent third parties under normal market conditions and normal commercial terms in the same or nearby regions. For local spot coal price, reference is generally made to (i) the spot price index of the local coal exchange or market in Bohai-rim region or nearby provinces as published on China Coal Market Website (www.cctd.com.cn) organised by China Coal Transportation & Sale Society in the PRC; (ii) the sale price of local large-scale coal enterprises as published by each coal industry website (if any); and/or (iii) price quotation of a few enterprises with comparable quality, quantity and location (if any);

(4) The quality of the coal (including the estimated calorific value of coal as required by different coal-fired power generating units);

(5) The quantity of coal; and

(6) The transportation fees.

Where the price of mutual coal supplies between both parties is not applicable under the pricing principles of the Agreement due to any changes by laws and regulations, policies and market of China, both parties may adjust pricing principles of respective aforesaid supplies.

B. The New Mutual Supplies and Services Agreement entered into by the Company and China Energy

On 27 August 2021, the Company entered into the New Mutual Supplies and Services Agreement with China Energy. The New Mutual Supplies and Services Agreement is effective from 1 January 2021 and will expire on 31 December 2023. Pursuant to the New Mutual Supplies and Services Agreement, the Group and China Energy Group mutually supply products and provide services.

The pricing principles for the products and services provided under the New Mutual Supplies and Services Agreement set out below:

(1) General pricing principles

a. Government-prescribed price and government-guided price: if at any time, the government-prescribed price is applicable to any particular product or service, such product or service shall be supplied at the applicable government-prescribed price. Where a government-guided fee standard is available, the price will be agreed within the range of the government-guided price;

b. Tender and bidding price: where tender and bidding process is necessary under applicable laws and regulations, the price will be ultimately determined in accordance with the tender and bidding process;

c. Market price: the price of the same or similar products or services provided by an independent third party during its ordinary course of business on normal commercial terms. The management shall consider at least two comparable deals with independent third parties for the same period when determining whether the price for any product or service transaction under the Agreement is the market price; The Group shall conduct market price research through various independent industry information vendors such as industry websites, and participate in activities organised by leading industry organisation.

d. Agreed price: to be determined by adding a reasonable profit margin over a reasonable cost. The management shall consider at least two comparable deals with independent third parties for the same period when determining the reasonable profit of any product or service transaction under the Agreement.

(2) In addition to the above, the parties further agreed on the following pricing policies in respect of following products and services:

a. Rail transportation: price prescribed by National Development and Reform Commission of the People's Republic of China (NDRC) or other related government competent authorities;

b. Construction: where tender and bidding process is necessary under applicable laws and regulations, the price ultimately determined in accordance with the tender and bidding process; where tender and bidding process is not necessary under applicable laws and regulations, the market price;

c. Oil products: government-guided price;

d. Power transaction: government-guided price shall prevail if there is any; the uniform clearing price shall prevail in centralized price bidding transaction; the price of recent comparable transaction shall be referred to in independently negotiated transactions;

e. Hardware and software equipment and related technology services: market price (including tender and bidding price);

f. Chemical products: market price;

g. Production equipment and spare parts, office products: market price;

h. Tendering services: price prescribed by National Development and Reform Commission of the People's Republic of China;

i. Technical consulting services: agreed price with a profit margin of approximately 10%;

j. Information technology services: both parties negotiate and agree on the service price within the scope of budget, which is reviewed by professional institution(s) with pricing reviewing qualification according to relevant national and industrial rules and regulations on construction pricing, pricing mechanism and fee standards, with reference to the market customs of the information technology industry, actual standards and market price, taking into account the actual condition of the Company's information technology construction;

k. Logistics and support services and training services: agreed price (cost plus a profit margin of approximately 5%);

l. Social security and pension management services and staff data recording services: agreed price (cost plus a profit margin of approximately 5%);

m. Various daily administrative services to the headquarters of China Energy (exclusive of financial management and services): agreed price (cost plus a profit margin of approximately 5%).

Where the price of mutual supplies and services between the Group and China Energy Group is not applicable under the pricing principles of the Agreement due to any changes by laws and regulations, policies and market of China, both parties may adjust pricing principles of respective supplies and services.

C. *The New Financial Services Agreement entered into by the Company and Finance Company*

On 26 March 2021, the Company entered into the New Financial Services Agreement with the Finance Company. The New Financial Services Agreement is effective from 1 January 2021 and will expire on 31 December 2023. Pursuant to the New Financial Services Agreement, Finance Company would provide comprehensive credit (without any pledge and guarantee provided by the Members of the Group) and other financial services to the Members of the Group, and the Members of the Group may place deposits in Finance Company. The pricing policy of the New Financial Services Agreement is as follows:

(1) In terms of deposits and loans or similar services provided by Finance Company to Members of the Group, subject to compliance with the relevant rules and regulations of PBOC, China Banking and Insurance Regulatory Commission (the "CBIRC") and other relevant regulatory authorities:

a. The interest rates for deposits placed by Members of the Group with Finance Company shall be no less than the interest rate paid by major commercial banks in the PRC for comparable deposits services provided to Members of the Group and shall be negotiated in normal commercial terms;

b. The interest rates for loans granted by Finance Company to Members of the Group shall be no more than the benchmark loan interest rate for the corresponding period stipulated by the PBOC and no more than the interest rate charged by major commercial banks in the PRC for comparable loans services provided to Members of the Group and shall be negotiated in normal commercial terms.

With respect to the deposit interest rate offered by Finance Company for deposits placed by Members of the Group, Finance Company will pay close attention to the benchmark interest rate stipulated by the PBOC on monthly basis and, by way of inquiry, ascertain the deposit interest rates of major commercial banks in the PRC (i.e. Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, and Bank of Communications), to ensure the interest rates for deposits placed by Members of the Group with Finance Company shall be no less than the interest rate paid by major commercial banks in the PRC for comparable deposits services provided to Members of the Group. Furthermore, price determination of deposits interest rate offered by Finance Company will be under strict supervision and the Company will enforce relevant internal approval procedures.

(2) In terms of paid services provided by Finance Company to Members of the Group:

a. Finance Company can provide paid consultation, agency, settlement, transfer, investment, letter of credit, online banking, entrusted loan, guarantee, bill acceptance and other related services to Members of the Group.

b. Subject to compliance with the relevant rules and regulations of PBOC, CBIRC and other relevant regulatory authorities, the service fees charged by Finance Company for the provision of the above financial services to Members of the Group shall be no more than the service fees charged by major commercial banks in the PRC for comparable financial services provided to Members of the Group and shall be negotiated in normal commercial terms.

With respect to the service fees charged by Finance Company for provision of financial services to Members of the Group, Finance Company will, by way of inquiry, ascertain the service fees rate charged by major commercial banks on monthly basis and ensure the service fees charged by Finance Company for provision of financial services to Members of the Group shall be no more than the service fees charged by major commercial banks in the PRC for comparable financial services provided to Members of the Group. In addition, price determination of service fees charged by Finance Company will be under strict supervision and the Company will enforce relevant internal approval procedures.

2. Non-exempt continuing connected transactions between the Group and other parties

D. Continuing Connected Transactions Framework Agreement between the Company and China State Railway Group Co., Ltd. ("China Railway")

China Railway Taiyuan Group Co., Ltd. ("Taiyuan Railway Bureau") is the parent company of Daqin Railway Co., Ltd., which is a substantial shareholder of Shuohuang Railway, a significant subsidiary of the Company. China Railway is the controlling shareholder of Taiyuan Railway Bureau. Therefore, China Railway constitutes a connected person of the Company under the Hong Kong Listing Rules. On 28 October 2019, the Company and Taiyuan Railway Bureau which acted for and on behalf of China Railway entered into the Continuing Connected Transactions Framework Agreement, effective from 1 January 2020 to 31 December 2022. Pursuant to the Continuing Connected Transactions Framework Agreement,, the Group and China Railway Group (China Railway and its subsidiaries, including Taiyuan Railway Bureau Group (including Taiyuan Railway Bureau and its subsidiaries)) have agreed to provide transportation service, supply coal and provide other products and services to each other.

The pricing of the transactions under the Continuing Connected Transactions Framework Agreement shall be agreed in the implementation agreements, but shall be determined in accordance with the general principles below:

(1) The price of transportation service mutually provided by the China Railway Group and the Group shall be determined in the following priority:

(i) the prices as determined by the government;

(ii) if the prices are not specified by the government, the prices will be determined in accordance with the pricing standards and rules of national railways within the guidance prices set by the government;

(iii) if the prices are not specified by the government and the government has not set applicable guidance prices, the prices shall be determined in accordance with the applicable industry price settlement rules;

(iv) except for applying the prices specified by the government, the guidance prices set by the government and the industry settlement rules, if there are comparable market prices or pricing standards, priority shall be given to such market prices or pricing standards as reference to determine the prices upon negotiation;

(v) if none of the above-mentioned pricing standards is available, the prices shall be determined with reference to the prices of non-connected transactions between the connected parties and independent third parties;

(vi) if neither comparable market prices nor prices of non-connected transactions are available for reference, the prices shall be determined upon negotiation according to the aggregate of the total actual costs for providing the relevant services, reasonable profits and taxes and additional charges paid.

(2) The price of coal mutually supplied by the China Railway Group and the Group is the product of the unit price RMB/tone multiplied by the actual weight. The unit price of coal shall be determined by both parties after arm's length negotiations with reference to the market price and conditions and the following factors, provided that the transaction terms shall not be less favourable than those provided by independent third parties:

(i) the national industrial policy as well as industry and market conditions in the PRC;

(ii) the specified guidelines issued by NDRC setting out the coal purchase prices (if any);

(iii) the current transacted coal prices of the local coal exchange or market in the PRC, i.e., the coal price with comparable quality that is offered to or offered by independent third parties under normal market conditions and normal commercial terms in the same or nearby regions. For local spot coal price, reference is made to (i) the spot price index of the local coal exchange or market in Bohai-rim region or nearby provinces as published on the website of 中國煤炭市場網(www.cctd.com.cn) organised by China Coal Transportation& Sale Society (中國煤炭運銷協會) in the PRC; (ii) the sale price of local large coal enterprises as published by each coal industry website (if any); and/or (iii) price quotation of one or more other enterprises with comparable quality, quantity and location (if any);

(iv) the quality of the coal;

(v) the quantity of coal; and

(vi) the estimated transportation fees.

(3) The price of other products and services mutually provided by the China Railway Group and the Group shall be determined in accordance with the general principles and order of this section:

(i) Government-prescribed price and government-guided price: if at any time, the government-prescribed price is applicable to any particular product or service, such product or service shall be supplied at the applicable government-prescribed price. Where a government-guided fee standard is available, the price will be agreed within the range of the government-guided price;

(ii) Tender and bidding price: where tender and bidding process is necessary under relevant laws, regulations and rules, the price shall be ultimately determined in accordance with the tender and bidding process;

(iii) Market price: The price will be determined as same as or similar to products or services provided by an independent third party during its ordinary course of business on normal commercial terms. The management shall consider at least two comparable deals with independent third parties for the same period when determining whether the price for any product or service transaction under this Agreement is the market price; and

(iv) Agreed price: to be determined by adding a reasonable profit margin over a reasonable cost. The management shall consider at least two comparable deals with independent third parties for the same period when determining the reasonable profit of any product or service under this Agreement.

In addition to the above, for certain types of product or service, specific pricing policy is adopted as follows:

(i) Rolling stock usage: market price.

(ii) Overhaul services and railway track maintenance services: price prescribed by NDRC or other related government competent authorities.

(iii) Equipment supply: tender and bidding price.

(iv) Business consulting and technical services: agreed price (cost plus a profit margin of approximately 5%).

The agreements A to C above are daily related transactions under the Shanghai Listing Rules, while the agreements A to D above are continuing connected transactions under the Hong Kong Listing Rules.

3. Implementation of and review opinions on the non-exempt continuing related party/connected transactions

In 2021, the implementation of the agreements A to D above is set out in the table below. In particular, the total amount of related party/connected transactions for sale of products and provision of services by the Group to China Energy Group under the New Mutual Coal Supply Agreement and the New Mutual Supplies and Services Agreement amounted to RMB107,278 million, representing 32.0% of the revenue of the Group during the reporting period.

		Provision of products and services by the Group to related/connected persons and other inflows			Purchase of products and services from related/connected persons by the Group and other outflows		
No.	Name of agreement	Prevailing transaction cap	Transaction amount during the reporting period	Proportion in the same type of transactions	Prevailing transaction cap	Transaction amount during the reporting period	Proportion in the same type of transactions
		RMB million	*RMB million*	*%*	*RMB million*	*RMB million*	*%*
A	New Mutual Coal Supply Agreement	86,000	96,776	38.8	20,000	14,019	13.6
B	New Mutual Supplies and Services Agreement	13,000	10,502	–	13,000	6,595	–
	including: (1) Products		7,314	11.8		2,106	2.1
	(2) Services		3,188	13.4		4,489	15.2
D	Continuing Connected Transactions Framework Agreement	7,300	1,052	0.4	19,800	8,743	3.8

No.	Name of agreement	Transaction item		Transaction cap during the valid period of agreement *RMB million*	Transaction amount during the Reporting period *RMB million*
C	New Financial Services Agreement	(1)	Maximum daily balance of comprehensive facilities provided by Finance Company to the members of the Company (including loans, credits, bill acceptance and discount, guarantee, performance guarantee, overdrafts, opening letters of credit, etc., inclusive of accrued interest thereon)	100,000	24,527
		(2)	Maximum daily deposit balance of the members of the Company in Finance Company (inclusive of accrued interest thereon)	27,900	27,439
		(3)	Total fee charged by Finance Company for providing the members of the Company with financial services, including but not limited to consultancy, agency, settlement, transfer, investment, letter of credit, online banking, entrusted loan, guarantee, acceptance of bill and other services to the members of the Company	200	32

The transaction amount for supply of sale of coal by the Group to the China Energy Group in 2021 under the New Mutual Coal Supply Agreement exceeded the annual cap approved. The Directors consider that the failure to re-comply with the requirements under Rule 14A.54(1) of the Listing Rules on a timely basis, which was inadvertent and regretful, was a *force majeure* event. In order to avoid any occurrence of similar events in the future, the Company has taken necessary and additional measures to strengthen the reporting and documentation system of the Company and its subsidiaries. The Company has proposed to revise the annual caps for the three years ending 31 December 2021, 31 December 2022 and 31 December 2023 for the supply of coal by the Group to the China Energy Group, and the annual caps for the two years ending 31 December 2022 and 31 December 2023 for the supply of products and provision of services by the Group to the China Energy Group. For details, please refer to the announcement made by the Company on 25 March 2022.

Save for this, the above continuing related party/connected transactions were in the ordinary course of business of the Company, and were strictly in compliance with procedures of review and approval by independent directors and independent shareholders as well as disclosure requirements.

The Independent Non-executive Directors of the Company have confirmed to the Board of the Company that they have reviewed the transactions contemplated under the agreements A to D above and are of the view that except that the transaction amount for supply of sale of coal by the Group to the China Energy Group in 2021 under the New Mutual Coal Supply Agreement exceeded the cap approved, (1) those transactions were entered into in the ordinary course of business of the Group; (2) those transactions were on normal commercial terms or better terms; and (3) those transactions were conducted according to the agreements governing them on terms that are fair and reasonable and in the interest of the shareholders of the Company as a whole.

KPMG, the international auditors of the Company, have reviewed the continuing connected transactions under the agreements A to D above and issued a letter to the Board, indicating that they were aware that the cap on the Group's coal sales to the China Energy for 2021 was RMB86 billion and the actual total coal sales were RMB96.776 billion, exceeding the cap of RMB10.776 billion. In addition, they were not aware of any other matters for which they would consider that the continuing connected transactions above (1) were not approved by the Board; (2) were not conducted according to the Company's pricing policy in terms of all material aspects; (3) were not conducted according to the terms of the relevant agreements in terms of all material aspects; and (4) as of the year ended 31 December 2021, except for the aforementioned total sales of coal to China Energy that exceeded the upper limit, the aggregate amount for other transactions had exceeded the annual caps disclosed in the Company's announcements on the continuing connected transactions.

23 types of related party transactions were disclosed in Note 43 of the financial statements for the year 2021 prepared by the Company under the International Financial Reporting Standards. According to the Hong Kong Listing Rules, except for the transactions under item ii"income from entrusted loans", item x "purchase of coal" and partial transaction under item xvi "other income", all of the other related party transactions disclosed in Note 43 constituted connected transactions under the Hong Kong Listing Rules and were required to be disclosed in accordance with Chapter 14A of the Hong Kong Listing Rules. The Company has complied with the disclosure requirements of Chapter 14A of the Hong Kong Listing Rules in respect of disclosure of the above connected transactions and continuing connected transactions.

(II) Related party transactions regarding the acquisition and disposal of assets or equity

☐ Applicable ✔ Not applicable

(III) Material related party transactions regarding joint external investments

1. Matters that have been disclosed on interim announcements and where there is no any further progress and change upon subsequent implementation

Overview of Event	Index
Upon the approval of the fifth meeting of the fifth session of the Board of Directors, as the limited partner, the Company contributed RMB4 billion to participate in the establishment of the Beijing China Energy New Energy Industry Investment Fund (Limited Partnership) ("China Energy Fund"), and entered into the Partnership Agreement of Beijing China Energy New Energy Industry Investment Fund (Limited Partnership) on 22 January 2021.	Connected Transaction – Participation in the Establishment of China Energy Fund (www.hkexnews.hk, 22 January 2021) Announcement on Update on the Connected Transaction of Participation in the Establishment of Industry Fund by China Shenhua (www.sse.com.cn, 23 January 2021)
Guoneng Fund completed the industrial and commercial registration procedures and obtained a business licence.	Oversea Regulatory Announcement (www.hkexnews.hk, 9 February 2021) Announcement on Update on the Connected Transaction of Participation in the Establishment of Industry Fund (www.sse.com.cn, 10 February 2021)
Guoneng Fund completed the filing procedures with the Asset Management Association of China.	Oversea Regulatory Announcement (www.hkexnews.hk, 26 February 2021) Announcement on Update on the Connected Transaction of Participation in the Establishment of Industry Fund (www.sse.com.cn, 27 February 2021)

Overview of Event	Index
As approved at the eighth meeting of the fifth session of the Board of the Company, the Company proposed to, as a limited partner, contribute RMB2 billion with its own funds to jointly establish Guoneng Green and Low-Carbon Development Investment Fund (the "Guoneng Low-carbon Fund") with limited partners including China Longyuan Power Group Corporation Limited*. All partners other than the Company, are the subsidiaries of China Energy, the controlling shareholders of the Company, therefore, the transaction constitutes a connected transaction of joint foreign investment.	Announcement on Connected Transaction-Participation in the Establishment of Guoneng Low-carbon Fund (www.hkexnews.hk, 27 August 2021) Announcement by the Company on participation in the establishment of Guoneng Low-carbon Fund and Connected Transaction (www.sse.com.cn, 28 August 2021)
The Company signed the Partnership Agreement of Guoneng Green and Low-Carbon Development Investment Fund (Limited Partnership) with other partners, and Guoneng Low-carbon Fund has completed the procedures for industrial and commercial registration.	Connected Transaction-Announcement on Update on the Connected Transaction of Participation in the Establishment of Guoneng Low-carbon Fund (www.hkexnews.hk, 8 October 2021) Announcement by the Company on update on the Connected Transaction of participation in the Establishment of Guoneng Low-carbon Fund (www.sse.com.cn, 9 October 2021)
The filing procedures of the Guoneng Low-carbon Fund had been completed in the Asset Management Association of China.	Connected Transaction Announcement on Update on the Connected Transaction of Participation in the Establishment of Guoneng Low-carbon Fund (www.hkexnews.hk, 25 October 2021) Announcement by the Company on Update on the Connected Transaction of Participation in the Establishment of Guoneng Low-carbon Fund (www.sse.com.cn, 26 October 2021)

(IV) Debts and liabilities between related parties

Unit: RMB million

Related parties	Relationship	Funds provided to related parties: Opening balance	Amount incurred	Closing balance	Funds offered by related parties to the Group: Opening balance	Amount incurred	Closing balance
China Energy	Controlling shareholder	–	–	–	874	–	874
Finance Company	Controlled subsidiary of the parent company	19,750	7,376	27,126	24,076	(2,679)	21,397
Anhui Anqing Wanjiang Power Generation Co., Ltd.	Controlled subsidiary of the parent company	55	(55)	–	–	–	–
Other related parties	Others	461	(61)	400	–	201	201
Total		20,266	7,260	27,526	24,950	(2,478)	22,472

Reasons for debts and liabilities between related parties

(1) Long and short-term borrowings were provided by China Energy to the Group.

(2) The Group's deposits and loans with Finance Company.

(3) Prior to the jointly establishment of Beijing GD by the Company with GD Power, the Company provided finance lease to Anhui Anqing Wanjiang Power Generation Co., Ltd., its former subsidiary, through Shenhua Lease Company. As approved at the general meeting of the Company, the financial lease payment will be gradually returned in accordance with the original agreement/contract arrangement, that is the repayment will be gradually completed in 2021. As at the end of the reporting period, the financial lease payment has been returned.

(4) The entrusted loans were issued or received by the Group, etc..

Internal decision procedures have been performed in respect of the above transfer of related debts and liabilities in accordance with relevant regulations.

Repayment of debts and liabilities between related parties	Currently, the principal and interests of the above borrowings and entrusted loans are repaid in a normal manner in accordance with the repayment schedule.
Undertakings related to debts and liabilities between related parties	N/A
Impacts of debts and liabilities between related parties on the operating results and financial position of the Company	The above borrowings and entrusted loans are beneficial to the normal commencement of relevant project construction and production operation of the Group and have no material impact on the operating results and financial position of the Company.

(V) Financial business between the Company and Finance Company with which the Company has relationship

1. Main financial indicators of the Finance Company

	Unit	2021	2020	Change %
Revenue	RMB million	2,998	2,196	36.5
Total profit	RMB million	2,770	1,318	110.2
Net profit	RMB million	2,113	1,020	107.2

	Unit	31 December 2021	31 December 2020	Change %
Total assets	RMB million	143,734	105,607	36.1
Total liabilities	RMB million	120,427	83,136	44.9
Owner's equity	RMB million	23,307	22,471	3.7

Note: The above financial dates were prepared in accordance with the China Accounting Standards for Business Enterprises and have been audited.

2. Main risk indicators of the Finance Company

No.	Control indicators	As at 31 December 2021	Compliant with regulatory requirements or not
1	Capital adequacy rate not lower than 10%	15.65%	Yes
2	Non-performing asset rate not higher than 4%	0%	Yes
3	Non-performing loan rate not higher than 5%	0%	Yes
4	Capital loss coverage ratio not lower than 100%	+∞ (none noted sub-prime suspicious loss assets)	Yes
5	Loan loss coverage ratio not lower than 100%	+∞ (none noted sub-prime suspicious loss assets)	Yes
6	Liquidity ratio not lower than 25%	37.36%	Yes
7	Ratio of self-owned fixed assets not higher than 20%	0.07%	Yes
8	Ratio of investment (against total capital) not higher than 70%	50.01%	Yes
9	Inter-bank borrowing ratio not higher than 100%	0%	Yes
10	Guarantee ratio not higher than 100%	28.54%	Yes

3. Deposit business

Unit: RMB million

Related parties	Relationship	Maximum daily deposit limit	Deposit interest rate range	Opening balance	Amount for the period		Closing balance
					Total amount deposited for the period	Total amount withdrawn for the period	
Finance Company	Subsidiary of controlling shareholder	27,900	0.455%-3.3%	19,750	146,020	138,644	27,126
Total	/	/	/	19,750	146,020	138,644	27,126

Note: "Maximum daily deposit limit" refers to the maximum daily deposit balance (including accrued interest incurred) of the Group in Finance Company during the reporting period.

4. Loan business

Unit: RMB million

Related parties	Relationship	Loan limit	Loan interest rate range	Opening balance	Amount for the period: Total amount of loan for the period	Amount for the period: Total amount of repayment for the period	Closing balance
Finance Company	Subsidiary of controlling shareholder	100,000	3.15%-4.90%	24,076	9,512	12,191	21,397
Total	/	/	/	24,076	9,512	12,191	21,397

Note: "Loan limit" refers to the maximum daily balance (including accrued interest incurred) of loans provided by Finance Company to the Group.

5. Credit facilities or other financial business

Unit: RMB million

Related parties	Relationship	Business Type	Quota	Amount for the period
Finance Company	Subsidiary of controlling shareholder	Bill discount	100,000	3,913
Finance Company	Subsidiary of controlling shareholder	Issue of acceptance bill	100,000	1,061
Finance Company	Subsidiary of controlling shareholder	Intermediary business	200	32

Note: (1) Maximum daily balance of the comprehensive credit facilities (including loans, bill acceptance and discount, etc.), including accrued interest, provided by Finance Company to the Group as approved by the general meeting of the Company refers to RMB100,000 million.

(2) The amount for the period of bill discount and issue of acceptance bill business refers to total amount of relevant services provided by Finance Company to the Group during the reporting period.

(3) The amount for the period of intermediary business refers to total amount of various service fees charged by Finance Company for provision of financial services to the Group.

XI. MATERIAL CONTRACTS AND THEIR PERFORMANCE

(I) Trust, contracting and leasing

☐ Applicable ✔ Not applicable

During the reporting period, the Company did not enter into or have any management and administration contracts in respect of the whole or any material part of the business of the Company.

(II) Guarantees

Unit: RMB million

1. Guarantee provided by the Company to external parties (excluding guarantee granted to its subsidiaries)

Guarantor	Relationship between the guarantor and the listed company	Guaranteed	Amount guaranteed	Date of provision of guarantee (execution date of agreement	Beginning date of guarantee	Expiry date of guarantee	Type of guarantee	Whether performance has been completed	Whether guarantee is overdue	Amount of guarantee overdue	Whether counter guarantee is provided	Whether guarantee is for the benefit of related parties	Relationship
Baorixile Energy	Controlled subsidiary	Hulunbei'er Liangyi Railway Company Limited	72.44	2008.08.30	2008.08.30	2029.08.29	Joint and several liability guarantee	No	No	0	No	No	N/A

Total amount of guarantee provided during the reporting period (excluding guarantee provided to its subsidiaries)	(8.86)
Total balance of guarantee at the end of the reporting period (A) (excluding guarantee provided to its subsidiaries)	72.44

2. Guarantee provided by the Company and its subsidiaries for the benefit of its subsidiaries

Total amount of guarantee provided for the benefit of subsidiaries during the reporting period	(74.60)
Total balance of guarantee provided for the benefit of subsidiaries at the end of the reporting period (B)	3,187.85

3. Total amount of guarantee (including guarantee for the benefit of its subsidiaries)

Total amount of guarantee (A+B)	3,260.29
Proportion of total amount of guarantee to the net assets attributable to equity holders of the Company at the end of the year under China Accounting Standards for Business Enterprises in 2021 (%)	0.9
Including:	
Amount of guarantee provided for the benefit of shareholders, de facto controller and their related parties (C)	0
Amount of guarantee directly or indirectly provided for the benefit of parties with a gearing ratio in excess of 70% (D)	3,260.29
Portion of the total amount of guarantee in excess of 50% of net assets (E)	0
Aggregated amount of the above three amounts of guarantee (C+D+E)	3,260.29
Description of the potential joint and several repayment liability for outstanding guarantee	Please refer to below
Description of guarantee	Please refer to below

Note: The balance of guarantee provided by the subsidiary to external parties of total amount of guarantee at the end of the reporting period equals to the amount of external guarantee of the subsidiary multiplied by the shareholding of the Company in the subsidiary.

As at the end of the reporting period, the total balance of the amount of guarantee provided by the Group amounted to RMB3,260.29 million, including:

(1) As at the end of the reporting period, the guarantee provided by Baorixile Energy, a subsidiary of which the Company owns 56.61% of the shares, for the benefit of external parties was as follows: prior to the acquisition of Baorixile Energy by the Company in 2011 and pursuant to the Guarantee Agreement on the Syndicated Renminbi Loan for the Cooperative Railway Project Connecting Yimin and Yiershi Newly Constructed by Hulunbei'er Liangyi Railway Company Limited, in 2008, Baorixile Energy, as one of the guarantors, provided joint and several liability guarantee to Hulunbei'er Liangyi Railway Company Limited (hereinafter referred to as the "Liangyi Railway Company", of which Baorixile Energy owns 14.22% of the shares) for the syndicated loans. The major liability guaranteed was the debts due to the lender with a maximum balance of RMB207.47 million from 2008 to 2027, regardless of whether the debt is due when the above period expires. The above syndicated loans will fall due by tranches between 2011 and 2026. The Guarantee Agreement provides that the guarantee period of the debts borne by the guarantor shall be calculated from the due date of each tranche to two years after the due date of the last tranche, i.e. 2029.

Given that Liangyi Railway Company failed to pay the loan interest on time due to its deteriorating business operation, as resolved by the shareholders' general meeting of Liangyi Railway Company, additional capital was injected into Liangyi Railway Company by its shareholders (including Baorixile Energy). Baorixile Energy has injected an accumulated amount of RMB11.82 million into Liangyi Railway Company.

As of the end of the reporting period, Baorixile Energy, in proportion to its shareholding, repaid the principal on the loans on behalf of Liangyi Railway Company amounting to a total of RMB73.23 million. Baorixile Energy already made full provision for impairment on its 14.22% equity interest in Liangyi Railway Company and the repayment amount paid on its behalf. Together with other shareholders, Baorixile Energy will continue to call for improvement of business operation of Liangyi Railway Company. As at 31 December 2021, Liangyi Railway Company had a gearing ratio of 172.4%.

(2) As of the end of the reporting period, the amount of guarantee between subsidiaries in consolidated reports of the Company, in proportion to its shareholding, amounted to approximately RMB3,187.85 million, which was mainly due to the fact that Shenhua Hong Kong Limited, the wholly-owned subsidiary of the Company, provided guarantees for the issuance of USD0.5 billion bonds by China Shenhua Overseas Capital Co., Ltd., its wholly-owned subsidiary.

For the details of the opinions of the Independent Directors, please refer to the relevant reports simultaneously disclosed with this Report.

(III) Entrusted cash asset management

1. General status of entrusted loans

Unit: RMB million

Type of products	Source of funding	Maximum Balance Note	Outstanding ending balance	Overdue Uncollectible amount
Entrusted loans	Own fund	437.4	400.0	0

Note: Maximum balance refers to the daily highest balance of the entrusted loan of such type of the Group in 2021.

2. Individual entrusted loans

Unit: RMB million

Name of borrower	Relationship between the borrower and the Group	Trustee	Amount of entrusted loans	Initial date of loans	Expiry date of loans	Duration of loans	Source of fund	Investment of fund	Determination of compensation	Interest rate	Actual return for 2021	Principal recovered for 2021	Whether it has been through legal procedures
Yili Chemical	associate of a subsidiary	Bank of China	400.0	2020/12/24	2023/12/24	3 years	Own fund	Replacement of loans	Interest to be paid quarterly	4.75%	19.1	0	Yes

As of 31 December 2021, the Group did not grant entrusted loans with an amount exceeding 5% of the Group's latest audited net assets attributable to equity holders of the Company to any individual party. The Company did not utilise the proceeds raised to grant entrusted loans, and there was no entrusted loan that was involved in litigations. No provision for impairment for the above entrusted loans has been made by the Group. Under centralised capital management of the Group, the entrusted loans among the Company and its subsidiaries were used for meeting operating and development needs. Such entrusted loans have been eliminated in the consolidated financial statements of the Group.

The entrusted loan of RMB37.40 million granted by the Company to Inner Mongolia Sanxin Railway Co., Ltd. ("Sanxin Railway Company") in February 2014 has expired in February 2015. In view of the actual operation of Sanxin Railway Company and through consultation, Sanxin Railway Company paid the Company the interest of RMB2.27 million during the entrusted loan, and the Company converted the principal of RMB37.40 million of entrusted loan into equity investment in Sanxin Railway Company. By the end of the reporting period, the Company had received the above loan interest and confirmed the relevant equity investment. This matter has no impact on the scope of the Company's consolidated financial statements.

Section VIII Changes in Share Capital and Shareholders

I. CHANGE IN ORDINARY SHARE CAPITAL

(I) Change in the number of ordinary shares

1. Change in number of shares

Unit: shares

	As at 31 December 2020		Change		As at 31 December 2021	
	Number	Percentage %	Repurchase and cancellation	Subtotal	Number	Percentage %
I. Shares with selling restrictions	0	0.00	0	0	0	0.00
II. Shares without selling restrictions	19,889,620,455	100.00	-21,100,500	-21,100,500	19,868,519,955	100.00
1. RMB ordinary shares	16,491,037,955	82.91	0	0	16,491,037,955	83.00
2. Overseas listed foreign shares	3,398,582,500	17.09	-21,100,500	-21,100,500	3,377,482,000	17.00
III. Total number of shares	19,889,620,455	100.00	-21,100,500	-21,100,500	19,868,519,955	100.00

2. Explanation on changes in shares

On 8 March 2021, the Company cancelled all H shares repurchased up to that date, totaling 21,100,500 shares, accounting for 0.6209% of the total number of H shares issued by the Company as at the date when the General Mandate was approved by the 2020 first extraordinary general meeting and 0.1061% of the total number of shares of the Company. After the cancellation, the total number of issued shares of the Company was reduced to 19,868,519,955 shares, including 16,491,037,955 A shares and 3,377,482,000 H shares. The Company has not issued preferred shares.

In 2021, the Group did not repurchase, sell or redeem any securities of the Company under the Hong Kong Listing Rules.

As of the disclosure date of this report, so far as the Directors are aware, the Company has satisfied minimum public float requirement under Rule 8.08 of the Hong Kong Listing Rules.

(II) Changes of shares with selling restrictions

☐ Applicable ✔ Not applicable

II. ISSUANCE AND LISTING OF SECURITIES

The Company did not issue any ordinary share, convertible corporate bond, warrant bond, corporate bond or other derivative securities, nor did it enter into any equity-linked agreement during the reporting period.

(I) Changes in total number of ordinary shares, shareholding structure and assets and liabilities structure of the Company

☐ Applicable ✔ Not applicable

(II) Pre-emptive rights

There is no provision for pre-emptive rights under the Articles of Association and the PRC laws which would entitle the existing shareholders to have priority to subscribe for new shares on a pro rata basis in the event of new share issuance by the Company.

III. SHAREHOLDERS

(I) Total number of shareholders

Total number of shareholders of ordinary shares as at the end of the reporting period *(accounts)*	161,039
Including: Holders of A shares (including China Energy)	159,087
Registered holders of H shares	1,952
Total number of ordinary shareholders at the end of last month prior to the date of this annual report *(accounts)*	150,723
Including: Holders of A shares (including China Energy)	148,787
Registered holders of H shares	1,936

(II) Shareholdings of top ten shareholders and top ten holders of marketable shares (or shareholders without selling restrictions) as of the end of the reporting period

Unit: share

Shareholdings of top ten shareholders							
Name of shareholders	Increase/ Decrease during the reporting period	Number of shares held at the end of the reporting period	Percentage %	Number of shares with selling restrictions	Shares subject to pledge, tag or lock-up: Status	Shares subject to pledge, tag or lock-up: Number	Nature of shareholders
China Energy Investment Corporation Limited	0	13,812,709,196	69.52%	0	Nil	N/A	State-owned corporation
HKSCC NOMINEES LIMITED	-20,842,236	3,369,478,486	16.96%	0	Unknown	N/A	Overseas corporation
China Securities Finance Corporation Limited	-45	594,718,004	2.99%	0	Nil	N/A	Others
Hong Kong Securities Clearing Company Limited	+118,584,244	218,669,817	1.10%	0	Nil	N/A	Overseas corporation
Central Huijin Asset Management Ltd.	-3,949,900	106,077,400	0.53%	0	Nil	N/A	State-owned corporation
Industrial and Commercial Bank of China – hanghai Index 50 Trading Open-end Index Securities Investment Fund	+3,278,174	27,825,922	0.14%	0	Nil	N/A	Others
China Life Insurance Company Limited – Life Insurance – Guoshou Ruian	+27,703,519	27,703,519	0.14%	0	Nil	N/A	Others
Zhuhai Ruifeng Huibang Asset Management Co., Ltd. – Ruifeng Huibang No.3 Privately Offered Fund	0	22,233,848	0.11%	0	Nil	N/A	Others
E Fund Management Co., Ltd. – Social Security Fund 1104 Portfolio	+21,768,317	21,768,317	0.11%	0	Nil	N/A	Others
China Merchants Bank Ltd. – SSE Dividend ETF	+10,946,501	21,505,083	0.11%	0	Nil	N/A	Others

Unit: share

Shareholdings of top ten shareholders without selling restrictions

Name of shareholders	Number of shares without selling restrictions	Type and number of shares	
		Type	Number
China Energy Investment Corporation Limited	13,812,709,196	RMB ordinary shares	13,812,709,196
HKSCC NOMINEES LIMITED	3,369,478,486	Overseas-listed foreign shares	3,369,478,486
China Securities Finance Corporation Limited	594,718,004	RMB ordinary shares	594,718,004
Hong Kong Securities Clearing Company Limited	218,669,817	RMB ordinary shares	218,669,817
Central Huijin Asset Management Ltd.	106,077,400	RMB ordinary shares	106,077,400
Industrial and Commercial Bank of China – Shanghai Index 50 Trading Open-end Index Securities Investment Fund	27,825,922	RMB ordinary shares	27,825,922
China Life Insurance Company Limited – Life Insurance – Guoshou Ruian	27,703,519	RMB ordinary shares	27,703,519
Zhuhai Ruifeng Huibang Asset Management Co., Ltd. – Ruifeng Huibang No.3 Privately Offered Fund	22,233,848	RMB ordinary shares	22,233,848
E Fund Management Co., Ltd. – Social Security Fund 1104 Portfolio	21,768,317	RMB ordinary shares	21,768,317
China Merchants Bank Ltd. – SSE Dividend ETF	21,505,083	RMB ordinary shares	21,505,083

Description of the special account for repurchase of the top ten shareholders	N/A
Description of the abovementioned shareholders' entrusting of voting rights, entrusted voting rights, and waiver of voting rights	N/A
Details regarding the connected relationships among the above shareholders or whether they are parties acting in concert	Both HKSCC NOMINEES LIMITED and Hong Kong Securities Clearing Company Limited are wholly-owned subsidiaries of Hong Kong Exchanges and Clearing Limited. Save as disclosed above, the Company is not aware of any connected relationships between the top ten shareholders without selling restrictions and the top ten shareholders, and whether they are parties acting in concert as defined in the Measures for Administration of Acquisition of Listed Companies of CSRC.
Details regarding the holders of preference shares with voting rights restored and the number of shares held	N/A

Note: The H shares held by HKSCC NOMINEES LIMITED on behalf of its various clients; the A shares held by HKSCC LIMITED on behalf of its various clients.

(III) Substantial shareholders' interests and short positions in the shares of the Company

As at 31 December 2021, persons set out in the table below had an interest and/or short position in the shares or underlying shares of the Company which is required to be recorded in the register of equity interests and/or short positions pursuant to section 336 of Part XV of the Securities and Futures Ordinance (the "SFO", Chapter 571 of the Laws of Hong Kong):

No.	Name of shareholders	Capacity	H shares/ A shares	Nature of interest	Number of H shares/ A shares held	Percentage of H shares/A shares over total issued H shares/A shares respectively %	Percentage of total issued share capital of the Company %
1	China Energy	Beneficial owner	A shares	N/A	13,812,709,196	83.76	69.52
2	BlackRock, Inc.	Interest of corporation controlled by the substantial shareholder	H shares	Long position	175,044,309	5.18	0.88

As at 31 December 2021, save as disclosed above, there was no other person who held interests and/or short positions in the shares or underlying shares of the Company which are required to be recorded in the register to be kept under section 336 of Part XV of the SFO, or was a substantial shareholder of the Company.

IV. CHANGES IN CONTROLLING SHAREHOLDER AND DE FACTO CONTROLLER

(I) Controlling shareholder as at the end of the reporting period

1. Legal person

Name	China Energy Investment Corporation Limited
Legal representative	Wang Xiangxi
Date of incorporation	23 October 1995
Principal business	State-owned assets operating activities within the scope authorized by the State Council; investment and management activities in various sectors, including resource products (such as coal), coal-to-liquids, coal chemical, power, thermal, port, various transportation, finance, domestic, international trade and logistics, real estate, advanced technology and information consultation and etc.; planning, organizing, coordinating and managing the production and operating activities in above sectors of members of China Energy Group; and sales of chemical materials and chemical products (excluding hazardous chemicals), textiles, construction materials, machinery, electronic equipment and office equipment. (Market entity is allowed to choose the business to be engaged in and carry out such business activities pursuant to laws; for projects that are subject to approval pursuant to the law, business operations shall commence in accordance with the business scope approved upon receipt of the approval from relevant authorities; no business activities which are prohibited or restricted by the state or Beijing industrial policies shall be carried out.)
Shareholdings in other domestic and overseas listed subsidiaries and associates during the reporting period	Directly or indirectly holding 50.78% shares of GD Power Development Co., Ltd.; Directly or indirectly holding 58.56% shares of China Longyuan Power Group Corporation Limited; Effectively controlling 78.40% shares of Guodian Technology & Environment Group Corporation Limited; Effectively controlling 51.25% shares of Ningxia Yinglite Chemicals Co., Ltd.; Effectively controlling 41.24% shares of Yantai Longyuan Power Technology Co., Ltd. Holding 67.50% shares of Guodian Changyuan Electric Co., Ltd.; Indirectly holding 20.84% shares of Shenzhen Laibao Hi-Tech Co., Ltd.

2. **Description of changes in controlling shareholders during the reporting period**

   There was no change in the controlling shareholder of the Company during the reporting period.

3. **Diagram of the equity and controlling relationship between the Company and the controlling shareholder at the end of the Reporting Period**

   On 8 March 2021, after the Company canceled the repurchased 21,100,500 H shares, the shareholding ratio of China Energy became 69.52%.

(II) De facto controller

1. Legal person

Name State-owned Assets Supervision and Administration Commission of the State Council

2. Description of changes in control of the Company during the reporting period

There was no change in de facto controller of the Company during the reporting period.

3. Diagram of the equity and controlling relationship between the Company and the de facto controller at the end of the Reporting Period

V. OTHER CORPORATE SHAREHOLDERS WITH MORE THAN 10% SHAREHOLDING IN THE COMPANY

As at the end of the reporting period, there was no other corporate shareholder with more than 10% shareholding in the Company.

VI. RESTRICTIONS ON THE REDUCTION IN THE SHAREHOLDING

☐ Applicable ✔ Not applicable

VII. DETAILED IMPLEMENTATION OF SHARE REPURCHASE

On March 8, 2021, the Company canceled the repurchased 21,100,500 H shares in the year 2020. No share repurchases were implemented by the Company in 2021.

Section IX Investor Relations

In 2021, China Shenhua strictly implemented the requirements of the *Securities Law and the Opinions of the State Council on Further Improving the Quality of Listed Companies* (《國務院關於進一步提高上市公司質量的意見》), attached great importance to the legitimate rights and interests of investors, continuously improved the communication channels between the Board and investors, optimized corporate governance, strengthened market value management, actively explored new development ideas while operating in a sound manner, listened to investors' voices, and was committed to building a long-term, stable and win-win shareholder relations between the Company and investors and sharing the achievements of corporate development with investors.

I. PERSISTING IN SUSTAINABLE DEVELOPMENT AND PROTECTING THE RIGHTS AND INTERESTS OF INVESTORS

FORMULATING THE "14TH FIVE-YEAR PLAN" TO MAINTAIN THE ENTERPRISE DETERMINATION FOR DEVELOPMENT. The Company's management focused on long-term development and has organized several strategic seminars to analyze the new situation of China's energy development and the characteristics of the Company, and to formulate and optimize the "14th Five-Year Plan" of China Shenhua. The Company will actively participate in energy reform and develop new energy by adopting various methods such as self-built operation, industrial fund and equity investment while continuing to consolidate the advantages of integrated operation.

STRICTLY CONTROLLING GOVERNANCE RISKS AND CONTINUOUSLY STRENGTHENING THE MANAGEMENT OF RELATED TRANSACTIONS. Affected by internal and external factors such as the significant increase in coal market prices and the continuous increase in the asset size of the Company in 2021, the Company adjusted the annual caps of daily related transactions such as the Financial Services Agreement and the Mutual Coal Supply Agreement. During the formulation of the agreements, in order to fully protect the interests of small and medium-sized shareholders, the management of the Company communicated with the regulators and controlling shareholders on the agreement plans for many times, so as to maximize the favorable terms for the Company and enhance the operating performance of the Company with strict compliance with the listing rules of the two places and reducing the governance risks.

STRENGTHENING INTERNAL MANAGEMENT AND ENHANCING MANAGEMENT EFFICIENCY. The Company continuously strengthened the management of subsidiaries and branches and regional management, established the Hebei Branch of China Shenhua Energy Company Limited, and further improved the regional integration of the power industry and enhanced market competitiveness. Our Company established the Guoneng (Weifang) Energy Co., Ltd., participated in the investment and establishment of the Guoneng Green and Low-Carbon Development Investment Fund, and actively sought development opportunities in the field of new energy. It completed the capital injection into China Energy Xinshuo Railway Development Co., Ltd., further integrated transportation assets and improved the operational efficiency of railway assets.

ACTIVELY RETURNING SHAREHOLDERS AND IMPLEMENTING A STABLE AND HIGH DIVIDEND DISTRIBUTION POLICY. With the approval of the 2019 AGM, the Company increased the cash dividend ratio from 2019 to 2021 to not less than 50% of the net profit attributable to shareholders of the Company in that year. According to the China Accounting Standards for Business Enterprises, the dividend ratios of the Company in 2019 and in 2020 were 57.9% and 91.8%, respectively. The Board recommended to pay a final dividend of RMB2.54 per share (tax inclusive) in 2021, RMB50,466 million (tax inclusive) in total, accounting for approximately 100.4% of the net profit attributable to shareholders of the Company under the China Accounting Standards for Business Enterprises in 2021.

II. HOLDING THE POSITION ON BEHALF OF PEOPLE AND CONTINUOUSLY OPTIMIZING INVESTOR SERVICES

TAKING THE PERFORMANCE PRESENTATION AS THE MAIN FORUM TO ENHANCE THE QUALITY OF INVESTOR SERVICES. In 2021, the Company overcame unfavorable factors such as the pandemic influence and innovatively adopted various methods to hold four performance presentations for the year 2020, the first quarter of 2021, the first half of 2021 and the third quarter of 2021, which explained the Company's performance and development ideas in detail and guided investors to accurately understand the Company's operation. For the first time, the performance presentation for the year 2020 was held in the form of "video + internet interaction" and the performance presentation for the fires half of 2021 was held in the form of "live broadcast + telephone interaction + text communication" to meet the communication needs of different investors. Taking into account the current information access preferences of investors, especially small and medium-sized investors, the Company has prepared small videos for annual and interim performance interpretation to improve the understandable and propagable properties of the performance interpretation. In addition, the Company attached great importance to the interactive needs of small and medium-sized investors. In the four performance presentations, the Company responded to 53 questions in text from investors collected in advance, and the Company's executives responded to a total of 289 questions from investors in text on site.

CARING FOR SHAREHOLDERS AND RESOLUTELY SAFEGUARDING SHAREHOLDERS' RIGHT TO KNOW AND DECISION-MAKING. In 2021, the Company held two general meetings and A shareholders class meeting and H shareholders class meeting. In response to the proposals concerned by shareholders, the Company communicated with 26 domestic and oversea institutional shareholders and dozens of individual shareholders, and answered the relevant questions seriously, thus ensuring investors' right to know to the maximum extent. The Company took the convenience of shareholders as the first priority, took into account the pandemic prevention requirements, and held the general meeting on the spot. Chairman and management of the Company deeply communicated with shareholders attended and heard the opinions and suggestions for the operation and development for the Company from shareholders.

PROVIDING BETTER DAILY SERVICE FOR INVESTORS AND MAINTAINING TWO-WAY COMMUNICATION CHANNELS. In 2021, the Company took a number of measures to ensure the smooth flow of investor communication channels such as investor hotline and investor mailbox, received investors' studies and researches and actively responded to questions on SSE e-interactive to achieve high-quality communication with investors both offline and online. During the year, the Company held a total of 76 investor communication meetings through investor research and conference calls, with more than 1,000 investors involved. The Company answered 180 questions from investors on the SSE e-interactive platform, answering investors' queries in a timely manner. The Company regularly reported investors' concerns and demands management and the Board of the Company on a weekly and monthly basis to ensure that investors' voices are delivered in a timely and effective manner.

III. CHINA SHENHUA MAJOR AWARD LIST IN 2021

No.	Date of Award	Award Title	Award Institution
1	January 2021	2020 Evergreen Award -Sustainable Development Inclusive Award	Caijing Magazine
2	May 2021	Best Investor Relations Award of Tianma Award	Securities Times
3	June 2021	2020 Outstanding Performance Award for Enterprise Water Safety	CDP (Carbon Disclosure Project)
4	July 2021	Practice Case of 2020 Annual Performance Presentation of Beijing Listed Companies	The Listed Companies Association of Beijing
5	August 2021	ESG Excellent Practice Cases of Beijing Listed Companies	The Listed Companies Association of Beijing
6	August 2021	2020-2021 Information Disclosure Work Appraisal Grade A	SSE
7	August 2021	Industry Pioneer Title of Chine Carbon Company awarded by the First Session of China Carbon Company	Sina Finance
8	September 2021	In 2021, the Company reached the level of four-and-a-half star leader in ESG rating of 440 listed companies controlled by central enterprises, and was selected as one of the "ESG Pioneer 50 Index of Central Enterprises" and the "ESG Management Information System" was selected as an excellent ESG case in 2021.	Subject Group of ESG Blue Book (2021) for Listed Companies of Central Enterprises by the State-owned Assets Supervision and Administration Commission of the State Council

No.	Date of Award	Award Title	Award Institution
9	November 2021	Most Valuable Company in Investor Relations of the Year of the First China Listed Company Classic Award	ChinaFund Jihuibao
10	December 2021	The 11th China Securities Golden Bauhinia Award and Best Hong Kong Stock Connect Listed Company Award	Hosted by Hong Kong Ta Kung Wen Wei Media Group
11	December 2021	23rd Golden Bull Award for Listed Companies and 2021 Golden Bull Social Responsibility Award	China Securities Journal
12	December 2021	2021 Best Practice Cases for the Office of the Board of Directors of Listed Companies	China Association for Public Companies
13	December 2021	China Top 100 Special Contribution Enterprises Award, China Top 100 Enterprises Award, China Ethical Enterprises Award	China Business's Top 100 Forum
14	December 2021	2021 Evergreen Award – Sustainable Development Efficiency Award	Caijing Magazine

Independent auditor's report to the members of
China Shenhua Energy Company Limited
(Incorporated in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of China Shenhua Energy Company Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 190 to 307, which comprise the consolidated statement of financial position as at 31 December 2021, and the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standard Board ("IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institute of Certified Public Accounts ("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 judgment, 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.

KEY AUDIT MATTERS (CONTINUED)

Impairment assessment on coal mines related non-current assets

Refer to Notes 17(i),18 and 20 to the consolidated financial statements and the accounting policies in Note 3.

Key audit matter	How our audit addressed the key audit matter
As at 31 December 2021, the Group's coal mines related non-current assets, which comprise property, plant and equipment, construction in progress, exploration and evaluation assets and other non-current assets, had a total carrying value of RMB97,300million. In accordance with the prevailing accounting standards, management performed assessment at the end of the reporting period to determine whether there was any indication that these coal mines related non-current assets may be impaired. An asset is impaired when its recoverable amount, or the recoverable amount of the cash generating unit to which it belongs, is less than its carrying amount. As at 31 December 2021, management performed an impairment assessment on assets or assets group with indications of impairment on the balance sheet date. The recoverable amounts of these coal mines related non-current assets is determined based on the higher of value in use that based on future discounted cash flows on a cash generating unit basis and the net value of the assets or assets group's fair value minus disposal costs.	Our procedures in relation to impairment assessment on coal mines related non-current assets included: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of key internal controls relating to impairment assessment on non-current assets, understanding of the Group's procedures to identify impairment indicators of the non-current assets and evaluating management's identification of impairment indicators, if any, based on the internal sources and external sources of information; • assessing the appropriateness of the methodologies used by management to estimate value in use with reference to the requirements of the prevailing accounting standards; • challenging the reasonableness of significant judgements and estimates, such as sales growth rate related to future market supply and demand conditions, future coal price, future capital expenditure, future operating costs and discount rates used in management's calculation of value in use based on our knowledge of the business and industry;

KEY AUDIT MATTERS (CONTINUED)

Impairment assessment on coal mines related non-current assets (continued)

Refer to Notes 17(i) ,18 and 20 to the consolidated financial statements and the accounting policies in Note 3.

Key audit matter	How our audit addressed the key audit matter
When assessing the recoverable amounts, management is required to make a number of judgemental assumptions, particularly relating to the discount rates, the underlying cash flows projection based on the future market supply and demand conditions. Any changes in management's judgement may impact the results of the impairment assessment. As set out in Notes 17(i),18 and 20 to the consolidated financial statements, management concluded that an impairment provision for coal mines related non-current assets of RMB837 million was required for the current year. We identified impairment assessment on coal mines related non-current assets as a key audit matter due to the significant judgment made by management in determining the recoverable amounts of the assets and considering the possibility of management bias in the selection of assumptions adopted.	• When the management determines the recoverable amount by using the value in use calculations that based on future discounted cash flows, engaging our internal valuation specialists to assess whether the discount rates applied in the value in use calculations were within the reasonable range; • evaluating the historical accuracy of management's forecasts by comparing cash flow forecasts made in previous periods to the actual results in the current year; • evaluating the sensitivity analysis on discount rates and considering the resulting impact on the impairment assessment for the year and whether there were any indicators of management bias; and • assessing the relevant disclosures in the consolidated financial statements in respect of management's impairment assessment with reference to the requirements of the prevailing accounting standards.

KEY AUDIT MATTERS (CONTINUED)

Timing of revenue recognition from sale of coal

Refer to Note 5 to the consolidated financial statements and the accounting policies in Note 3.

Key audit matter	How our audit addressed the key audit matter
Sale of coal accounted for 74% of the Group's revenue for the year ended 31 December 2021. Sale of coal is recognised when the control of the coal is transferred to the customer. Management evaluates the terms of individual contracts in order to determine the appropriate timing for revenue recognition, which varies amongst contracts. Revenue is one of the key performance indicators of the Group. We identified the timing of revenue recognition as a key audit matter because of the different terms of trade offered by the Group to its customers which increases the risk that revenue could be recorded in the incorrect period or could be subject to manipulation to meet targets or expectations.	Our audit procedures to assess the timing of revenue recognition from the sale of coal included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of key internal controls over revenue recognition from the sale of coal; • inspecting coal sale contracts on a sample basis, to identify terms and conditions relating to transfer of the control of the coal and assessing the Group's timing of revenue recognition with reference to the requirements of the prevailing accounting standards; • obtaining confirmations, on a sample basis, from customers of the Group in relation to coal sales transactions during the year and balances of trade receivables of the year end and, for unreturned confirmations, performing alternative procedures by comparing the sales amount of the transactions with relevant underlying documentation or cash receipts subsequent to the financial year end relating to trade receivable balances;

KEY AUDIT MATTERS (CONTINUED)

Timing of revenue recognition from sale of coal (continued)

Refer to Note 5 to the consolidated financial statements and the accounting policies in Note 3.

Key audit matter	How our audit addressed the key audit matter
	• comparing, on a sample basis, whether specific coal sales transactions recorded before and after the financial year end date with relevant underlying documentation, which included sales invoices, goods dispatch notes, customer receipts, or shipping documents, as applicable under the respective sales transactions contracts, to determine whether the related revenue had been recognised in the appropriate financial period on the basis of the terms of sale as set out in the respective sales contracts; and • inspecting underlying documentation for journal entries relating to coal sales which were considered to meet specific risk-based criteria.

INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

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

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

The directors 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. This report is made solely to you, as a body, 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 these consolidated financial statements.

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

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

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

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

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

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

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

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

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

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence and 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 the independent auditor's report is Guen Kin Shing.

KPMG
Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong

25 March 2022

Consolidated statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2021

	Notes	Year ended 31 December 2021 RMB million	2020 RMB million
Revenue			
Goods and services	5	**335,216**	233,263
Cost of sales	7	**(239,156)**	(162,374)
Gross profit		**96,060**	70,889
Selling expenses		**(581)**	(555)
General and administrative expenses		**(9,119)**	(8,948)
Research and development costs		**(2,499)**	(1,362)
Other gains and losses	12	**(955)**	(194)
Other income	8	**893**	778
Loss allowances, net of reversal	12	**(2,561)**	(524)
Other expenses		**(1,103)**	(1,090)
Interest income	9	**2,492**	1,684
Finance costs	9	**(2,583)**	(2,263)
Share of results of associates		**(874)**	947
Profit before income tax		**79,170**	59,362
Income tax expense	10	**(18,161)**	(15,378)
Profit for the year	12	**61,009**	43,984
Profit for the year		**61,009**	43,984
Other comprehensive income for the year			
Items that will not be reclassified to profit or loss, net of income tax:			
Fair value changes on investments in equity instruments at fair value through other comprehensive income		**292**	56
Items that may be reclassified subsequently to profit or loss, net of income tax:			
Exchange differences		**(172)**	(344)
Share of other comprehensive income of associates		**66**	(41)
Fair value changes on investments in debt instruments at fair value through other comprehensive income		**-**	(4)
Other comprehensive income for the year, net of income tax		**186**	(333)
Total comprehensive income for the year		**61,195**	43,651

	Notes	Year ended 31 December 2021 RMB million	2020 RMB million
Profit for the year attributable to:			
Equity holders of the Company		**51,607**	35,849
Non-controlling interests		**9,402**	8,135
		61,009	43,984
Total comprehensive income for the year attributable to:			
Equity holders of the Company		**51,830**	35,607
Non-controlling interests		**9,365**	8,044
		61,195	43,651
Earnings per share			
–Basic/ diluted *(RMB)*	16	**2.597**	1.803

The notes on pages 201 to 307 form part of these financial statements.

Consolidated Statement of Financial Position

At 31 December 2021

	Notes	**31 December 2021 RMB million**	31 December 2020 RMB million
Non-current assets			
Property, plant and equipment	17	**263,656**	238,198
Construction in progress	18	**26,201**	39,845
Exploration and evaluation assets	19	**4,000**	-
Intangible assets	20	**4,651**	3,888
Right-of-use assets	24	**22,240**	18,597
Interests in associates	21	**47,708**	49,556
Financial assets at fair value through other comprehensive income	22	**2,174**	1,845
Other non-current assets	23	**28,089**	35,890
Deferred tax assets	30	**3,568**	2,856
Total non-current assets		**402,287**	390,675
Current assets			
Inventories	25	**12,633**	12,750
Accounts and bills receivables	26	**13,607**	11,759
Financial assets at fair value through other comprehensive income	22	**376**	-
Prepaid expenses and other current assets	27	**18,514**	17,480
Restricted bank deposits	28	**4,479**	3,391
Time deposits with original maturity over three months		**1,701**	11,186
Cash and cash equivalents	29	**156,706**	112,880
Assets classified as held for sale	11	**294**	2,783
Total current assets		**208,310**	172,229
Current liabilities			
Borrowings	31	**9,917**	8,847
Accounts and bills payables	34	**35,216**	28,980
Accrued expenses and other payables	35	**29,109**	18,949
Current portion of lease liabilities	33	**187**	242
Current portion of long-term liabilities	36	**1,427**	689
Income tax payable		**9,028**	6,313
Contract liabilities		**6,864**	5,256
Liabilities associated with assets classified as held for sale		**-**	217
Total current liabilities		**91,748**	69,493
Net current assets		**116,562**	102,736
Total assets less current liabilities		**518,849**	493,411

	Notes	31 December 2021 RMB million	31 December 2020 RMB million
Non-current liabilities			
Borrowings	31	**49,193**	50,251
Bonds	32	**3,172**	3,241
Long-term liabilities	36	**8,025**	2,661
Accrued reclamation obligations	37	**6,754**	6,169
Deferred tax liabilities	30	**974**	896
Lease liabilities	33	**1,510**	606
Total non-current liabilities		**69,628**	63,824
Net assets		**449,221**	429,587
Equity			
Share capital	38	**19,869**	19,890
Reserves		**360,169**	344,313
Equity attributable to equity holders of the Company		**380,038**	364,203
Non-controlling interests		**69,183**	65,384
Total equity		**449,221**	429,587

Approved and authorised for issue by the board of directors on 25 March 2022.

Wang Xiangxi
Chairman and Executive Director

Xu Mingjun
Executive Director

The notes on pages 201 to 307 form part of these financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2021

	Equity attributable to equity holders of the Company										
	Share capital RMB million (Note 38)	Treasury shares RMB million (Note 38)	Share premium RMB million (Note (i))	Capital reserve RMB million (Note (ii))	Exchange reserve RMB million	Statutory reserves RMB million (Note (iii))	Other reserves RMB million (Note (iv))	Retained earnings RMB million (Note (v))	Total RMB million	Non-controlling interests RMB million	Total equity RMB million
At 1 January 2021	19,890	(256)	85,001	3,657	(201)	20,236	(14,809)	250,685	364,203	65,384	429,587
Profit for the year	–	–	–	–	–	–	–	51,607	51,607	9,402	61,009
Other comprehensive income for the year	–	–	–	–	(133)	–	356	–	223	(37)	186
Total comprehensive income for the year	–	–	–	–	(133)	–	356	51,607	51,830	9,365	61,195
Dividend declared *(Note 15)*	–	–	–	–	–	–	–	(35,962)	(35,962)	–	(35,962)
Appropriation of maintenance and production funds *(Note (iii))*	–	–	–	–	–	5,581	–	(5,581)	–	–	–
Utilisation of maintenance and production funds *(Note (iii))*	–	–	–	–	–	(3,392)	–	3,392	–	–	–
Cancellation of repurchased own shares	(21)	256	(235)	–	–	–	–	–	–	–	–
Contributions from non–controlling shareholders	–	–	–	–	–	–	–	–	–	1,646	1,646
Distributions to non–controlling shareholders	–	–	–	–	–	–	–	–	–	(6,739)	(6,739)
Disposal of subsidiaries	–	–	–	–	–	–	–	–	–	(227)	(227)
Others	–	–	–	–	–	–	137	(170)	(33)	(246)	(279)
At 31 December 2021	19,869	–	84,766	3,657	(334)	22,425	(14,316)	263,971	380,038	69,183	449,221

	Equity attributable to equity holders of the Company										
	Share capital *RMB million* *(Note 38)*	Treasury shares *RMB million* *(Note 38)*	Share premium *RMB million* *(Note (i))*	Capital reserve *RMB million* *(Note (ii))*	Exchange reserve *RMB million*	Statutory reserves *RMB million* *(Note (iii))*	Other reserves *RMB million* *(Note (iv))*	Retained earnings *RMB million* *(Note (v))*	Total *RMB million*	Non-controlling interests *RMB million*	Total equity *RMB million*
At 1 January 2020	19,890	–	85,001	3,618	56	25,118	(14,824)	237,218	356,077	64,141	420,218
Profit for the year	–	–	–	–	–	–	–	35,849	35,849	8,135	43,984
Other comprehensive income for the year	–	–	–	–	(257)	–	15	–	(242)	(91)	(333)
Total comprehensive income for the year	–	–	–	–	(257)	–	15	35,849	35,607	8,044	43,651
Dividend declared (Note 15)	–	–	–	–	–	–	–	(25,061)	(25,061)	–	(25,061)
Appropriation of maintenance and production funds (Note (iii))	–	–	–	–	–	2,995	–	(2,995)	–	–	–
Utilisation of maintenance and production funds (Note (iii))	–	–	–	–	–	(6,181)	–	6,181	–	–	–
Purchase of own shares	–	(256)	–	–	–	–	–	–	(256)	–	(256)
Contributions from non-controlling shareholders	–	–	–	–	–	–	–	–	–	606	606
Distributions to non-controlling shareholders	–	–	–	–	–	–	–	–	–	(7,950)	(7,950)
Disposal of subsidiaries	–	–	–	–	–	–	–	–	–	627	627
Others	–	–	–	39	–	(1,696)	–	(507)	(2,164)	(84)	(2,248)
At 31 December 2020	19,890	(256)	85,001	3,657	(201)	20,236	(14,809)	250,685	364,203	65,384	429,587

Notes:

(i) Share premium represents the difference between the total amount of the par value of shares issued and the amount of the net proceeds received upon the global initial public offering of H shares in 2005 and the issuance of A shares in 2007.

(ii) The capital reserve represents the difference between the total amount of the par value of shares issued and the amount of the net assets, net of other reserves, transferred from Shenhua Group Corporation Limited ("Shenhua Group") in connection with the Restructuring (as defined in Note 1).

(iii) Statutory reserves

Statutory surplus reserve

According to the PRC Company Law and the Company's Articles of Association, the Company is required to transfer 10% of its net profit as determined in accordance with the China Accounting Standards for Business Enterprises ("China Accounting Standards") to its statutory surplus reserve until the reserve balance reaches 50% of the registered capital. The transfer to this reserve must be made before distribution of a dividend to shareholders.

The statutory surplus reserve has reached 50% of the registered capital in 2009. Accordingly, no appropriation of net profit to the statutory surplus reserve has been proposed since 1 January 2010.

Statutory surplus reserve can be used to make up losses, if any, or to expand the Company's business, and may be converted into share capital by the issue of new shares to shareholders in proportion to their existing shareholdings or by increasing the par value of the shares currently held by them, provided that the balance after such issue is not less than 25% of the registered capital of the Company. The statutory surplus reserve is not distributable.

Specific reserve for maintenance and production funds

Pursuant to the relevant PRC regulations, the Group is required to transfer production and maintenance funds at fixed rates based on relevant bases, such as production volume, to a specific reserve account. The production and maintenance funds could be utilised when expenses or capital expenditures on production maintenance and safety measures are incurred. The amount of production and maintenance funds utilised would be transferred from the specific reserve account to retained earnings.

Notes: (Continued)

(iii) Statutory reserves (Continued)

Discretionary surplus reserve

The appropriation to the discretionary surplus reserve is subject to the shareholders' approval. The utilisation of the reserve is similar to that of the statutory surplus reserve.

The directors of the Company (the "Directors") have not proposed any appropriation to the discretionary surplus reserve in 2021 and 2020.

(iv) Other reserves

Other reserves mainly represents the consideration paid for acquisition of subsidiaries under common control, and share of other reserves of associates.

(v) Retained earnings

Included in the retained earnings of the Group were its share of the surplus reserve of its domestic subsidiaries amounted to RMB26,936 million as at 31 December 2021 (31 December 2020: RMB26,065 million).

The notes on pages 201 to 307 form part of these financial statements.

Consolidated Statement of Cash Flows

For the year ended 31 December 2021

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Operating activities		
Profit before income tax	79,170	59,362
Adjustments for:		
Depreciation of property, plant and equipment *(Note 12)*	19,245	17,954
Depreciation of right–of–use assets *(Note 12)*	725	689
Amortisation of intangible assets *(Note 12)*	413	400
Amortisation of long–term deferred expenses *(Note 12)*	1,162	942
(Gains)/ losses on disposal of property, plant and equipment, exploration and evaluation assets, intangible assets and non–current assets *(Note 12)*	(346)	160
Losses on disposal of subsidiaries and associates *(Note 12)*	9	7
Gains on changes in fair value arising from remeasurement of remaining equity interests after losing control *(Notes 12)*	–	(1,181)
Gains on disposal of financial assets at FVTPL *(Note 12)*	–	(449)
Losses on changes in fair value of derivative financial instruments *(Note 12)*	–	134
Impairment losses on property, plant and equipment *(Note 12)*	535	605
Impairment losses on construction in progress *(Note 12)*	376	268
Impairment losses on exploration and evaluation assets *(Note 12)*	–	505
Impairment losses on intangible assets *(Note 12)*	11	–
Impairment losses on right–of–use assets *(Note 12)*	–	3
Impairment losses on assets held for sale *(Note 12)*	–	87
Impairment losses on goodwill *(Note 12)*	36	18
Impairment losses on interests in associates *(Note 12)*	60	–
Reversal of allowance for prepaid expenses *(Note 12)*	–	(57)
Write–down of inventories *(Note 12)*	274	94
Interest income *(Note 9)*	(2,492)	(1,684)
Share of results of associates	874	(947)
Loss allowances, net of reversal *(Note 12)*	2,561	524
Interest expenses	2,698	2,334
Exchange gain, net *(Note 9)*	(115)	(71)
Operating cash flows before movements in working capital	105,196	79,697
Changes in working capital:		
Increase in inventories	(157)	(909)
Increase in accounts and bills receivables	(2,779)	(2,689)
Increase in prepaid expenses and other assets	(5,027)	(2,609)
Increase in accounts and bills payables	2,326	3,693
Increase in accrued expenses and other liabilities	9,488	15,438
Increase in contract liabilities	1,608	472
Cash generated from operations	110,655	93,093
Income tax paid	(16,080)	(11,804)
Net cash generated from operating activities	94,575	81,289

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Investing activities		
Additions of property, plant and equipment, intangible assets, exploration and evaluation assets, construction in progress and other non–current assets	(23,236)	(20,030)
Increase in right–of–use assets	(627)	(644)
Proceeds from disposal of property, plant and equipment, intangible assets and other non–current assets	900	490
Proceeds from disposal of wealth management products and derivative financial instruments included in prepaid expenses and other current assets	–	33,736
Investments in associates	(736)	(123)
Purchase of non–controlling interests	–	(786)
Net cash received from disposal of subsidiaries	1,389	1,350
Net cash received from disposed of assets classified as held for sale	2,566	–
Net cash received from acquisition of subsidiaries	614	–
Dividend received from associates	1,613	937
Interest received	2,135	1,427
Increase in restricted bank deposits	(1,088)	(3,023)
Placing of time deposits with original maturity over three months	(1,046)	(11,212)
Maturity of time deposits with original maturity over three months	10,531	2,016
Investments in long–term loans included in other non–current assets	–	(1,191)
Disposal of interbank certificate of deposits included in prepaid expenses and other current assets	–	28,621
Collection of other current assets	141	480
Net cash (used in)/ generated from investing activities	(6,844)	32,048

Consolidated Statement of Cash Flows (Continued)

For the year ended 31 December 2021

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Financing activities		
Capital element of lease rentals paid *(Note 29(b))*	(197)	(250)
Interest element of lease rentals paid *(Note 29(b))*	(29)	(37)
Interest paid *(Note 29(b))*	(3,214)	(2,530)
Proceeds from borrowings *(Note 29(b))*	22,114	9,940
Repayments of borrowings *(Note 29(b))*	(21,741)	(13,840)
Repayments of bonds	–	(3,488)
Proceeds from bills discounted	995	996
Purchase of own shares	–	(256)
Contributions from non–controlling shareholders	1,129	606
Distributions to non–controlling shareholders	(6,826)	(8,159)
Dividend paid to equity holders of the Company *(Note 15)*	(35,962)	(25,061)
Net cash used in financing activities	(43,731)	(42,079)
Net increase in cash and cash equivalents	44,000	71,258
Cash and cash equivalents, at the beginning of the year	112,880	41,827
Effect of foreign exchange rate changes	(174)	(131)
Cash and cash equivalents included in assets classified as held for sale	–	(74)
Cash and cash equivalents, at the end of the year	156,706	112,880

The notes on pages 201 to 307 form part of these financial statements.

1. PRINCIPAL ACTIVITIES AND ORGANISATION

Principal activities

China Shenhua Energy Company Limited (the "Company") and its subsidiaries (hereinafter collectively referred to as the "Group") are principally engaged in: (i) the production and sale of coal; and (ii) the generation and sale of coal–based power to provincial/regional electric grid companies in the People's Republic of China (the "PRC"). The Group operates an integrated railway network and seaports that are primarily used to transport the Group's coal sales from its mines. The primary customers of the Group's coal sales include power plants, metallurgical and coal chemical producers in the PRC.

Organisation

The Company was established in the PRC on 8 November 2004 as a joint stock limited company as part of the Restructuring (as defined below) of Shenhua Group, a state–owned enterprise under the direct supervision of the State Council of the PRC.

Effective on 31 December 2003, the coal production and power generation operations previously operated by various entities wholly–owned or controlled by Shenhua Group were restructured and managed separately (the "Restructuring"), and those assets and liabilities related to the operations and businesses that were transferred to the Company were revalued by China Enterprise Appraisal Co., Ltd., an independent valuer registered in the PRC, as at 31 December 2003 as required by the PRC rules and regulations.

On 8 November 2004, in consideration for Shenhua Group transferring the coal mining and power generating assets and liabilities to the Company, the Company issued 15,000,000,000 domestic state–owned ordinary shares with a par value of RMB1.00 each to Shenhua Group. The shares issued to Shenhua Group represented the entire registered and paid–up share capital of the Company at that date.

In 2005, the Company issued 3,089,620,455 H shares with a par value of RMB1.00 each, at a price of Hong Kong Dollars ("HKD") 7.50 per H share by way of a global initial public offering. In addition, 308,962,045 domestic state–owned ordinary shares of RMB1.00 each owned by Shenhua Group were converted into H shares. A total of 3,398,582,500 H shares were listed on The Stock Exchange of Hong Kong Limited.

In 2007, the Company issued 1,800,000,000 A shares with a par value of RMB1.00 each, at a price of RMB36.99 per A share in the PRC. The A shares were listed on the Shanghai Stock Exchange.

1. PRINCIPAL ACTIVITIES AND ORGANISATION (CONTINUED)

Immediate parent and ultimate controlling party

On 28 August 2017, Shenhua Group received the Notice regarding the Restructuring of China Guodian Corporation and Shenhua Group Corporation Limited (Guo Zi Fa Gai Ge [2017] No. 146) from the State–owned Assets Supervision and Administration Commission of the State Council, which approves that China Guodian Corporation (the "China Guodian") and Shenhua Group shall implement the joint restructuring, China Guodian shall be merged into Shenhua Group, and the company name of Shenhua Group shall be changed to China Energy Investment Corporation Limited (the "China Energy Group"). China Energy Group will be the parent company after the completion of the restructuring.

On 27 November 2017, Shenhua Group has completed the industrial and commercial registration of changes in the business license. The Directors consider the immediate parent and ultimate holding company of the Group to be China Energy Group.

2. CHANGES IN ACCOUNTING POLICIES

The Group has applied the following amendments to IFRSs issued by the IASB to these financial statements for the current accounting period:

- Amendments to IFRS 16, Covid–19–Related Rent Concessions beyond 31 December 2021
- Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16, Interest Rate Benchmark Reform–phase 2

None of these developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented in this financial report. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period except for the amendment to IFRS 16, Covid–19–Related Rent Concessions, which provides a practical expedient that allows lessees not to assess whether particular rent concessions occurring as a direct consequence of the COVID–19 pandemic are lease modifications and, instead, account for those rent concessions as if they were not lease modifications, if the eligibility conditions are met. One of these conditions requires the reduction in lease payments affect only payments originally due on or before a specified time limit. The 2021 amendment extends this time limit from 31 December 2021 to 31 December 2022.

3. SIGNIFICANT ACCOUNTING POLICIES

Basis of preparation

The consolidated financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IASs") and Interpretations issued by the International Accounting Standards Board (the "IASB"). They are presented in Renminbi ("RMB") and all values are rounded to the nearest million (RMB' million) except when otherwise indicated. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited ("Listing Rules") and by the Hong Kong Companies Ordinance ("CO").

The IASB has issued certain new and revised IFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 2 provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these financial statements.

The consolidated financial statements have been prepared on the historical cost basis, except for certain financial instruments as disclosed in Note 40.3, which have been measured at fair value at the end of each reporting period, as explained in the accounting policies set out below.

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

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

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

– Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;

– Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and

– Level 3 inputs are unobservable inputs for the asset or liability.

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

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

Judgements made by management in the application of IFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in Note 4.

Significant accounting policies adopted by the Group are disclosed below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

– has power over the investee;

– is exposed, or has rights, to variable returns from its involvement with the investee; and

– has the ability to use its power to affect its returns.

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

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Basis of consolidation (Continued)

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

– the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;

– potential voting rights held by the Group, other vote holders or other parties;

– rights arising from other contractual arrangements; and

– any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income are attributed to equity holders of the Company and to the non–controlling interests.Total comprehensive income of subsidiaries is attributed to equity holders of the Company and to the non–controlling interests even if this results in the non–controlling interests having a deficit balance.

Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

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.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Changes in the Group's ownership interests in existing subsidiaries

Changes in the Group's interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity 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 recognised directly in equity and attributed to owners of the Company.

Business combinations

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

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with IAS 12 Income Taxes and IAS 19 Employee benefits respectively.

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

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

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

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

A cash–generating unit to which goodwill has been allocated is tested for impairment annually or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the cash–generating unit to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount of the cash–generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro–rata basis based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognised directly in profit or loss. An impairment loss recognised for goodwill is not reversed in subsequent periods.

On disposal of the relevant cash–generating unit or any of the cash–generating unit within the group of cash–generating units, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of an operation within the cash–generating unit (or a cash–generating unit within a group of cash–generating units), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the cash–generating unit) disposed of and the portion of the cash–generating unit (or the group of cash–generating units) retained.

Investments in associates

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

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under the equity method, an investment in an associate is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long–term interests that, in substance, form part of the Group's net investment in the associate, after applying the expected credit losses (the "ECL") model to such other long–term interests where applicable), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of that associate.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Investments in associates (Continued)

On acquisition of the investment in an associate, any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss is recognised when the recoverable amount is less than the carrying value of the investment in associates. Any reversal of that impairment loss is recognised in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

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

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

Non–current assets held for sale

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

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

When the Group is committed to a sale plan involving disposal of an investment, or a portion of an investment, in an associate or joint venture, the investment or the portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met, and the Group discontinues the use of the equity method in relation to the portion that is classified as held for sale from the time when the investment (or a portion of the investment) is classified as held for sale.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Non–current assets held for sale (Continued)

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

Revenue from contracts with customers

Under IFRS 15, the Group recognises 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 or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised 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 an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with IFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

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

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than entity's functional currencies (foreign currencies) are recognised at the rates of exchange prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non–monetary items that are measured in terms of historical cost in a foreign currency are not retranslated. Exchange differences on monetary items are recognised in profit or loss in the period in which they arise.

For the purpose of presenting the consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into the presentation currency of the Group (i.e. RMB) using exchange rates prevailing at the end of each reporting period. Income and expenses items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognised in other comprehensive income and accumulated in equity under the heading of exchange reserve, attributed to non–controlling interests as appropriate.

Borrowing costs

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 as part of the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. All other borrowing costs are expensed in the period in which they are incurred.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non–current assets are recognised as deferred income in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

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

Retirement benefit costs

Payments to state–managed retirement benefit schemes and a supplemental defined contribution pension plan approved by the government are recognised as an expense when employees have rendered service entitling them to the contributions.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from "profit before income tax" as reported in the consolidated statement of profit or loss and other comprehensive income because of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Unrecognised deferred tax assets are reassessed at the end of each reporting year and are recognised to the extent that it has become probable that future taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realised, based on tax rate (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Taxation (Continued)

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

Property, plant and equipment

Property, plant and equipment, which consists of freehold land and buildings, mining structures and mining rights, mining related machinery and equipment, and other items of plant and equipment, held for use in the production or supply of goods or services, or for administrative purposes, are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Depreciation is recognised so as to write–off the cost of items of property, plant and equipment (other than freehold land and construction in progress, which are subject to impairment assessment) less their residual values over their estimated useful lives. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Property, plant and equipment, except for freehold land, and mining structures and mining rights, are depreciated on a straight–line basis at the following rates per annum:

Categories	Term for deprecation (year)
Buildings	10 – 55 years
Mining related machinery and equipment	5 – 40 years
Generators related machinery and equipment	8 – 35 years
Railway and port	6 – 45 years
Vessels	25 years
Coal chemical related machinery and equipment	8 – 20 years
Furniture, fixtures, motor vehicles and other equipment	5 – 35 years

The Directors reviewed the estimated useful lives of the assets annually based on the Group's historical experience with similar assets and taking into account anticipated technological changes.

Construction in progress intended to be used for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property, plant and equipment, commences when the assets are ready for their intended use.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property, plant and equipment (Continued)

Mining structures and mining rights

The costs of mining structures and mining rights, which include the costs of acquiring and developing mining structures and mining rights, are firstly capitalised as "construction in progress" in the year in which they are incurred and then reclassified to "Mining structures and mining rights" under property, plant and equipment when they are ready for commercial production.

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

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

Stripping costs incurred to develop a mine (or pit) before the production commences or to improve access to the component of the ore body during the production stage are capitalised as part of the cost of constructing the mine (or pit) and subsequently amortised over the life of the mine (or pit) on a units–of–production basis. Stripping costs and secondary development expenditure, mainly comprising costs on blasting, haulage, excavation, etc. incurred during the production stage of the ore body and does not providing any improved access to the ore body are charged to profit or loss as incurred.

Commercial reserves are proved and probable reserves. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

Exploration and evaluation assets

Exploration and evaluation assets comprise costs which are directly attributable to the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource:

- researching and analysing historical exploration data;
- gathering exploration data through topographical, geochemical and geophysical studies;
- exploratory drilling, trenching and sampling;
- determining and examining the volume and grade of the resource;
- surveying transportation and infrastructure requirements; and
- conducting market and finance studies.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property, plant and equipment (Continued)

Exploration and evaluation assets (Continued)

Expenditure during the initial exploration preparation stage of a project is charged to profit or loss as incurred. Exploration and evaluation costs, including the costs of acquiring licenses, are capitalised as exploration and evaluation assets on a project–by–project basis pending determination of the technical feasibility and commercial viability of the project.

Once the final feasibility study has been completed and a development decision has been taken, accumulated capitalised exploration and evaluation expenditures in respect of an area of interest are transferred to property, plant and equipment. In circumstances when an area of interest is abandoned or management decides it is not commercially viable, any accumulated costs in respect of that area are written off in the period the decision is made.

Obligations for land reclamation

The Group's obligations for land reclamation consist of spending estimates at both surface and underground mines in accordance with the PRC rules and regulations. The Group estimates its liabilities for land reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash flows for the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset associated with the liability for final reclamation and mine closure. The obligation and corresponding asset are recognised in the period in which the liability is incurred. The asset is depreciated on the units–of–production method over its expected life and the liability is accreted to the projected spending date. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation and the corresponding asset are recognised at the appropriate discount rate.

Intangible assets

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at costs less accumulated amortisation and any accumulated impairment losses. Amortisation for intangible assets with finite useful lives is recognised on a straight–line basis over their estimated useful lives. The estimated useful life and amortisation 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.

Internally–generated intangible assets – research and development expenditure

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

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Intangible assets (Continued)

Internally–generated intangible assets – research and development expenditure (Continued)

An internally–generated intangible asset arising from development activities (or from the development phase of an internal project) is recognised if, and only if, all of the following have been demonstrated:

– the technical feasibility of completing the intangible asset so that it will be available for use or sale;

– the intention to complete the intangible asset and use or sell it;

– the ability to use or sell the intangible asset;

– how the intangible asset will generate probable future economic benefits;

– the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognised for internally–generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally–generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally–generated intangible asset is measured at cost less accumulated amortisation and accumulated impairment losses (if any), on the same basis as intangible assets acquired separately.

Intangible assets acquired in a business combination not under common control

Intangible assets acquired in a business combination are recognised separately from goodwill and are initially recognised at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired in a business combination with finite useful lives are reported at cost less accumulated amortisation and any accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

Derecognition of intangible assets

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

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Intangible assets (Continued)

Impairment of tangible and intangible assets other than goodwill

At the end of the reporting period, the Group reviews the carrying amounts of its tangible, intangible assets with finite useful lives to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any).

The recoverable amount of tangible and intangible assets are estimated individually, when it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash–generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash–generating units, or otherwise they are allocated to the smallest group of cash–generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of 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 cash–generating unit) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash–generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or a cash–generating unit) is reduced to its recoverable amount. 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 basis based on the carrying amount of each asset in the unit. 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. An impairment loss is recognised immediately in profit or loss.

Leased assets

At inception of a contract, the Group assesses whether the contract is, or contains, 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. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Leased assets (Continued)

(i) As a lessee

Where the contract contains lease component(s) and non–lease component(s), the Group has elected not to separate non–lease components and accounts for each lease component and any associated non–lease components as a single lease component for all leases.

At the lease commencement date, the Group recognises a right–of–use asset and a lease liability, except for short–term leases that have a lease term of 12 months or less and leases of low–value assets. When the Group enters into a lease in respect of a low–value asset, the Group decides whether to capitalise the lease on a lease–by–lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

The right–of–use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right–of–use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right–of–use asset is subsequently stated at cost less accumulated depreciation and impairment losses.

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right–of–use asset, or is recorded in profit or loss if the carrying amount of the right–of–use asset has been reduced to zero.

The lease liability is also remeasured when there is a change in the scope of a lease or the consideration for a lease that is not originally provided for in the lease contract ("lease modification") that is not accounted for as a separate lease. In this case the lease liability is remeasured based on the revised lease payments and lease term using a revised discount rate at the effective date of the modification. The only exceptions are any rent concessions which arose as a direct consequence of the COVID–19 pandemic and which satisfied the conditions set out in paragraph 46B of IFRS 16 Leases. In such cases, the Group took advantage of the practical expedient set out in paragraph 46A of IFRS 16 and recognised the change in consideration as if it were not a lease modification.

In the consolidated statement of financial position, the current portion of long–term lease liabilities is determined as the present value of contractual payments that are due to be settled within twelve months after the reporting period.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Leased assets (Continued)

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

When a contract contains lease and non–lease components, the Group allocates the consideration in the contract to each component on a relative stand–alone selling price basis.

When the Group is an intermediate lessor, the sub–leases are classified as a finance lease or as an operating lease with reference to the right–of–use asset arising from the head lease. If the head lease is a short–term lease to which the Group applies the exemption method, then the Group classifies the sub–lease as an operating lease.

Inventories

Inventories are stated at the lower of cost and net realisable value. Costs of inventories are calculated using the weighted average method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle that obligation, and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial instruments (Continued)

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities measured at fair value through profit and loss (the "FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities FVTPL are recognised immediately in profit or loss.

Effective interest method

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

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

– the financial asset is held within a business model whose objective is to collect 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.

Financial assets that meet the following conditions are subsequently measured at fair value through other comprehensive income (the "FVTOCI"):

– the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling; 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 FVTPL, except that at the date of initial application/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 recognised by an acquirer in a business combination to which IFRS 3 Business Combinations applies.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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 amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

(i) Amortised cost and interest income (Continued)

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost. 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 recognised by applying the effective interest rate to the amortised 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 recognised 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.

(ii) 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 recognised in other comprehensive income and accumulated in the other reserves; 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 recognised 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 the "other income" line item in profit or loss.

(iii) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss. The net gain or loss recognised in profit or loss includes any dividend or interest earned on the financial asset and is included in the "other gains and losses" line item.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Impairment of financial assets

The Group recognises a loss allowance for ECL on financial assets which are subject to impairment under IFRS 9 (including accounts receivable, other receivables, long–term receivables, loans to China Energy Group and fellow subsidiaries, entrusted loans and financial guarantee contracts). 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 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. Assessments are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for accounts receivable. The ECL on these assets are assessed individually for credit–impaired debtors or using a provision matrix with appropriate groupings.

For all other instruments, the Group measures the loss allowance equal to 12–month ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Impairment of financial assets (Continued)

(i) 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 instrument's external credit rating (if available);
- 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;
- 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.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Impairment of financial assets (Continued)

(i) Significant increase in credit risk (Continued)

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.

For financial guarantee contracts, the date that the Group becomes a party to the irrevocable commitment is considered to be the date of initial recognition for the purposes of assessing the financial instrument for impairment. In assessing whether there has been a significant increase in the credit risk since initial recognition of financial guarantee contracts, the Group considers the changes in the risk that the specified debtor will default on the contract.

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.

(ii) 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). 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.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Impairment of financial assets (Continued)

(iii) 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:

(a) significant financial difficulty of the issuer or the borrower;

(b) a breach of contract, such as a default or past due event;

(c) the lenders of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concessions that the lenders would not otherwise consider;

(d) it is becoming probable that the borrower will enter bankruptcy or other financial re–organisation; or

(e) the disappearance of an active market for that financial asset because of financial difficulties.

(iv) 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. 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 recognised in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Impairment of financial assets (Continued)

(v) 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.

For a financial guarantee contract, the Group is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed. Accordingly, the expected losses is the present value of the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder, the debtor or any other party.

For ECL on financial guarantee contracts, the Group will apply a discount rate that reflects the current market assessment of the time value of money and the risks that are specific to the cash flows but only if, and to the extent that, the risks are taken into account by adjusting the discount rate instead of adjusting the cash shortfalls being discounted.

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 accounts and bills receivables and other receivables are each assessed as a separate group. Loans receivable are assessed for ECL on an individual basis);

– Past–due status; 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.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Impairment of financial assets (Continued)

(v) Measurement and recognition of ECL (Continued)

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 amortised cost of the financial asset.

For financial guarantee contracts, the loss allowances are recognised at the higher of the amount of the loss allowance determined in accordance with IFRS 9; and the amount initially recognised less, where appropriate, cumulative amount of income recognised over the guarantee period.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognisation. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

Derecognition of financial assets

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

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI upon application of IFRS 9, the cumulative gain or loss previously accumulated in other reserves is not reclassified to profit or loss, but is transferred to retained earnings.

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 recognised at the proceeds received, net of direct issue costs.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial assets (Continued)

Financial liabilities and equity (Continued)

Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL.

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is (i) contingent consideration of an acquirer in a business combination to which IFRS 3 applies, (ii) held for trading or (iii) it is designated as at FVTPL.

A financial liability is classified as held for trading if:

– it has been acquired principally for the purpose of repurchasing it in the near term; or

– on initial recognition it is 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, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

– such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

– the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

– it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at amortised cost

Financial liabilities including borrowings, accounts and bills payables, other payables, long–term liabilities, medium–term notes and bonds are subsequently measured at amortised cost, using the effective interest method.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument. Financial guarantee contract liabilities are measured initially at their fair values. It is subsequently measured at the higher of:

– the amount of the loss allowance determined in accordance with IFRS 9 /IAS 37 Provisions, Contingent Liabilities and Contingent Assets; and

– the amount initially recognised less, where appropriate, cumulative amortisation recognised over the guarantee period.

Derecognition of financial liabilities

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

Derivative financial instruments

The Group's derivative financial instruments represent cross–currency exchange rate swaps, and are initially recognised at fair value at the date when the derivative contracts are entered into, and remeasured at fair value at the end of the reporting period, with any gains or losses recognised in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Related parties

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

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

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

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

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

Segment reporting

Operating segments, and the amounts of each segment item reported in the financial statements, are identified from the financial information provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 3, the Directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

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

4.1 Critical judgements in applying accounting policies

The following are critical judgements, apart from those involving estimation (see Note 4.2 below), that the Directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the consolidated financial statements.

Control over Guoneng Hebei Dingzhou Power Co., Ltd. ("Dingzhou Power")

Note 45 describes that Dingzhou Power is a subsidiary of the Company although the Company has only 41% ownership interest and voting rights in Dingzhou Power. The remaining 59% of ownership interest and voting rights are owned by two shareholders that are unrelated to the Group as to 19% and 40%, respectively. Details of Dingzhou Power are set out in Note 45.

The Directors evaluated whether the Company has the practical ability to lead the relevant activities of Dingzhou Power to determine whether the Company has actual control over Dingzhou Power. The Company is the largest equity owner of Dingzhou Power and no other equity owners individually or in aggregate had the power to control Dingzhou Power according to the articles of association. Historically, the Company controlled the operation of Dingzhou Power by appointing senior management, approving annual budget and determining the remuneration of employees etc. Considering above mentioned factors, the Directors are of the opinion that the Company has sufficiently dominant power over Dingzhou Power as the Company is the governing body of most of the relevant activities of it. Therefore the financial statements of Dingzhou Power are consolidated by the Company during the periods presented.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

4.2 Key sources of estimation uncertainty

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

Coal reserves

Engineering estimates of the Group's coal reserves are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated coal reserves can be designated as "proved" and "probable". Proved and probable coal reserve estimates are updated at regular basis and have taken into account recent production and technical information of each mine. In addition, as prices and cost levels change from year to year, the estimate of proved and probable coal reserves also changes. This change is considered as a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation rates.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expenses and impairment loss. Depreciation rates are determined based on estimated proved and probable coal reserve quantity (the denominator) and capitalised costs of mining structures and mining rights (the numerator). The capitalised cost of mining structures and mining rights are amortised based on the units of coal produced.

Impairment losses

In considering the impairment losses that may be required for certain of the Group's assets which mainly include property, plant and equipment, construction in progress, exploration and evaluation assets, intangible assets, right–of–use assets, interests in associates and other non–current assets, the recoverable amount of the asset need to be determined. The recoverable amount is the higher of its fair value less cost of disposal and value in use. It is difficult to precisely estimate fair value because quoted market prices for these assets may not be readily available. In determining the value in use, the Group uses all readily available information in determining expected cash flows generated by the cash–generating unit to which the asset belongs and they are discounted to their present value, which requires significant judgement relating to cash flow items such as level of sale volume, selling price, amount of operating costs and future returns.

In considering the impairment losses that may be required for current receivables and other financial assets, future cash flows need to be determined. One of the key assumptions that has to be applied is about the ability of the debtors to settle the receivables.

Notwithstanding that the Group has used all available information to make this estimation, inherent uncertainty exists and actual write–offs may be higher or lower than the amount estimated.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

4.2 Key sources of estimation uncertainty (Continued)

Depreciation

Other than the freehold land and mining structures and mining rights, property, plant and equipment are depreciated on a straight–line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. The Group reviews the estimated useful lives and residual value of the assets regularly based on the Group's historical experience with similar assets and taking into account anticipated technological changes. Depreciation for future periods is adjusted if there is a significant change from previous estimates. The carrying amount of the property, plant and equipment is disclosed in Note 17.

Deferred tax assets

As at 31 December 2021, deferred tax assets of RMB3,568 million (2020: RMB2,856 million) have been recognised in the Group's consolidated statement of financial position. No deferred tax asset has been recognised on the tax losses of RMB7,097 million (2020: RMB5,563 million) and deductible temporary differences of RMB8,864 million (2020: RMB9,244 million) due to the unpredictability of future profit streams. The realisation of the deferred tax assets mainly depends on whether sufficient future profits or taxable temporary differences will be available in the future. In cases where the actual future profits generated are less or more than expected, a material reversal or further provision of deferred tax assets may arise, which will be recognised in profit or loss in the period in which such a reversal or further provision takes place.

Fair value measurement of financial instruments

Certain of the Group's financial assets, unquoted equity instruments and accounts and bills receivables amounting to RMB2,550 million as at 31 December 2021 (RMB1,845 million as at 31 December 2020) are measured at fair values with fair values being determined based on unobservable inputs using valuation techniques as set out in Note 40.3. Changes in assumptions relating to any key inputs may have a material impact on the reported fair values of these instruments.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

4.2 Key sources of estimation uncertainty (Continued)

Provision of ECL for accounts receivables

The Group uses provision matrix to calculate ECL for accounts receivable. The provision rates are based on the aging of accounts receivable as groupings of receivables that have similar loss patterns. The provision matrix is based on the Group's historical default rates taking into consideration forward–looking information that is available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward–looking information are considered. In addition, accounts and bills receivables with significant balances and credit impaired are assessed for ECL individually.

The provision of ECL is sensitive to changes in estimates. The information about the ECL and the Group's accounts receivable are disclosed in Notes 26 and 40.2, respectively.

Obligations for land reclamation

The estimation of the liabilities for reclamation and mine closure involves the estimates of the amount and timing for the future cash spending as well as the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liability. The Group considers the factors including development plan of the mines, the geological structure of the mining regions and reserve volume to determine the scope, amount and timing of reclamation and mine closure works to be performed. Determination of the effect of these factors involves judgements from the Group and the estimated liabilities may turn out to be different from the actual expenditure to be incurred. The discount rate used by the Group may also be altered to reflect the changes in the market assessments of the time value of money and the risks specific to the liability, such as change of the borrowing rate and inflation rate in the market. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation will be recognised at the appropriate discount rate. The carrying amounts of the obligations are disclosed in Note 37.

5. REVENUE FROM GOODS AND SERVICES

Disaggregation of revenue of business lines and geographical location of customers is as follows:

Segments	Coal		Power		Railway		Port		Shipping		Coal chemical		Other		Total	
	2021 **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million
Types of goods or service																
Sales of goods																
Coal	**249,569**	163,751	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	**249,569**	163,751
Power	**–**	–	**56,599**	44,321	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	**56,599**	44,321
Coal chemical products	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	**5,277**	4,549	**–**	–	**5,277**	4,549
Others	**6,672**	5,446	**7,360**	5,027	**–**	–	**–**	–	**–**	–	**574**	616	**–**	–	**14,606**	11,089
	256,241	169,197	**63,959**	49,348	**–**	–	**–**	–	**–**	–	**5,851**	5,165	**–**	–	**326,051**	223,710
Transportation and other services																
Railway	**–**	–	**–**	–	**5,730**	4,743	**–**	–	**–**	–	**–**	–	**–**	–	**5,730**	4,743
Port	**–**	–	**–**	–	**–**	–	**771**	525	**–**	–	**–**	–	**–**	–	**771**	525
Shipping	**–**	–	**–**	–	**–**	–	**–**	–	**1,321**	1,747	**–**	–	**–**	–	**1,321**	1,747
Others	**–**	–	**–**	–	**1,108**	1,061	**211**	449	**–**	–	**–**	–	**24**	1,028	**1,343**	2,538
	–	–	**–**	–	**6,838**	5,804	**982**	974	**1,321**	1,747	**–**	–	**24**	1,028	**9,165**	9,553
Total	**256,241**	169,197	**63,959**	49,348	**6,838**	5,804	**982**	974	**1,321**	1,747	**5,851**	5,165	**24**	1,028	**335,216**	233,263
Geographical markets																
Domestic markets	**252,481**	168,198	**56,991**	44,623	**6,838**	5,804	**982**	974	**1,321**	1,747	**5,851**	5,165	**24**	1,028	**324,488**	227,539
Overseas markets	**3,760**	999	**6,968**	4,725	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–	**10,728**	5,724
Total	**256,241**	169,197	**63,959**	49,348	**6,838**	5,804	**982**	974	**1,321**	1,747	**5,851**	5,165	**24**	1,028	**335,216**	233,263

5. REVENUE FROM GOODS AND SERVICES (CONTINUED)

Segments	Coal		Power		Railway		Port		Shipping		Coal chemical		Other		Total	
	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million
Timing of revenue recognition																
A point in time	256,241	169,197	63,959	49,348	–	–	–	–	–	–	5,851	5,165	–	–	326,051	223,710
Over time	–	–	–	–	6,838	5,804	982	974	1,321	1,747	–	–	24	1,028	9,165	9,553
Total	256,241	169,197	63,959	49,348	6,838	5,804	982	974	1,321	1,747	5,851	5,165	24	1,028	335,216	233,263

The Group's revenue from contracts with customers is RMB335,106 million for the year ended 31 December 2021 (2020: RMB232,155 million).

Set out below is the reconciliation of the revenue with the amounts disclosed in the segment information.

Segments	Coal		Power		Railway		Port		Shipping		Coal chemical		Other		Total	
	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million	2021 RMB million	2020 RMB million
Revenue disclosed in segment information																
External customers	256,241	169,197	63,959	49,348	6,838	5,804	982	974	1,321	1,747	5,851	5,165	24	1,028	335,216	233,263
Inter-segment	36,420	20,832	165	138	33,861	32,919	5,458	5,385	4,874	1,365	–	–	297	825	81,075	61,464
	292,661	190,029	64,124	49,486	40,699	38,723	6,440	6,359	6,195	3,112	5,851	5,165	321	1,853	416,291	294,727
Adjustment and eliminations	(36,420)	(20,832)	(165)	(138)	(33,861)	(32,919)	(5,458)	(5,385)	(4,874)	(1,365)	–	–	(297)	(825)	(81,075)	(61,464)
Revenue	256,241	169,197	63,959	49,348	6,838	5,804	982	974	1,321	1,747	5,851	5,165	24	1,028	335,216	233,263

The Group produces and sells coal and coal chemical products to customers at spot market. For sales of coal and coal chemical products, revenue is recognised when control of the goods has transferred, being when the goods have been shipped to the customers' specific location. According to the Group's historical experiences, there was no significant exchange or return of coal and coal chemical products occurred. There is no sales-related warranties associated with coal and coal chemical products.

For sales of power, revenue is recognised upon the transmission of electric power to the power grid companies. Power could not be returned or exchanged and there is also no warranties associated with power sales.

The Group provides railway transportation services, shipment transportation services as well as port loading and storage services to customers. Such services are recognised as a performance obligation satisfied over time as the Group rendering the services. Revenue is recognised for these services based on the stage of completion of the performance obligation using output method.

All performance obligations of sales of coal, power and coal chemical products, railway and shipment transportation services, and port loading and storage services are part of contracts with an original expected duration of one year or less, and as permitted under IFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

6. SEGMENT AND OTHER INFORMATION

The Group manages its businesses by divisions, which are organised by business lines (products and services). In a manner consistent with the way in which information is reported internally to the Group's chief operating decision maker ("CODM"), including president, senior vice president and chief financial officer, for the purposes of resource allocation and performance assessment, the Group has presented the following six (2020: six) reportable segments. No operating segments have been aggregated to form the following reportable segments.

(1) Coal operations – which produce coal from surface and underground mines, and the sale of coal to external customers, the power operations segment and the coal chemical operations segment. The Group sells its coal under long–term supply contracts, which allow periodical price adjustments, and at spot market.

(2) Power operations – which use coal from the coal operations segment and external suppliers, thermal power, wind power, water power and gas power to generate electric power for the sale to coal operations segment and external customers. Electric power is sold to the power grid companies in accordance with planned power output at the tariff rates as approved by the relevant government authorities. Electric power produced in excess of the planned power output is sold at the tariff rate as agreed upon with the respective power grid companies which are generally lower than the tariff rates for planned power output.

(3) Railway operations – which provide railway transportation services to the coal operations segment, the power operations segment, the coal chemical operations segment and external customers. The rates of freight charges billed to the coal operations segment, the power operations segment, the coal chemical operations segment and external customers are consistent and do not exceed the maximum amounts approved by the relevant government authorities.

(4) Port operations – which provide loading, transportation and storage services to the coal operations segment and external customers. The Group charges service fees and other expenses, which are reviewed and approved by the relevant government authorities.

(5) Shipping operations – which provide shipment transportation services to the power operations segment, the coal operations segment and external customers. The rates of freight charges billed to the power operations segment, the coal operations segment and external customers are consistent.

(6) Coal chemical operations – which use coal from the coal operations segment to first produce methanol and further process into polyethylene and polypropylene, together with other by–products, for sale to external customers. The Group sells its polyethylene at spot market.

(a) Segment results

For the purposes of assessing segment performance and allocating resources between segments, the Group's CODM monitors the results attributable to each reportable segment based on profit before income tax ("reportable segment profit"). Reportable segment profit represents the profit earned by each segment without allocation of head office and corporate items. Inter–segment sales are primarily charged at prevailing market rate which are the same as those charged to external customers.

6. SEGMENT AND OTHER INFORMATION (CONTINUED)

(a) Segment results (Continued)

Information regarding the Group's reportable segments as provided to the Group's CODM for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2021 and 2020 is set out below:

	Coal		Power		Railway		Port		Shipping		Coal chemical		Total	
	2021 **RMB** ***million***	2020 RMB *million*	**2021** **RMB** ***million***	2020 RMB *million*	**2021** **RMB** ***million***	2020 RMB *million*	**2021** **RMB** ***million***	2020 RMB *million*	**2021** **RMB** ***million***	2020 RMB *million*	**2021** **RMB** ***million***	2020 RMB *million*	**2021** **RMB** ***million***	2020 RMB *million*
Revenue from external customers	**256,241**	169,197	**63,959**	49,348	**6,838**	5,804	**982**	974	**1,321**	1,747	**5,851**	5,165	**335,192**	232,235
Inter-segment revenue	**36,420**	20,832	**165**	138	**33,861**	32,919	**5,458**	5,385	**4,874**	1,365	**–**	–	**80,778**	60,639
Reportable segment revenue	**292,661**	190,029	**64,124**	49,486	**40,699**	38,723	**6,440**	6,359	**6,195**	3,112	**5,851**	5,165	**415,970**	292,874
Reportable segment profit	**58,949**	28,992	**2,025**	6,907	**15,723**	15,790	**2,623**	2,487	**1,003**	226	**706**	180	**81,029**	54,582
Including:														
Interest expenses	**849**	761	**1,514**	1,341	**1,107**	869	**136**	270	**–**	2	**50**	90	**3,656**	3,333
Depreciation and amortisation	**8,769**	7,413	**5,495**	5,265	**5,094**	4,987	**1,024**	997	**313**	297	**726**	844	**21,421**	19,803
Share of results of associates	**345**	154	**(3)**	168	**(4)**	–	**6**	4	**–**	–	**–**	–	**344**	326
Loss allowances and impairment of assets	**1,140**	1,297	**69**	538	**(3)**	–	**3**	7	**–**	–	**61**	(2)	**1,270**	1,840

(b) Reconciliations of reportable segment revenue, segment profit and other items of profit or loss for the years ended 31 December 2021 and 2020 are set out below:

	Reportable segment amounts		Unallocated head office and corporate items		Elimination of inter-segment amounts		Consolidated	
	2021 ***RMB million***	2020 *RMB million*	**2021** ***RMB million***	2020 *RMB million*	**2021** ***RMB million***	2020 *RMB million*	**2021** ***RMB million***	2020 *RMB million*
Revenue	**415,970**	292,874	**321**	1,853	**(81,075)**	(61,464)	**335,216**	233,263
Profit/(loss) before income tax	**81,029**	54,582	**(2,814)**	3,927	**955**	853	**79,170**	59,362
Interest expenses	**3,656**	3,333	**900**	861	**(1,963)**	(1,933)	**2,593**	2,261
Depreciation and amortisation	**21,421**	19,803	**124**	182	**–**	–	**21,545**	19,985
Share of results of associates	**344**	326	**(1,133)**	621	**(85)**	–	**(874)**	947
Loss allowances and impairment of assets	**1,270**	1,840	**2,583**	207	**–**	–	**3,853**	2,047

6. SEGMENT AND OTHER INFORMATION (CONTINUED)

(c) Geographical information

The following table sets out information about geographical location of (i) the Group's revenue from external customers and (ii) the Group's property, plant and equipment, construction in progress, exploration and evaluation assets, intangible assets, right–of–use assets, interests in associates, certain non–current assets. The geographical location of customers is based on the location at which the services were provided or the goods delivered. The geographical location of the specified non–current assets is based on the physical location of the asset, in the case of property, plant and equipment, construction in progress and right–of–use assets, and the location of operations, in the case of exploration and evaluation assets, intangible assets, other non–current assets and interests in associates.

	Revenue from external customers		Specified non-current assets	
	Year ended 31 December		31 December	
	2021	2020	**2021**	2020
	RMB million	*RMB million*	***RMB million***	*RMB million*
Domestic markets	**324,488**	227,539	**377,145**	378,504
Overseas markets	**10,728**	5,724	**6,147**	7,070
	335,216	233,263	**383,292**	385,574

(d) Major customers

Revenue from any individual customer of the Group does not exceed 10% of the Group's revenue. Certain of the Group's customers are entities, which controlled, jointly controlled or significantly influenced by the PRC government ("government–related entities") and collectively considered as the Group's major customers. During the year ended 31 December 2021, revenue from the Group's top five major customers of coal and power segments amounted to RMB118,598 million (2020: RMB67,846 million).

6. SEGMENT AND OTHER INFORMATION (CONTINUED)

(e) Other information

Certain other information of the Group's segments for the years ended 31 December 2021 and 2020 is set out below:

	Coal		Power		Railway		Port		Shipping		Coal chemical		Unallocated items		Eliminations		Total	
	2021	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
	RMB million	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*
Coal purchased	**102,865**	48,742	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**102,865**	48,742
Cost of coal production	**60,899**	50,032	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**(4,904)**	(3,019)	**55,995**	47,013
Cost of coal transportation	**58,027**	51,557	**-**	-	**17,460**	16,291	**2,947**	3,060	**1,345**	1,238	**-**	-	**-**	-	**(44,193)**	(39,669)	**35,586**	32,477
Power cost	**-**	-	**55,186**	35,877	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**(30,467)**	(16,667)	**24,719**	19,210
Cost of coal chemical production	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	**4,186**	4,066	**-**	-	**(1,603)**	(1,449)	**2,583**	2,617
Others	**3,335**	3,042	**4,833**	2,852	**4,560**	4,013	**395**	254	**3,673**	1,517	**568**	609	**44**	28	**-**	-	**17,408**	12,315
Total cost of sales	**225,126**	153,373	**60,019**	38,729	**22,020**	20,304	**3,342**	3,314	**5,018**	2,755	**4,754**	4,675	**44**	28	**(81,167)**	(60,804)	**239,156**	162,374
Profit from operations *(Note (i))*	**59,125**	29,832	**3,010**	7,976	**16,310**	16,636	**2,720**	2,678	**980**	209	**722**	259	**(2,951)**	1,047	**92**	(660)	**80,008**	57,977
Capital expenditures *(Note (ii))*	**20,575**	8,151	**16,876**	7,766	**3,979**	3,441	**1,002**	388	**55**	11	**851**	564	**39**	1,202	**-**	-	**43,377**	21,523
Total assets *(Note (iii))*	**268,067**	222,984	**166,654**	150,299	**139,551**	124,113	**19,821**	21,619	**8,065**	6,410	**8,864**	8,938	**446,069**	424,257	**(446,494)**	(395,716)	**610,597**	562,904
Total liabilities *(Note (iii))*	**(120,171)**	(106,897)	**(134,566)**	(110,040)	**(56,285)**	(50,470)	**(6,519)**	(6,629)	**(514)**	(257)	**(2,425)**	(2,950)	**(176,717)**	(154,901)	**335,821**	298,827	**(161,376)**	(133,317)

Notes:

(i) Profit from operations is calculated as revenue minus cost of sales, selling expenses, general and administrative expenses, research and development costs, loss allowances and impairment of assets.

(ii) Capital expenditures consist of addition in property, plant and equipment, construction in process, exploration and evaluation assets, intangible assets, long–term deferred expense, land use rights and prepayment for mining projects.

(iii) Unallocated items of total assets include deferred tax assets and other unallocated corporate assets. Unallocated items of total liabilities include deferred tax liabilities and other unallocated corporate liabilities.

7. COST OF SALES

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Coal purchased	**102,865**	48,742
Materials, fuel and power	**23,696**	19,501
Personnel expenses	**21,285**	16,066
Depreciation and amortisation	**18,093**	16,647
Repairs and maintenance	**10,722**	9,124
Transportation charges	**18,764**	15,076
Taxes and surcharges	**16,502**	10,926
Other operating costs	**27,229**	26,292
	239,156	162,374

8. OTHER INCOME

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Government grants	**465**	424
Claim income	**39**	21
Others	**389**	333
	893	778

9. INTEREST INCOME/FINANCE COSTS

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Interest income from:		
– bank deposits	**2,474**	1,075
– other loans and receivables	**18**	609
Total interest income	**2,492**	1,684
Interest on:		
– borrowings	**2,896**	2,369
– lease liabilities	**29**	37
– bonds	**130**	146
Total finance costs on financial liabilities not at FVTPL	**3,055**	2,552
Less: amount capitalised	**(850)**	(602)
	2,205	1,950
Others	**105**	73
Unwinding of discount	**388**	311
Exchange gain, net	**(115)**	(71)
Total finance costs	**2,583**	2,263
Net finance costs	**91**	579

Note:

Borrowing costs capitalised during the year arose on the general borrowing pools and were calculated by applying a capitalisation rate from 1.80% to 4.90% (2020: from 1.80% to 6.15%) per annum to expenditure on qualifying assets.

10. INCOME TAX EXPENSE

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Current tax, mainly PRC enterprise income tax	**20,260**	15,966
Over provision in respect of prior years	**(1,465)**	(790)
Deferred tax	**(634)**	202
	18,161	15,378

The tax charge for the year can be reconciled to the profit before income tax per consolidated statement of profit or loss and other comprehensive income as follows:

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Profit before income tax	**79,170**	59,362
Tax at the PRC income tax rate of 25% (2020: 25%)	**19,793**	14,841
Tax effects of:		
– different tax rates of branches and subsidiaries	**(2,066)**	(607)
– non–deductible expenses	**890**	231
– non–taxable income	**–**	(296)
– share of results of associates	**194**	(240)
– utilisation of tax losses and deductible temporary difference previously not recognised	**(483)**	(224)
– tax losses and deductible temporary difference not recognised	**1,298**	2,463
– over provision	**(1,465)**	(790)
Income tax expense	**18,161**	15,378

Under the Law of the PRC on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, the tax rate applicable for the PRC group entities is 25% (2020: 25%) except for subsidiaries and branches operating in the western developing region of the PRC which are entitled to a preferential tax rate of 15% from 2011 to 2020.

On 23 April 2020, the relevant government and tax authorities issued an announcement (Announcement [2020] No.23 of Ministry of Finance, State Taxation Administration, and National Development and Reform Commission), according to which the future periods of application of the preferential tax rate of 15% will be extended for another 10 years from 2021 to 2030, if the companies' main business are included in the "Catalogue of Encouraged Industries in the Western Region (2020 Version)", which came into effect sine 1 March 2021 with new encouraged industries applicable to the coal subsidiaries and branches of the Company..

10. INCOME TAX EXPENSE (CONTINUED)

As at 31 December 2021, some of the coal subsidiaries and branches of the Company engaged in coal mining have obtained the approval from the relevant government and tax authorities and are entitled to enjoy the preferential tax rate of 15%. Meanwhile, some other coal subsidiaries of the Group are still in the process of obtaining the approval.

The applicable tax rates of the Group's overseas subsidiaries are as follows:

	Year ended 31 December	
	2021	2020
	%	%
Australia	**30.0**	30.0
Indonesia	**22.0**	25.0
United States	**21.0**	21.0
Hong Kong, China	**8.25/16.5***	8.25/16.5*

During the years ended 31 December 2021 and 2020, there was no significant assessable profit and provision for income tax for the overseas subsidiaries.

* The two–tiered profits tax rates regime is applicable from the year of assessment 2018/19 onwards. The profits tax rate for the first Hong Kong Dollars (''HK$'') 2,000,000 of profits of corporations will be lowered to 8.25%, and profits above that amount will continue to be subject to the tax rate of 16.5%.

11. ASSETS CLASSIFIED AS HELD FOR SALE

In April 2021, Shenhua Watermark Coal Pty Ltd. ("Watermark Company"), a wholly–owned subsidiary of the Company, and the New South Wales Government of Australia signed the Agreements on Mining Rights and Disposal of Ecological Land (the "Agreements"). Pursuant to the Agreements, Watermark Company will withdraw from the development interest of the existing coal mine project after consultation with the New South Wales government to pursue the trend of transformation to clean and low–carbon energy while satisfying the environmental protection need and planning adjustment of New South Wales government. In September 2021, the Company approved of Watermark Company disposing of its land, houses and ancillary facilities and other real estate, amounting to approximately RMB256 million. Therefore, these assets of Watermark Company were accounted as assets held for sale as at 31 December 2021.

During the year ended 31 December 2021, Shenhua Beidian Shengli Energy Co., Ltd. ("Beidian Shengli Company"), a subsidiary of the Company, was committed to dispose of certain idle land use rights amounted to approximately RMB38 million, and such assets were classified as held for sale as at 31 December 2021.

12. PROFIT FOR THE YEAR

Profit for the year has been arrived at after charging/(crediting)

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Personnel expenses, including	**35,499**	29,405
– Contributions to defined contribution plans	**3,662**	2,504
Depreciation of property, plant and equipment *(Note 17)*	**19,264**	17,965
Depreciation of right–of–use assets	**807**	713
Amortisation of intangible assets	**413**	400
Amortisation of long–term deferred expenses	**1,162**	946
Depreciation and amortisation charged for the year	**21,646**	20,024
Less: amount capitalised	**101**	39
Depreciation and amortisation *(Note)*	**21,545**	19,985
Loss allowances		
– Loans receivables and interbank certificate of deposits	**–**	(2)
– Trade receivables *(Note 40.2)*	**21**	275
– Other receivables and other loans *(Note 40.2)*	**2,540**	251
	2,561	524

12. PROFIT FOR THE YEAR (CONTINUED)

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Other gains and losses, represent		
–(gains)/ losses on disposal of property, plant and equipment, exploration and evaluation assets, intangible assets and non–current assets	**(346)**	160
– losses on disposal of subsidiaries and associates	**9**	7
– gains on changes in fair value arising from remeasurement of remaining equity interests after losing control	**–**	(1,181)
– gains on disposal of financial assets at FVTPL	**–**	(449)
– losses on changes in fair value of derivative financial instruments	**–**	134
– impairment losses on property, plant and equipment *(Note 17)*	**535**	605
– impairment losses on construction in progress *(Note 18)*	**376**	268
– impairment losses on exploration and evaluation assets *(Note 19)*	**–**	505
– impairment losses on Intangible assets *(Note 20)*	**11**	–
– impairment losses on Interests in associates	**60**	–
– impairment losses on right–of–use assets	**–**	3
– impairment losses on assets held for sale	**–**	87
– impairment losses on goodwill	**36**	18
– reversal of allowance for prepaid expenses	**–**	(57)
– write down of inventories	**274**	94
	955	194
Carrying amount of inventories sold	**186,436**	118,657
Operating lease charges relating to short–term leases, leases of low–value assets and variable lease payments	**185**	218
Auditors' remuneration		
– audit service	**33**	32

Note:

Cost of sales include an amount of depreciation and amortisation of RMB18,093 million for the year ended 31 December 2021 (2020: RMB16,647 million).

13. DIRECTORS' AND SUPERVISORS' EMOLUMENTS

Directors' and supervisors' remuneration for the year, disclosed pursuant to the applicable Listing Rules and CO, is as follows:

	Year ended 31 December 2021				
	Fee *RMB million*	Basic salaries, Housing and other allowance and benefits in kind *RMB million*	Discretionary bonuses *RMB million*	Retirement scheme contributions *RMB million*	Total *RMB million*
Chairman					
Wang Xiangxi *(Note (i))*	–	–	–	–	–
Sub-total	–	–	–	–	–
Executive directors					
Yang Jiping *(Note (ii) and Note (iii))*	–	0.26	0.78	0.09	1.13
Xu Mingjun	–	0.39	0.92	0.14	1.45
Sub-total	–	0.65	1.70	0.23	2.58
Non-executive directors					
Jia Jinzhong *(Note (i))*	–	–	–	–	–
Yang Rongming *(Note (i) and Note (ii))*	–	–	–	–	–
Sub-total	–	–	–	–	–

13. DIRECTORS' AND SUPERVISORS' EMOLUMENTS (CONTINUED)

	Year ended 31 December 2021				
	Fee *RMB million*	Basic salaries, Housing and other allowance and benefits in kind *RMB million*	Discretionary bonuses *RMB million*	Retirement scheme contributions *RMB million*	Total *RMB million*
Independent non-executive directors					
Chen Hanwen	0.30	–	–	–	0.30
Bai Chongen	0.30	–	–	–	0.30
Yuan Guoqiang	0.30	–	–	–	0.30
Sub-total	0.90	–	–	–	0.90
Employee director					
Wang Xingzhong	–	0.33	0.83	0.12	1.28
Sub-total	–	0.33	0.83	0.12	1.28
Supervisors					
Zhou Dayu *(Note (iv))*	–	–	–	–	–
Luo Meijian *(Note (iv))*	–	–	–	–	–
Zhang Changyan	–	–	0.39	–	0.39
Sub-total	–	–	0.39	–	0.39
Total	0.90	0.98	2.92	0.35	5.15

13. DIRECTORS' AND SUPERVISORS' EMOLUMENTS (CONTINUED)

	Year ended 31 December 2020				
	Fee *RMB million*	Basic salaries, Housing and other allowance and benefits in kind *RMB million*	Discretionary bonuses *RMB million*	Retirement scheme contributions *RMB million*	Total *RMB million*
Chairman					
Wang Xiangxi *(Note (i))*	–	–	–	–	–
Sub–total	–	–	–	–	–
Executive directors					
Li Dong *(Note (i) and Note (iii))*	–	–	–	–	–
Gao Song *(Note (i) and Note (iii))*	–	–	–	–	–
Mi Shuhua (*Note (i) and Note (iii))*	–	–	–	–	–
Yang Jiping *(Note (ii))*	–	0.23	0.24	0.04	0.51
Xu Mingjun *(Note (ii))*	–	0.23	0.24	0.03	0.50
Sub–total	–	0.46	0.48	0.07	1.01
Non–executive directors					
Zhao Jibin *(Note (i) and Note (iii))*	–	–	–	–	–
Jia Jinzhong *(Note (i) and (Note(ii))*	–	–	–	–	–
Zhao Yongfeng *(Note (iii))*	–	0.08	0.20	0.02	0.30
Sub–total	–	0.08	0.20	0.02	0.30

13. DIRECTORS' AND SUPERVISORS' EMOLUMENTS (CONTINUED)

	Year ended 31 December 2020				
	Fee *RMB million*	Basic salaries, Housing and other allowance and benefits in kind *RMB million*	Discretionary bonuses *RMB million*	Retirement scheme contributions *RMB million*	Total *RMB million*
Independent non–executive directors					
Tam Wai Chu, Maria *(Note(iii))*	0.23	–	–	–	0.23
Jiang Bo *(Note(iii))*	0.23	–	–	–	0.23
Zhong Yingjie, Christina *(Note(iii))*	0.23	–	–	–	0.23
Peng Suping *(Note(iii))*	0.23	–	–	–	0.23
Chen Hanwen *(Note (ii))*	0.15	–	–	–	0.15
Bai Chongen *(Note (ii))*	0.15	–	–	–	0.15
Yuan Guoqiang *(Note (ii))*	0.15	–	–	–	0.15
Sub–total	1.37	–	–	–	1.37
Employee director					
Wang Xingzhong *(Note (ii))*	–	0.19	0.20	0.04	0.43
Sub–total	–	0.19	0.20	0.04	0.43
Supervisors					
Zhai Richeng *(Note (iv))*	–	–	–	–	–
Zhou Dayu *(Note (iv))*	–	–	–	–	–
Luo Meijian *(Note (iv))*	–	–	–	–	–
Zhang Changyan	–	0.32	0.46	0.06	0.84
Sub–total	–	0.32	0.46	0.06	0.84
Total	1.37	1.05	1.34	0.19	3.95

Discretionary bonuses were determined by the remuneration committee in accordance with the relevant human resources policies.

13. DIRECTORS' AND SUPERVISORS' EMOLUMENTS (CONTINUED)

Notes:

(i) The emoluments of these directors were borne by China Energy Group during the years ended 31 December 2021 and 2020.

(ii) Mr. Yang Jiping and Mr. Xu Mingjun were elected and appointed as executive directors on 29 May 2020.

Mr. Jia Jinzhong was elected and appointed as non–executive director on 29 May 2020.

Dr. Chen Hanwen, Dr. Bai Chongen and Dr. Yuan Guoqiang were elected and appointed as independent non–executive directors on 29 May 2020.

Mr. Wang Xingzhong was elected and appointed as employee director on 29 May 2020.

Mr. Yang Rongming was elected and appointed as non–executive director on 25 June 2021.

(iii) Dr. Li Dong resigned as executive director on 29 March 2020.

Mr. Gao Song and Mr. Mi Shuhua resigned as executive directors on 29 May 2020.

Mr. Zhao Jibin resigned as executive director on 29 May 2020.

Mr. Zhao Yongfeng was elected and appointed as non–executive director on 29 May 2020 and resigned on 23 December 2020.

Dr. Tam Wai Chu, Maria, Dr. Jiang Bo and Ms. Zhong, Yingjie, Christina resigned as independent non–executive directors on 29 May 2020.

Dr. Peng Suping resigned as independent non–executive director on 29 May 2020.

Mr. Yang Jiping resigned as executive director on 16 November 2021.

(iv) Mr. Zhai Richeng resigned as supervisor and Mr. Luo Meijian was elected and appointed as supervisor on 29 May 2020.

The emoluments of Mr. Zhai Richeng were borne by China Energy Group during the year ended 31 December 2020.

The emoluments of Mr. Zhang Changyan were borne by China Energy Group during the year ended 31 December 2021.

The emoluments of Mr. Zhou Dayu and Mr. Luo Meijian were borne by China Energy Group during the years ended 31 December 2021 and 2020.

Except for those emoluments of directors or supervisors whose emoluments were borne by China Energy Group, the executive directors' and supervisors' emoluments shown above were mainly for their services in connection with the management of the affairs of the Company and the Group.

The independent non–executive directors' emoluments shown above were mainly for their services as directors of the Company.

14. EMPLOYEES' EMOLUMENTS

Of the five individuals with the highest emoluments within the Group, three (2020: Nil) were directors of the Company whose emoluments are disclosed in note 13. The emoluments of other two (2020: five) highest paid individuals are as follows:

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Basic salaries, housing and other allowances and benefits in kind	**0.72**	1.73
Discretionary bonuses	**1.56**	3.78
Retirement scheme contributions	**0.27**	0.33
	2.55	5.84

Their emoluments are within the following band:

	Year ended 31 December	
	2021	2020
HKD1,000,001 to HKD1,500,000	**1**	5
HKD1,500,001 to HKD2,000,000	**1**	–
	2	5

15. DIVIDENDS

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Dividend approved and paid during the year:		
2020 final – RMB1.81 (2020: 2019 final - RMB1.26) per ordinary share	**35,962**	25,061

Subsequent to the end of the reporting period, a final dividend in respect of the year ended 31 December 2021 of RMB50,466 million, at RMB2.54 per ordinary share (in respect of the year ended 31 December 2020: final dividend RMB35,962 million, at RMB1.81 per ordinary share) has been proposed by the Directors and is subject to approval by the shareholders in the following general meeting.

16. EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to ordinary equity holders of the Company of RMB51,607 million (2020: RMB35,849 million) and the weighted average of 19,869 million ordinary shares (2020: 19,888 million shares) in issue during the year, calculated as follows:

Weighted average number of ordinary shares

	Year ended 31 December	
	2021	2020
	million	*million*
Number of shares in issue at 1 January	**19,890**	19,890
Effect of shares repurchased	**(21)**	(2)
Weighted average number of shares in issue	**19,869**	19,888

No diluted earnings per share for both 2021 and 2020 were presented as there were no potential ordinary shares in existence during both years.

17. PROPERTY, PLANT AND EQUIPMENT

	Land and buildings RMB million	Mining structures and mining rights RMB million	Mining related machinery and equipment RMB million	Generators related machinery and equipment RMB million	Railway and port RMB million	Vessels RMB million	Coal chemical related machinery and equipment RMB million	Furniture, fixtures, motor vehicles and other equipment RMB million	Total RMB million
Cost									
At 1 January 2020	57,603	37,399	66,293	96,057	130,679	7,518	13,358	17,998	426,905
Additions	161	143	1,868	250	881	4	27	159	3,493
Transferred from construction in progress	3,050	16	496	2,894	955	38	32	150	7,631
Reclassification and other additions	(995)	2,929	1,381	(295)	340	–	(548)	(14)	2,798
Disposals or write-off	(219)	(169)	(696)	(99)	(367)	–	(56)	(92)	(1,698)
Exchange adjustment	(25)	–	1	(119)	–	–	–	(10)	(153)
Classified as assets held for sale	(338)	–	–	(2,387)	–	–	–	(11)	(2,736)
At 31 December 2020	59,237	40,318	69,343	96,301	132,488	7,560	12,813	18,180	436,240
Additions	166	8,757	2,091	163	1,569	8	44	107	12,905
Transferred from construction in progress (Note 18)	2,855	(1)	2,939	17,929	8,151	14	160	1,177	33,224
Reclassification and other additions	(973)	(215)	260	–	928	–	–	–	–
Disposals or write-off	(219)	(104)	(1,558)	(1,374)	(389)	–	(30)	(705)	(4,379)
Exchange adjustment	(179)	–	–	(40)	–	–	–	(12)	(231)
Classified as assets held for sale	(1,310)	–	–	–	–	–	–	–	(1,310)
At 31 December 2021	**59,577**	**48,755**	**73,075**	**112,979**	**142,747**	**7,582**	**12,987**	**18,747**	**476,449**
Depreciation and impairment									
At 1 January 2020	13,037	14,371	47,355	36,188	48,719	1,536	6,920	12,786	180,912
Charge for the year	1,727	1,108	4,152	4,167	5,184	331	721	575	17,965
Reclassification	383	1	63	(48)	70	–	(292)	72	249
Impairment losses (Note (i))	455	–	23	126	–	–	–	1	605
Disposals or write-off	(112)	(157)	(590)	(45)	(316)	–	(49)	(85)	(1,354)
Exchange adjustment	(15)	–	–	(38)	–	–	–	(8)	(61)
Classified as assets held for sale	(23)	–	–	(246)	–	–	–	(5)	(274)
At 31 December 2020	15,452	15,323	51,003	40,104	53,657	1,867	7,300	13,336	198,042
Charge for the year	1,705	2,364	3,883	4,436	5,296	334	675	571	19,264
Reclassification	30	(93)	41	–	22	–	–	–	–
Impairment losses (Note (i))	226	–	153	11	–	–	131	14	535
Disposals or write-off	(238)	(37)	(1,507)	(1,383)	(322)	–	(25)	(396)	(3,908)
Exchange adjustment	(103)	–	(1)	(17)	–	–	–	(3)	(124)
Classified as assets held for sale	(1,016)	–	–	–	–	–	–	–	(1,016)
At 31 December 2021	**16,056**	**17,557**	**53,572**	**43,151**	**58,653**	**2,201**	**8,081**	**13,522**	**212,793**
Carrrying values									
At 31 December 2021	**43,521**	**31,198**	**19,503**	**69,828**	**84,094**	**5,381**	**4,906**	**5,225**	**263,656**
At 31 December 2020	43,785	24,995	18,340	56,197	78,831	5,693	5,513	4,844	238,198

17. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Notes:

(i) Impairment losses

– Impairment losses for smallest identifiable group of assets that generate independent cash flows ("CGUs")

In 2021, management identified certain property, plant and equipment and other related non-current assets having impairment indications.

Management performed impairment assessments of these assets as at 31 December 2021 using value-in-use calculations for each CGUs by measuring their recoverable amount which is determined based on discounted cash flow analysis covering the shorter of their economic or legal useful life, and pre-tax discount rate ranging from 7.58% to 10.10%, and concluded that impairment provisions for coal mines related assets included in property, plant and equipment were required as follows:

	RMB million
Shenhua Zhunge'er Energy Co., Ltd.("Zhunge'er Energy")	175
Shenhua Shendong Coal Group Co., Ltd.	140
Shenhua Baotou Coal Chemical Co., Ltd.("Baotou Coal Chemical")	28
Shendong Coal Group Equipment Management Center	57
Guoneng Zhuanlongwan Company	50

The estimated recoverable amounts of the above assets were based on their fair values less costs of disposal, the fair value of buildings was determined by considering the cost charged if the Group rebuild the assets under current condition, and the fair value of generators related machinery and equipment was determined by using market comparison approach with reference to the recent transaction price of similar assets, after taking into account of its remaining useful lives. The fair value is categorised as a Level 3 measurement.

(ii) The Group was in the process of applying for the title certificates of certain of its properties with an aggregate carrying amount of RMB4,036 million as at 31 December 2021 (2020: RMB4,002 million). The Directors are of the opinion that the Group is entitled to lawfully and validly occupy or use the above mentioned properties.

(iii) As at 31 December 2021, the property, plant and equipment with carrying amount of RMB815 million (2020: RMB893 million) have been pledged to the banks to secure the banking facilities granted to the Group.

18. CONSTRUCTION IN PROGRESS

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
At the beginning of the year	**39,845**	34,495
Additions	**23,388**	14,493
Transferred to property, plant and equipment *(Note 17)*	**(33,224)**	(7,631)
Transferred to intangible assets *(Note 20)*	**(625)**	(136)
Transferred to right-of-use assets *(Note 24)*	**(2,807)**	(60)
Transferred to other non-current assets	**–**	(1,021)
Exchange adjustment	**–**	(14)
Impairment losses *(Note (ii))*	**(376)**	(268)
Classified as assets held for sale	**–**	(13)
At the end of the year	**26,201**	39,845

Notes:

(i) As at 31 December 2021, the Group is in the process of obtaining requisite permits of certain of its construction in progress from the relevant government authorities. The Directors are of the opinion that the Group will be able to obtain the requisite permits in due course.

(ii) As a result of deferral of certain coal mine, management performed impairment assessment of the related construction in progress and concluded that impairment provision of RMB376 million was required and charged into profit or loss for the current year.

19. EXPLORATION AND EVALUATION ASSETS

The movements of the exploration and evaluation assets are as follows:

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
At the beginning of the year	**–**	484
Additions	**4,000**	5
Exchange adjustments	**–**	16
Impairment losses *(Note 12)*	**–**	(505)
At the end of the year	**4,000**	–

20. INTANGIBLE ASSETS

The movement of intangible assets, mainly licenses, software and franchises, is as follows:

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
At the beginning of the year	**3,888**	3,648
Additions	**563**	821
Transferred from construction in progress	**625**	136
Amortisation	**(413)**	(400)
Disposal	**(1)**	(316)
Classified as assets held for sale	**–**	(1)
Impairment losses *(Note 12)*	**(11)**	–
At the end of the year	**4,651**	3,888

21. INTERESTS IN ASSOCIATES

	31 December 2021	31 December 2020
	RMB million	*RMB million*
Unlisted shares, at cost	**47,723**	47,380
Share of post-acquisition profits and other comprehensive income, net of dividend received	**(15)**	2,176
	47,708	49,556

21. INTERESTS IN ASSOCIATES (CONTINUED)

The Group's associates are unlisted and established in the PRC. The following list contains only the particulars of associates, which principally affect the results or assets of the Group:

Name of associate	Proportion of ownership interest and voting power held by the Group 31 December 2021 %	31 December 2020 %	Principal activities
Beijing GD Power Co., Ltd. ("Beijing GD")	**42.53**	42.53	Generation and sale of electricity
Haoji Railway Co., Ltd. ("Haoji Railway")	**12.50**	12.50	Provision of transportation service
Shendong Tianlong Group Co., Ltd.	**20.39**	20.39	Coal production and sale
Sichuan Guangan Power Co., Ltd.	**20.00**	20.00	Generation and sale of electricity
Guohua (Hebei) Renewables Co., Ltd.	**25.00**	25.00	Generation and sale of electricity
Inner Mongolia Yili Chemical Industry Co., Ltd.	**25.00**	25.00	Production and sale of chemicals
Suizhong Power Generation Co., Ltd.	**15.00**	15.00	Generation and sale of electricity
Inner Mongolia Guohua Hulunbeier Power Generation Co., Ltd.	**20.00**	20.00	Generation and sale of electricity
China Energy Finance Co., Ltd. ("Finance Company")	**40.00**	40.00	Provision of comprehensive financial service

21. INTERESTS IN ASSOCIATES (CONTINUED)

Summarised financial information of the material associates, adjusted for any differences in accounting policies, and reconciled to the carrying amounts in the consolidated financial statements, are disclosed below:

	31 December 2021/ Year ended 31 December 2021			31 December 2020/ Year ended 31 December 2020		
	Beijing GD	Finance Company	Haoji Railway	Beijing GD	Finance Company	Haoji Railway
	RMB million	*RMB million*	*RMB million*	*RMB million*	*RMB million*	*RMB million*
Current assets	29,548	85,451	9,724	26,734	12,295	8,445
Non-current assets	126,331	59,552	147,381	149,135	21,248	148,568
Total assets	155,879	145,003	157,105	175,869	33,543	157,013
Current liabilities	47,922	120,417	2,671	47,423	11,305	3,865
Non-current liabilities	23,247	91	102,945	34,535	–	99,742
Total liabilities	71,169	120,508	105,616	81,958	11,305	103,607
Non-controlling interests	25,681	–	–	28,136	–	–
Equity attributable to equity holders of the company	59,029	24,495	51,489	65,775	22,238	53,406
Revenue	101,461	4,034	9,242	89,379	1,050	5,238
(Loss)/profit for the year	(4,009)	2,117	(1,944)	2,794	118	(4,967)
Total comprehensive (loss)/income for the year	(4,018)	2,117	(1,944)	2,795	113	(4,967)
Equity attributable to equity holders of the company	59,029	24,495	51,489	65,775	22,238	53,406
Group's proportion of ownership interest	42.53%	40.00%	12.50%	42.53%	40.00%	12.50%
Carrying amount of equity investment in associated company	25,105	9,798	6,436	27,974	8,895	6,675

21. INTERESTS IN ASSOCIATES (CONTINUED)

Aggregate information of associates that are not individually material:

	31 December 2021 RMB million	31 December 2020 RMB million
Aggregate carrying amount of individually immaterial associates in the consolidated financial statements	6,369	6,012
Aggregate amounts of the Group's share of those associates:		
– Profit for the year	227	333
– Total comprehensive income for the year	332	294

22. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	31 December 2021 RMB million	31 December 2020 RMB million
Non-current asset		
Unlisted equity securities *(Note(i))*	2,174	1,845
Current asset		
Accounts and bills receivables *(Note(ii))*	376	–
	2,550	1,845

Note:

(i) The above unlisted equity investments represent the Group's equity interest in entities established in the PRC. The Directors of the Company have elected to designate these equity investments as FVTOCI as it is the Group's strategy to hold these investments for long-term purposes and realising their performance potential in the long run.

(ii) As at 31 December 2021, certain accounts and bills receivables were classified as financial assets at FVOCI, as certain subsidiaries' business model is achieved both by collecting contractual cash flows and selling of these assets.

23. OTHER NON-CURRENT ASSETS

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Prepayments in connection with construction work, equipment purchases and others *(Note (i))*	**4,868**	9,807
Prepayments for mining projects	**5,273**	10,171
Deductible VAT and other tax	**392**	631
Long-term entrusted loans *(Note (ii))*	**400**	400
Service concession receivables *(Note (iii))*	**12,853**	11,044
Goodwill	**199**	235
Long-term deferred expenses *(Note (iv))*	**4,104**	3,602
	28,089	35,890

Notes:

(i) At 31 December 2021, the Group had prepayments to China Energy Group and fellow subsidiaries amounting to RMB377 million (2020: RMB156 million).

(ii) The Group has long-term entrusted loan of RMB400 million to an associate through a PRC state-owned bank,with an interest rate of 4.75% per annum.The applicable interest rate is determined in accordance with the prevailing interest rates published by People's Bank of China (the "PBOC").

(iii) Pursuant to the Power Purchase Agreements entered between certain power plants of the Group and PT Perusahaan Listrik Negara (Persero) ("PLN"), an independent third party, certain power plants of the Group build power plants to supply electricity to PLN for a 25-30 years period from the power plant's commercial operation date under the service concession scheme. Service concession receivables represents service provided in connection with the service concession arrangement, for which a guaranteed minimum payments have been agreed. Due to the length of the payment plans, receivables are the present value of future guaranteed cash receipts discounted using effective interest rate.

(iv) The movement of long-term deferred expenses during the year is as follows:

	Year ended 31 December	
	2021 *RMB million*	2020 *RMB million*
At the beginning of the year	**3,602**	3,667
Additions	**1,692**	884
Amortisation	**(1,162)**	(946)
Disposal	**(28)**	(1)
Classified as assets held for sale	**–**	(2)
At the end of the year	**4,104**	3,602

24. RIGHT-OF-USE ASSETS

The right-of-use assets represent land use rights paid to the PRC's government authorities and the leased assets. The Group is in the process of applying for the title certificates of certain land use rights certificates with an aggregate carrying amount of RMB3,685 million as at 31 December 2021 (2020: RMB1,739 million). The Directors are of the opinion that the Group is entitled to lawfully and validly occupy or use the above mentioned lands.

As at 31 December 2021, the Group has no bank loans secured by the Group's right-of-use assets (2020: RMB810 million).

The Group leases assets including buildings, machinery, equipment and other properties, and land use rights. Information about leases for which the Group is a lessee is presented below.

	Buildings *RMB million*	Machinery, equipment and other properties *RMB million*	Land use rights *RMB million*	Total *RMB million*
Cost				
At 1 January 2020	141	880	22,367	23,388
Additions	248	27	585	860
Transferred from construction in progress	–	–	60	60
Disposals	–	–	(2)	(2)
Classified as assets held for sale	–	–	(78)	(78)
Others	–	–	(224)	(224)
At 31 December 2020	389	907	22,708	24,004
Additions	120	1,160	627	1,907
Transferred from construction in progress	–	–	2,807	2,807
Disposals	–	(350)	(143)	(493)
At 31 December 2021	**509**	**1,717**	**25,999**	**28,225**
Accumulated depreciation				
At 1 January 2020	(51)	(157)	(4,429)	(4,637)
Depreciation	(107)	(137)	(469)	(713)
Disposals	–	–	1	1
Classified as assets held for sale	–	–	6	6
At 31 December 2020	(158)	(294)	(4,891)	(5,343)
Depreciation	(119)	(89)	(599)	(807)
Disposals	–	144	85	229
At 31 December 2021	**(277)**	**(239)**	**(5,405)**	**(5,921)**
Impairment losses				
At 1 January 2020	–	–	(61)	(61)
Additions	–	–	(3)	(3)
At 31 December 2020 and 2021	–	–	(64)	(64)
Net book value				
At 31 December 2021	**232**	**1,478**	**20,530**	**22,240**
At 31 December 2020	**231**	**613**	**17,753**	**18,597**

25. INVENTORIES

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Coal	**6,373**	5,236
Materials and supplies	**7,384**	8,750
Others *(Note)*	**1,127**	906
	14,884	14,892
Less: write-down of inventories	**(2,251)**	(2,142)
	12,633	12,750

Note: Others mainly represent properties for sale and properties under development.

Movement in write-down of inventories during the year is as follows:

	Year ended 31 December	
	2021 *RMB million*	2020 *RMB million*
At the beginning of the year	**2,142**	2,587
Write down of inventories	**274**	94
Write off of inventories	**(165)**	(539)
At the end of the year	**2,251**	2,142

26. ACCOUNTS AND BILLS RECEIVABLES

	31 December 2021 RMB million	31 December 2020 RMB million
Accounts receivable		
– China Energy Group and fellow subsidiaries	**3,391**	2,574
– Associates	**256**	407
– Third parties	**7,888**	6,116
	11,535	9,097
Less: allowance for credit losses	**(1,277)**	(1,299)
	10,258	7,798
Bills receivable		
– China Energy Group and fellow subsidiaries	**567**	65
– Third parties	**2,782**	3,896
	3,349	3,961
	13,607	11,759

As at 31 December 2021 and 31 December 2020, accounts and bills receivables from contracts with customers amounted to RMB14,884 million and RMB13,058 million, respectively.

Bills receivable were mainly issued by PRC banks and were expiring within one year. As at 31 December 2021, the Group has no bills (2020: RMB84 million) pledged to secure bills payable.

As of the end of the reporting period, the ageing analysis of trade receivables, based on the invoice date and net of loss allowance, is as follows:

	31 December 2021 RMB million	31 December 2020 RMB million
Less than one year	**9,527**	6,972
One to two years	**143**	125
Two to three years	**80**	84
More than three years	**508**	617
	10,258	7,798

26. ACCOUNTS AND BILLS RECEIVABLES (CONTINUED)

As at 31 December 2021, included in the Group's accounts receivables are debtors with gross carrying amount of RMB5,926 million (2020: RMB4,750 million) which are past due as at the reporting date. The past due balances are not considered as in default because the debtors are not in significant financial difficulty and the management expects that the debtor is able and likely to pay for the debts. The Group does not hold any collateral over these balances.

Details of credit risks of accounts and bills receivables for the year ended 31 December 2021 are set out in Note 40.2.

Included in accounts receivable, the following amounts are denominated in foreign currencies:

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
United States Dollars ("USD")	**717**	276
Euro ("EUR")	**534**	–
Great Britain Pound ("GBP")	**23**	–
Indonesian Rupiah ("IDR")	**470**	303
	1,744	579

Transfers of financial assets

As at 31 December 2021, the Group endorsed bills receivable amounting to RMB861 million (2020: RMB961 million) to suppliers to settle the accounts payable of same amounts and discounted bills receivable amounting to RMB331 million (2020: RMB2,067 million) to banks. In accordance to the relevant laws in the PRC, the holders of the bills receivable have a right of recourse against the Group if the issuing banks default payment (the "Continuing Involvement"). In the opinion of the Directors, the fair values of the Continuing Involvement are insignificant, and the Group has transferred substantially all the risks and rewards of ownership relating to these bills receivable, and accordingly derecognised the full carrying amounts of the bills receivable, in case of bills receivable endorsed to suppliers, derecognised the associated accounts payable.

Certain subsidiaries of the Company entered into accounts receivables factoring agreements with financial service companies, and the subsidiaries transferred accounts receivables to the financial service companies and received bills receivables and cash, respectively. During the year ended 31 December 2021, the subsidiaries paid RMB15 million (2020: RMB7 million) for the accounts receivables factoring and recognised in expenses.

27. PREPAID EXPENSES AND OTHER CURRENT ASSETS

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Financial assets measured at amortised cost		
– Service concession receivables (Note 23(iii))	**1,964**	1,512
– Current portion of entrusted loans	**–**	37
– Other receivables due from associates	**502**	470
– Amount due from China Energy Group	**–**	1,417
– Other receivables	**2,709**	2,234
– Other loans	**4,500**	4,500
	9,675	10,170
Less: impairment losses (Note)	**3,207**	706
	6,468	9,464
Prepaid expenses and deposits	**8,361**	4,999
Deductible VAT and other taxes	**3,685**	3,017
	18,514	17,480

Note:

The Group conducted credit impairment text for long-term loans of certain debtors and accordingly made an impairment provision of RMB2,583 million for the current year.

28. RESTRICTED BANK DEPOSITS

Restricted bank deposits represent collaterals for bills payable and collaterals related to the operating of mines and ports.

The Group performed impairment assessment on restricted bank deposits and concluded that the probability of defaults of the counterparty banks are insignificant and accordingly, no allowance for credit losses is provided.

Details of impairment assessment of restricted bank deposits are set out in Note 40.2.

29. CASH AND CASH EQUIVALENTS

(a) Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of financial position and the consolidated statement of cash flows comprise cash at bank and in hand, and time deposits with original maturity within three months.

	31 December 2021 ***RMB million***	31 December 2020 *RMB million*
Deposits with banks and other financial institutions	**162,886**	127,457
Less: Restricted bank deposits	**4,479**	3,391
Less: Time deposits with original maturity over three months	**1,701**	11,186
Cash and cash equivalents in the consolidated cash flow statement	**156,706**	112,880

As at 31 December 2021, the Group performed impairment assessment on bank balances and concluded that the probability of defaults of the counterparty banks are insignificant and accordingly, no allowance for credit losses is provided.

Details of impairment assessment of bank deposits are set out in Note 40.2.

29. CASH AND CASH EQUIVALENTS (CONTINUED)

(b) Reconciliation of liabilities arising from financing activities

The table below shows the detailed changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Borrowings *RMB million* *(Note 31)*	Bonds *RMB million* *(Note 32)*	Lease liabilities *RMB million* *(Note 33)*	Accrued interest payable *RMB million* *(Note 35)*	Total *RMB million*
At 1 January 2021	**59,098**	**3,241**	**848**	**263**	**63,450**
Capital element of lease rentals paid	**–**	**–**	**(197)**	**–**	**(197)**
Interest element of lease rentals paid	**–**	**–**	**(29)**	**–**	**(29)**
Interest paid	**–**	**–**	**–**	**(3,214)**	**(3,214)**
Proceeds from borrowings	**22,114**	**–**	**–**	**–**	**22,114**
Repayments of borrowings	**(21,741)**	**–**	**–**	**–**	**(21,741)**
Foreign exchange	**(361)**	**(76)**	**–**	**–**	**(437)**
Amortisation of discount on bonds	**–**	**7**	**–**	**–**	**7**
Interest expenses	**–**	**–**	**29**	**3,160**	**3,189**
Increase in lease liabilities from entering into new leases during the year	**–**	**–**	**1,396**	**–**	**1,396**
Decrease in lease liabilities during the year	**–**	**–**	**(350)**	**–**	**(350)**
At 31 December 2021	**59,110**	**3,172**	**1,697**	**209**	**64,188**
At 1 January 2020	41,115	6,948	821	471	49,355
Capital element of lease rentals paid	–	–	(250)	–	(250)
Interest element of lease rentals paid	–	–	(37)	–	(37)
Interest paid	–	–	–	(2,530)	(2,530)
Proceeds from borrowings	9,940	–	–	–	9,940
Repayments of borrowings	(13,840)	–	–	–	(13,840)
Repayments of bonds	–	(3,488)	–	–	(3,488)
Foreign exchange	(453)	(223)	–	–	(676)
Deconsolidation of Finance Company's financial statements	22,336	–	–	(217)	22,119
Amortisation of discount on bonds	–	4	–	–	4
Interest expenses	–	–	37	2,539	2,576
Increase in lease liabilities from entering into new leases during the year	–	–	277	–	277
At 31 December 2020	59,098	3,241	848	263	63,450

29. CASH AND CASH EQUIVALENTS (CONTINUED)

(c) Total cash outflow for leases

Amounts included in the consolidated cash flow statement for leases comprise the following:

	Year ended 31 December 2021 RMB million	2020 RMB million
Within operating cash flows	**185**	218
Within financing cash flows	**226**	287
	411	505

These amounts relate to the following:

	Year ended 31 December 2021 RMB million	2020 RMB million
Lease rental paid	**411**	505

30. DEFERRED TAXATION

For the purpose of the presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances for financial reporting purpose.

	31 December 2021 RMB million	31 December 2020 RMB million
Deferred tax assets	**3,568**	2,856
Deferred tax liabilities	**(974)**	(896)
	2,594	1,960

30. DEFERRED TAXATION (CONTINUED)

The following are the major deferred tax assets and liabilities recognised and movements thereon during the current and prior year:

	At 1 January 2021 RMB million	Credited/(charged) in profit or loss/other comprehensive income RMB million	31 December 2021 RMB million
Allowances, primarily for receivables and inventories	609	(53)	556
Property, plant and equipment	193	95	288
Right-of-use assets	–	–	–
Tax losses utilised	96	(8)	88
Tax allowable expenses not yet incurred	1	–	1
Unrealised profits from sales within the Group	1,196	179	1,375
Accrued salaries and other expenses not yet paid	58	(24)	34
Others	(193)	445	252
Net deferred tax assets	1,960	634	2,594

	At 1 January 2020 RMB million	Credited/(charged) in profit or loss/other comprehensive income RMB million	31 December 2020 RMB million
Allowances, primarily for receivables and inventories	540	69	609
Property, plant and equipment	112	81	193
Right-of-use assets	–	–	–
Tax losses utilised	116	(20)	96
Tax allowable expenses not yet incurred	1	–	1
Unrealised profits from sales within the Group	1,255	(59)	1,196
Accrued salaries and other expenses not yet paid	65	(7)	58
Others	73	(266)	(193)
Net deferred tax assets	2,162	(202)	1,960

30. DEFERRED TAXATION (CONTINUED)

At the end of the reporting period, the Group has unused tax losses of RMB7,449 million (2020: RMB5,946 million) and unrecognised deductible temporary differences of RMB8,864 million (2020: RMB9,244 million) available for offset against future profits. A deferred tax asset has been recognised in respect of RMB352 million (2020: RMB383 million) of such losses. No deferred tax asset has been recognised in respect of the remaining RMB7,097 million (2020: RMB5,563 million) losses due to the unpredictability of future profit streams. Included in unrecognised tax losses are losses of RMB1,324 million (2020: RMB2,059 million) that will expire in 2022.

31. BORROWINGS

An analysis of the Group's borrowings is as follows:

	31 December 2021 ***RMB million***	31 December 2020 *RMB million*
Current borrowings:		
Short-term bank and other borrowings	**4,248**	5,043
Current portion of long-term borrowings	**5,669**	3,804
	9,917	8,847
Non-current borrowings:		
Long-term borrowings, less current portion	**49,193**	50,251
	59,110	59,098
Secured	**10,070**	10,920
Unsecured	**49,040**	48,178
	59,110	59,098

The Group's short-term borrowings are unsecured and bear interest at rates ranging from 3.00% to 4.35% per annum (2020: 2.80% to 5.10% per annum), and long-term borrowings bear interest at rates ranging from 1.80% to 4.90% per annum (2020: 1.80% to 6.15% per annum).

31. BORROWINGS (CONTINUED)

	31 December 2021 RMB million	31 December 2020 RMB million
The exposure of the long-term borrowings and the contractual maturity dates:		
Within one year	**5,669**	3,804
More than one year, but not exceeding two years	**5,337**	4,815
More than two years, but not exceeding five years	**3,854**	10,280
More than five years	**40,002**	35,156
	54,862	54,055

The Group's long-term borrowings comprise:

		31 December 2021 RMB million	31 December 2020 RMB million
Loans from banks and other institutions			
RMB denominated	Interest rates ranging from 4.28% to 5.39% per annum with maturities through 22 January 2036	**42,388**	41,061
RMB denominated	Interest rates ranging from LPR-2.60% to LPR+0.05% per annum with maturities through 8 October 2041	**3,195**	2,667
USD denominated	Interest rates ranging from Libor+0.7% to Libor+2.85% per annum with maturities through 26 December 2034	**8,220**	8,846
Japanese Yen ("JPY") denominated	Interest rates ranging from 1.80% to 2.60% per annum with maturities through 20 March 2031	**1,057**	1,478
Euro denominated	Interest rate at 2.85% per annum with maturities through 22 June 2022	**2**	3
		54,862	54,055
Less: current portion of long-term borrowings		**(5,669)**	(3,804)
		49,193	50,251

31. BORROWINGS (CONTINUED)

As at 31 December 2021, included in the above outstanding long-term borrowings, were entrusted loans from China Energy Group and fellow subsidiaries amounting to RMB21,179 million (2020: RMB21,640 million).

Certain borrowings are secured over certain property, plant and equipment with a carrying amount of RMB815 million (2020: RMB893 million) (see Note 17(iii)).

32. BONDS

The Group issued a dollar bond of a total USD500 million on 20 January 2015. The net proceeds of the Dollar bond issued were mainly used for repayment of loans of subsidiaries. Details of the Group's bond are as follow:

	Effective interest rate %	Due date	**31 December 2021** ***RMB million***	31 December 2020 *RMB million*
10 - year corporate bond	4.10%	19/01/2025	**3,172**	3,241

33. LEASE LIABILITIES

The lease liabilities were repayable as follow:

	31 December 2021		31 December 2020	
	Present value of the minimum lease payments ***RMB million***	**Total minimum lease payments** ***RMB million***	Present value of the minimum lease payments *RMB million*	Total minimum lease payments *RMB million*
Within 1 year	**187**	**216**	242	275
After 1 year but within 2 years	**225**	**267**	206	229
After 2 years but within 5 years	**476**	**628**	341	366
After 5 years	**809**	**1,015**	59	61
	1,510	**1,910**	606	656
	1,697	**2,126**	848	931
Less: total future interest expenses		**(429)**		(83)
Present value of lease liabilities		**1,697**		848

34. ACCOUNTS AND BILLS PAYABLES

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Accounts payable		
– China Energy Group, an associate of China Energy Group and fellow subsidiaries	**2,064**	1,435
– Associates	**626**	1,075
– Third parties	**31,100**	25,362
	33,790	27,872
Bills payable	**1,426**	1,108
	35,216	28,980

The following is an aging analysis of accounts and bills payables, presented based on invoice date.

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Less than one year	**31,468**	24,621
One to two years	**888**	671
Two to three years	**400**	459
More than three years	**2,460**	3,229
	35,216	28,980

Included in accounts and bills payables, the following amounts are denominated in foreign currencies:

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
USD	**1,202**	521
Euro	**84**	12
Others	**474**	214
	1,760	747

35. ACCRUED EXPENSES AND OTHER PAYABLES

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Accrued staff wages and welfare benefits	**5,941**	4,359
Accrued interest payable	**209**	263
Taxes payable other than income tax	**10,610**	4,154
Dividends payable	**1,194**	1,422
Other accrued expenses and payables *(Note)*	**11,155**	8,751
	29,109	18,949

Notes:

Other accrued expenses and payables of the Group included:

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Amounts due to China Energy Group and fellow subsidiaries	**584**	519
Amounts due to associates	**4**	59
	588	578

The above balances are unsecured, interest-free and payable on demand.

36. LONG-TERM LIABILITIES

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Payables for acquisition of mining rights *(Note (i))*	**6,453**	742
Deferred income *(Note (ii))*	**1,408**	1,431
Defined benefit plans	**4**	6
Others	**1,587**	1,171
	9,452	3,350
Analysed for reporting purpose as:		
Current liabilities	**1,427**	689
Non-current liabilities	**8,025**	2,661
	9,452	3,350

Notes:

(i) The balances mainly represent payables for acquisition of mining rights which are to be settled over the period of production set out in the contracts on an annual basis. The annual payment is determined by fixed rates on a per tonne basis with reference to the annual production volume of the acquired mines in the acquisition agreements.

(ii) Deferred income mainly represents grants provided by several local governments in the PRC to encourage the construction of non-current assets.

37. ACCRUED RECLAMATION OBLIGATIONS

	Year ended 31 December	
	2021 *RMB million*	2020 *RMB million*
At the beginning of the year	**6,169**	3,372
Addition for the year	**565**	2,654
Accretion expense	**350**	288
Accrued reclamation obligations utilised	**(330)**	(145)
At the end of the year	**6,754**	6,169

During the year, the coal mine related subsidiaries of the Group re-estimated the reclamation obligations related to the mine geological restoration and environment cost according to the relevant regulations of the state.

38. SHARE CAPITAL

	31 December 2021 *RMB million*
Registered, issued and fully paid:	
16,491,037,955 domestic listed A shares of RMB1.00 each	**16,491**
3,377,482,000 H shares of RMB1.00 each	**3,378**
	19,869

	31 December 2020 *RMB million*
Registered, issued and fully paid:	
16,491,037,955 domestic listed A shares of RMB1.00 each	16,491
3,398,582,500 H shares of RMB1.00 each	3,399
	19,890

The Company repurchased 21,100,500 shares of its own ordinary shares on the Stock Exchange of Hong Kong during the period from November to December 2020, the repurchase was governed by section 257 of the Hong Kong Companies Ordinance. The total amount paid RMB256 million was debited to "treasury shares". In March 2021, the Company has completed the cancellation procedures for all the repurchased shares.

All A shares and H shares rank pari passu in all material aspects.

39. CAPITAL RISK MANAGEMENT

The Group's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The Group manages the capital structure and makes adjustments to it in the light of changes in economic conditisons and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders or issue new shares to reduce debts.

The Group monitors capital using a gearing ratio which is total liabilities divided by total assets. The Group aims to maintain the gearing ratio at a reasonable level. The Group's gearing ratio as at 31 December 2021 was 26% (2020: 24%).

There were no changes in the Group's approach to capital management compared with previous years.

40. FINANCIAL INSTRUMENTS

40.1 Categories of financial instruments

The carrying amounts of each of the following categories of financial assets and financial liabilities at the end of the reporting period are set out as follows:

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Financial assets		
Financial assets at amortised cost	196,114	155,624
Equity instruments at FVTOCI *(Note 22)*	2,174	1,845
Accounts and bills receivable at FVTOCI *(Note 22)*	376	–
	198,664	157,469
Financial liabilities		
Amortised cost	117,341	105,763

40.2 Financial risk management objectives and policies

The Group's major financial instruments include accounts and bills receivables, loans and advances to/deposits from/amounts due to China Energy Group and fellow subsidiaries, amounts due from/to associates, other receivables, accounts and bills payables, borrowings, other payables, long-term liabilities and bonds. Details of the financial instruments are disclosed in the respective notes. The risks associated with these financial instruments include market risk (interest rate and currency risks), credit risk and liquidity risk. The policies on how to mitigate these risks are set out below. The management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Market risk

(i) Currency risk

The functional currency of most of the group entities is RMB in which most of the transactions are denominated. However, certain of the Group's receivables, bank balances, borrowings and payables are denominated in foreign currencies other than the functional currency in which they are measured. The carrying amounts of the Group's receivables, bank balances, borrowings and payables denominated in foreign currencies are set out in Notes 26, 29, 31 and 34, respectively.

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Market risk (Continued)

(i) Currency risk (Continued)

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:

	Liabilities		Assets	
	31 December		31 December	
	2021	2020	**2021**	2020
	RMB million	*RMB million*	***RMB million***	*RMB million*
USD	**1,202**	445	**431**	278
JPY	**1,057**	1,479	**–**	–
Other currencies	**1,127**	834	**2,773**	2,146

Sensitivity analysis

The following table details the Group's sensitivity to a 10% increase or decrease in exchange rate of each foreign currency against RMB, while all other variables are held constant. The sensitivity analysis includes only outstanding foreign currency denominated monetary items at the end of the reporting period.

	USD		JPY		Other currencies	
	Year ended 31 December		Year ended 31 December		Year ended 31 December	
	2021	2020	**2021**	2020	**2021**	2020
	RMB million	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*
(Decrease)/Increase in profit after tax for the year:						
– if RMB weakens against foreign currencies	**(57)**	(13)	**(78)**	(112)	**122**	99
– if RMB strengthens against foreign currencies	**57**	13	**78**	112	**(122)**	(99)

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Market risk (Continued)

(ii) Interest rate risk

The Group is exposed to fair value interest rate risk in relation to fixed-rate loan and receivables, borrowings and bonds (see Notes 27, 31 and 32).

The Group is also exposed to cash flow interest rate risk in relation to variable-rate borrowings and variable-rate loans (see Note 31). Other than the concentration of interest rate risk related to the movements in London Interbank Offered Rate and the loan interest published by the PBOC, the Group has no significant concentration of interest rate risk.

The Group's exposures to interest rates on financial liabilities are detailed in the liquidity risk management section of this note.

Sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to interest rates for variable-rate borrowings and variable-rate loans and receivables at the end of the reporting period. No sensitivity analysis has been presented for the exposure to interest rates for bank balances as the management of the Group considers that, taking into account that the fluctuation in interest rates on bank balances is minimal, the impact of profit or loss for the year is insignificant.

The analysis is prepared assuming variable-rate borrowings and variable-rate loans and receivables outstanding at the end of the reporting period were outstanding for the whole year.

If interest rates had been 100 basis points (2020: 100 basis points) higher/lower and all other variables were held constant, the Group's profit for the year ended 31 December 2021 would decrease/increase by RMB387 million (2020: decrease/increase by RMB403 million).

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment

As at 31 December 2021, other than those financial assets whose carrying amounts best represent the maximum exposure to credit risk, the Group's maximum exposure to credit risk which will cause a financial loss to the Group arising from the amount of financial guarantees provided by the Group is disclosed in Note 41.2. The Group does not hold any collateral or other credit enhancements to cover its credit risks associated with its financial assets and financial guarantee contracts.

Accounts and bills receivables arising from contracts with customers

In order to minimise the credit risk, the management of the Group has delegated a team responsible for determination of credit limits and credit approvals. Before accepting any new customer, the Group uses an internal credit scoring system to assess the potential customer's credit quality and defines credit limits by customer. Limits and scoring attributed to customers are reviewed once a year. Other monitoring procedures are in place to ensure that follow-up action is taken to recover overdue debts. In this regard, the Directors consider that the Group's credit risk is significantly reduced.

Loan receivables

The credit risks on loan receivables are limited because the counterparties are mainly related parties, the Group assesses the recoverability by reviewing their financial positions and results periodically and considers that its exposure to credit risk arising from default of the counterparties is limited.

Bank balances

The credit risks on bank balances are limited because the counterparties are banks with high credit ratings assigned by credit-rating agencies, such as China Construction Bank, Industrial and Commercial Bank of China, Bank of China and Agricultural Bank of China.

Other receivables

Other receivables represent pledge and guarantee deposit, dividend receivables and interest receivables. The pledge and guarantee deposit is paid for regular businesses. The dividend receivables relate to the investments of the Company and the interest receivables mainly relate to related parties and stated owned entities. Thus, the credit risk on other receivables are limited.

Financial guarantee contracts

The credit risks on financial guarantee contracts are limited because the counterparties are state owned entities with good financial position.

The Group does not have any significant concentration of credit risk. Accounts and bills receivables consist of a large number of customers, spread across diverse industries and geographical areas.

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

The tables below detail the credit risk exposures of the Group's financial assets and financial guarantee contracts, which are subject to ECL assessment:

	Notes	**External credit rating**	**12-month or lifetime ECL**	**31 December 2021** *RMB million*	2020 *RMB million*
Financial assets at amortised costs					
Loans receivables	23, 27	N/A	12-month ECL	**400**	437
Restricted bank deposits	28	N/A	12-month ECL	**4,479**	3,391
Cash	29	N/A	12-month ECL	**158,407**	124,066
Other receivables	27	N/A	12-month ECL	**2,262**	2,797
			Credit-impaired	**949**	1,324
Service concession receivables	23, 27	N/A	12-month ECL	**14,817**	12,556
Other loans	27	N/A	Credit-impaired	**4,500**	4,500
Accounts receivable *(Note (i))*	26	N/A	Provision matrix	**10,076**	6,996
			Credit-impaired	**1,459**	2,101
Other items					
Financial guarantee contracts *(Note (ii))*		N/A		**128**	144

Notes:

(i) For accounts receivable, the Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. Except for debtors with credit-impaired, the Group determines the ECL on these items by using a provision matrix, grouped by debtors' aging.

(ii) For financial guarantee contracts, the gross carrying amount represents the maximum amount the Group has guaranteed under the respective contracts.

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Provision matrix - debtors' ageing

As part of the Group's credit risk management, the Group uses debtors' ageing to assess the impairment for its receivables from customers in relation to its sales of coal, power, coal chemical products and transportation services because these customers consist of a large number of customers with common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The following table provides information about the exposure to credit risk for accounts receivables which are assessed based on provision matrix as at 31 December 2021 within lifetime ECL (not credit-impaired). Accounts receivable with credit-impaired with gross carrying amounts of RMB1,459 million (2020: RMB2,101 million) as at 31 December 2021 were assessed individually.

Gross carrying amount

	Average loss rate 2021	**Accounts receivable 2021** *RMB million*	Average loss rate 2020	Accounts receivable 2020 *RMB million*
Current (not past due)	**0.4%**	**5,609**	0.4%	4,347
Less than one year past due	**1%**	**4,025**	1%	2,035
One to two years past due	**6%**	**205**	6%	105
Two to three years past due	**10%**	**65**	10%	90
More than three years past due	**23%**	**172**	20%	419
		10,076		6,996

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.

During the year ended 31 December 2021, the Group provided RMB66 million (2020: RMB312 million) impairment allowance for accounts receivable and reversed RMB45 million (2020: RMB37 million), based on the provision matrix.

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Gross carrying amount (Continued)

The following table shows the movement in lifetime ECL that has been recognised for accounts receivable under the simplified approach.

	Lifetime ECL (not credit - impaired) *RMB million*	Lifetime ECL (credit - impaired) *RMB million*	Total *RMB million*
As at 1 January 2020	144	929	1,073
Impairment losses recognised	18	294	312
Impairment losses reversed	(26)	(11)	(37)
Write-offs	–	(49)	(49)
As at 1 January 2021	136	1,163	1,299
Impairment losses recognised	8	58	66
Impairment losses reversed	(23)	(22)	(45)
Write-offs	–	(43)	(43)
As at 31 December 2021	121	1,156	1,277

The following tables show reconciliation of loss allowances that has been recognised for loan receivables and interbank certificate of deposits.

	Year ended 31 December	
	2021 12-month ECL *RMB million*	2020 12-month ECL *RMB million*
As at 1 January	–	640
– Impairment losses reversed	–	(190)
New financial assets originated or purchased	–	188
Effect of disposals of subsidiaries	–	(638)
As at 31 December	–	–

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Gross carrying amount (Continued)

The following tables show reconciliation of loss allowances that has been recognised for other receivables and other loans.

	12-month ECL (not credit-impaired) *RMB million*	**Lifetime ECL (credit-impaired)** *RMB million*	**Total** *RMB million*
As at 1 January 2020	162	298	460
– Impairment losses recognised	50	208	258
– Impairment losses reversed	(1)	(6)	(7)
– Write-offs	–	(5)	(5)
As at 1 January 2021	211	495	706
– Impairment losses recognised	28	2,583	2,611
– Impairment losses reversed	(1)	(70)	(71)
– Write-offs	–	(62)	(62)
– Other *(Note)*	–	23	23
As at 31 December 2021	238	2,969	3,207

Note:

Tianjin Yuanhua Shipping Co., Ltd., which formerly was an associate of the Company, became a subsidiary of Guoneng Yuanhai Shipping Co., Ltd. (Note 45), which results in an impairment losses.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligation as they fall due. The approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risk damage to the Group's reputation.

The Group closely monitors cash flow requirements and optimising its cash return. The Group prepares cash flow forecasts and ensures it has sufficient cash for the servicing of operation, financial, and capital obligations; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters.

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.2 Financial risk management objectives and policies (Continued)

Liquidity risk (Continued)

The following table details the remaining contractual maturity of the Group's financial liabilities at the end of the reporting period, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of the reporting period) and the earliest date the Group can be required to pay:

	31 December 2021						
	Weighted average interest rate %	On demand or less than 1 year RMB million	1 - 2 years RMB million	2 - 5 years RMB million	More than 5 years RMB million	Total undiscounted cash flows RMB million	Total carrying amount RMB million
Financial liabilities:							
Accounts and bills payables, other payables, lease liabilities and long-term liabilities		42,317	4,587	6,323	3,552	56,779	55,059
Borrowings variable interest rate	4.34	7,741	4,985	5,433	40,870	59,029	52,762
Borrowings fixed interest rate	2.97	3,555	1,445	1,453	192	6,645	6,348
Bonds	4.10	124	124	3,318	–	3,566	3,172
		53,737	11,141	16,527	44,614	126,019	117,341

	31 December 2020						
	Weighted average interest rate %	On demand or less than 1 year RMB million	1 - 2 years RMB million	2 - 5 years RMB million	More than 5 years RMB million	Total undiscounted cash flows RMB million	Total carrying amount RMB million
Financial liabilities:							
Accounts and bills payables, other payables, lease liabilities and long-term liabilities		37,467	2,088	3,732	1,085	44,372	43,424
Borrowings variable interest rate	4.47	7,098	6,736	14,709	36,407	64,950	53,707
Borrowings fixed interest rate	2.65	4,235	268	811	355	5,669	5,391
Bonds	4.10	126	126	3,522	–	3,774	3,241
		48,926	9,218	22,774	37,847	118,765	105,763

Saved as discussed above, the Group also makes use of banks and financial institutions facilities as one of the effective sources of liquidity.

The maximum liability of financial guarantees issued by the Group is disclosed in Note 41.2.

40. FINANCIAL INSTRUMENTS (CONTINUED)

40.3 Fair value measurements

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

	31 December 2021 ***RMB million***	31 December 2020 *RMB million*	**Fair value hierarchy**	**Valuation technique(s) and key input(s)**
Financial assets:				
Equity instruments	**2,174**	1,845	Level 3	Market comparison approach. Fair value is estimated based on value of comparable listed companies, multiples and discount for lack of liquidity.
Accounts and bills receivables	**376**	–	Level 3	Discounted cash flow method. The significant unobservable inputs used by the Group for the valuation are the expected rates of return.

There were no transfer between Level 1, Level 2 and Level 3 during the year ended 31 December 2021 and 2020.

Fair value of financial assets and financial liabilities that are not measured at fair value on a recurring basis

Except as detailed in the following table, the Directors consider that the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the consolidated financial statements approximate their fair values:

	31 December 2021		31 December 2020	
	Carrying amount ***RMB million***	**Fair value** ***RMB million***	Carrying amount *RMB million*	Fair value *RMB million*
Financial liabilities:				
Fixed rate bank borrowings	**6,348**	**6,645**	5,391	5,669
Fixed rate bonds	**3,172**	**3,261**	3,241	3,426

The fair value of fixed rate bank borrowings above in the Level 2 category is measured using discounted cash flow method where the future cash flows are estimated based on the contract and discounted at a rate that reflects the credit risk of the issuers.

The fair values of bonds are included in the Level 1 category, which have been derived from the quoted prices (unadjusted) in an active market.

41. COMMITMENTS AND CONTINGENT LIABILITIES

41.1 Capital commitments

As at 31 December, the Group had capital commitments for land, buildings and mining rights, equipment and other as follows:

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Contracted for but not provided		
– Land, buildings, mining rights and exploration and evaluation assets	**41,369**	30,737
– Equipment	**22,639**	21,918
– Other *(Note)*	**5,481**	4,000
	69,489	56,655

Note:

As at 22 January 2021, the Group entered into a partnership agreement as a limited partner with other partners to participate in the establishment of Beijing Guoneng New Energy Industry Investment Fund Partnership (Limited Partnership), the committed investment payments under which amounted to RMB4,000 million and the remaining uninvested amount is RMB3,573 million.

As at 29 September 2021, the Group entered into a partnership agreement as a limited partner with other partners to participate in the establishment of Guoneng Low Carbon Fund Partnership, the committed investment payments under which amounted to RMB2,000 million and the remaining uninvested amount is RMB1,908 million.

41.2 Financial guarantees issued

As at 31 December 2021, the Group had issued certain guarantees in respect of certain banking facilities granted to an entity which the Group held less than 20% equity interest. The maximum amount guaranteed is RMB128 million (2020: RMB144 million).

41.3 Legal contingencies

The Group is the defendant in certain lawsuits as well as the plaintiff in other proceedings arising in the ordinary course of business. While the outcomes of such contingencies, lawsuits or other proceedings cannot be determined at present, management believes that any resulting liabilities will not have a material adverse effect on the financial position or operating results of the Group.

41. COMMITMENTS AND CONTINGENT LIABILITIES (CONTINUED)

41.4 Environmental contingencies

To date, the Group has not incurred any significant expenditure for environmental remediation, is currently not involved in any environmental remediation, and apart from the provision for land reclamation costs, has not accrued any further amounts for environmental remediation relating to its operations. Under the existing legislation, management believes that there are no probable liabilities that will have a material adverse effect on the financial position or operating results of the Group. The regulatory bodies, however, have moved, and may move further towards the adoption of more stringent environmental standards. Environmental liabilities are subject to considerable uncertainties which affect the Group's ability to estimate the ultimate cost of remediation efforts. These uncertainties include (i) the exact nature and extent of the contamination at various sites including, but not limited to coal mines and land development areas, whether operating, closed or sold; (ii) the extent of required cleanup efforts; (iii) varying costs of alternative remediation strategies; (iv) changes in environmental remediation requirements; and (v) the identification of new remediation sites. The amount of such future cost is indeterminable due to such factors as the unknown magnitude of possible contamination and the unknown timing and extent of the corrective actions that may be required. Accordingly, the outcome of environmental liabilities under future environmental legislation cannot reasonably be estimated at present, and could be material.

42. EMPLOYEE BENEFITS PLAN

In addition to a minimal defined benefit plan operated by its subsidiary, the Group participates, in line with the regulations of the PRC, mainly in various defined contribution retirement plans organised by municipal and provincial governments for its employees. The Group is required to make contributions to the retirement plans at 20% of the salaries, bonuses and certain allowances of the employees. In addition, as approved by the government, the Group makes contribution to a supplemental defined contribution pension plan for its employees. The fund is managed by a qualified fund manager. The Group has no other material obligation for the payment of pension benefits associated with these plans beyond the annual contributions described above. The Group's contributions for the year ended 31 December 2021 were RMB3,662 million (2020: RMB2,504 million).

43. RELATED PARTY TRANSACTIONS

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group

The Group is controlled by China Energy Group and has significant transactions and relationships with China Energy Group, an associate of China Energy Group and subsidiaries of China Energy Group ("fellow subsidiaries"). Related parties refer to enterprises over which China Energy Group is able to exercise significant influence or control. The Group also has entered into transactions with its associates, over which the Group can exercise significant influence.

The Group had the following transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group that were carried out in the normal course of business during both years:

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group (Continued)

		Year ended 31 December	
		2021	2020
		RMB million	*RMB million*
Interest income	(i)	**183**	615
Income from entrusted loans	(ii)	**19**	19
Interest expense	(iii)	**810**	286
Purchases of ancillary materials and spare parts	(iv)	**1,773**	1,229
Mining service income	(v)	**3**	57
Ancillary and social services	(vi)	**1,294**	1,329
Transportation service income	(vii)	**1,813**	1,339
Transportation service expense	(viii)	**2,357**	201
Sale of coal	(ix)	**96,776**	54,906
Purchase of coal	(x)	**16,696**	10,073
Property leasing	(xi)	**100**	125
Repairs and maintenance services expense	(xii)	**70**	17
Coal export agency expense	(xiii)	**4**	4
Purchase of equipment and construction work	(xiv)	**1,101**	494
Sale of coal chemical product	(xv)	**6,941**	3,945
Other income	(xvi)	**1,748**	4,395
Granting of loans from Finance Company	(xvii)	**–**	15,205
Bills receivables discounted from Finance Company		**3,913**	–
Repayment of loans from Finance Company	(xviii)	**–**	13,062
Net deposits received by Finance Company	(xix)	**–**	19,492
Net deposits placed with Finance Company	(xx)	**27,126**	19,726
Granting of loans from China Energy Group	(xxi)	**10,012**	3,067
Repayment of loans from China Energy Group	(xxii)	**12,491**	1,596

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group (Continued)

(i) Interest income represents interest earned from deposits in and loans to China Energy Group and fellow subsidiaries. The applicable interest rate is determined in accordance with the prevailing interest rates published by the PBOC.

(ii) Income from entrusted loans represents interest earned from entrusted loans to an associate of the Group. The applicable interest rate is determined in accordance with the prevailing interest rates published by the PBOC.

(iii) Interest expense represents interest incurred from deposits placed and loans from China Energy Group and fellow subsidiaries. The applicable interest rate is determined in accordance with the prevailing interest rates published by the PBOC.

(iv) Purchases of ancillary materials and spare parts represent purchase of materials and utility supplies related to the Group's operations from fellow subsidiaries and an associate of China Energy Group.

(v) Mining service income represents income earned from coal mining services to a fellow subsidiary.

(vi) Ancillary and social services represent expenditures for social welfare and support services such as property management, water and electricity supply, and canteen expense paid to China Energy Group, fellow subsidiaries and an associate of China Energy Group.

(vii) Transportation service income represents income earned from fellow subsidiaries in respect of coal transportation services.

(viii) Transportation service expense represents expense related to coal transportation service to fellow subsidiaries.

(ix) Sale of coal represents income from sale of coal to fellow subsidiaries.

(x) Purchase of coal represents coal purchased from an associate of the Group, an associate of China Energy Group and fellow subsidiaries.

(xi) Property leasing represents rental paid or payable in respect of properties leased from China Energy Group and fellow subsidiaries.

(xii) Repairs and maintenance services expense represents expense related to machinery repairs and maintenance services provided by an associate of the China Energy Group and fellow subsidiaries.

(xiii) Coal export agency expense represents expense related to coal export agency services provided by a fellow subsidiary.

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group (Continued)

(xiv) Purchase of equipment and construction work represents expenditure related to equipment and construction service provided by fellow subsidiaries.

(xv) Sale of coal chemical product represents income from sale of coal chemical product to a fellow subsidiary.

(xvi) Other income includes agency income, repairs and maintenance service income, sales of ancillary materials and spare parts, management fee income, sales of water and electricity, financial service income, lease income, etc. earned from China Energy Group, an associate of China Energy Group and fellow subsidiaries.

(xvii) Granting of loans from Finance Company represents loans granted by Finance Company to China Energy Group and fellow subsidiaries before Finance Company was deconsolidated from the Group's consolidated financial statements.

(xviii) Repayment of loans from Finance Company represents loans repaid by China Energy Group and fellow subsidiaries to Finance Company before Finance Company was deconsolidated from the Group's consolidated financial statements.

(xix) Receipt of deposits by Finance Company represents net deposits received by Finance Company from China Energy Group and fellow subsidiaries before Finance Company was deconsolidated from the Group's consolidated financial statements.

(xx) Net deposits placed with Finance Company represents net deposits placed by the Group with Finance Company after Finance Company was deconsolidated from the Group's consolidated financial statements.

(xxi) Granting of loans from China Energy Group and fellow subsidiaries.

(xxii) Repayment of loans to China Energy Group and fellow subsidiaries.

The Directors are of the opinion that the above transactions with related parties were conducted in the ordinary course of business and in accordance with the agreements governing such transactions.

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group (Continued)

The Group entered into a number of agreements with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group. The terms of the principal agreements are summarised as follows:

(i) The Group has entered into a mutual supply agreement for the mutual provision of production supplies and ancillary services with an associate of China Energy Group and fellow subsidiaries. Pursuant to the agreement, an associate of China Energy Group and fellow subsidiaries provide the Group with the production supplies and services, ancillary production services including the use of the information network system and ancillary administrative services. On the other hand, the Group provides fellow subsidiaries with water supplies, rolling stock management, railway management, railway transportation and other related or similar production supplies or services and use of the information network system.

The products and services provided under the agreement, other than the sharing of use of the information network system which is free of charge, are provided in accordance with the following pricing policy:

- price prescribed by the state (including any price prescribed by any relevant local government), if applicable;
- where there is no state-prescribed price but where there is a state-guidance price, then the state-guidance price;
- where there is neither a state-prescribed price nor a state-guidance price, the market price; or
- where none of the above is applicable or where it is not practical to apply the above pricing policies in reality, the price to be agreed between the relevant parties shall be based on reasonable costs incurred in providing the goods or services plus a profit margin of 5% of such costs.

(ii) The Group has entered into coal supply agreements with an associate of China Energy Group, fellow subsidiaries and associates of the Group. The coal supplied is charged at the prevailing market price.

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group (Continued)

(iii) The Group, through Finance Company, has entered into a financial services agreement with China Energy Group and fellow subsidiaries. Pursuant to the agreement, Finance Company provides financial services to China Energy Group and fellow subsidiaries. The interest rate for the deposits with Finance Company from China Energy Group and fellow subsidiaries should not be lower than the lowest limit published by the PBOC for the same type of deposit. The interest rate for loans made by Finance Company to China Energy Group and fellow subsidiaries should not be higher than the highest limit published by the PBOC for the same type of loan. The above interest rates should be determined by reference to the rate charged by normal commercial banks in the PRC for comparable deposits and loans on normal commercial terms. The fees charged by Finance Company for the provision of other financial services shall be determined according to the rates chargeable by the PBOC or the China Banking Regulatory Commission.

The Group has entered into a new financial services agreement with Finance Company effective from 1 January 2021. Pursuant to the agreement, Finance Company provides financial services to the Group. The interest rate for the deposits with Finance Company from the Group and fellow subsidiaries should not be lower than the lowest limit published by the PBOC for the same type of deposit. The interest rate for loans made by Finance Company to the Group and fellow subsidiaries should not be higher than the highest limit published by the PBOC for the same type of loan. The above interest rates should be determined by reference to the rate charged by normal commercial banks in the PRC for comparable deposits and loans on normal commercial terms. The fees charged by Finance Company for the provision of other financial services shall be determined according to the rates chargeable by the PBOC or the China Banking Regulatory Commission.

(iv) The Group has entered into a property leasing agreement with fellow subsidiaries of China Energy Group for leasing of certain properties to each other. No rent is payable by the Group before fellow subsidiaries obtains the relevant property ownership certificate. The rental charges are based on comparable market rates. If fellow subsidiaries of China Energy Group negotiate to sell a leased property to a third party, the Company has a pre-emptive right to purchase such property under terms no less favorable than other third party.

(v) The Group has entered into a land leasing agreement with fellow subsidiaries of China Energy Group. The annual rent is determined based on the local market rate. The Group is not allowed to sub-let the leased land.

(vi) The Group has entered into an agency agreement for the export of coal with a fellow subsidiary of China Energy Group. The fellow subsidiary is appointed as a non-exclusive export agent of the Group and is entitled to receive an agency fee based on the relevant market rates or lower rates. Currently, the rate is 0.7% of the free on board sales price of coal exported.

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.1 Transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group (Continued)

(vii) The Group entered into an agency agreement for the sale of coal with fellow subsidiaries of China Energy Group. The Group is appointed as the exclusive sales agent of fellow subsidiaries of China Energy Group for thermal coal and non-exclusive sales agent for coking coal. The Group is entitled to receive an agency fee, which is based on its related costs incurred plus a profit margin of 5% for sales of coal outside the Inner Mongolia Autonomous Region. No agency fee is charged for sales of coal within the Inner Mongolia Autonomous Region.

(viii) The Group has entered into agreements with fellow subsidiaries of China Energy Group under which the Group has been granted the right to use certain trademarks. Fellow subsidiaries of China Energy Group bear its own cost for the registration of such trademarks during the term of the trademarks license agreement and expenses for enforcement against any infringement of the licensed trademarks by third parties.

Amounts due from/to China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group:

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Cash and time deposits at bank	**27,126**	19,726
Accounts and bills receivables	**3,892**	2,735
Prepaid expenses and other current assets	**1,755**	920
Other non-current assets	**426**	704
Total amounts due from China Energy Group, an associate of China Energy Group, fellow subsidiaries and associates of the Group	**33,199**	24,085
Borrowings	**22,472**	20,359
Accounts payable	**2,690**	2,510
Accrued expenses and other payables	**657**	578
Contract liabilities	**1,781**	896
Total amounts due to China Energy Group, an associate of China Energy Group and fellow subsidiaries, and associates of the Group	**27,600**	24,343

Other than those disclosed in Notes 23, 26, 27, 31 and 35, amounts due from/to China Energy Group, an associate of China Energy Group, fellow subsidiaries, and associates of the Group bear no interest, are unsecured and are repayable in accordance with normal commercial terms.

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.2 Key management personnel emoluments

Key management personnel receive compensation in the form of fees, basic salaries, housing and other allowances, benefits in kind, discretionary bonuses and retirement scheme contributions.

Key management personnel compensation of the Group is summarised as follows:

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Short-term employee benefits	**9**	9
Post-employment benefits	**1**	1
	10	10

Total remuneration is included in "personnel expenses" as disclosed in Note 12.

43.3 Contributions to post-employment benefit plans

The Group participates in various defined contribution post-employment benefit plans organised by municipal and provincial governments and a supplemental defined contribution pension plan approved by the government for its employees. Further details of the Group's post-employment benefit plans are disclosed in Note 42.

43.4 Transactions with other government-related entities in the PRC

The Company is ultimately controlled by the PRC government and the Group operates in an economic environment currently predominated by government-related entities.

Other than those transactions with China Energy Group, an associate of China Energy Group, fellow subsidiaries and associates of the Group as disclosed above, the Group conducts business with other government-related entities which include but are not limited to the following:

– Power sales;

– Sales and purchases of coal;

– Transportation services;

– Construction work;

– Purchases of ancillary materials and spare parts;

– Ancillary and social services; and

– Financial services arrangements.

43. RELATED PARTY TRANSACTIONS (CONTINUED)

43.4 Transactions with other government-related entities in the PRC (Continued)

These transactions are conducted in the ordinary course of the Group's business on terms comparable to those with other entities that are not government-related. The Group has established its pricing policies in respect of sale of goods and provision of services, and approval process for purchases of products and services. Such policies and approval process apply to all counterparties regardless of whether the counterparty is government-related or not.

Having considered the potential for transactions to be impacted by related party relationships, the Group's buying, pricing strategy and approval processes, and what information would be necessary for an understanding of the potential effect of the relationship on the financial statements, the Directors are of the opinion that the following transactions with other government-related entities require disclosure:

Transactions with other government-related entities, including state-controlled banks in the PRC

	Year ended 31 December	
	2021	2020
	RMB million	*RMB million*
Coal revenue	**68,999**	74,053
Power revenue	**57,437**	40,808
Transportation costs	**9,408**	8,961
Interest income	**2,272**	2,406
Interest expenses (including amount capitalised)	**2,104**	3,354

Balances with other government-related entities, including state-controlled banks in the PRC

	31 December 2021	31 December 2020
	RMB million	*RMB million*
Accounts and bills receivables	**4,644**	3,134
Prepaid expenses and other current assets	**4,268**	7,468
Cash and time deposits at banks	**131,263**	103,590
Restricted bank deposits	**4,479**	3,391
Borrowings	**36,279**	39,067
Accrued expenses and other payables	**1,999**	1,528
Contract liabilities	**3,747**	1,278

44. NON-ADJUSTING EVENTS AFTER THE REPORTING PERIOD

After the end of the reporting period, the Directors proposed a final dividend, the details of which are disclosed in Note 15.

45. SUBSIDIARIES

Details of the Company's material subsidiaries

The Company's subsidiaries are unlisted. Details of the Company's material subsidiaries at the end of the reporting period are set out below:

Name of the subsidiary	Place of incorporation and operation	Type of legal entity	Particulars of registered capital	Proportion of ownership interest and voting rights held by the Group		Principal activities
				31 December 2021 %	31 December 2020 %	
Guoneng Sales Group Co., Ltd.	PRC	Limited company	RMB1,889 million	100	100	Trading of coal
Guoneng Shendong Coal Group Co., Ltd.(formerly known as "Shenhua Shendong Coal Group Co., Ltd.")	PRC	Limited company	RMB4,989 million	100	100	Trading of coal; provision of integrated services
Zhunge'er Energy	PRC	Limited company	RMB7,102 million	58	58	Coal mining and development; generation and sale of electricity
Guoneng Baorixile Energy Industrial Co., Ltd. (formerly known as "Shenhua Baorixile Energy Industrial Co., Ltd.")	PRC	Limited company	RMB1,169 million	57	57	Coal mining; provision of loading and transportation services
Beidian Shengli Company	PRC	Limited company	RMB2,925 million	63	63	Coal mining; provision of loading and transportation services
Guoneng Jinjie Energy Co., Ltd. (formerly known as "Shaanxi Guohua Jinjie Energy Co., Ltd.")	PRC	Limited company	RMB2,278 million	70	70	Generation and sale of electricity; coal mining development
Shenhua Shendong Power Co., Ltd.	PRC	Limited company	RMB3,024 million	100	100	Generation and sale of electricity
Guoneng Yuedian Taishan Power Co., Ltd. (formerly known as "Guangdong Guohua Yuedian Taishan Power Co., Ltd.", "Taishan Power")	PRC	Limited company	RMB4,670 million	80	80	Generation and sale of electricity

45. SUBSIDIARIES (CONTINUED)

Details of the Company's material subsidiaries (Continued)

Name of the subsidiary	Place of incorporation and operation	Type of legal entity	Particulars of registered capital	Proportion of ownership interest and voting rights held by the Group		Principal activities
				31 December 2021 %	31 December 2020 %	
Hebei Guohua Cangdong Power Co., Ltd.	PRC	Limited company	RMB1,834 million	**51**	51	Generation and sale of electricity
Dingzhou Power	PRC	Limited company	RMB1,561 million	**41**	41	Generation and sale of electricity
Guoneng Sichuan Energy Co., Ltd. (formerly known as "Shenhua Sichuan Energy Co., Ltd.")	PRC	Limited company	RMB3,101 million	**66**	51	Generation and sale of electricity; trading of coal
Shenhua Fujian Energy Co., Ltd.	PRC	Limited company	RMB3,280 million	**100**	100	Generation and sale of electricity
Guoneng Shuohuang Railway Development Co., Ltd.	PRC	Limited company	RMB15,231 million	**53**	53	Provision of transportation services
Guoneng Huanghua Harbour Administration Co., Ltd. (formerly known as "Shenhua Huanghua Harbour Administration Co., Ltd.")	PRC	Limited company	RMB6,790 million	**70**	70	Provision of harbour and port services
Guoneng Yuanhai Shipping Co., Ltd. (formerly known as "Shenhua Zhonghai Shipping Co., Ltd.") *(Note)*	PRC	Limited company	RMB5,948 million	**51**	51	Provision of transportation services
Guoneng Baotou Coal Chemical Co., Ltd.	PRC	Limited company	RMB5,132 million	**100**	100	Coal chemical
Guoneng Railway Transportation Co., Ltd.	PRC	Limited company	RMB5,003 million	**100**	100	Provision of transportation

45. SUBSIDIARIES (CONTINUED)

Details of the Company's material subsidiaries (Continued)

Name of the subsidiary	Place of incorporation and operation	Type of legal entity	Particulars of registered capital	Proportion of ownership interest and voting rights held by the Group		Principal activities
				31 December 2021 %	31 December 2020 %	
China Shenhua Overseas Development & Investment Co., Ltd. ("Shenhua Oversea Capital")	Hong Kong, China	Limited company	HKD5,252 million	**100**	100	Investment holding
Shenhua Australia Holding Pty Ltd.	Australia	Limited company	AUD400 million	**100**	100	Coal mining and development; generation and sale of electricity
Watermark Company	Australia	Limited company	AUD350 million	**100**	100	Coal mining and development; generation and sale of electricity
PT GH EMM Indonesia	Indonesia	Limited company	USD63 million	**70**	70	Coal mining and development; generation and sale of electricity
Guoneng Baoshen Railway Group Co., Ltd. (formerly known as "Shenhua Baoshen Railway Group Co., Ltd.")	PRC	Limited company	RMB11,700 million	**100**	100	Provision of transportation services
(Tianjin) Finance Lease Co., Ltd.	PRC	Limited company	RMB2,500 million	**100**	100	Provision of financial lease services
Guoneng Xinshuo Railway Co., Ltd. (formerly known as "Shenhua Xinshuo Railway Co., Ltd.")	PRC	Limited company	RMB7,450 million	**100**	100	Provision of transportation services
Guoneng Zhunneng Group Co., Ltd.	PRC	Limited company	RMB834 million	**100**	100	Coal mining and development
China Energy Bayannaoer Coal Chemical Co., Ltd.	PRC	Limited company	RMB450 million	**100**	100	Coal chemical

Note:

Tianjin Yuanhua Shipping Co., Ltd., which formerly was an associate of the Company, became a subsidiary of Guoneng Yuanhai Shipping Co., Ltd. as a result of the capital injection into Guoneng Yuanhai Shipping Co., Ltd using the total equity interests held by the Company and the other shareholder in Tianjin Yuanhua Shipping Co., Ltd..

45. SUBSIDIARIES (CONTINUED)

Details of the Company's material subsidiaries (Continued)

The above table lists subsidiaries of the Group which, in the opinion of the Directors, principally affected the results or assets of the Group. To give details of other subsidiaries would, in the opinion of the Directors, result in particulars of excessive length.

As at 31 December 2021, Shenhua Oversea Capital had a total USD500 million bond (Note 32). Other than Shenhua Oversea Capital, none of the subsidiaries had issued any debt securities at the end of the year.

Details of non-wholly owned subsidiaries that have material non-controlling interests

Summarised financial information in respect of each of the Group's subsidiaries that has material non-controlling interests is set out below. The summarised financial information below represents amounts before intragroup eliminations.

Name of the subsidiary	Place of incorporation and operation	Proportion of ownership interest and voting rights held by non-controlling interest		Profit allocated to non-controlling interests		Accumulated non-controlling interests	
				Year ended 31 December			
		31 December 2021	31 December 2020	2021	2020	31 December 2021	31 December 2020
				RMB million	RMB million	RMB million	RMB million
Zhunge'er Energy	PRC	42.24	42.24	1,166	519	15,951	14,853
Guoneng Baorixile Energy Industrial Co., Ltd.	PRC	43.39	43.39	827	358	2,918	2,291
Yulin Shenhua Energy Co., Ltd.	PRC	49.90	49.90	783	298	2,478	2,064
Dingzhou Power	PRC	59.50	59.50	(142)	246	1,524	1,666
Guoneng Jinjie Energy Co., Ltd	PRC	30.00	30.00	1,196	939	3,172	2,781
Guoneng Shuohuang Railway Development Co., Ltd.	PRC	47.28	47.28	3,671	3,627	17,462	17,057
Guoneng Yuanhai Shipping Co., Ltd.	PRC	49.00	49.00	369	83	3,698	3,026
Taishan Power	PRC	20.00	20.00	23	109	1,474	1,551
Guoneng Huanghua Harbour Administration Co., Ltd.	PRC	30.00	30.00	502	475	3,624	3,563
Individually immaterial subsidiaries with non-controlling interests						16,773	16,532
						69,074	65,384

45. SUBSIDIARIES (CONTINUED)

Details of the Company's material subsidiaries (Continued)

	Zhunge'er Energy		Guoneng Baorixile Energy Industrial Co., Ltd.		Yulin Shenhua Energy Co., Ltd.	
	31 December 2021	31 December 2020	**31 December 2021**	31 December 2020	**31 December 2021**	31 December 2020
	RMB million	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*
Current assets	**31,098**	25,857	**2,757**	1,363	**1,506**	733
Non-current assets	**16,172**	16,278	**9,566**	5,134	**5,112**	5,035
Current liabilities	**9,241**	6,751	**1,827**	1,000	**1,217**	1,452
Non-current liabilities	**560**	533	**4,016**	505	**436**	181
Total equity	**37,469**	34,851	**6,480**	4,992	**4,965**	4,135

	Year ended 31 December		Year ended 31 December		Year ended 31 December	
	2021	2020	**2021**	2020	**2021**	2020
	RMB million	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*
Revenue	**14,892**	11,756	**5,440**	4,050	**4,126**	2,666
Expenses	**11,465**	9,764	**2,960**	2,702	**2,365**	1,888
Profit and total comprehensive income for the year	**2,655**	1,240	**1,815**	825	**1,516**	571
Dividend paid to non-controlling interests	**21**	21	**143**	943	**484**	401
Net cash inflow/(outflow) from operating activities	**720**	(501)	**1,613**	239	**1,354**	841
Net cash outflow from investing activities	**(452)**	(252)	**(969)**	(59)	**(373)**	(89)
Net cash outflow from financing activities	**(46)**	(46)	**(331)**	(2,127)	**(1,136)**	(799)
Net cash inflow/(outflow)	**222**	(799)	**313**	(1,947)	**(155)**	(47)

45. SUBSIDIARIES (CONTINUED)

Details of the Company's material subsidiaries (Continued)

	Dingzhou Power		Guoneng Jinjie Energy Co., Ltd		Guoneng Shuohuang Railway Development Co., Ltd.	
	31 December 2021	31 December 2020	**31 December 2021**	31 December 2020	**31 December 2021**	31 December 2020
	RMB million	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*
Current assets	**796**	934	**4,693**	2,036	**9,328**	8,118
Non-current assets	**3,994**	4,158	**8,594**	8,739	**34,631**	34,437
Current liabilities	**2,129**	2,041	**2,196**	915	**3,955**	3,628
Non-current liabilities	**100**	251	**788**	854	**4,674**	4,447
Total equity	**2,561**	2,800	**10,303**	9,006	**35,330**	34,480

	Year ended 31 December		Year ended 31 December		Year ended 31 December	
	2021	2020	**2021**	2020	**2021**	2020
	RMB million	*RMB million*	***RMB million***	*RMB million*	***RMB million***	*RMB million*
Revenue	**3,686**	3,564	**9,758**	7,369	**22,008**	20,585
Expenses	**3,919**	3,004	**5,081**	3,738	**11,686**	10,326
Profit and total comprehensive income for the year	**(238)**	414	**3,945**	3,080	**7,760**	7,670
Dividend paid to non-controlling interests	**–**	655	**924**	982	**3,266**	3,247
Net cash inflow from operating activities	**352**	473	**6,052**	3,638	**8,127**	7,906
Net cash outflow from investing activities	**(168)**	(129)	**(240)**	(811)	**(1,290)**	(2,398)
Net cash outflow from financing activities	**(180)**	(344)	**(2,832)**	(2,701)	**(6,748)**	(6,155)
Net cash inflow/(outflow)	**4**	–	**2,980**	126	**89**	(647)

45. SUBSIDIARIES (CONTINUED)

Details of the Company's material subsidiaries (Continued)

	Guoneng Yuanhai Shipping Co., Ltd.		Taishan Power		Guoneng Huanghua Harbour Administration Co., Ltd.	
	31 December 2021 RMB million	31 December 2020 RMB million	**31 December 2021 RMB million**	31 December 2020 RMB million	**31 December 2021 RMB million**	31 December 2020 RMB million
Current assets	**2,994**	812	**2,950**	1,394	**2,238**	2,001
Non-current assets	**5,129**	5,653	**7,844**	8,458	**11,579**	11,788
Current liabilities	**530**	247	**3,430**	2,100	**1,313**	1,117
Non-current liabilities	**46**	43	**–**	–	**1,204**	1,580
Total equity	**7,547**	6,175	**7,364**	7,752	**11,300**	11,092

	Year ended 31 December		Year ended 31 December		Year ended 31 December	
	2021 RMB million	2020 RMB million	**2021 RMB million**	2020 RMB million	**2021 RMB million**	2020 RMB million
Revenue	**6,195**	3,112	**10,393**	6,349	**4,993**	4,923
Expenses	**5,203**	2,903	**10,211**	5,462	**2,806**	2,889
Profit and total comprehensive income for the year	**753**	169	**118**	544	**1,623**	1,556
Dividend paid to non-controlling interests	**73**	73	**101**	276	**437**	345
Net cash (outflow)/inflow from operating activities	**(124)**	523	**632**	1,203	**2,383**	2,330
Net cash inflow/(outflow) from investing activities	**418**	(22)	**(112)**	(152)	**(641)**	(255)
Net cash outflow from financing activities	**(55)**	(252)	**(517)**	(1,045)	**–**	–
Net cash inflow	**239**	249	**3**	6	**1,742**	2,075

46. INFORMATION ABOUT THE FINANCIAL POSITION AND RESERVES OF THE COMPANY

	31 December 2021 *RMB million*	31 December 2020 *RMB million*
Non-current assets		
Property, plant and equipment	**44,737**	44,035
Construction in progress	**3,624**	4,702
Intangible assets	**1,071**	1,008
Right-of-use assets	**5,518**	3,678
Investments in subsidiaries	**133,953**	123,676
Investments in associates	**42,300**	44,741
Equity investments at FVTOCI	**1,989**	1,655
Other non-current assets	**24,332**	24,291
Deferred tax assets	**866**	275
Total non-current assets	**258,390**	248,061
Current assets		
Inventories	**3,372**	3,890
Accounts and bills receivables	**9,220**	7,613
Prepaid expenses and other current assets	**39,416**	47,244
Restricted bank deposits	**3,381**	2,146
Time deposits with original maturity over three months	**–**	10,200
Cash and cash equivalents	**142,410**	105,609
Total current assets	**197,799**	176,702

46. INFORMATION ABOUT THE FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

		31 December 2021 *RMB million*	31 December 2020 *RMB million*
Current liabilities			
Borrowings		**311**	273
Accounts and bills payables		**8,961**	8,611
Accrued expenses and other payables		**127,896**	96,021
Current portion of lease liabilities		**344**	133
Current portion of long-term liabilities		**588**	409
Income tax payable		**2,540**	2,636
Contract liabilities		**90**	84
Total current liabilities		**140,730**	108,167
Net current assets		**57,069**	68,535
Total assets less current liabilities		**315,459**	316,596
Non-current liabilities			
Borrowings		**1,619**	2,080
Lease liabilities		**2,054**	462
Long-term liabilities		**802**	729
Accrued reclamation obligations		**4,156**	4,120
Deferred tax liabilities		**53**	67
Total non-current liabilities		**8,684**	7,458
Net assets		**306,775**	309,138
Equity			
Share capital	38	**19,869**	19,890
Reserves		**286,906**	289,248
Total equity		**306,775**	309,138

46. INFORMATION ABOUT THE FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

	Share premium *RMB million*	Treasury shares *RMB million*	Statutory reserves *RMB million*	Other comprehensive income *RMB million*	Capital and other reserves *RMB million*	Retained earnings *RMB million*	Total *RMB million*
At 1 January 2020	85,001	–	20,748	95	1,126	170,748	277,718
Profit for the year	–	–	–	–	–	35,283	35,283
Other comprehensive income	–	–	–	51	–	–	51
Total comprehensive income for the year	–	–	–	51	–	35,283	35,334
Purchase of own shares *(Note 38)*	–	(256)	–	–	–	–	(256)
Dividend declared *(Note 15)*	–	–	–	–	–	(25,061)	(25,061)
Appropriation of maintenance and production funds	–	–	1,595	–	–	(1,595)	–
Utilisation of maintenance and production funds	–	–	(4,880)	–	–	4,880	–
Attributable share of Finance Company's retained earning	–	–	–	–	8	1,505	1,513
At 31 December 2020	85,001	(256)	17,463	146	1,134	185,760	289,248
At 1 January 2021	85,001	(256)	17,463	146	1,134	185,760	289,248
Profit for the year	–	–	–	–	–	33,263	33,263
Other comprehensive income	–	–	–	336	–	–	336
Total comprehensive income for the year	–	–	–	336	–	33,263	33,599
Cancellation of repurchased own shares *(Note 38)*	(235)	256	–	–		–	21
Dividend declared *(Note 15)*	–	–	–	–	–	(35,962)	(35,962)
Appropriation of maintenance and production funds	–	–	3,839	–	–	(3,839)	–
Utilisation of maintenance and production funds	–	–	(2,165)	–	–	2,165	–
At 31 December 2021	84,766	–	19,137	482	1,134	181,387	286,906

46. INFORMATION ABOUT THE FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

According to the Company's Articles of Association, the amount of retained earnings available for distribution to equity holders of the Company is the lower of the amount determined in accordance with the China Accounting Standards and the amount determined in accordance with IFRSs after the appropriation to reserves as detailed in Note (iii) to the consolidated statement of changes in equity.

At 31 December 2021, the aggregate amount of retained earnings determined in accordance with the China Accounting Standards available for distribution to equity holders of the Company was RMB179,811 million (2020: RMB183,374 million).

47. POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2021

Up to the date of issue of these financial statements, the IASB has issued a number of amendments or standards, which are not yet effective for the year ended 31 December 2021 and which have not been adopted in these financial statements. These developments include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Annual Improvements to IFRSs 2018-2020 Cycle	1 January 2022
Amendments to IFRS 3, Reference to the Conceptual Framework	1 January 2022
Amendments to IAS 16, Property, Plant and Equipment: Proceeds before Intended Use	1 January 2022
Amendments to IAS 37, Onerous Contracts — Cost of Fulfilling a Contract	1 January 2022
Amendments to IAS 1, Classification of Liabilities as Current or Non-current	1 January 2023
Amendments to IAS 1 and IFRS Practice Statement 2, Disclosure of Accounting Polices	1 January 2023
Amendments to IAS 8, Definition of Accounting Estimates	1 January 2023
Amendments to IAS 12, Deferred tax related to assets and liabilities arising from a single transaction	1 January 2023

The Group is in the process of making an assessment of what the impact of these developments is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.

Section XI Documents Available for Inspection

Documents Available for Inspection	The annual report for the year 2021 signed by the Chairman The financial statements signed and sealed by the Chairman, the Chief Financial Officer, and the Person-in-charge of the Accounting Department The original copy of the audit report sealed by the accounting firm and signed and sealed by the certified public accountant The original copies of all documents and announcements of the Company publicly disclosed in the newspapers designated by the CSRC during the reporting period The annual report for the year 2021 published on the websites of SSE and the HKEx

Approval date of the Board of Directors for submission: 25 March 2022

Section XII Summary of Major Financial Information for the Recent Five Years

The finance information below is extracted from the financial statement prepared by the Group in accordance with International Financial Reporting Standards:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	For the year ended 31 December				
	2017 *RMB million*	2018 *RMB million*	2019 *RMB million*	2020 *RMB million*	**2021** ***RMB million***
Revenue	248,746	264,101	241,871	233,263	**335,216**
Operating cost	(160,460)	(173,677)	(164,979)	(162,374)	**(239,156)**
Gross profit	88,286	90,424	76,892	70,889	**96,060**
Selling expenses	(612)	(725)	(640)	(555)	**(581)**
General and administrative expenses	(9,115)	(9,854)	(8,988)	(8,948)	**(9,119)**
Research and development costs	(341)	(454)	(940)	(1,362)	**(2,499)**
Other gains and losses	(1,880)	(2,844)	(2)	(194)	**(955)**
Other income	894	744	708	778	**893**
Credit impairment losses	–	(152)	(139)	(524)	**(2,561)**
Other expenses	(1,262)	(3,504)	(278)	(1,090)	**(1,103)**
Interest income	1,205	1,479	1,170	1,684	**2,492**
Finance costs	(4,416)	(5,421)	(3,294)	(2,263)	**(2,583)**
Share of results of associates	534	448	433	947	**(874)**
Profit before income tax	73,293	70,141	64,922	59,362	**79,170**
Income tax expense	(16,155)	(15,977)	(15,145)	(15,378)	**(18,161)**
Profit for the year	57,138	54,164	49,777	43,984	**61,009**
Profit for the year attributable to:					
Equity holders of the Company	47,795	44,137	41,707	35,849	**51,607**
Non-controlling interests	9,343	10,027	8,070	8,135	**9,402**
Earnings per share (RMB)					
–Basic/diluted	2.403	2.219	2.097	1.803	**2.597**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at 31 December				
	2017 *RMB million*	2018 *RMB million*	2019 *RMB million*	2020 *RMB million*	**2021** ***RMB million***
Total non-current assets	438,958	358,330	402,589	390,675	**402,287**
Total current assets	132,644	233,296	160,494	172,229	**208,310**
Total assets	571,602	591,626	563,083	562,904	**610,597**
Total current liabilities	115,905	123,381	95,483	69,493	**91,748**
Total non-current liabilities	76,592	59,408	47,382	63,824	**69,628**
Total liabilities	192,497	182,789	142,865	133,317	**161,376**
Net assets	379,105	408,837	420,218	429,587	**449,221**
Total equity attributable to equity holders of the Company	305,541	331,693	356,077	364,203	**380,038**
Non-controlling interests	73,564	77,144	64,141	65,384	**69,183**
Total equity	379,105	408,837	420,218	429,587	**449,221**

中国神华能源股份有限公司
CHINA SHENHUA ENERGY COMPANY LIMITED

Hang Seng Corporate
Sustainability Index
Series Member 2021-2022