ENN 新奥

ENN Energy Holdings Limited

(Stock code: 2688)

SET OFF A LOW-CARBON JOURNEY

ANNUAL REPORT 2021

ENN

= ENERGY + INNOVATION

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CORPORATE INFORMATION

Board of Directors

Executive Directors

Wang Yusuo (Chairman)
Zheng Hongtao (Vice Chairman)
Wu Xiaojing (President)
Wang Dongzhi

Non-executive Directors

Wang Zizheng
Jin Yongsheng
Zhang Yuying

Independent Non-executive Directors

Ma Zhixiang
Yuen Po Kwong
Law Yee Kwan, Quinn *CPA*
Yien Yu Yu, Catherine *CFA*

Compliance Secretary

Leung Mui Yin

Authorised Representatives

Wang Dongzhi
Jin Yongsheng

Members of the Audit Committee

Law Yee Kwan, Quinn* *CPA*
Ma Zhixiang
Yuen Po Kwong
Yien Yu Yu, Catherine *CFA*

Members of the Remuneration Committee

Yuen Po Kwong*
Ma Zhixiang
Law Yee Kwan, Quinn *CPA*
Yien Yu Yu, Catherine *CFA*

Members of the Nomination Committee

Wang Yusuo*
Jin Yongsheng
Ma Zhixiang
Yuen Po Kwong
Law Yee Kwan, Quinn *CPA*
Yien Yu Yu, Catherine *CFA*

Members of the Risk Management Committee

Zheng Hongtao*
Wu Xiaojing
Wang Dongzhi
Ma Zhixiang
Yuen Po Kwong
Law Yee Kwan, Quinn *CPA*
Yien Yu Yu, Catherine *CFA*

Registered Office

PO Box 309
Ugland House
Grand Cayman
KY1-1104
Cayman Islands

Principal Place of Business in Hong Kong

Room 3101–04, 31st Floor
Tower 1, Lippo Centre
No. 89 Queensway
Hong Kong

Head Office in The PRC

Building A, ENN Industrial Park
Xinyuan DongDao
Economic and Technological
Development Zone
Langfang City
Hebei Province
The PRC

Principal Share Registrar and Transfer Office in the Cayman Islands

Suntera (Cayman) Limited
Suite 3204, Unit 2A
Block 3, Building D
PO Box 1586
Gardenia Court, Camana Bay
Grand Cayman
KY1-1100
Cayman Islands

Hong Kong Branch Share Registrar and Transfer Office

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

Stock Exchange Listing

The Stock Exchange of Hong Kong Limited

Stock Code

2688

Auditors

Deloitte Touche Tohmatsu
Registered Public Interest Entity Auditors
35th Floor, One Pacific Place
No. 88 Queensway
Hong Kong

Legal Adviser

Woo, Kwan, Lee & Lo
26th Floor, Jardine House
1 Connaught Place
Central
Hong Kong

Principal Bankers

China Construction Bank
Bank of Communications
Industrial and Commercial Bank of China
Bank of China (Hong Kong)
The Hongkong and Shanghai Banking Corporation

Website

www.ennenergy.com

E-mail address

enn@enn.cn

* Chairman of the relevant Board committees

OUR VISION

ENDEAVOUR TO BECOME A RESPECTED, INNOVATIVE AND SMART ENTERPRISE

CELEBRATING 20 YEARS OF EXCELLENCE

2001

Listed on the HKEX GEM on 10 May, became one of the first offshore-listed private enterprises in Mainland China

2002

Transferred listing from GEM to Main Board on 3 June

Included as a constituent stock of Hang Seng Composite Industry Index on 2 September

2005

Obtained the first credit ratings of Ba1 and BB+ by Moody's and S&P respectively in July, facilitated the Company expand business with new funding channel

Successfully issued a USD bond for the first time

2006

The Group joined forces with IBM Global Services (China) to launch a consultation project on process streamlining and information system management to enhance the Group's management quality with reference to the best practice of global peers. In June, the total IT solutions project was commenced. The Group was the pioneer to implement enterprise management software SAP utilities solution, oil & gas industry solution and ERP system simultaneously

2007

Built the Health, Safety, Environment "HSE" management system which was implemented to all project companies to establish standardised and regulated workflows ensuring safe operation

2008

Launched the safety campaign which committed to zero accident, zero injury, zero environmental damage "Three-Zero"

2010

The Company upgraded its development strategy and innovated its business model based on its natural gas business foundation. It aimed at providing customers with diversified energy products and energy management services so as to reduce customer's energy cost and emissions. Therefore, the Company was renamed from "Xinao Gas" to "ENN Energy" on 22 September to better reflect its new mission, strategy and specific business

Credit rating was upgraded by S&P to BBB- in December, representing the first private enterprise in Mainland China to receive an investment-grade credit rating

2001

2011

The number of citygas projects managed by the Group exceeded 100

In April, the Company received investment-grade credit ratings of BBB- and BBB from Moody's and Fitch respectively

2014

Became a constituent stock of Hang Seng Composite LargeCap Index on 10 March

2016

Signed three long-term LNG import contracts with Chevron, Origin and Total to open up new gas supply channels for the Group

2018

Completed the acquisition of ENN Ubiquitous Energy Network Technology Company Ltd. to accelerate the Group's transformation and upgrade to an integrated energy service provider on 16 August

Included in MSCI China Large Cap Index on 1 June

2019

Became a constituent stock of Hang Seng China Enterprises Index on 17 June

2020

Issued the first US$750 million green bond to support the Group's green and low-carbon project development

Became a constituent stock of the Hang Seng ESG 50 Index and Hang Seng Corporate Sustainability Benchmark Index on 7 September

The Group received the Award of Excellence: Downstream at the S&P Global Platts Global Energy Awards, became the first Chinese enterprise receiving such honor

2021

Became a constituent stock of the Hang Seng Index on 6 December, further strengthened the Company's influential status in the capital market

2021

ENN ENERGY AT A GLANCE

Our Purpose

ENN Energy is a leading clean energy distributor and solutions provider in China, focusing on satisfying the needs of our customers through technological innovation and digitalisation. Our goal is to help our customers transit to a safe, convenient, and low-carbon future, and create sustainable return for our shareholders.

Key Performance Highlights

Growing business

252
No. of City Gas Project
2020: 235

33,097
million m^3
Natural Gas Sales Volume
2020: 29,569 million m^3

150
No. of Integrated Energy Project
2020: 119

19,065
million kWh
Integrated Energy Sold
2020: 12,042 million kWh

Decarbonisation performance

49.07
million tons
Helped Society & Clients Reduce Carbon Emissions
2020: 42.11 million tons

8,060
tce./bil m^3
Carbon Intensity
2020: 7,092 tce./bil m^3

52.6%
Proportion of Integrated Energy Projects Utilising Renewable Energy
2020: 30%

40
No. of Project Companies Obtained ISO 14001 & ISO 45001
2020: 17

Leverage digitisation & technology to grow

RMB 1,480
million
Investment in Operation Safety
2020: RMB1,210 million

97%
Proportion of Construction Projects with Digitalised Management
2020: 94%

81%
Proportion of Gas Purchased Online
2020: 50%

Enhance operational performance

Safety Performance
1.09
Occupational Injury Case/Mil Hrs
2020: 1.27

0 case
Fatalities
2020: 1 case

92.1%
Customer Satisfaction Rate
2020: 94.1%

0
Environmental Regulatory Non-compliance Cases
2020: 0

Our Key Customers

Large Industrial

- Stable natural gas supply
- Low-carbon services & solutions
- Energy system optimisation

Small-mid Industrial and Commercial

- Stable natural gas supply
- Facilities operation and maintenance
- Convenient customer services

Residential

- Stable natural gas supply
- Clean heating
- Smart home solutions and in-home services

Key indices

Hang Seng ESG50 Index
Hang Seng Corporate Sustainability Benchmark Index

Hang Seng Index
Hang Seng China Enterprises Index
Hang Seng Composite Large Cap Index
MSCI China Large Cap Index

Key ratings

Sustainability

A	MSCI ESG Rating
A	Hang Seng Corporate Sustainability Index
B	CDP

Financial

BBB	Standard & Poor's
Baa1	Moody's
BBB+	Fitch

Awards & Rankings

2021 S&P Global Platts Top 250 Global Energy Company Ranking
Ranked 67

Forbes Global 2000 World's Largest Public Companies 2021
Ranked 859

Institutional Investor 2021 All-Asia Executive Team Ranking
Most Honored Company
Best IR Program (Power Sector)

Chinese Edition of Bloomberg Businessweek ESG Leading Enterprise Awards 2021
ESG Leading Enterprise Award,
Leading Environmental Initiative Award,
Theme Award – ESG Investment

Hong Kong Economic Times Excellent ESG Recognition Scheme
2021–2022 Outstanding ESG Enterprise Award

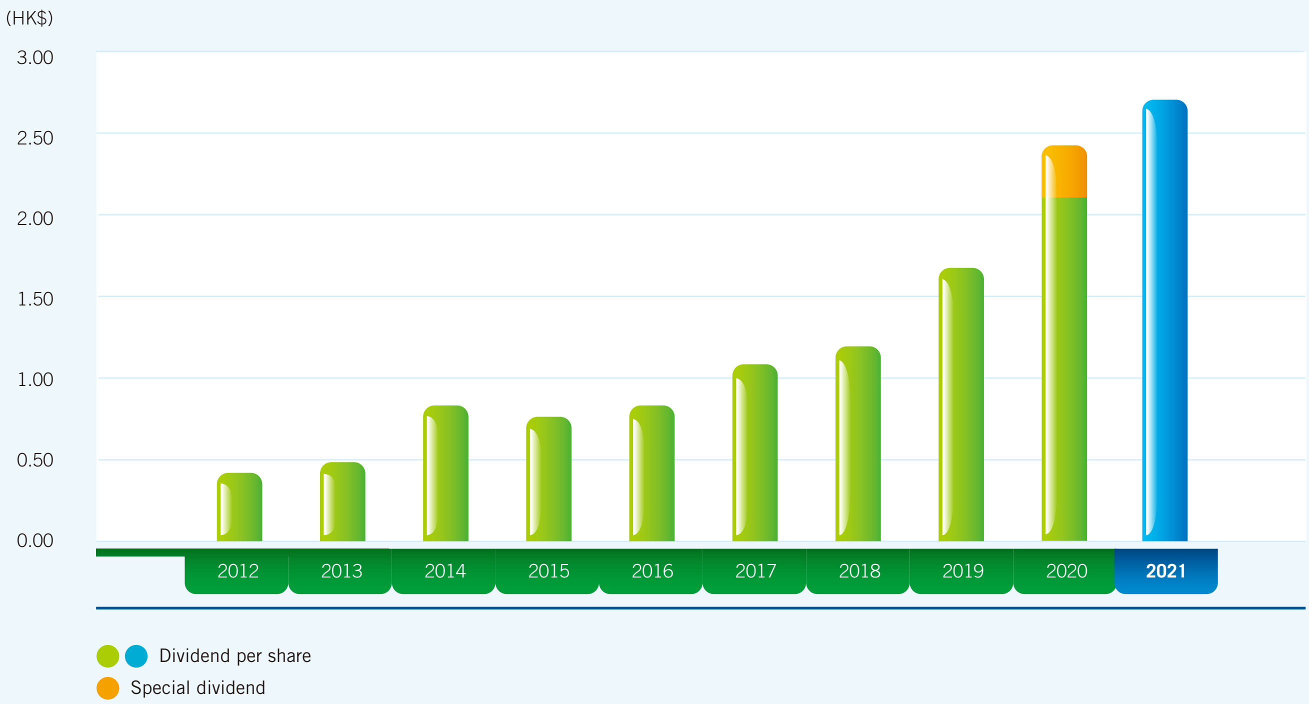
The Economic Observer The 4th Global Business Leaders Forum
2021 Outstanding Practice Case Award for Sustainable Development

Chinese Business Journal China Energy Development Summit Forum
Model Enterprise of the Year in Carbon Neutrality

SHAREHOLDER VALUE

Delivering Value to Shareholders

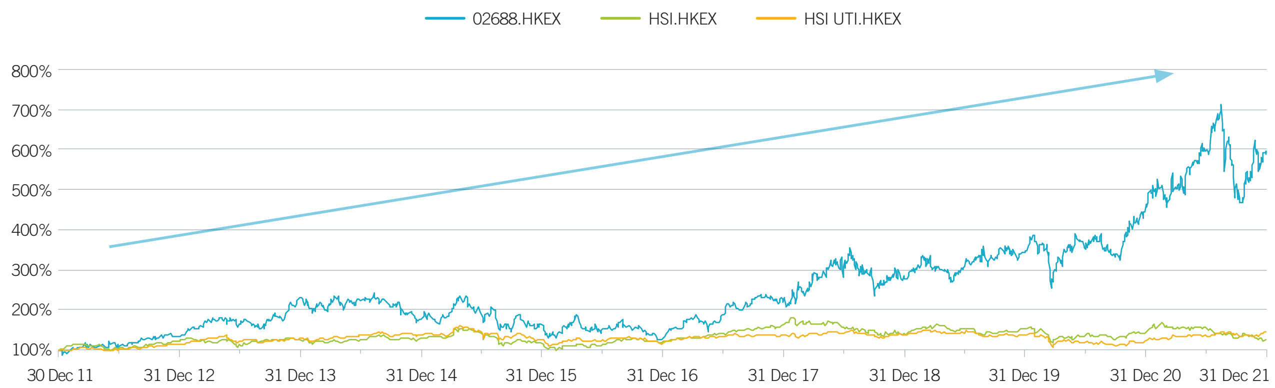
Dividend
(2012–2021)



Dividend Payments

The Company currently distributes its annual dividends to our shareholders by two tranches, with the aim of sharing the Company's profit and ensuring a sound financial position of the Company which is sufficient to support our business growth. The Board takes into consideration various factors, including but not limited to the Group's business condition, industry development trend, investment opportunity, as well as providing stable and reliable dividend return to shareholders. The Company started to distribute dividends since 2004, our dividend amounts have been steadily increased most of the time.

10-year Share Price Performance (1 Jan 2012 – 31 Dec 2021)



Share performance in 2021

Highest closing price 16 August 2021	Average closing price	Total Returns*
HK$177.00	HK$137.10	31.4%

Movement for 2021

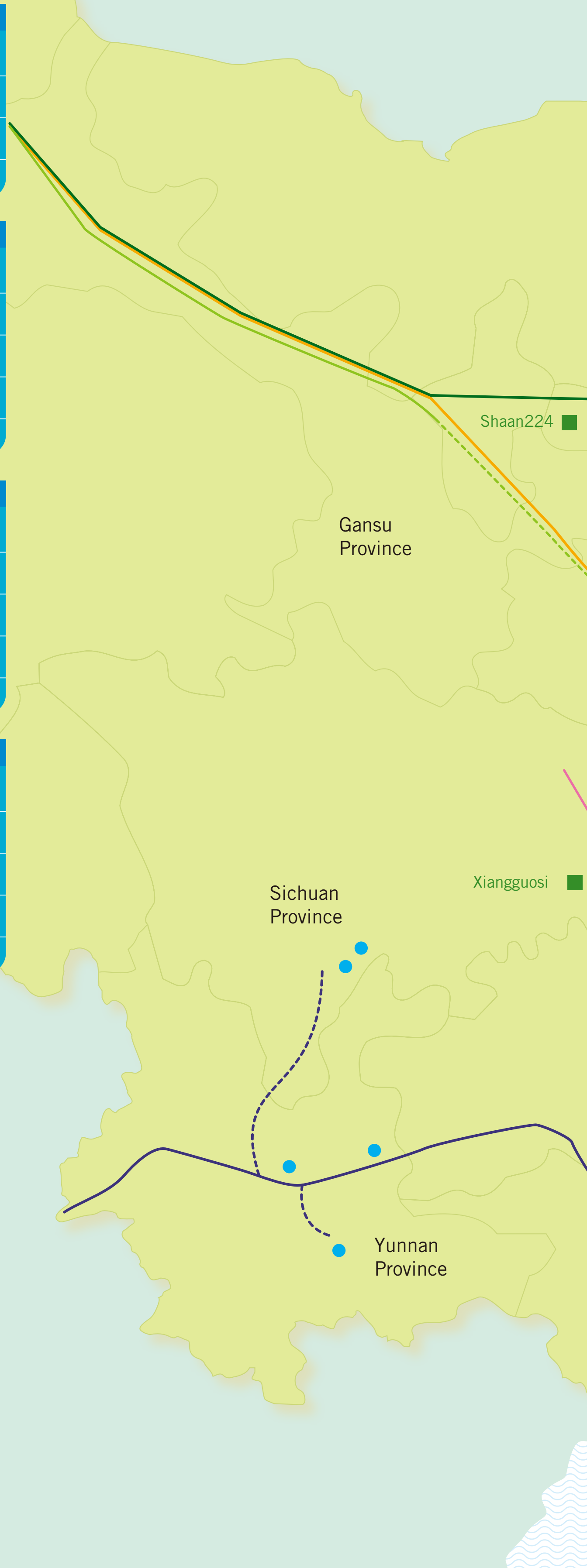
29.0%

HK$113.80 (31 December 2020)
HK$146.80 (31 December 2021)

*Total return = (share price change + dividend payments over the time)/base price as 31 December 2020

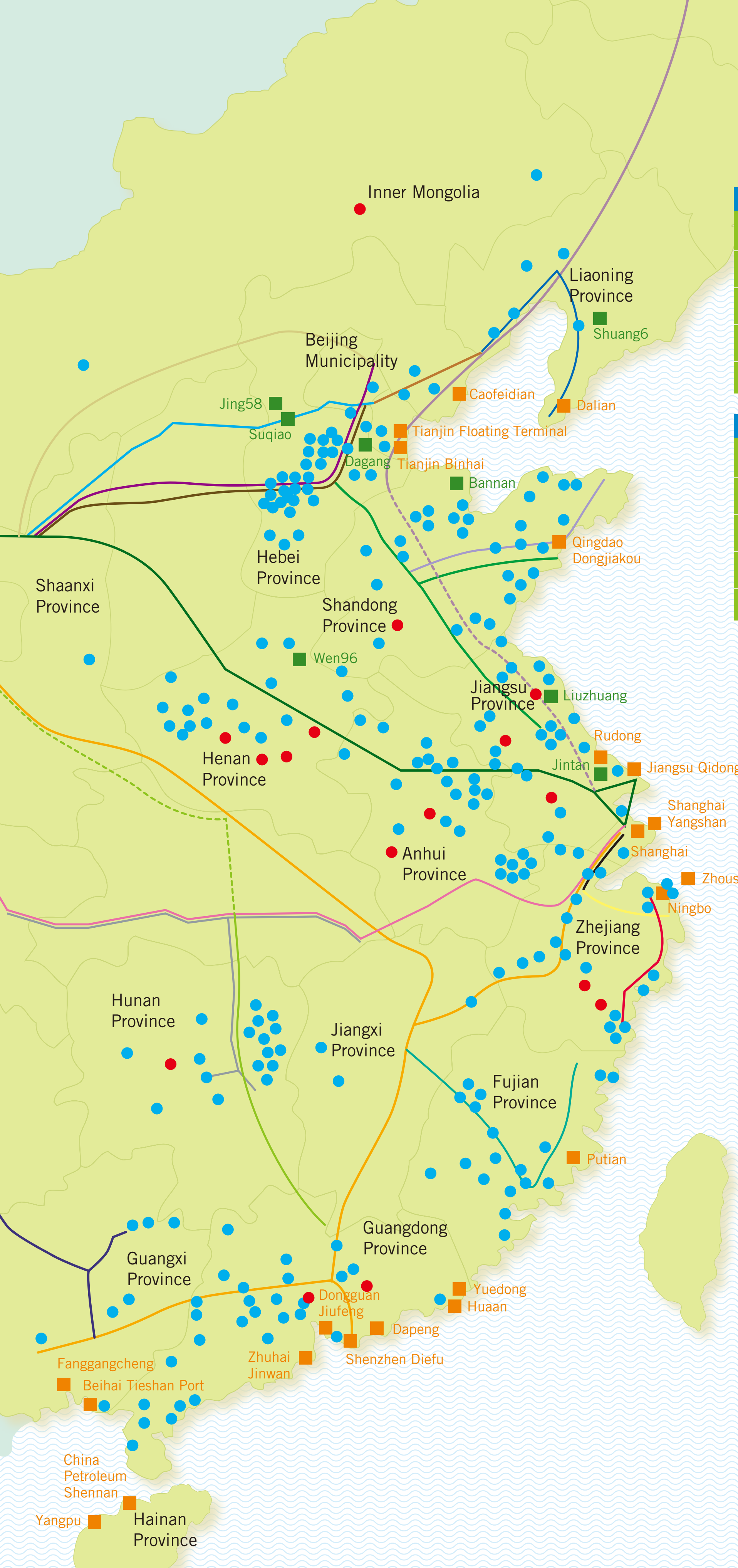
OUR BUSINESS PROFILE

Province	City Gas Projects	Installed Designed Daily Capacity for Connected C/I Customers ('000 m³)	Connected Residential Customers ('000 household)	Integrated Energy Projects	Retail Gas Sales Volume ('000 m³)
Anhui	27	13,415	2,493	18	1,958,844
Guangdong	29	20,527	2,407	21	3,921,076
Guangxi	7	1,646	490	6	389,342
Sichuan	2	22	1		75,594
Heilongjiang	3	513	40	1	23,405
Hebei	34	22,658	4,146	17	3,034,310
Henan	21	12,321	2,583	18	1,789,673
Jiangxi	5	1,507	38		133,483
Yunnan	3	351	90		89,597
Jiangsu	25	20,480	2,923	9	2,361,006
Beijing Municipality	1	560	84		63,316
Fujian	17	12,942	959	7	2,880,069
Hunan	17	14,134	3,514	13	1,853,195
Inner Mongolia	2	468	220	2	169,402



- City Gas Projects
- Installed Designed Daily Capacity for Connected Commercial/Industrial Customers ("C/I Customers") ('000 m³)
- Connected Residential Customers ('000 household)
- Integrated Energy Projects
- Retail Gas Sales Volume ('000 m³)

- ENN Project
- New projects added in 2021
- LNG Terminal
- National Gas Storage



Shandong
26
21,982
3,518
15
3,269,443

Zhejiang
22
17,319
1,902
16
2,715,162

Shanghai
2
29
5
3
135,616

Tianjin
2
1
13,844

Shaanxi
1
12
33,717

Liaoning
6
1,906
410
2
353,238

Shanxi
30
12
1,746

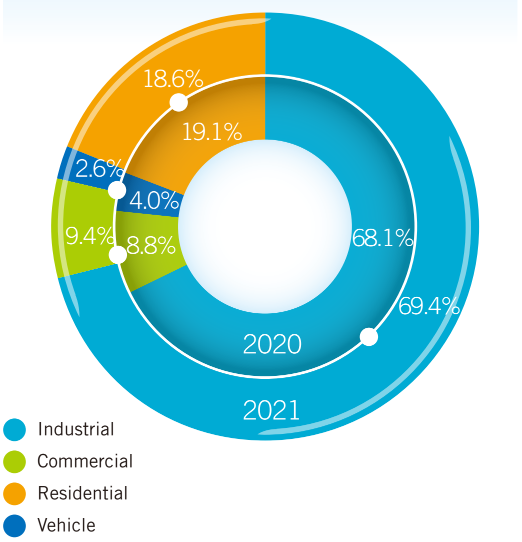
Hainan
1
2,802

Hubei
923

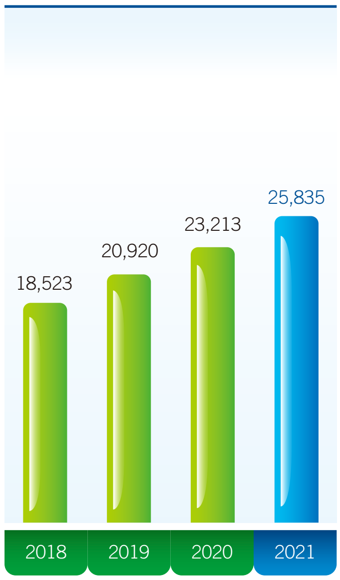
OPERATIONAL & FINANCIAL HIGHLIGHTS

	As at December 31		
	2021	2020	Increase/(Decrease)
Key operating data*			
Number of city-gas projects in China	**252**	235	17
Urban population coverage (thousand)	**124,271**	112,331	10.6%
New natural gas customers developed during the year:			
– residential households (thousand)	**2,622**	2,293	14.3%
– C/I customers (sites)	**25,331**	28,367	(10.7%)
– installed designed daily capacity for C/I customers (thousand m³)	**21,036**	17,078	23.2%
Accumulated number of piped gas customers:			
– residential households (thousand)	**25,835**	23,213	11.3%
– C/I customers (sites)	**202,459**	177,128	14.3%
– installed designed daily capacity for C/I customers (thousand m³)	**162,822**	141,787	14.8%
Piped gas penetration rate	**62.4%**	62.0%	0.4ppt
Retail gas sales volume (million m³)	**25,269**	21,953	15.1%
Wholesale of natural gas sales volume (million m³)	**7,828**	7,616	2.8%
Combined daily capacity of natural gas processing stations (thousand m³)	**181,464**	155,264	16.9%
Total length of existing intermediate and main pipelines (km)	**72,849**	63,096	15.5%
Accumulated number of integrated energy projects in operation	**150**	119	31
Integrated energy projects under construction	**42**	24	18
Sales volume of integrated energy (million kWh)	**19,065**	12,042	58.3%

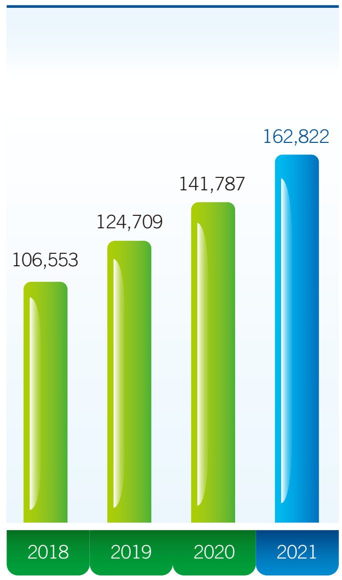
Retail Gas Sales Volume Breakdown



Accumulated Number of Connected Residential Household
(thousand)



Accumulated Installed Designed Daily Capacity for Commercial Industrial Users
(thousand m³)



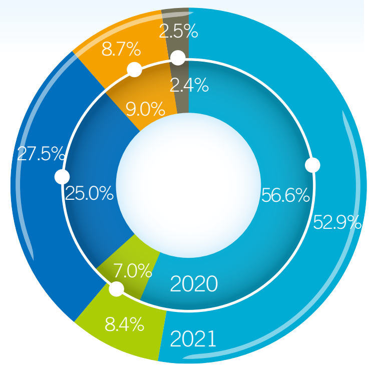
* The Group's operational data included the data of its subsidiaries, joint ventures and associates.

	2021	2020	Increase/ (Decrease)
For the year *(in RMB million)*			
Revenue			
Retail gas sales business	**49,247**	40,510	21.6%
Integrated energy business	**7,805**	5,042	54.8%
Wholesale of gas	**25,634**	17,936	42.9%
Construction and installation	**8,086**	6,444	25.5%
Value added business	**2,341**	1,685	38.9%
Total	**93,113**	71,617	30.0%
Gross profit			
Retail gas sales business	**6,164**	6,491	(5.0%)
Integrated energy business	**1,365**	903	51.2%
Wholesale of gas	**358**	362	(1.1%)
Construction and installation	**4,446**	3,264	36.2%
Value added business	**1,723**	1,312	31.3%
Total gross profit	**14,056**	12,332	14.0%
Core profit[1]	**7,154**	6,242	14.6%
Free cash flow[2]	**2,936**	3,016	(2.7%)
As at 31 December *(in RMB million)*			
Total assets	**99,988**	90,043	11.0%
Total borrowings	**19,890**	19,684	1.0%
Earnings and Dividend per share			
Earnings per share (RMB)	**6.88**	5.59	23.1%
Dividend per share (HK$)[3]	**2.70**	2.42	11.6%
Ratios			
Return on equity[4]	**21.7%**	20.5%	1.2 ppt
Net gearing ratio[5]	**26.6%**	30.6%	(4.0 ppt)

Notes:

1. Profit attributable to owners of the Company but stripping out other gains and losses (excluding net settlement amount realised from commodity derivative contracts), deferred tax arose from unrealised gain of commodity derivative contracts and share-based payment expenses.
2. Free cash flow = Cash flow from operating activities – Capital expenditure – Finance cost + Dividend income
3. Total dividends per share in 2021 include the interim dividend of HK$0.59 per share paid and the proposed final dividend of HK$2.11 per share, while total dividends per share in 2020 included the final dividend and special dividend paid per share.
4. Return on equity = Profit for the year attributable to owners of the Company/Equity attributable to owners of the Company
5. Net gearing ratio = Net debts/Total equity x 100%

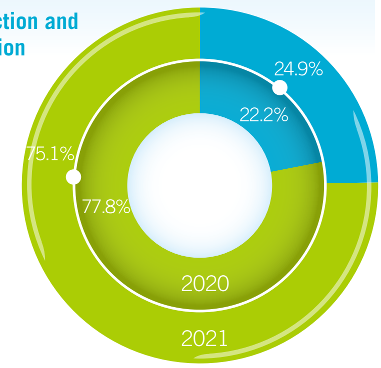
Turnover Breakdown by Segment



Retail gas sales business
Integrated energy business
Wholesale of gas
Construction and installation
Value added business

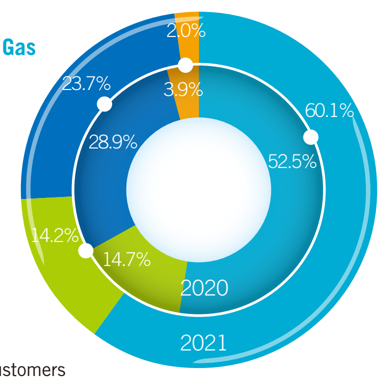
Turnover Breakdown by Customer
(including subsidiaries, joint ventures and associates)

Construction and Installation



Residential households
C/I customers

Sales of Gas



C/I customers
Residential households
Wholesale of gas
Vehicles gas refuelling stations

COMPARISON OF TEN-YEAR RESULTS

	2021	2020	2019	2018
Highlights (Group)*				
Number of connected households (thousand)	**25,835**	23,213	20,920	18,523
Installed designed daily capacity for C/I customers (thousand m^3)	**162,822**	141,787	124,709	106,553
Units of piped gas sold				
Residential households# (thousand m^3)	**4,707,980**	4,197,249	3,806,381	2,889,578
C/I customers (thousand m^3)	**19,915,629**	16,882,284	14,879,404	13,228,550
Gas sold to vehicles gas refuelling stations (thousand m^3)	**681,304**	909,712	1,276,484	1,293,930
Wholesale of gas sales volume (thousand m^3)	**7,827,611**	7,616,141	7,038,805	5,958,069
Length of existing pipelines(1) (km)	**72,849**	63,096	54,344	46,397
Daily capacity of existing natural gas processing stations (thousand m^3)	**181,464**	155,264	147,802	123,640
Revenue & Profit (RMB million)				
Revenue	**93,113**	71,617	70,183	60,698
Profit before tax	**11,393**	9,558	8,841	5,601
Income tax expense	**(2,398)**	(2,227)	(1,980)	(1,783)
Profit for the year	**8,995**	7,331	6,861	3,818
Profit for the year attributable to non-controlling interests	**(1,240)**	(1,053)	(1,191)	(1,000)
Profit for the year attributable to owners of the Company	**7,755**	6,278	5,670	2,818
Dividends	**2,498**	2,273	1,719	1,176
Assets & Liabilities (RMB million)				
Non-current assets (excluding interests in associates and joint ventures)	**63,712**	58,715	54,581	45,706
Interests in associates	**3,655**	3,619	3,308	3,049
Interests in joint ventures	**5,063**	4,141	3,841	3,620
Current assets	**27,558**	23,568	19,515	21,539
Current liabilities	**(41,579)**	(33,233)	(31,288)	(33,017)
Non-current liabilities	**(16,259)**	(20,638)	(18,937)	(15,343)
Net assets	**42,150**	36,172	31,020	25,554
Capital & Reserves (RMB million)				
Share capital	**117**	117	116	116
Reserves	**35,660**	30,444	25,752	21,269
Equity attributable to owners of the Company	**35,777**	30,561	25,868	21,385
Non-controlling interests	**6,373**	5,611	5,152	4,169
Total equity	**42,150**	36,172	31,020	25,554
Earnings per share – basic (RMB)	**6.88**	5.59	5.05	2.56

(1) Length of existing pipelines consists of intermediate pipelines and main pipelines.

* The Group's operational data included the data of its subsidiaries, joint ventures and associates.

Residential gas sales volume includes household users and social welfare institutions since 2019.

2017	2016	2015	2014	2013	2012
16,221	14,147	12,326	10,605	9,275	7,785
87,901	71,182	58,608	50,243	41,864	33,423
2,153,314	1,821,136	1,490,416	1,225,825	1,030,054	930,290
10,934,583	7,966,280	7,001,499	6,676,785	5,538,164	4,345,314
1,447,063	1,561,737	1,588,928	1,441,323	1,186,697	935,926
5,140,957	3,036,778	1,231,521	804,160	370,019	248,536
39,146	32,921	29,936	27,065	23,907	21,312
104,370	84,910	80,198	73,617	58,088	46,176
48,269	34,103	32,063	29,087	22,966	18,027
5,190	4,195	4,027	4,747	2,760	2,852
(1,517)	(1,307)	(1,306)	(1,127)	(960)	(859)
3,673	2,888	2,721	3,620	1,800	1,993
(871)	(737)	(685)	(652)	(548)	(511)
2,802	2,151	2,036	2,968	1,252	1,482
952	775	705	709	414	362
36,155	32,487	30,328	23,715	21,006	18,137
1,505	1,350	1,024	882	804	798
3,929	3,704	3,810	3,436	2,998	2,271
17,626	13,840	11,857	15,002	11,097	9,687
(25,605)	(18,341)	(19,408)	(13,540)	(10,869)	(11,614)
(13,393)	(15,186)	(11,516)	(14,954)	(13,144)	(8,609)
20,217	17,854	16,095	14,541	11,892	10,670
112	112	113	113	113	113
16,840	14,854	13,355	11,985	9,430	8,540
16,952	14,966	13,468	12,098	9,543	8,653
3,265	2,888	2,627	2,443	2,349	2,017
20,217	17,854	16,095	14,541	11,892	10,670
2.59	1.99	1.88	2.74	1.16	1.39

CHAIRMAN'S STATEMENT

Dear Shareholders,

Time flies and in what seemed like a blink of the eye, ENN Energy has been listed for 20 years. Over the past 20 years, we have got complete trust and strong support of our shareholders, we have focused on creating value for our customers and are fully committed to serving more than 25 million residential customers and 200,000 C/I customers. We have built a strong foundation in our principal businesses through integrating various energy sources, including gas, electricity and heating. Over the past 20 years, ENN Energy has strived its best to maximise shareholder value and put in full efforts to achieve stable growth. The continual rise in our stock price as well as the generation of the total shareholders' return of more than 137 times* is a true testament to the Group's efforts and capabilities. This past year, we also celebrated a momentous event as we became a constituent stock of the Hang Seng Index and achieving the status of a blue-chip stock. Over the past 20 years, we have tried hard to make contribution to the community we serve, maintain a high standard of compliance on safety and continuously improve our corporate governance. We have executed our mission of "Creating a Modern Energy System" and have earned wide market recognition. Thank you, all shareholders, for being with us all these times!

"China will strive to achieve carbon peak in 2030 and carbon neutrality in 2060. We will proactively plan ahead with an aim to providing customers with more diversified low-carbon energy solutions, and assist our customers and the country along their decarbonisation journey, and strive to achieve net zero carbon emissions by the Group by 2050."

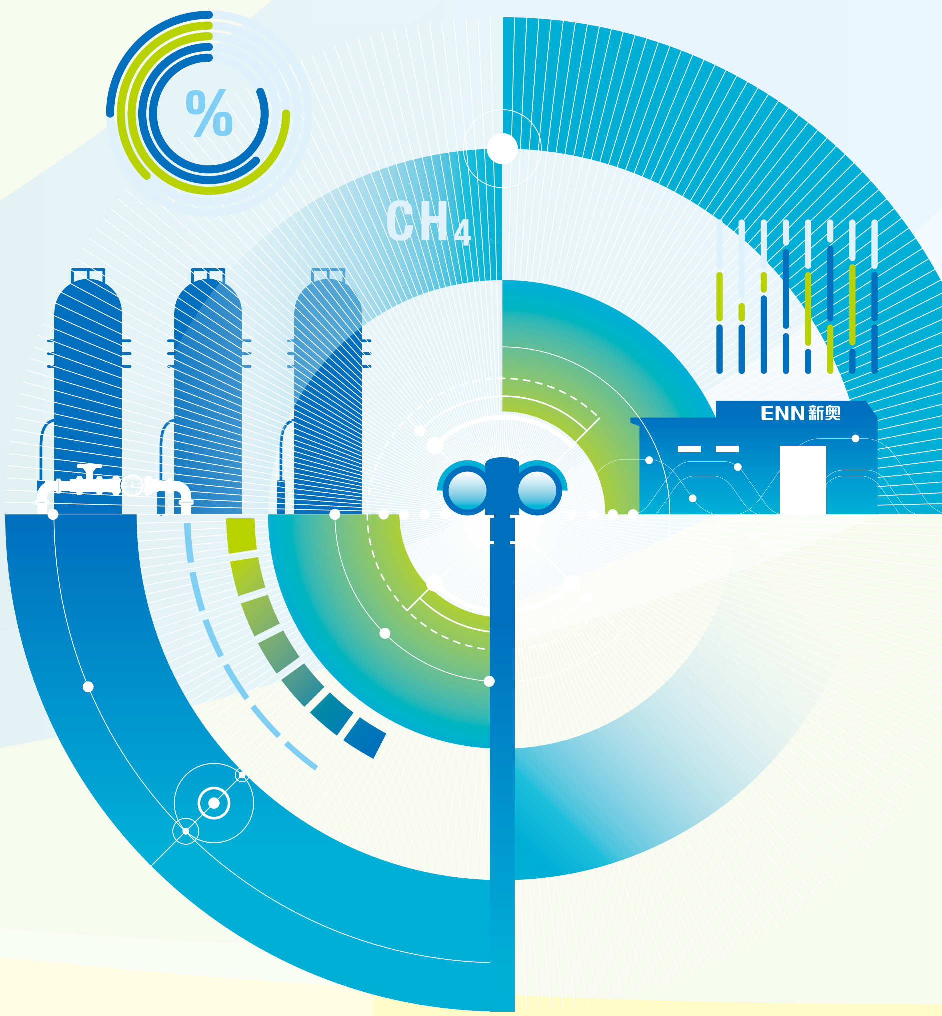
Wang Yusuo
Chairman

* Total shareholder return = (Stock price movement in the past 20 years + total dividends)/IPO Price of HKD1.15 (Closing price in 31 December 2021: HKD147)

Looking back at 2021, the Group promptly responded to the increasingly complex and severe external developments. For the year ended 31 December 2021, the Group's revenue increased by 30% to RMB93,113 million and core profit driven by operating activities increased by 14.6% to RMB7,154 million. Basic earnings per share reached RMB6.88. As a result, the Board recommended a final dividend payment of HK$2.11 per share, and together with the interim dividend of HK$0.59 per share paid, total dividends for the year amount to HK$2.70 per share (representing an increase of 11.6% year-on-year).

Apart from striving continuously to achieve good results, we firmly believe that strengthening our safety standards is a prerequisite for achieving sustainable development. During the year, a comprehensive security assessment of member companies was carried out and security inspection guidelines for all scenarios were issued. These enabled us to identify and rectify all major hidden dangers in our businesses. Focus was placed on key safety risks in four major business scenarios, namely engineering, pipeline network, citygate stations and customer sites. Through the use of IoT and other digital technologies, we built a digitally intelligent safety infrastructure in these four scenarios with the motto "Risks must be visible, Major risks identified and Well-managed".

As an energy enterprise, we proactively respond to climate change and have set our long-term goal of achieving carbon neutrality by 2050. In October 2021, we published the "Decarbonisation Action 2030 – Journey to Net Zero". The first phase of our action plans was crafted; a special working group was set up to address climate change issues by identifying climate risks and opportunities. In depth analysis of material issues was also conducted in this area. Such initiatives will strengthen our ability to deal with climate change and to fully understand its risks and opportunities involved. All these will provide theoretical support and allow us to make timely adjustments to our business model. We also joined the Methane Guiding Principles, a recognised international methane emission control organisation in 2021. The Group has also established a working group responsible for implementing methane emission control by exploring and deploying continuous methane emission reduction measures. We hope that while enhancing our capability to reduce the Group's emissions, we will also lead the industry to take a big step in the reduction of methane emission.



CHAIRMAN'S STATEMENT

In 2022, our businesses development would be affected by a number of macroeconomic factors such as the intensifying economic uncertainties, the turbulent geopolitical developments, the volatile energy market, as well as the capricious COVID-19 pandemic. Meanwhile, China has been promoting the "Dual Carbon" goals of reaching carbon emission peak by 2030 and carbon neutrality by 2060, hence customers' needs in "safety, energy and carbon reduction" will continue to grow which will bring long-term business opportunities to us. The deepening of the energy industry reform and market liberalisation will set the scene for competition among market players to create value for their customers. As the digital technologies integrate with the energy industry, the latter will enter into a new era. The digitalisation of the energy sector will empower the industry and bring in new opportunities.

In the future, our strategy will be to seize all upcoming opportunities by making use of first-mover advantage. We will focus on transformation and upgrading our business model. Firstly, we will implement new business concepts, apply new technologies and implement safety standards in operations to promote our "Safety First" brand proposition. Secondly, we will design low-carbon smart solutions according to customers' needs, create value for customers, and offer comprehensive solutions by synergising gas, integrated energy and other value-added services. We aim at forming a large-scale, high quality and resilient business structure. Thirdly, we will accelerate the digitalisation of our operations, upgrade our core capabilities and create a high-quality enduring business model. Fourthly, we will continue to deepen our ecological development, accelerate the restructuring of our organisation and create a win-win situation within the industry ecosystem.

Lastly, I would like to express my gratitude on behalf of the Board to you once again, and I look forward to your continued trust and support. We will join all our eco-partners hand in hand endeavouring to achieve rapid growth and strive for better results!

Chairman
Wang Yusuo
18 March 2022

Promote methane control throughout the natural gas industrial chain together with the industry

MANAGEMENT DISCUSSION AND ANALYSIS

Operation Highlights

Ensured Intrinsic Safety, Built a Brand for Safety

ENN Energy as a pioneer in the industry, we firmly believe that strengthening intrinsic safety is a necessary requirement for the sustainable development of the gas industry. ENN Energy consolidated key responsibilities internally, enhanced safety capabilities for each position, and comprehensively implemented hidden risk management, strived to achieve the industry-best performance in safety rectification, establish a benchmark of digital intelligence of safety, and build a brand of safety. The Group adhered to the principle of "Safety as the Brand of ENN" by focusing on the safety pain points of four major business scenarios, namely environmental engineering, pipeline network, citygate stations and customer sites to build intrinsically safe facilities. The Group applied IoT and digital intelligence technologies to realise intelligent management of all scenarios and processes, deployed the "Safety Heart Safety Assurance" system to collect data in various business scenarios to conduct safety monitoring and developed a digitalised intelligent safety management model that was "Risks must be visible, Major risks identified and Well-managed" under all scenarios.

Following the stringent COVID-19 pandemic prevention and control measures including social distancing and community lockdown imposed in various cities in 2021, not all physical safety inspections were feasible. As an alternative, the Group actively promoted the "Smart Safety Inspection System V2.0" which enabled users to carry out online safety self-inspection and self-test programs and guided them to report the status of indoor gas facilities in accordance with the safety inspection procedures. The Group's customer service officers were able to follow up on the self-inspection results uploaded by users and contacted them in a timely manner to rectify any potential safety hazards to ensure the safety of customers' facilities and identify potential hazards under all circumstances.

Promotion of Technological Innovation

Technology is the core competitiveness of an enterprise, and innovation is the driving force of keeping sustainable development of an enterprise. In 2021, the Group carried out technological innovation in various aspects, including digital intelligence; green and low-carbon transformation; as well as operational safety works. By adopting innovative technologies, products and services, the Group was able to solve business problems and customer pain points, drive business development and help customers to achieve energy conservation and emission reduction, cost reduction and efficiency enhancement.

During the year, the Group actively promoted the implementation of digitalised products and innovative technologies in various business scenarios. The Group completed 143 technological innovation projects and filed 48 patent applications by the end of the year. In view of the pressure faced by industrial customers due to the dual controls policy and

MSCI ESG Rating

"A"

2021 S&P Global Platts Top 250 Global Energy Company Rankings

No.67

the demand of energy conservation and carbon reduction under the dual carbon initiative, the Group helped customers to improve energy efficiency, save energy costs and reduce carbon dioxide emissions. Meanwhile, for public buildings, such as hotels, commercial complexes and office buildings, we helped customers to achieve energy conservation and emission reduction through innovative technical solutions, such as geothermal heat pump heating, water pump frequency conversion, energy conservation of cold and heat source systems and renewable energy utilisation to satisfy customer needs for low-carbon buildings. The Group is also preparing to establish a laboratory in Shijiazhuang for the research and development of hydrogen applications in various business scenarios, including hydrogen blending in gas pipelines.

Enhance the Level of ESG Governance

The Group attaches great importance to the governance of sustainable development and performance, and integrates international standards into its daily governance. The ESG Committee regularly conducted in-depth reviews of the staged progress of ESG governance and performance, and formulated targeted improvement plans so as to deepen the integration of sustainable development and business development strategies and enhance the Group's ESG performance in each aspect. The Group's management remuneration has been linked to ESG metrics and established a clawback mechanism to ensure the achievement of key actions and performance targets, thus, strengthened the Group's ESG governance capabilities. In addition, MSCI has upgraded the Group's ESG rating to "A" at its latest ESG assessment report published in October 2021, demonstrating the Group's ESG development has been highly regarded by the capital market.

Capital Market Awards

With years of steady growth in operating results and business models that keep up with market changes, we have become a blue-chip stock since the inclusion as a constituent of the Hang Seng Index on 6 December 2021. The Group was ranked No.67 (up 29 places from 2020) in "2021 S&P Global Platts Top 250 Global Energy Company Rankings". The Group was also included in Forbes' annual Global 2000 list for the third consecutive year and is currently ranked No.859 (up 137 places from 2020). The Group has been awarded "Most Honoured Company" by Institutional Investors for five consecutive years; "ESG Leading Enterprise Award", "Leading Environmental Initiative Award" and "Theme Award-ESG Investment" by Bloomberg Businessweek Chinese Edition and "Outstanding ESG Enterprise Award" by Hong Kong Economic Times. ENN Energy won the "2021 Outstanding Practice Case Award for Sustainable Development" for its integrated energy project in Yangpu, Hainan at "The 4th Global Business Leaders Forum" organised by The Economic Observer. The above awards served as a proof and affirmation of ENN Energy's capabilities to confront difficulties and provide clean energy and integrated energy services continuously with a focus on customer needs.

Business Highlights

Integrated Energy Business: Grasped the "Dual Carbon" Opportunity; Accelerated Business Expansion; Promoted Innovative Business Model of "Energy + Carbon"

China has set a "Dual Carbon" target which is to achieve carbon emission peak by 2030 and carbon neutrality by 2060, bringing tremendous development opportunities for integrated energy business that the Group has been actively developing in recent years. The Group continues to seize the opportunities arising from low-carbon development and market-oriented reform by focusing on four comprehensive energy solutions for customers, namely low-carbon factories; low-carbon buildings; low-carbon transportation; and low-carbon industrial parks. We design the optimal energy supply solutions according to the resource conditions of the project location, the customer's energy demand and the load forecast. The Group has vigorously developed energy-saving, production process optimisation, energy facilities management and operation, as well as other demand-side energy services for the end-users. The Group has also actively seized distributed photovoltaic projects and strategically developed energy storage, and explored the integrated solution of "load, source, network and storage" to increase project return. During the year, the contracted photovoltaic installed capacity was 380MW.

In 2021, the integrated energy projects that were put into operation incorporated the use of various clean energy sources, including biomass, photovoltaic, energy storage and natural gas, which provided digital and intelligent support for regional integrated energy management and the achievement of carbon neutrality goals. Among them, Beijing Daxing International Airport Economic Zone, a national airport economic demonstration zone utilises renewable energy such as geothermal energy and solar energy, and capitalises the "smart city + LoRa" IoT technology together with digitalised terminals to construct a regional smart energy system.

During the year, the construction of 31 integrated energy projects were completed and put into operation. The number of operational projects increased to 150, generating a total of 19,065 million kWh of integrated energy sales including cooling, heating, electricity and steam, up 58.3% year-on-year. The Group is also constructing 42 integrated energy projects, when these projects reach full utilisation, the total integrated energy demand is expected to reach 36 billion kWh. During the year, revenue of integrated energy business surged 54.8% to RMB 7,805 million, gross profit also increased significantly by 51.2% to RMB 1,365 million.

Retail Gas Sales Business: Strived for Innovation in Dynamic Environment; Achieved Performance Growth in Adversity; Solidified Business Foundation

By the end of 2021, the Group's total gas sales volume reached 33,097 million cubic meters, a year-on-year increase of 12%. Among the total gas sales volume, retail gas sales volume increased by 15.1% to 25,269 million cubic meters, driving the revenue of retail gas sales business grew by 21.6% to RMB49,247 million. During the year, total volume of natural gas sold to C/I customers reached 19,900 million cubic meters, representing

The Xuancheng project uses wind power as one of the zero-carbon resources to provide power to customers

Accumulated Integrated Energy Projects in Operation

↑31
150

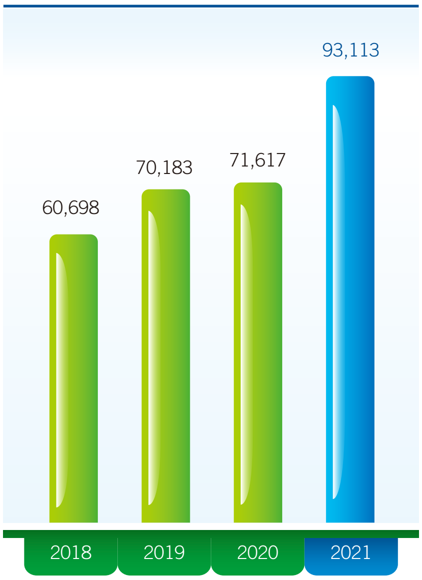
Integrated Energy Sold

↑58.3%
19,065 million kWh

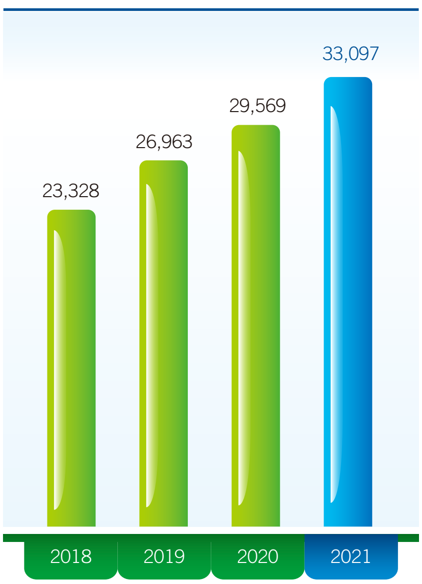
Integrated Energy Solutions Reduced Emissions for Customers

6,666,714
tons of carbon dioxide

Total Revenue
(RMB million)



Total Natural Gas Sales Volume*
(million m³)



* The Group's operational data included the data of its subsidiaries, joint ventures and associates.

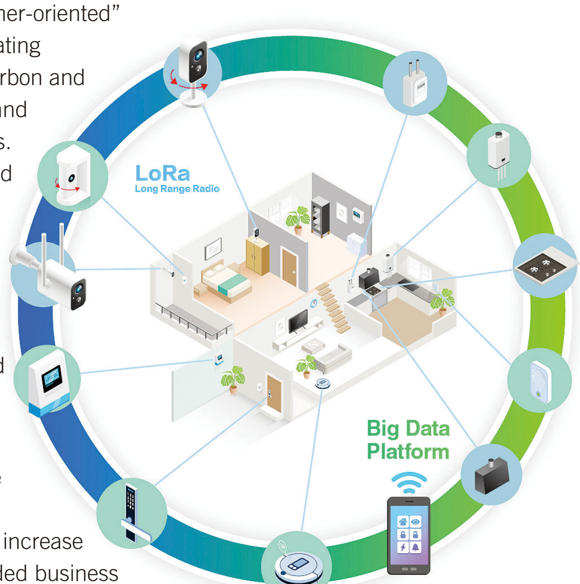
an increase of 17.9% compared with last year, and accounting for 78.8% of retail gas sales volume. Total volume of natural gas sold to residential customers increased by 12.4% to 4,703 million cubic meters, accounting for 18.6% of retail gas sales volume. Due to the shortage of natural gas supply and the price inflation of natural gas caused by the international situation and the increasing demand, the gross profit of retail gas sales business declined by 5.0% to RMB6,164 million.

The Group developed 25,331 C/I customers (gas appliances installed with daily designed capacity of 21.036 million cubic meters), the construction and installation for 2.62 million new residential customers were completed. By the end of 2021, the Group has served a total of 202,459 C/I customers (gas appliances installed with daily designed capacity of 162.822 million cubic meters). The Group has developed 25.835 million residential customers cumulatively, the average piped gas penetration rate increased to 62.4%.

The Group seized the opportunity arising from industry consolidation, with its keen market insight, excellent safety and operation management, and flexible project development strategies, as well as leading integrated energy service concept. During the year, the Group acquired the exclusive operation rights for 17 city gas projects, including Ruyang Industrial Cluster Zone in Henan Province, as well as 3 regional pipeline network projects, including Henan Tongyu Pipeline. Most of the above newly acquired projects are located in the surrounding areas of the existing projects, which have excellent synergies effect and can facilitate the rapid growth of integrated energy business and value-added business. By the end of 2021, the Group had a total of 252 exclusive operating rights for city gas projects, covering a total of 20 provinces.

Value-Added Business: Integration of Customers' Resources; Optimisation of Service Experience; Maximisation of Value-creation for Customers

ENN Energy adheres to the "customer-oriented" philosophy to construct a value-creating portfolio, which offers safety, low-carbon and smart solutions to meet diversified and differentiated needs from customers. During the year, the Group promoted 360°kitchen solutions, concealed pipeline installation, heating systems, security systems, fully furnished housing facilities, LoRa digital intelligent IoT, NFC debit cards, etc., which further unleashed the value of gas users in terms of value-added business opportunity.



Based on energy consumption and living data, the intelligent system can accurately predict user needs and to provide low-carbon products and services

In 2021, the Group's revenue of the value-added business amounted to RMB2,341 million, representing an increase of 38.9%. The revenue of value-added business per customer recorded RMB99, a significant increase of 28.6% compared to last year. Benefiting from the diversified value-added services provided to customers and the extensive effort promoting high-end and intelligent products, thus, the gross profit increased by 31.3% to RMB1,723 million. Currently, the penetration rate of value-added business among the Group's existing customers is merely 9%, while the penetration rate amongst newly-developed customers was 21% during the year, reflecting a rapid development of business.

Number of city-gas projects

252

Revenue of Value added business per customer

RMB
99

Business Outlook

The Group believes that the Chinese economic growth will be remained and continue to drive the demand of energy. President Xi Jinping stated that China has to take the path of ecological priority and green and low-carbon development to achieve the "Dual Carbon" goal. Meanwhile, the recently announced "Green Investment Act" by the European Commission redefined "green investment" to include natural gas facilities investment as green project. This demonstrated that the international community regarded natural gas as one of the indispensable clean energies on the road to energy transformation. China is expected to focus on high-quality economic development in 2022, leading by green and low-carbon transformation, which will drive the Group's integrated energy and retail gas sales business.

Seize the "Dual-carbon" Opportunity and Accelerate the Development of Integrated Energy Business

In 2022, the Group will actively explore and develop its integrated energy business. Firstly, relying on it's existing 200,000 C/I customers, dig deeper to customer needs, expand the integrated energy business and gas sales scale of existing customers. Secondly, focusing on the 4 major scenarios of the main energy-consuming customers, including low-carbon industrial parks, low-carbon factories, low-carbon buildings and low-carbon transportation, quickly implement integrated energy solutions based on local resource conditions. Thirdly, accelerate technological and operational breakthroughs of renewable energy, such as biomass, photovoltaic, geothermal and hydrogen energy, to enhance the competitive advantage of the integrated energy business. Fourthly, the Group will also actively develop asset-light energy services, such as carbon consulting, carbon asset management and facilities custodian services. It is expected the value of the aforementioned integrated energy projects can be further improved in the future.

Integration of Diversified Resources to Expand and Strengthen the Foothold of Gas Business

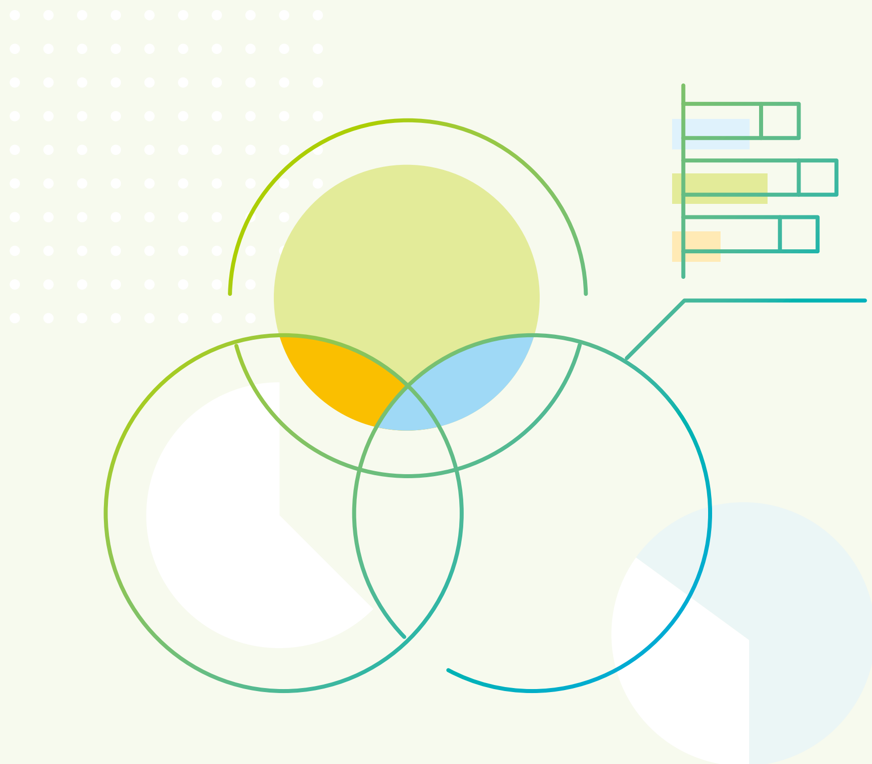
In 2022, the Group will deepen the cooperation with the three major oil and gas companies to steadily expand the volume of piped gas procurement, and actively acquire unconventional gas sources, and utilise the cost advantage contributed by the long-term LNG resources, to enhance the diversity and competitiveness of the Group's gas source structure. Meanwhile, we are committed to provide innovative development strategies to assist more C/I customers and residential households to decarbonise. In the aspect of development of large customers, the Group will continue to focus on the replacement of high-carbon energy consumptions to prioritise the deployment of resources, and achieve a larger scale of development. In the meantime, the Group will continue to seize the opportunity of industrial consolidation, and utilise our advantages in relying on excellent safety management, innovative business model, efficient operational capabilities and stable financial position etc., to invest and acquire new projects to expand our business scope.

Explore customer needs and upgrade the "Smart City Smart Home" value-added business model

The Group will also strive to explore new customer needs, focus on the 3 business solutions, namely "Safe Home, Smart Home and Green Home", and build a diversified product portfolio to satisfy customer needs. In the meantime, we will develop various brand-new marketing channels and strengthen brand promotion to increase the penetration rate of the value-added business amongst existing customer base, to enhance customers' loyalty and drive the Group's profit growth.

FINANCIAL REVIEW

Financial Performance



During the year, total revenue of the Group increased by 30.0% to RMB93,113 million compared to last year. The significant increase was attributable to the robust growth of the Group's core businesses including integrated energy, retail gas sales and value added business. Profit attributable to the owners of the Company amounted to RMB7,755 million, representing an increase of 23.5% year on year. Stripping out the impact of other gains and losses (excluding net settlement amount realised from commodity derivative contracts), deferred tax arose from unrealised gain of commodity derivative contracts and share-based payment expenses amounted to RMB601 million, core profit driven by operating activities increased by 14.6% to RMB7,154 million. Basic earnings per share increased by 23.1% year on year to RMB6.88. During the year, the Group's operating cash inflow was RMB10,466 million, leading to positive free cash inflow of RMB2,936 million. The Board has recommended a final dividend of HK$2.11 (equivalent to approximately RMB1.72) per share to the shareholders on the register of members of the Company on 26 May 2022, together with the interim dividend of HK$0.59 (equivalent to approximately RMB0.49) per share paid, total dividends for the year amount to HK$2.70 (equivalent to approximately RMB2.21) per share, increase by 11.6% year-on-year.

Financial Resources Review

Financial Resources and Liquidity

The Group's capital mainly derived from cash inflow of its business operations, financing, investment income and equity. The main factors influencing the Group's future cash balance are cash flow from operation, capital expenditures and repayment of debts.

An analysis of the Group's cash, current and non-current debts is as follows:

	2021 RMB million	2020 RMB million	Increased/ (Decreased) by RMB million
Bank balances and cash (excluding restricted bank deposits)	**8,684**	8,630	54
Long-term debts (including bonds)	**8,040**	12,714	(4,674)
Short-term debts (including bonds)	**11,850**	6,970	4,880
Total debts	**19,890**	19,684	206
Net debts[1]	**11,206**	11,054	152
Total equity	**42,150**	36,172	5,978
Net gearing ratio[2]	**26.6%**	30.6%	(4.0ppt)
Net current liabilities	**14,021**	9,665	4,356

1 Net debts = Total debts – Bank balances and cash (excluding restricted bank deposits)

2 Net gearing ratio = Net debts/Total equity x 100%

Working Capital Management

As at 31 December 2021, the Group's bank balances and cash (excluding restricted bank deposits) remained stable. For the year ended 31 December 2021, the Group's operating cash inflow was RMB10,466 million, while the free cash flow[3] decreased slightly by RMB80 million to approximately RMB2,936 million year on year.

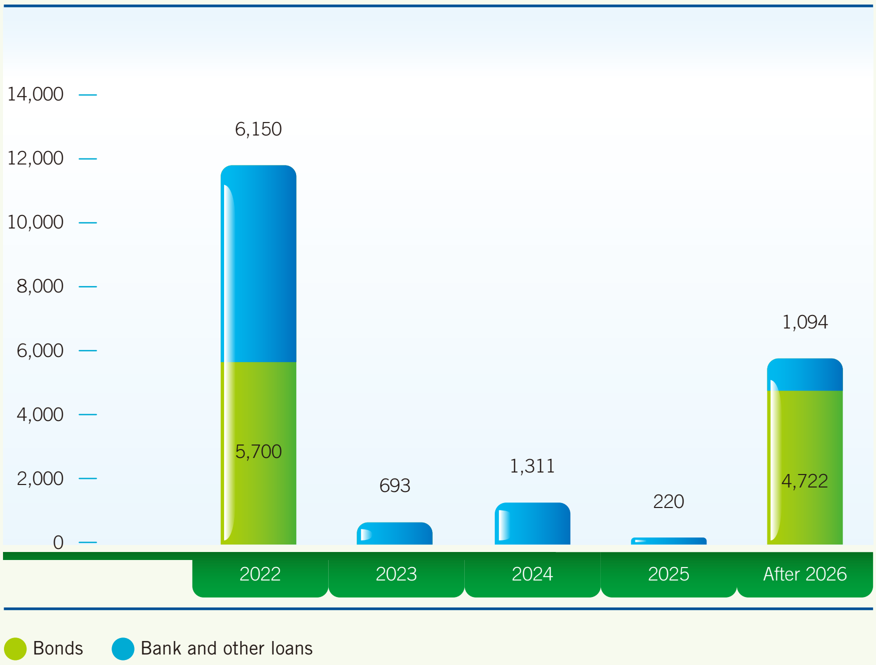
As at 31 December 2021, the Group recorded net current liabilities of approximately RMB14,021 million, mainly because of the Group's three corporate bonds and unsecured bonds aggregating to approximately RMB5,700 million will be due in 2022. As at the date of this report, two corporate bonds amounted to RMB1,500 million expired and had been refinanced by long-term loans. For the other expiring corporate bonds and unsecured bonds, the Group will continue to monitor the market changes and take the opportunity to refinance these bonds by issuing long-term bonds. By the time, the net current liabilities would be improved significantly.

As the Group has high quality current assets and good credit ratings, and given that the cash on hand, taking the opportunity to issue long-term bonds in the future and the available standby credit provided by the correspondent bank, the Group's planned future capital expenditures (including the investments in subsidiaries, associates and joint ventures, as well as property, plant and equipment), finance costs and external dividends payment will be sufficiently met.

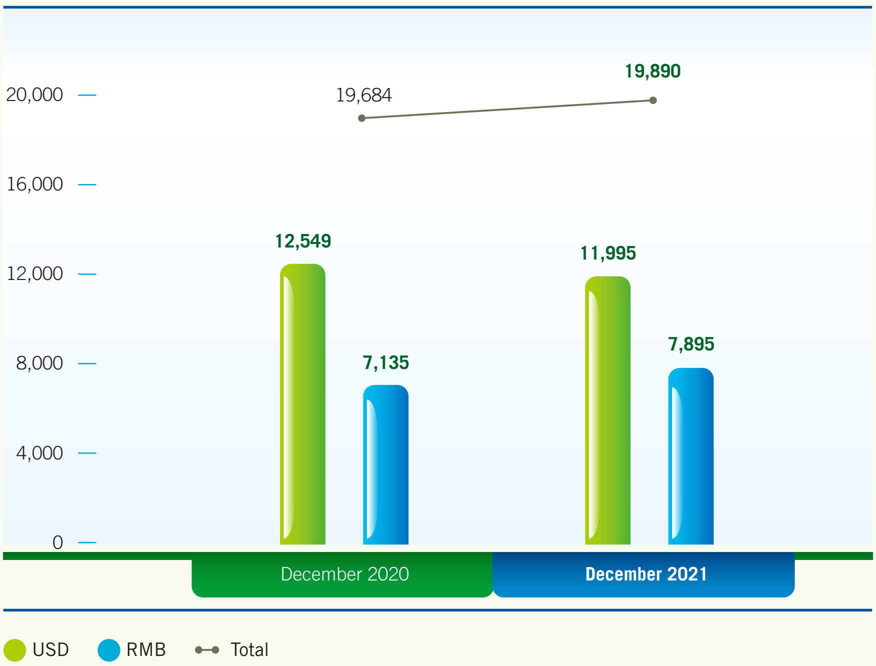
Borrowings Structure

As at 31 December 2021, the Group's total debts amounted to RMB19,890 million, representing an increase of RMB206 million compared to the total debts as of 31 December 2020. However, the Group's net gearing ratio reduced 4 percentage points to 26.6% as at 31 December 2021 (2020: 30.6%). Around 91.4% of the Group's total debts are at fixed interest rate. The Group seeks to maintain strict control over the debt level and strike a balance between duration of debt and cost of financing.

Debts Repayment Schedule
(RMB Million)



Total Debt
(RMB Million)



3 Free cash flow = Cash flow from operating activities – capital expenditure – financing cost + dividend income

Foreign exchange risk management

As at 31 December 2021, the principal amount of the Group's borrowings denominated in foreign currencies amounted to USD1,891 million (2020: USD1,936 million), equivalent to approximately RMB11,995 million (2020: RMB12,549 million), and among which 39.0% (2020: 68.0%) is long-term debt. As of 31 December 2021, the Group has hedged debt principal of USD550 million (2020: USD750 million) and the hedge ratio of long-term USD debts reached 41.8% (2020: 40.9%). In view of the existence of fluctuation in RMB/USD rate, the Group will continue to closely monitor the foreign exchange market and strive to use foreign currency derivative contracts to mitigate the impact on its results when deemed appropriate.

Charge on Assets

As at 31 December 2021, the Group pledged certain assets as securities for bank and other loans, bill facilities and contracts granted to the Group, associates and joint ventures in the ordinary course of business, Details are set out in Note 52 to the consolidated financial statements.

Credit Rating

As of the date of this report, the credit ratings of the Company are summarised below:

	Standard & Poor's	Moody's	Fitch
Long-term credit rating	BBB	Baa1	BBB+
Outlook	Stable	Stable	Stable

These ratings reflect the Group's sound financial position which can generate highly visible and stable operating cash flow. The management of the Company believes that the good credit rating will continue to provide the Group with sufficient financial resources for its long-term development.

Commodity Price Risk Management

At present, the Group has three regular international LNG sale and purchase agreements. The pricing of the international sale and purchase agreements is mainly indexed to the price of crude oil or natural gas. Changes in these indexes may bring risk exposure to the Group. Therefore, the Group has established a series of risk management policies and commodity hedging mechanism by hedging a reasonable proportion of planned annual sale and purchase of LNG, to stabilise the Company's international LNG procurement costs and reduce commodity price risks, so as to minimise the adverse impact of international energy price fluctuations on the Group's business. During the year, the Company developed a mobile APP – ETMO risk management platform corresponding to the Energy Trading Risk Management (ETRM) System, which allowed portable monitoring of business fully. In addition, the Group will continue to monitor market and business conditions to optimise its existing hedging strategy, trading authorisation and risk management policies, so as to better manage the risks associated with the Group's international LNG procurement.

As at 31 December 2021, the Group has recognised realised gains arising from commodity derivative contracts of RMB 198 million (31 December 2020: RMB 171 million) and unrealised gain of RMB796 million (31 December 2020: RMB32 million).

Contingent Liabilities

As at 31 December 2021, the Group did not have any material contingent liabilities.

DIRECTORS AND SENIOR MANAGEMENT

Executive Directors

Mr. WANG Yusuo, aged 58, is a founder of the Group, the Chairman and the Executive Director of the Company, and is the Chairman of the Nomination Committee. He is responsible for overseeing the Group's overall strategic planning and providing leadership for and overseeing the functioning of the Board. He has over 30 years of experience in investment and the management of the energy business in the PRC, he has deep and professional insights on the trend, digitalisation and strategies development of energy industry. He holds a Doctor of Philosophy in Management from Tianjin University of Finance and Economics. He is the father of Mr. Wang Zizheng, a Non-executive Director of the Company. He is a director and a controlling shareholder of Langfang City Natural Gas Company Limited (the "LCNG"), a controlling shareholder of the Company. He is the chairman of ENN Natural Gas Co., Ltd. (formerly known as ENN Ecological Holdings Co., Ltd., stock code: 600803.SH) and a director of ENC Data Technology Co., Ltd (formerly known as Beibu Gulf Tourism Corporation Limited, stock code: 603869.SH), all listed on Shanghai Stock Exchange. In June 2021, he ceased to be a Non-executive Director of Legend Holdings Corporation (a company listed on Hong Kong Stock Exchange, stock code: 3396.HK) and became an Independent Director of DiDi Global Inc. (a company listed on New York Stock Exchange, stock code: DIDI.US).

Mr. ZHENG Hongtao, aged 47, is the Executive Director and the Vice Chairman of the Company, he is also the Chairman of the Risk Management Committee and the Environmental, Social and Governance Committee of the Company. He assists the Chairman in overseeing the Group's overall strategic planning and overseeing the functioning of the Board. He obtained a doctorate degree in engineering from Tsinghua University in 2004, majoring in power engineering and engineering thermophysics. He is the pioneer for China's international spot LNG trading and has extensive experience in energy planning, international LNG resources procurement and trading, LNG shipping, domestic natural gas sales and related asset mergers and acquisitions. He is currently a director and the president of ENN Natural Gas Co., Ltd (formerly known as ENN Ecological Holdings Co., Ltd, stock code: 600803.SH), whose shares are listed on Shanghai Stock Exchange.

Ms. Wu Xiaojing, aged 53, is the Executive Director and the President of the Company, and a member of the Risk Management Committee. She assists the Vice Chairman of the Company to ensure the execution and achievement of strategies and smart operation of the Group, especially on the strategic execution of integrated energy business. She obtained an Executive Master's Degree in business administration from the Peking University in 2011. Prior to joining the Group in 2004, she served in the Southern China branch of Beckman Coulter, Inc. and was responsible for the business development in the region. After joining the Group, she served as the head of several municipal and provincial level companies of the Group. She has extensive experience in the business operation and market development for energy companies.

Mr. WANG Dongzhi, aged 53, is the Executive Director of the Company, and a member of the Risk Management Committee and Environmental, Social and Governance Committee. He is responsible for the corporate governance, design and the monitoring of implementation of internal control strategies of the Group. He graduated in 1991 with a Bachelor Degree in Engineering Management from the Beijing Chemical University. He obtained a Bachelor's Degree in Economics in 1996, the qualifications of Certified Accountant in the PRC in 2000, a Master's Degree in Business Management from the Tianjin University in 2003 and received the Executive Master of Business Administration from China Europe International Business School (CEIBS) in 2016. Prior to joining the Group in 2000, he was in charge of the finance department in a Sino-foreign joint venture company. He has extensive experience in financial management. He is currently a director and/or holds position as senior management in LCNG and its subsidiaries, including the chief financial officer of ENN Natural Gas Co., Ltd. (formerly known as ENN Ecological Holdings Co., Ltd., stock code: 600803.SH), which it is listed on the Shanghai Stock Exchange. He is also an Independent Director of Abterra Ltd. (a company listed on Singapore Stock Exchange, stock code: ABTR.SI).

Non-executive Directors

Mr. WANG Zizheng, aged 33, is the Non-executive Director of the Company, and a member of the Environmental, Social and Governance Committee of the Company. He has joined the Group in 2014 and served as the Executive Chairman of the Company during 11 May 2018 to 16 March 2020, responsible for assisting the Chairman and Vice Chairman of the Board in overseeing the Group's overall strategic planning and functioning of the Board. He graduated from Tongji University with a Bachelor's Degree in Urban Planning. He has extensive experience in investment, merger and acquisition and operation management of overseas LNG refuelling stations. He is a director of LCNG, a controlling shareholder of the Company, and a director of ENN Natural Gas Co., Ltd (formerly known as ENN Ecological Holdings Co., Ltd., stock code: 600803.SH), which it is listed on Shanghai Stock Exchange. He is the son of Mr. Wang Yusuo.

Mr. JIN Yongsheng, aged 58, is the Non-executive Director of the Company and a member of the Nomination Committee. He graduated from the Tianjin University of Finance and Economics in 1986, majoring in finance, and has obtained an Executive Master's Degree in business administration from the Peking University in 2005. He is qualified to practise law in China. He was an Executive Director of the Company from 2000 to 2006, responsible for the management of the Group's administration, legal affairs and investor relations. He was then re-designated to be a Non-executive Director due to work re-arrangement from 2006 to 2017. He is currently a director of LCNG, the controlling shareholder of the Company and the non-executive director of Shanghai Dazhong Public Utilities (Group) Co., Ltd. (stock code: 1635.HK), whose shares are listed on the main board of Hong Kong Stock Exchange.

Mr. ZHANG Yuying, aged 49, is the Non-executive Director of the Company. He was appointed as the Executive Director and the President of the Company in 2019, and also a member of the Risk Management Committee, until 20 December 2021. He graduated from Renmin University of China in 2003 with a Master's Degree in Business Administration. Prior to joining the Group, he worked in Kaifeng Electromechanical Group and Henan Tongli Electrical Appliances Group. After joining the Group, he held various important positions in business planning and strategic performance management of the Group. He has extensive experience in corporate market insight, strategic research and planning and operational excellence.

Independent Non-executive Directors

Mr. MA Zhixiang, aged 69, was appointed as an Independent Non-executive Director of the Company on 24 March 2014. He is currently a member of Audit Committee, Nomination Committee, Remuneration Committee, Risk Management Committee and Environmental, Social and Governance Committee. He has held senior management positions in China Petroleum Pipeline Bureau and PetroChina Company Limited and has resigned from these positions in March 2012. He graduated from School of Mechanics of University of Petroleum (East China) with a Doctor's Degree in Engineering in Storage and Transportation. He has over 40 years of extensive experience in corporate management practices and experience in the petroleum and natural gas industry, he has unique point of views on the historical evolution, development pain points and prospects of China's energy industry.

Mr. YUEN Po Kwong, aged 52, was appointed as an Independent Non-executive Director of the Company on 24 March 2014. He is currently the Chairman of the Remuneration Committee and a member of the Audit Committee, Nomination Committee and Risk Management Committee. He is currently a Partner of Fangda Partners specialising in dispute resolution and contentious regulatory compliance. He graduated from Oxford University in England with a Master's Degree in Chemistry and from Cornell University with a Master's Degree in Synthetic Organic Chemistry. He then attended College of Law in Guildford, England and obtained his Diploma in Law (with Distinction) and Diploma in Legal Studies. Before studying law in England, He was a teaching fellow at Cornell University. Prior to joining Fangda Partners to establish its Hong Kong office in 2012. He was a partner of the "Magic Circle Firms", specialising in resolving China related disputes. He has extensive experience in regulatory and corporate compliance.

Mr. LAW Yee Kwan, Quinn, JP, aged 69, was appointed as an Independent Non-executive Director of the Company on 30 May 2014. He is currently the Chairman of Audit Committee, and a member of Nomination Committee, Remuneration Committee and Risk Management Committee of the Company. He is an honorary fellow of Hong Kong University of Science and Technology (the "HKUST"), and he presently serves as a court member at the HKUST and a governing board member of HKUST (Guangzhou). He began his professional career at an international accounting firm and thereafter had held senior management positions with diverse corporate and operational responsibilities both in the private and public sector.
The Directors believe that Mr. Law has accumulated extensive experience in corporate governance, internal control and risk management. He is a fellow member of The Hong Kong Institute of Certified Public Accountants and the Association of Chartered Certified Accountants. He held directorship in several listed companies both in Hong Kong and overseas in the past. He is currently also the independent Non-executive Director of HKBN Limited (stock code: 1310.HK) and BOC Hong Kong (Holdings) Limited (stock code: 2388. HK), all listed on the main board of Hong Kong Stock Exchange. In addition, he is currently performing duties as an independent non-executive director of Bank of Tianjin Co Ltd (a Hong Kong listed company, stock code: 1578.HK) pending automatic retirement upon approval of the bank's newly appointed independent non-executive directors by the relevant PRC authority, and will by then commence to serve as a supervisor of the bank.

Ms. YIEN Yu Yu, Catherine, aged 51, was appointed as an Independent Non-executive Director of the Company on 30 November 2018. She is currently a member of Audit Committee, Nomination Committee, Remuneration Committee and Risk Management Committee of the Company. She has over 25 years of experience in the areas of corporate finance, capital markets and mergers and acquisitions, she also accumulated over 20 year of experiences in energy industry as a result of her works. She was a member and then Deputy Chairman of the Listing Committee of the Stock Exchange from 10 July 2015 to 9 July 2021. She is currently a

Managing Director of Rothschild & Co Hong Kong Limited and a member to the Advisory Committee of the Securities and Futures Commission. She is also an Independent Non-executive Director of CIMC Enric Holdings Limited (a company listed on the main board of Hong Kong Stock Exchange, stock code: 3899.HK). Ms. Yien was an Independent Non- executive Director of the Company from September 2004 to May 2016. Ms. Yien is a holder of the Chartered Financial Analyst designation, and is currently a fellow member of Hong Kong Securities and Investment Institute and The Hong Kong Institute of Directors. She graduated from the Imperial College of Science, Technology and Medicine of University of London in England with a Joint Honours Degree in Mathematics with Management (BSc Hons).

Senior Management

Ms. ZHANG Jin, aged 48, is the Chief Human Resources Officer of the Company. She is responsible for the human resources management and general administration work, etc. She graduated from Renmin University of China with a Bachelor's Degree in Economics and a Master's Degree in Management. Prior to joining the Group in 2016, she served as the Chief Administrative Officer of Shanda Games, the Senior Vice President of Shanda Network Group, the Vice President of Human Resources of Shanda Group and the Vice President of Human Resources of Lenovo Group. She has extensive experience in corporate management. She is currently a director of ENN Natural Gas Co., Ltd. (formerly known as ENN Ecological Holdings Co., Ltd., stock code: 600803.SH) and a director of ENC Data Technology Co., Ltd (formerly known as Beibu Gulf Tourism Corporation Limited, stock code: 603869.SH), whose shares are listed on Shanghai Stock Exchange.

Mr. LIU Jianfeng, aged 45, is currently the Chief Financial Officer of the Company. He is responsible for finance, legal affairs, financial management and mergers and acquisitions of the Company. He is a member of the steering committee of Methane Guiding Principles, he promoted the Company to adopt and implement international standards of methane emission reduction, and lead industry companies to jointly advance methane management. He received a Bachelor's Degree in Economics from the Central University of Finance and Economics and a Master's Degree in Law from China University of Political Science and Law from 1995 to 2003. He then received an MBA and a Master's Degree in Law from Boston College from 2012 to 2014. He is a member of the CPA Australia. Prior to joining the Group, he held key financial management positions in several companies in the oil and gas industry, and participated in a number of large scale multinational M&A transactions. Mr. Liu also served in leading law firms in the PRC, and is a qualified PRC lawyer and corporate legal consultant. He has over 20 years' experience in financial management, asset management, onshore and offshore mergers and acquisitions and investment.

Mr. XIONG Liang, aged 50, is the Executive Vice President of the Company. He is responsible for quality, occupational safety and environmental protection of the Group. He obtained a Bachelor's Degree in Oil Engineering and a Master's Degree in Petroleum and Natural Gas Engineering from Southwest Petroleum University in 1994 and 2009 respectively, and then obtained a doctorate degree in Safety Science and Engineering from China University of Geosciences (Wuhan) in 2020. Prior to joining the Group in 2018, he served in CNOOC Tianjin Branch, Chevron Joint Venture, Iran North Pars LNG Project and CNOOC Safety and Environmental Protection Company, and he was employed as the safety emergency expert of Ministry of Emergency Management of the People's Republic of China and State-owned Assets Supervision and Administration Commission of the State Council. Mr. Xiong has over 25 years of experience in the management of energy quality, occupational safety and environmental protection.

Mr. HUANG Zhenping, aged 42, is the Chief Digital Officer of the Company, and he is responsible for setting the strategic direction for digital transformation of the Group. He obtained a Master's Degree in Engineering from Wuhan University in 2011. Prior joining the Group in 2020, he served as the Controller in Suning.com, the President of Internet in Zhengbang Group, the Vice President in Xianyi Holding Co., Limited and President in xebest.com, etc. Mr. Huang has accumulated about 20 years of extensive experience in innovative internet business, architecture and operations of platforms, modern supply chain management, Internet of Things and enterprise digital transformation.

Ms. SU Li, aged 49, is the Senior Vice President of the Company. She is responsible for the marketing and sales of Zhejiang and Shanghai provincial companies. She graduated from Shanghai Jiao Tong University in 2015 and obtained an Executive Master's Degree in Business Administration. After joining the Group in 2002, she held deputy general manager and general manager positions of various subsidiaries. Based on her outstanding business development performance, she was promoted as the regional general manager and was responsible for the sales and marketing in Zhejiang Province, as well as the business expansion of industrial parks projects. She has extensive experience in business operation and market development for energy companies.

Ms. MU Nini, aged 44, is the Financial Controller of the Company, assisting the Chief Financial Officer in the Group's daily financial management, corporate internal control, taxation and treasury management. Ms. Mu graduated from Qingdao Technological University in 2001 and received the Executive Master of Business Administration from China Europe International Business School (CEIBS) in 2017. She holds the qualifications of Senior Accountant and China Certified Management Accountant in the PRC. Before joining the Group in 2011, she served as the accounting and financial manager of Qingdao Haier Group and the financial manager of Jiangsu Shenma Electric Co., Ltd. Ms. Mu has extensive experience in finance, corporate internal control, taxation and treasury management.

Ms. LEUNG Mui Yin, aged 39, is the Company Secretary of the Company. She is a member of The Hong Kong Chartered Governance Institute (formerly known as "The Hong Kong Institute of Chartered Secretaries") and The Chartered Governance Institute in the United Kingdom. She is also a member of The Hong Kong Institute of Certified Public Accountants. She joined the Group in 2011, and successively held various positions in finance function and as the deputy company secretary of the Company. She holds a Bachelor's degree in Accountancy, and has over 10 years of experience in relation to accounting and financial reporting, finance, corporate governance and company secretarial services.

CORPORATE GOVERNANCE REPORT

Corporate governance is the collective responsibility of the board of directors of the Company (the "Board") and the Board strongly believes that good corporate governance is fundamental in ensuring the proper management of the Company in the interests and expectation of all of its stakeholders. The Board is conscious about continuous improvement in the arena of corporate governance, including but not limited to an effective board of directors, prudent internal and risk controls, transparency as well as clear and comprehensive disclosure and, most importantly, take prompt actions in responding to identified improved opportunities.

Leadership

BOARD GOVERNANCE
- Code of Corporate Governance
- Model Code
- Onboarding Guideline for directors
- Board mandate
- Articles of association

BOARD COMPOSITION
- 4 EDs, 3 NEDs and 4 INEDs
- All directors are appointed with a specific term of 3 years and are subject to rotation
- Diverse skills, knowledge and experience

CORPORATE STRATEGY
- Set strategy and participate in significant decision-making
- Oversee financial performance and ESG development of the Group

Effectiveness

EVALUATION
- Board evaluation process via questionnaire covering the Board's effectiveness, and develop measures for improvement

INFORMATION & SUPPORT
- Good information flow between the Board and the management
- Access to independent professional advice and support from Company Secretary
- Management are invited to attend Board/Committee meetings to present and answer questions to facilitate the decision-making process

DIVERSITY
- Board Diversity Policy
- Diversity of skills and expertise (See page 46)

COMMITMENT
- All directors are committed to devoting sufficient time and attention to the Company's affairs

INDEPENDENCE
- The independent non-executive directors hold meetings with the Chairman of the Board without the executive directors presence

CONTINUOUS PROFESSIONAL DEVELOPMENT
- Directors receive various trainings and development programmes to refresh their skills and knowledge and to keep up to date with current development
- Visit the Company's key projects, and understand the Company's development

THE ROLE OF THE COMPANY SECRETARY
- Review and implement corporate governance practices
- Provide advice and support to directors
- Keep directors updated on legislative, regulatory and governance matters

Accountability

COMMITTEES
- 4 Board committees and 4 responsibility committees have been established
- Board committees and responsibility committees report to the Board

MANAGEMENT PROCESS
- Day-to-day management by the management (executive directors and senior management) and report to the Board

RISK MANAGEMENT AND INTERNAL CONTROL
- Regular review and monitor risk management process
- Robust assessment of principal risks and effectiveness of internal controls
- "Risk management and Internal Controls" (see pages 48 to 49)

FINANCIAL REPORT AND AUDITORS
- "Independent Auditor's Report" (see pages 69 to 71)
- External Auditor's independence and appointment
- Internal Audit function

ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE (ESG)
- Green Finance Framework developed
- Decarbonisation Action 2030 publication -ENN Energy's Zero Carbon Journey
- ESG Committee and ESG Working Group as a robust support
- Separate ESG report publication since 2018

Engagement

CONSTRUCTIVE USE OF GENERAL MEETINGS
- Accessible AGM
- Committee chairmen available at AGM to answer questions (in person or via electronic meeting)
- Notice is sent out more than 21 business days before each meeting (this exceed the requirement of Code of Corporate Governance)

DIALOGUE WITH SHAREHOLDERS
- Enhance shareholder communications by electronic channels
- Organise shareholders' visits to enhance their understanding on the Group's development and other businesses
- Updates on shareholders visits provided to the Board

COMMUNICATION CHANNELS WITH STAKEHOLDERS
- Teleconferences and webcasts for analysts and media briefings
- Investment community communications including roadshows
- Publication of financial reports, announcements, circulars and press releases
- Company's website

Board Activities during 2021

The key areas of Board activities during the year are as follows.

DIRECTIONS	• Reviewed the Group's position and all the challenges that the Group will be facing (including the impact brought by the policies), the progress in digitalised transformation and security renovation, as well as the resources and skills the business may require in future • Discussed business plans and opportunities, as well as long-term directional strategy for the growth of the Group • Considered and approved continuing connected transactions with the controlling shareholder due to business needs
RISK MANAGEMENT AND INTERNAL CONTROLS	• Reviewed the Group's risk appetite and assessed changes in external and internal risk level, imminent risks and mitigating actions • Reviewed the effectiveness of the Group's risk management and internal control systems
ACCOUNTABILITY	• Discussed the outcome of the Board evaluation and effectiveness review, and agreed improvement opportunities • The Chairmen of Audit Committee, Remuneration Committee, Nomination Committee, Risk Management Committee and Responsibility Committees updated the Board on the proceedings of their meetings, including the key discussion points and any areas of concern • Reviewed major corporate governance related reports
PEOPLE AND LEADERSHIP	• Reviewed the Board structure, size, composition and diversity, as well as the independence of independent non-executive directors • Reviewed and evaluated the fee of non-executive directors • Reviewed the compensation of the executive directors and the senior management • Considered the changes of directors and composition of the Board to support the strategic development of the Company
FINANCIAL, OPERATIONAL AND BUSINESS PERFORMANCE	• Reviewed the interim and annual results, approved the interim and annual reports • Reviewed the ESG performance and approved the ESG annual report • Reviewed and approved the material funding plan • Declared dividends • Reviewed the operating results of the Group's core business and regular updates for financial and investment

Corporate Culture

The Company deeply knows that healthy corporate culture is not only the core of good governance, but also the soul of an enterprise and an essential part of the sustainable development. In light of the vision of building a modern energy system and improving people's living, the Company develops its corporate culture according to the operating environment, values and strategies, including the value concepts of same belief in the aspects of compliance, integrity, safety, environmental protection, health and employee care, thereby stimulating the enterprise vitality, and endeavours to become a respected, innovative and smart enterprise.

Corporate Governance Practices

The Company is committed to high-quality corporate governance practices, so the Board and the management have been continually reviewing and enhancing the corporate governance practices with reference to local and international standards. Since its listing on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"), the Company has adopted the Code of Corporate Governance as contained in the Appendix 14 to the Listing Rules (the "CG Code") as the main guideline for corporate governance practices. The Company also continues to monitor developments in the arena of corporate governance externally to ensure the suitability and robustness of its corporate governance framework in light of the rapidly changing business environment and to meet the expectations of stakeholders.

Corporate Governance Code Compliance

For the year ended 31 December 2021, the Company was in compliance with all code provisions of the CG Code. The Board believes that its continuous efforts in enhancing the Company's corporate governance practices have, directly and indirectly, contributed to the strong business growth of the Company and its subsidiaries (the "Group") in the past years. The Company is honoured to have continuously received numerous awards from independent bodies over the previous years in recognition of the Group's achievements in its business and management. The latest awards garnered during the year are set out in the section headed "Awards & Rankings" under the "ENN at a Glance" on page 7 of this Annual Report.

The Company reviews the compliance of the Corporate Governance Code on an annual basis in order to ensure that the Company has complied with the code provisions, and make reference and execute applicable best recommended practices to achieve continuous improvement of corporate governance.

Securities Transactions by Directors

The Company has adopted the "Model Code for Securities Transactions by Directors of Listed Issuers" (the "Model Code") set out in Appendix 10 to the Listing Rules as the code of conduct for securities transactions by the directors of the Company. After having made specific enquiry, the Company confirms that all directors have complied with the Model Code throughout the year.

Senior managers and staff, who because of their office in the Company are, likely to be in possession of Inside Information (which term shall bear the same meaning as in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the "SFO")) of the Company, have also been requested to comply with the provisions of the Model Code.

The Board

According to the articles of association of the Company, the Board is a standing decision-making body of the Company. It assumes the responsibility of leading, guiding and supervising the affairs of the Group, and develops long-term strategic goals and policies for the Group. The Board is also responsible for performing the corporate governance functions of the Company, including developing, reviewing and monitoring of the Company's corporate governance policies and practices, compliance with legal and regulatory requirements and codes applicable to employees and directors of the Company, reviewing the Company's compliance with the CG Code, etc., pays attention to value creation and risk management during the process, and ensures that appropriate and sufficient disclosures are made in the annual report.

The Board has established board committees and other responsibility committees, they performed their duties and report to the Board in accordance with their respective terms of references. Details have been set out in below under the section headed "Board Committees" and "Other Responsibility Committees". The Board has delegated insignificant and more cumbersome board matters, however required board approvals, to Management Committee (details have been set out in below under the section headed "Management Committee"). The Management Committee has to report its decisions made to the Board bi-yearly. The Board has delegated the daily operations of the Group to executive directors and senior management of the Company (collectively the "Management"). Whenever the Board delegates its powers in management and administrative functions to the Management, they have simultaneously provided clear guidance, especially as to under what circumstances the Management should report to and obtain approval from the Board before making any decisions or entering into any undertakings on behalf of the Company.

The Chairman of the Board and the Management will ensure all directors (including the Independent Non-executive Directors) of the Company have access to adequate, complete and timely information so that they can make informed decisions and discharge their duties and responsibilities as directors. Directors may request further briefing or explanation on any aspect of the Group's operations or business and seek advice from the Company Secretary on the Company's compliance management matters, including Board procedures and corporate governance practices. Where appropriate, they can also seek independent professional advice at the Company's expenses.

The Company has insured director's liability insurances for the directors, which provided protection to the directors for liabilities that might arise in the course of their performance of duties according to law and facilitate directors to fully perform their duties.

Time Devotion of Directors

In order to ensure the all directors of the Company devote sufficient time to the affairs of the Company, they have to disclose to the Company, upon their appointment, of their offices held in other public companies or organisations and other significant commitments, if any. They need to disclose to the Company from time to time for any changes and the time involved annually. No independent non-executive directors of the Company served seven listed companies or more.

The Company has also formulated the Board attendance policy during the year that unless there is a special reason or the low attendance rate due to a small number of meetings, the attendance rate of the directors in the Board meetings and major committees meetings of the Company should not be less than 75%. The attendance rate of all the directors of the Company in 2021 had reached 75% or above, and the overall attendance rate of all the directors in the meetings had reached 97%. The directors of the Company have also confirmed that they have given sufficient time and attention to the affairs of the Company for the year ended 31 December 2021.

Appointment, Re-election and Retirement of Directors

The Nomination Committee of the Board is responsible for evaluating the appointment of new directors, re-election of directors or filling the vacancies of directors, advising to the Board and submitting for approval at the shareholders' general meeting upon approval by the Board. All directors of the Company have entered into formal service agreements/letters of appointment with the Company, each for a term of three years, subject to retirement by rotation in accordance with the articles of association of the Company. Article 116 of the articles of association of the Company provides that at each annual general meeting, one-third of the directors for the time being (or if their number is not a multiple of three (3), the number nearest to but not less than one-third) shall retire from office by rotation, provided that every director shall be subject to retirement by rotation at least once every three years. Also, pursuant to Article 99 of the articles of association of the Company, any director appointed to fill a casual vacancy or as an addition to the Board is subject to re-election at the next following general meeting or next following annual general meeting of the Company. According to the historical information of the past five years, the average term of re-election of each director is two (2) years.

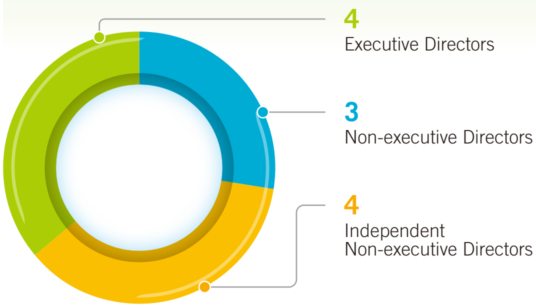
Assessment of Board Performance

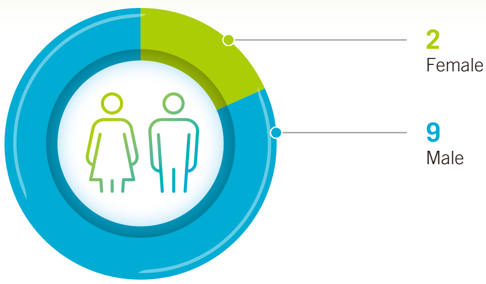
The Board believes that regular reviews of its own performance are essential for good corporate governance and board effectiveness, and hence has conducted a review at least once a year since 2020. The Board delivered a questionnaire to 11 directors, with the aim of understanding the directors' opinions and suggestions on the following four aspects, including the combination and composition of the Board, information quality and decision-making, Board activities, standard behaviour and self-assessment. In addition, other issues related to corporate culture, diversity of Board members and minority shareholders' rights were also included, positive responses from the directors were received. The improvement plan on the directors' opinions and suggestions were also formulated.

Board Composition

As at the date of this Annual Report, the Board had 11 directors, made up of 4 executive directors, 3 non-executive directors and 4 independent non-executive directors. Details are as follows:

Gender





Executive directors:
Mr. Wang Yusuo (Chairman)
Mr. Zheng Hongtao (Vice Chairman)
Ms. Wu Xiaojing (President)
Mr. Wang Dongzhi

Non-executive directors:
Mr. Wang Zizheng
Mr. Jin Yongsheng
Mr. Zhang Yuying

Independent non-executive directors:
Mr. Ma Zhixiang
Mr. Yuen Po Kwong
Mr. Law Yee Kwan, Quinn
Ms. Yien Yu Yu, Catherine

The directors of the Company have different expertise and relevant industrial experience and background, such as legal, accounting and finance, economics, corporate governance and industry expertise, etc., providing valuable contributions and advices to the Group in relation to its business development. Independent non-executive directors are committed to ensuring that the Board safeguards the interests of all the shareholders of the Company, and takes into account the concerns of stakeholders ensuring the fairness and reasonableness of the Board resolutions to promote the sustainable development of the Company. A list of the directors of the Company and their role and function is available on the websites of the Company and the Stock Exchange, and the biographical details of each of the directors of the Company are set out on pages 28 to 31 of this Annual Report.

As at the date of this report, except that Mr. Wang Zizheng (Non-executive director of the Company) is the son of the Chairman, no relationship (neither financial, business nor family) exists among members of the Board, and in particular, there is no relationship (neither financial, business nor family) between the Chairman and chief executives.

Chairman and Chief Executive

The posts of the Chairman and the Chief Executive of the Company are responsible by different persons to ensure a balance of power and authority and their roles are segregated with a clear division of responsibilities set out in writing.

Mr. Wang Yusuo is the Chairman of the Company (the "Chairman") who is responsible for the management of the Board. Throughout the year, Chairman is responsible for ensuring the effective functioning of the Board, monitoring the performance of the Vice Chairman and the Management, and establishing good corporate governance practice and procedure. Moreover, the Chairman held a meeting with the independent non-executive directors without the presence of other executive directors.

The daily management of the Group's operation, including the Group's strategic planning, execution and business expansion etc., is borne by the Vice Chairman, and he reports to the Board. During the year, Mr. Zhang Yuying, being the then President, is responsible for leading the senior management, assisting the Vice Chairman to execute the strategies and plans set out by the Board, and focusing on the daily management of the Group's operation, strategy execution review and deviation correction, and ensuring achievement of business goals until 20 December 2021. On the same day, Ms. Wu Xiaojing was appointed as executive director of the Company and took over as the President after Mr. Zhang Yuying was re-designated as non-executive director of the Company.

Non-executive Directors and Independent Non-executive Directors

Non-executive directors do not belong to the management of the Company as they do not participate in the daily operation and management of the Group. However, they are also not considered to be independent. Independent non-executive directors are independent directors who meet the independence criteria under the Listing Rules. The non-executive directors (including the independent non-executive directors) of the Company have a term of appointment of three years. They have the same duties of care and skill and fiduciary duties as the executive directors. They possess skills and experience in other aspects (such as human resources, law, information technology, etc.) other than the Group's business knowledge, which helps to enhance the Board's balance of skills, experience and diversity of perspectives, whereby playing an important role in the Board.

The non-executive directors (including independent non-executive directors) serve as members of the Company's Board committees (including audit, remuneration, nomination and risk management) and other responsibility committees, provide independent judgment to the Board to bear on issues of strategy, policy, performance, accountability, resources, key appointments and standards of conduct, and monitor the Company's performance in achieving agreed corporate goals and objectives and the relevant reporting. The independent non-executive directors will take the lead where potential conflicts of interests arise in the decision making of the Board.

During the year, the Board has at all times complied with the requirements of the Listing Rules about the qualification and number of the non-executive directors, including the appointment of at least three independent non-executive directors, of which at least one has appropriate professional qualification, or accounting or related financial management expertise pursuant to Rule 3.10 of the Listing Rules, and pursuant to the requirement of Rule 3.10A of the Listing Rules, the Company's independent non-executive directors representing at least one-third of the Board.

Although Ms. Yien Yu Yu, Catherine has served the Company for more than nine years, her works in investment banking and previous works in listing committee of the Stock Exchange are close to capital market operation and corporate compliance development, which has a positive effect on the corporate governance of the Company. She resigned as a director of the Company in May 2016, and was re-appointed as a director of the Company in November 2018, a period two and a half years in between. Hence, the Board believes that she is still capable of bringing a fresh perspective and providing independent judgment. The Company has received from each independent non-executive director a written confirmation of his/her independence pursuant to the requirement of the Listing Rules. With reference to such confirmations, the Company, to its best knowledge, considers all the independent non-executive directors fulfilled the guidelines on independence as set out in Rule 3.13 of the Listing Rules and all to be independent. The respective capacity of independent non-executive director is expressly identified in all corporate communications that disclose the names of the directors of the Company.

Meetings of the Board

The Board meet regularly to keep abreast of the Group's conduct, business activities, operational performance and latest development. Notice of a regular Board meeting is given to all directors of the Company at least 14 days in advance. Directors are invited to include items which they wish to be included in the agenda for the same to be finalised and the agenda will, together with the relevant meeting papers, be given to the directors at least three days prior to a Board or Board committee meeting.

The Company has adopted the following practices to keep the directors informed of the latest information about the Group and facilitate the working of an effective and accountable Board:

- The public relations company appointed by the Company informs the directors of the news and stock closing price relating to the Company on every working day.
- The management timely communicates the possible reasons causing the significant fluctuation in stock price that they are aware of.
- Send the Group's market and media updates to the directors of the Company on a bi-weekly basis.
- Send the report about the operational, investment and financial performance of the Group to the directors of the Company on a monthly basis.
- As most of the directors of the Company are on occasional, and sometimes unexpected, business trips and/or are stationed in different regions of China, apart from encouraging them to attend in person, the directors could attend the meeting through electronic means of communication. For simple and straight forward Board resolutions, or a resolution that has been fully communicated through different communication channels and obtained the consent of all directors before the meeting, the Company Secretary will suggest the resolutions to be passed in the form of a written resolution with the relevant materials circulated together with draft resolutions to the full Board.
- Where a director is unable to attend a meeting, he/she is informed about the matters to be discussed and encouraged to express his/her views to the Chairman of the Board or the Company Secretary prior to the meeting.
- Agree and execute the next annual plan for Board meetings and Board committee meetings as well as corporate events with directors by the Company secretary in December every year to reserve their times for attendance.
- In relation to notifiable transactions/issues about the Company, external independent professional advices will be sought upon request by the directors of the Company, the expenses will be borne by the Company.
- The Company has set up an independent board committee comprising independent non-executive directors to review all discloseable connected transactions of the Company or other transactions which the committee considered to have conflicts of interests, and an independent financial advisor will be engaged to give independent opinion on such transactions to the Board.

The Company Secretary is responsible for taking minutes of Board and Board committee meetings with details of the matters considered by the Board and decisions reached, including any concerns raised by the members of the Board or dissenting views expressed, as well as the recommendations to improve the Company's corporate governance and internal control systems. Minutes of the Board meetings and Board committees meetings have been recorded in sufficient details, and maintained by the Company Secretary for inspection by any directors of the Company within a reasonable time upon a reasonable notice given.

Directors' attendance

The Board held six meetings (including four regular meetings, but excluding Board approvals obtained by circulating written resolutions) during 2021 and other additional meetings when Board approvals are needed for other issues. Details of the directors' attendance record of Board meetings and general meetings during the year are as follows:

	Attendance/number of meetings held	
	Regular meetings	Annual general meeting
Executive directors:		
Wang Yusuo	4/4	1/1
Zheng Hongtao	4/4	1/1
Wu Xiaojing (Note 1)	0/0	0/0
Wang Dongzhi	4/4	1/1
Non-executive directors:		
Wang Zizheng	4/4	0/1
Jin Yongsheng	4/4	1/1
Zhang Yuying (Note 1)	4/4	1/1
Independent non-executive directors:		
Ma Zhixiang	4/4	0/1
Yuen Po Kwong	4/4	1/1
Law Yee Kwan, Quinn	4/4	1/1
Yien Yu Yu, Catherine	4/4	1/1

Note:

1. On 20 December 2021, Ms. Wu Xiaojing was appointed as executive director of the Company. On the same day, Mr. Zhang Yuying was appointed as non-executive director of the Company.

Directors' Training and Professional Development

Directors are encouraged to participate in continuous professional development to develop and refresh their knowledge and skills to ensure their contribution to the Board remains informed and relevant.

During the year, newly appointed directors of the Company had been offered an induction training and briefed on director's responsibilities under the relevant legal and regulatory requirements (including but not limited to the Companies Ordinances, the Listing Rules and the SFO). They were provided with an information memorandum on directors' duties and obligations which assists them in understanding their responsibilities as a director of the Company. During the year, the Group explained and provided training to employees on the methane emission and control of city gas system, and the new "Production Safety Law" coupled with the major safety incident. The directors and senior management of the Company were also invited to attend the seminar and the training. The directors and senior management have received training materials about the amendments on the Listing Rules for references as well from the Company Secretary.

President of the Company updated the business and prospects of the Group in detail to the Board twice during the year, providing the directors of the Company an update on the operation and business of the Group, as well as the development of the energy industry. During the year, affected by the pandemics, the Company reported to the directors (especially the independent non-executive directors) of the Company the progress of the Group's key projects through video conferencing.

For the year ended 31 December 2021, all the directors of the Company had provided their training records to the Company.

Board Committees

To streamline its duties and uphold good corporate governance, the Board allocates certain of its executive and monitoring functions to four Board committees, namely the Audit Committee, the Remuneration Committee, the Nomination Committee and the Risk Management Committee, which are comprised of directors only.

Audit Committee

The Audit Committee is made up of all independent non-executive directors and is mainly responsible for monitoring the completeness of the financial statements, annual and interim reports and accounts of the Group, and reviewing the risk management and internal control system. The Committee maintains a decent relationship with the Company's external auditor, and makes recommendation to the Board on the appointment, reappointment and removal of external auditor, and related matters. A written term of reference explaining its role and the authority delegated to it by the Board is published on the websites of the Company and the Stock Exchange.

All members have sufficient experience in reviewing the effectiveness of the risk management and internal control systems, the internal audit functions, as well as reviewing the audited financial statements as aided by auditors and senior management of the Group whenever required. Mr. Law Yee Kwan, Quinn and Ms. Yien Yu Yu, Catherine, being the members of the Audit Committee, have appropriate professional qualifications, or accounting and/or related financial management expertise and experience.

Six Audit Committee meetings were held during the year. The Chief Financial Officer, head of internal audit function and the representatives of the external auditor also attended the relevant meetings. Attendance of the members is set out below:

Members	Attendance/number of meetings held	Number of meetings
Law Yee Kwan, Quinn (Chairman of the Audit Committee)	6/6	
Ma Zhixiang	6/6	
Yuen Po Kwong	6/6	
Yien Yu Yu, Catherine	6/6	

100% Attendance

100% Independence

The Audit Committee held meetings during the year principally for the following issues:

- reviewed the consolidated financial statements of the Group for the year ended 31 December 2020 and for the six months ended 30 June 2021, and the significant financial reporting judgements contained therein;
- reviewed the continuing connected transactions of the Group for the year ended 31 December 2020 under the Listing Rules;
- discussed with the management and external auditor the issues that may have significant impact on the financial statements, including but not limited to gas safety management, debt and cash flow management, and asset impairment;
- discussed with the external auditor the impact of any changes in accounting policies as well as the nature and scope of annual audit and interim review before the commencement of the audit work, and their reporting responsibilities;
- reviewed the external auditor's independence, objectivity and the effectiveness of the audit process in accordance with applicable standards;
- made recommendations to the Board on the appointment and reappointment of external auditor, and approved the remuneration and terms of engagement of the external auditor;
- listened to the work report of the head of internal audit department, and reviewed the effectiveness of the Group's risk management and internal control systems bi-yearly, and monitored the improvement (if any); and
- assessed whether there were adequate resources, staff qualifications and experience, training programmes and budget of the Company's accounting and financial reporting functions provided by the Management.

Auditors' remuneration

For the year ended 31 December 2021, Deloitte Touche Tohmatsu ("Deloitte"), the auditor of the Company provided audit service and non-audit services to the Group, and the amounts of remuneration paid and payable in connection therewith are as follows:

	Approximate Amount (RMB)
Annual audit service	7,330,000
Non-audit services – interim review service	1,950,000
– tax advisory service	450,000
Total	9,730,000

Save as disclosed above, the Group did not engage Deloitte to provide other services during the year and up to the date of this report.

As stated by the Audit Committee to the Board, the Audit Committee is of the view that service fees paid/payable by the Company to external auditor for the services provided for the year were reasonable. External auditor had no material disagreement with the management of the Company during the year.

Remuneration Committee

The Remuneration Committee is made up of all independent non-executive directors of the Company and is responsible for establishing a formal and transparent procedures for developing the overall remuneration policy and structure for all directors and senior management of the Company and making recommendations about the remuneration of individual executive directors and senior management to the Board, and ensuring no director or any of his/her associates is involved in deciding his/her own remuneration. A written term of reference explaining its role and the authority delegated to it by the Board is published on the websites of the Company and the Stock Exchange.

The objective of the remuneration policy of the Company is to maintain at a reasonable and competitive remuneration package so as to attract and retain the best employees to serve the needs for the development of the Company. The remuneration package consists of fixed and variable remuneration, cash and benefits in kind, including but not limited to: basic salary which is fixed to commensurate with market rate and each individual's experience and ability; year-end bonus and/or share options granted with reference to an individual employee's position, performance and ability to contribute to the overall corporate success (the granting of share options is subject to shareholders' mandates as required and the applicable laws and regulations of relevant jurisdictions) and/or award shares; and other customary and/or mandatory benefits to employees, such as retirement fund scheme, insurance and paid holiday, with reference to prevailing practices in relevant jurisdictions. In evaluating the remuneration packages for directors and senior management of the Company, the Remuneration Committee takes into consideration various factors such as salaries paid by comparable companies, time commitment, responsibilities and employment terms elsewhere in the Group. Most of the remuneration of the directors and senior management of the Company are linked with the Company and personal performance, such as environmental, social and corporate governance performance indicators. If employees violate applicable rules and regulations, depends on circumstances, his/her monthly performance sharing, year-end value sharing and/or medium to long term incentives payments, will be deducted as punishment.

Three Remuneration Committee meetings were held during the year. Attendance of the members is set out below:

Members	**Attendance/number of meetings held**	**Number of meetings**
Yuen Po Kwong (Chairman of the Remuneration Committee)	2/3	
Ma Zhixiang	3/3	
Law Yee Kwan, Quinn	3/3	
Yien Yu Yu, Catherine	3/3	

92%
Attendance

100%
Independence

In addition to the meetings held by the Remuneration Committee, resolutions were passed by way of written resolutions after all members received sufficient detailed information for consideration. The works of Remuneration Committee during the year are as follows:

- reviewed the policy and structure of remuneration for all directors and senior management of the Company, and made recommendations to the Board on the establishment of a formal and transparent procedure for developing remuneration policy;
- made recommendations to the Board on the remuneration of the executive directors and senior management of the Company for year 2021;
- made recommendations to the Board on the remuneration of new directors and new Company Secretary of the Company;
- reviewed the fees of the non-executive directors (including independent non-executive directors) of the Company; and
- approved the terms of services contract and remuneration packages of directors appointed during the year, and made recommendations to the Board.

The remuneration payable to the senior management (other than Directors) of the Company for the year ended 31 December 2021 fell within the following bands:

Remuneration Bands (HK$)	Number of individuals
1,500,001 to 2,000,000	1
2,000,001 to 2,500,000	2
3,500,001 to 4,000,000	1
4,500,001 to 5,000,000	1
7,000,001 to 7,500,000	1
7,500,001 to 8,000,000	2
8,000,001 to 8,500,000	1
Total	9

Details of Directors' remuneration and equity interest in the Company held by the Directors for the two years ended 31 December 2021 and 2020 respectively are listed out in Notes 12 and 45 to the consolidated financial statements.

Nomination Committee

The Company has established Nomination Committee which the chairman is the Chairman of the Board, and the majority of the members are independent non-executive directors. The Nomination Committee is responsible for reviewing the structure, composition and diversity of the Board, identifying and making recommendations to the Board of suitable candidates as directors, making recommendations to the Board on matters relating to the appointment and re-appointment of directors, succession planning for directors, and evaluating the independence of independent non-executive directors. A written term of reference explaining its role and the authority delegated to it by the Board is published on the websites of the Company and the Stock Exchange.

The Board adopted its "Nomination Policy" and "Board Diversity Policy", details had been uploaded onto the Company's website. The "Nomination Policy" aims to provide guidance to the Nomination Committee of the Company to identify and evaluate an appropriate candidate. It offers assistance to the Board and makes recommendations to the Board on, among others, the appointment or re-appointment of directors and succession planning for directors. Candidate is required by the Nomination Committee to provide personal information in prescribed form, and the Nomination Committee may take such measures that it considers appropriate in connection with its identification and evaluation of a candidate. Suitable candidate will be nominated by Nomination Committee to the Board with reasons of recommendation and voting intention of the Nomination Committee for the Board's consideration. The objective of the "Board Diversity Policy" is that the appointments of director should be based on merit with due regard for the benefits of diversity to the Board. In determining the composition of the Board, the Company seeks to achieve board diversity through consideration of a number of factors, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service.

In accordance with the Nomination Policy and the Board Diversity Policy, the Nomination Committee had reviewed the structure and composition of the Board in the first quarter of 2021, the Board adopted its recommendations and made minor adjustments to the Board committees, including (i) appointed Ms. Yien Yu Yu, Catherine as chairman of the Independent Board Committee; and (ii) appointed Mr. Jin Yongsheng as chairman of the Share Award Committee, which defined the responsibilities of the directors more clearly. In December 2021, the Chairman of the Board recommended and introduced Ms. Wu Xiaojing (the Executive Vice President of the Company) to the Board in consideration of the development needs and gender diversity of the Company, and appointed her as executive Director and President of the Company. Mr. Zhang Yuying was re-designated as non-executive director of the Company. After receiving the list of candidates for new director and the proposal to change the composition of the Board, the Nomination Committee had a dialogue with the Chairman of the Board and the candidate to understand the reasons for the recommendation and change, and assessed the merits of the candidate to the Company and the Board. In the selection process, the Nomination Committee evaluated the personal characteristics, field expertise, professional knowledge, industry qualifications and management experience of the candidate. After synthesising the evaluation opinions of all members on the candidates, the Nomination Committee made recommendations to the Board.

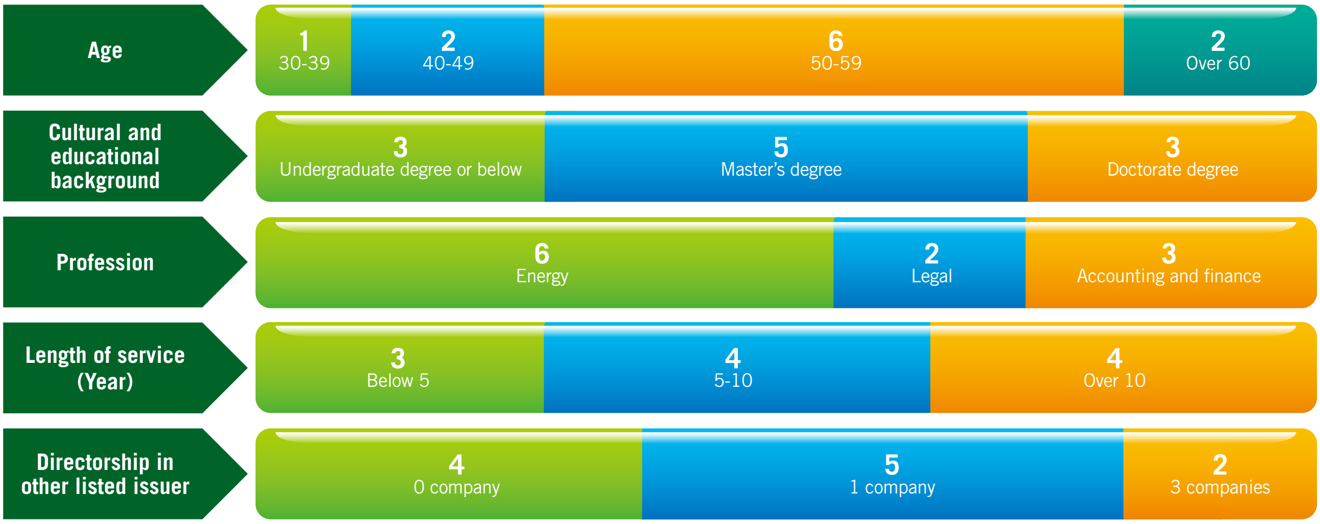
Two Nomination Committee meetings were held during the year (resolutions passed by way of written resolutions were not included). Attendance of the members is set out below:

Members	Attendance/number of meetings held	Number of meetings
Wang Yusuo (Chairman of the Nomination Committee)	2/2	
Jin Yongsheng	2/2	2
Ma Zhixiang	2/2	
Yuen Po Kwong	2/2	100% Attendance
Law Yee Kwan, Quinn	2/2	
Yien Yu Yu, Catherine	2/2	67% Independence

In addition to the meetings held by the Nomination Committee, resolutions were passed by way of written resolutions after all members received sufficient detailed information for consideration. The works of Nomination Committee during the year are as follows:

- reviewed the structure, size and composition (including the skills, knowledge and experience) of the Board, as well as diversity of Board members, and made recommendations on any proposed changes to the Board to complement the Company's corporate strategy;
- considered the candidates nominated by the member of the Board and made recommendations to the Board after evaluation;
- assessed the independence of independent non-executive directors; and
- made recommendation to the Board on retirement plan of the Directors in annual general meeting according to the requirements of the articles of associations of the Company.

Currently, the Board reflects various genders, cultural and educational backgrounds, and professional development. The directors' average years of service is 9, therefore they have deep knowledge of the Group. They have a broad range of individual attributes, interests and values, experiences and skills are balanced, therefore the Nomination Committee and the Board are of the view that the Board is diversified.



Risk Management Committee

The Risk Management Committee is responsible for assisting the Board to evaluate and determine the class and extent of the risks the Group is willing to take in achieving its strategic objectives, and to ensure the Group has established and maintained suitable and effective risk management and internal monitoring systems. Its written terms of reference explaining its role and the authority delegated to it by the Board is published on the websites of the Company and the Stock Exchange.

Further information relating to the key features and measures of risk management and internal monitoring systems is set out in the section headed "Risk Management and Internal Control". One Risk Management Committee meeting was held during the year. Attendance of the members is set out below:

Members	Attendance/number of meetings held	Number of meetings
Zheng Hongtao (Chairman of the Risk Management Committee)	1/1	
Wu Xiaojing (Note 1)	0/0	
Zhang Yuying (Note 1)	1/1	
Wang Dongzhi	1/1	
Ma Zhixiang	1/1	
Yuen Po Kwong	1/1	
Law Yee Kwan, Quinn	1/1	
Yien Yu Yu, Catherine	1/1	

1

100% Attendance

57% Independence

Note:

1. On 20 December 2021, Mr. Zhang Yuying was re-designated as non-executive director of the Company, and ceased to be a member of the Risk Management Committee at the same time. On the same day, Ms. Wu Xiaojing was appointed as a member of the Risk Management Committee.

The Risk Management Committee held meeting during the year to handle, among others, the followings:

- listened to the risk management work reports from the Management, considered the changes in the nature and extent of significant risks, and the Company's ability to respond to the changes in its business and the external environment;
- reviewed the Group's risk management procedure for identifying, assessing and managing the substantial risks; and
- made recommendations on the optimisation of the risk management and the internal monitoring systems to the Board.

Other Responsibility Committees

In order to make effective use of the Board's valuable time and resources, the Board has established other responsibility committees to handle insignificant and cumbersome Board matters, environmental, social and corporate governance report, share award scheme and discloseable connected transactions etc.. The responsibility committees may include non-director as members.

Management Committee

The Board has established the Management Committee (formerly known as "Executive Committee") on 21 March 2019 comprising all executive directors appointed by the Board from time to time. The Management Committee is responsible for the insignificant and cumbersome Board affairs which need approvals from the Board.

During the year, the Management Committee held 10 meetings which dealt with the opening of bank accounts, changes in authorised signers of the bank accounts and related matters, as well as approving the acceptance of facilities offered by certain banks and the provision of guarantee to wholly owned subsidiaries of the Company.

Environmental, Social and Corporate Governance Committee

The Board has established the ESG Committee on 21 March 2019 comprising four directors, namely Mr. Zheng Hongtao, Mr. Wang Dongzhi, Mr. Wang Zizheng and Mr. Ma Zhixiang which is responsible for formulating and reviewing the Company's environmental, social and corporate governance (the "ESG") policies and practices, setting the Company's ESG goals, updating major ESG issues and ESG risks regularly, reporting to the Board and making recommendations to the Board; reviewing and monitoring the training and continuous professional development in ESG by directors and the senior management of the Company; and reviewing and monitoring the Company's policies and practices in compliance with rules and regulations. A written term of reference explaining its role and the authority delegated to it by the Board is published on the website of the Company and the Stock Exchange.

During the year, the ESG Committee held two meetings to review the results of work relating to ESG in 2020 and formulate a work plan for 2021 to 2022. In addition, the Group explained and provided training to employees on the methane emission and control of city gas system, and the "Production Safety Law" coupled with the major safety incident, as well as incorporating the training attendance and examination as part of the criteria in employees' value assessment to cultivate and strengthen the awareness of sustainable development among employees. The Company is committed to improving the management of ESG, actively responding to the topics concerned by the capital market, and constantly integrating ESG culture and strategies into its daily operation. During the year, MSCI, a prestige ESG rating agency, upgraded the Company's ESG rating from BBB to A. For more information on our ESG development, please refer to the Company's 2021 Environmental, Social and Corporate Governance Report.

Share Award Committee

The Board has established the Share Award Committee on 30 November 2018, currently comprising four directors (namely Mr. Ma Zhixiang, Mr. Yuen Po Kwong, Mr. Law Yee Kwan, Quinn and Mr. Jin Yongsheng), Company Secretary and also the Chief Human Resource Officer, is responsible for the execution of the Board's instruction and the administration of the Share Award Scheme of the Company.

During the year, the Share Award Committee granted notional gain of a total of 866,600 Award Shares to certain outperformed employees (including directors) pursuant to the Share Award Scheme of the Company.

Independent Board Committee

The Board has established the Independent Board Committee on 23 October 2020, and Ms. Yien Yu Yu, Catherine currently is the chairman. The Committee comprises all independent non-executive directors of the Company as appointed by the Board from time to time, for the purpose of, among others, reviewing and recommending for the Board's approval of all discloseable connected transactions of the Company, and assessing the appropriateness of the continuing connected transactions of the Company, as well as the matters the Board deemed to be appropriate such as identification and judgement on potential competing business.

During the year, the Independent Board Committee held two meetings to review the Renewed Master Construction Services Agreement, the Master Equipment Purchasing and Modification Services Agreement and the Master Information Technology Services Agreement and enter into New Master Logistic Services Agreement, and discussed as to whether the Group should accept invitations about new projects issued by the Covenantor, and made recommendation to the Board. The independent financial adviser and the compliance advisor were engaged voluntarily by the Company to advise the Independent Board Committee/the Board on the abovementioned transactions/matters.

Accountability and Audit

Financial reporting

The directors are responsible for preparing financial statements for every financial year of the Company with the support of the accounting and finance team. The Board is collectively responsible for ensuring a balanced, clear and understandable assessment of the Group's annual and interim reports and other financial disclosures and reports under statutory requirements. In order to enable the Board to make an informed assessment of the financial and other information before its approval, the Board is provided with general financial information with explanation thereof (if appropriate) of the Group on a regular basis, as well as monthly report on operation, investment and financial performance to enable them to assess the Company's operational performance and financial position in a timely manner. Moreover, the management also regularly meets with the directors to present results and discuss any variance between the budget and the actual results. During the year, the Audit Committee discussed and assessed with the Management and external auditor the issues that may affect the going concern of the Group, such as the major issues that may have an impact on the financial performance of the Company, including gas safety management, debt and cash flow management, and asset impairment.

The accounting and finance department of the Company, headed by the Chief Financial Officer of the Company, is specifically responsible for the accounting and financial reporting functions of the Group and for coordinating and supervising the relevant departments of all the operating subsidiaries of the Company. A majority of the staff of such departments possess academic qualifications and extensive working experience in accounting and financial reporting. The Group also provides continuous training seminars, on-the-job training and offers allowance for external training programmes by professional bodies to motivate the staff to enhance and refresh their knowledge on an on-going basis. The dedicated staff responsible for preparing the annual and interim reports have professional knowledge on Hong Kong Financial Reporting Standards, the Listing Rules and Companies Ordinance to ensure the reports complied with relevant standards, rules and regulations. They are responsible for clearing audit matters for the annual and interim reports with the external auditor and then the Audit Committee. In addition, all new and amended accounting standards and requirements, as well as any changes in accounting policies adopted by the Group such as the adoption of hedge accounting, have been thoroughly discussed and approved by the Audit Committee before adoption by the Group.

The financial statements are prepared on a going concern basis, the Board is of the view that they give a true and fair view of the financial position, performance and cash flow of the Group for the year ended 31 December 2021, and the disclosure of other financial information and report therein complies with relevant legal requirements.

A statement of the reporting responsibility of the external auditor is set out in the Independent Auditor's Report on pages 69 to 71 of this Annual Report.

Risk Management and Internal controls

The Board is responsible for the Group's risk management and internal control systems, setting appropriate policies and strategies to review the effectiveness of the risk management and internal control systems. These strategies and policies are aimed at evaluating and determining the nature and extent of the risks that are compatible with the Group's strategic objectives and risk appetite, with main purpose for provision of reasonable assurance against material misstatement or loss rather than absolute elimination of the risk of failure to achieve business objectives.

The Risk Management Committee that set up by the Board is responsible for overseeing and reviewing the risk management and internal control systems of the Group, as well as monitoring the management's design, implementation and monitoring functions on the risk management and internal control systems. Through the reporting and recommendation given by the independent internal audit team, the Audit Committee is responsible for reviewing and commenting on the effectiveness of the risk management and internal control systems.

The processes used to identify, evaluate and manage significant risks by the Group are summarised as follows:

Risk Identification

- Identifies risks that may potentially affect the Group's business and operations, the nine category of risks include policy and price risk, compliance risk, operational risk, media risk, legal risk, health, safety and environmental risk, market risk, financial risk and climate changes; and
- Through the daily communication between the Management and the operational departments (covering the Group's market, engineering, procurement, operation and maintenance, etc.), from bottom to top, and paying attention to the development and change of international and domestic political and economic situation, identify other risks that may have a potential impact on the Group's business and operation.

Risk Assessment

- Assesses the risks identified by using the assessment criteria developed by the management; and
- Considers the impact on the business and the likelihood of risk occurrence.

Risk Response

- Prioritises the risks by comparing the results of the risk assessment;
- Determines the risk management strategies and internal control procedures to prevent, avoid or mitigate the risks;
- Strengthens the monitoring and warning function of the internal control and risk management systems continuously based on the result of risk assessment, including the use of digital applications to achieve dynamic early alert of business risks, providing business with risk control rules and standards, business based risk scenarios and coping strategies, customised solutions, and professional risk communication platform; and
- Provides different trainings according to the needs of different groups of people, including online safety certification training for all staff, anti fraud/anti-corruption training for key personnel, etc., promotion of compliance culture and enhance risk prevention awareness and risk alert capability of all staff.

Risk Monitoring and Reporting

- Establishes hierarchical supervisory responsibilities in the Group to ensure that risk monitoring is objective and effective;
- Performs ongoing and periodic monitoring of the risk and ensures that appropriate internal control procedures are in place;
- Revises the risk management strategies and internal control procedures in case of any significant change of situation; and
- Reports the results of risk monitoring to the management and the Board regularly.

After consolidation from the subsidiaries and a holistic review of the Group, the management of the Company submitted a written report on the effectiveness of the Group's risk management and internal control systems to the Audit Committee for review on a yearly basis.

The management has reported and confirmed to the Audit Committee and the Board that no significant control failings or weaknesses have been identified during the year, and the risk management and internal control systems (including financial, operational and compliance controls) have been effective and adequate for the year ended 31 December 2021 and the Board has considered the results of the review of the Audit Committee and confirmed that the Group's risk management and internal control systems are effective.

Internal Audit Team

The Group has established an internal audit team, which assesses the adequacy and effectiveness of the risk management and internal control systems of the Group regularly, and reports to the Audit Committee and the Board on the audit results semi-annually and makes recommendations to the management and the Board to address the significant deficiencies of the system or problems that are identified during the monitoring process. The internal audit team has the right of access to all information of the Company to perform its duties.

Whistleblowing Policy

The Company is committed to achieving and maintaining the highest corporate cultures of openness, probity and accountability. Apart from setting up strict "ENN Compliance Code" and "Policy on Anti-Fraud, Corruption and Bribery", a whistleblowing policy is also in place to create a system for the employees and business partners to raise concerns to the Audit Committee and the Board about possible improprieties relating to the Group. The identity of the whistleblower will be treated with the strictest confidence.

Inside Information

Regarding the disclosure of inside information, the Company has a mechanism in place for monitoring its business development so that potential inside information can be promptly identified and escalated up. In determining whether certain information constitutes inside information, the Company adopts a bottom-up approach to escalate information about business developments of the organisation. The final decision on the outcome of inside information assessment shall rest with the Board. The Board will ensure the Company following the requirements to disclose inside information in accordance with the SFO and the Listing Rules and conducts its affairs with close regard to the "Guidelines on Disclosure of Inside Information" issued by the Securities and Futures Commission to promote consistent disclosure practices. The Company designates the directors of the Company, the Chief Financial Officer/Financial Controller, the Company Secretary and staff responsible for investor relations who is properly delegated to speak on behalf of the Company when communicating with external parties such as investors, analysts or media. Other internal control measure such as limiting the number of employees on a need-to-know basis and management preview, designation of project codes and assignment of project coordinators to monitor the maintenance of confidentiality for the projects, etc., are instituted in the reporting procedures. The Company has also included in its Code of Conduct a strict prohibition on the unauthorised use of confidential or inside information. The Company's Information Disclosure Policy is available on the Company's website.

During the reporting period, the Company sought for advice from the compliance advisor in accordance with the requirements of information disclosure under the SFO and the Listing Rules from time to time. The Board is of the view that the Company's procedures on and internal control of handling and disseminating inside information are effective.

Company Secretary

Ms. Leung Mui Yin ("Ms. Leung") was appointed as the Company Secretary of the Company on 11 June 2021, and Ms. Liang Hongyu ceased to be the Company Secretary on the same day, the details of which are set out in the announcement of the Company dated 11 June 2021. During the year, the Company Secretary reported to the Chairman of the Board on corporate governance issues and was responsible to provide assistance to the Chairman, the Board and Board committees, and ensure good information flow within the Board and the policy and procedures of the Board are followed.

During the year, Ms. Leung undertook over 15 hours of professional training to update her skills and knowledge in accordance with the requirement under Rule 3.29 of the Listing Rules. She is a full-time employee of the Company, her biography is set out on page 31 of this Annual Report under the section headed "Directors and Senior Management" and on the Company's website.

Non-compete Undertakings

In order to protect the best interests of the Group and uphold the integrity of independence from its controlling shareholder, the Company entered into the Deed of Non-compete Undertakings with its controlling shareholder on 18 April 2002, which was amended by entering the Supplemental Deed of Non-competition on 21 November 2013 to specify the restricted scopes of business. Such amendment was approved by an extraordinary general meeting held on 30 December 2013. Details of the amended Deed of Non-compete Undertakings are set out in the circular of the Company dated 9 December 2013.

Communication with Shareholders

Effective communication

The Board believes that effective communication of full and clear information of the Company is the key to enhance corporate governance standards and shareholders' confidence. The Company has adopted its "Shareholders Communication Policy" with an aim to ensure our shareholders are provided with ready, equal and timely access to balanced and understandable information about the Company (including the Group's financial performance, strategic goals and plans, material developments, governance and risk profile), in order to enable our shareholders to exercise their rights in an informed manner, and to allow our shareholders to engage actively with the Company.

The Group uses several formal channels to ensure fair disclosure and comprehensive and transparent reporting of its performance and activities, including issue/publication of, among others, annual report and interim report, announcement, circular and press release both in English and Chinese, in order to provide our shareholders and the capital market with the Company's latest development, these information are posted and made available for downloading at the Company' s website. Constantly being updated in a timely manner, the website contains a wide range of additional information on the Group's business activities.

As a part of the day-to-day investor relations programme, the senior management holds regular briefings with institutional investors and financial analysts as well as media, and announces our annual and interim results. To facilitate communications with our shareholders and the capital market, Directors and designated staff members maintain dialogue with investors and analysts through face-to-face interaction, road show and investors relations promotion activities.

Annual general meeting ("AGM") provides a constructive forum to maintain communication with shareholders, and shareholders are encouraged to attend AGM to ensure a high level of accountability and allow our shareholders to understand the strategy and development of the Group. The Company will arrange the Chairman of the Board and the respective chairman of each of the Board Committees, or if failing so due to unexpected and/or uncontrollable reasons, his/their duly appointed delegate(s), to attend the general meetings to exchange views with shareholders and answer their questions. All Directors are encouraged to attend general meetings and develop a balanced understanding of the view of shareholders.

The external auditor will also be invited to attend the AGM of the Company to answer questions about the conduct of the audit, the preparation and content of the auditors' report, the accounting policies and auditor's independence.

The notice of the AGM is distributed to all shareholders at least 21 clear business days prior to such AGM and the accompanying circular also sets out details of each proposed resolution and other relevant information as required under the Listing Rules. Separate resolutions are proposed on each substantially separate issue, including the election or re-election of each Director nominated.

To ensure the votes cast are properly counted and recorded, it is the practice of the Company to appoint representatives of its branch share registrar as scrutineer of the voting procedures in general meetings.

Therefore, the Board considers that the Company's shareholder communication policy is still valid.

Shareholders' rights

Shareholders' enquiries

Shareholders should direct their questions about their shareholdings to the Company's Hong Kong Branch Share Registrar and Transfer Office.

Shareholders may make enquiries with the Board at the general meetings. Alternatively, shareholders may send written enquiries together with their contact details (such as postal address or email address) to the principal place of business of the Company in Hong Kong at Rooms 3101–04, 31st Floor, Tower 1, Lippo Centre, No. 89 Queensway, Hong Kong or to send e-mail to the Company (email address: enn@enn.cn).

Procedures to convene extraordinary general meetings and putting forward proposals at general meetings

Pursuant to article 72 of the articles of association of the Company, any two or more members of the Company or any one member of the Company which is a recognised clearing house (or its nominee(s)) may convene a general meeting by depositing at the principal office of the Company in Hong Kong the written requisition specifying the proposed agenda and signed by the requisitionist(s), provided that such requisitionist(s) hold(s) as at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company which carries the right of voting at general meetings of the Company.

If the Board does not within 21 days from the date of deposit of the requisition convene the meeting in accordance with the established procedures, the requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may convene the general meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board provided that any meeting so convened shall not be held after the expiration of three months from the date of deposit of the requisition, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

Subject to the articles of association of the Company and the law of Cayman Islands, the Company may by ordinary resolution at a general meeting elect any person to be a director either to fill a casual vacancy on the Board, or as an addition to the existing Board. Shareholders may nominate any person other than the directors of the Company to be a candidate for director at a general meeting, shareholders may refer to "Procedures for Putting Forward Proposals at General Meetings" under "Shareholders' rights" on the Company website for details.

General meetings held during the Year

Affected by the Covid-19 pandemics, the Company held the shareholders' meeting successively in the form of "network + site" during the year. The AGM was held on 10 May 2021 at Salon 1, JW Marriott Ballroom (Level 3), JW Marriott Hotel Hong Kong, Pacific Place, 88 Queensway, Hong Kong. In addition to the proposed resolutions, the Management also delivered an update to the shareholders about the latest development of the Group. All ordinary resolutions proposed at the AGM were passed as more than half of the votes were cast in favour of these resolutions, with voting percentage exceeding 88%. The Chairman of the Board and the chairmen of the Board committees attended the AGM, details of their attendance record are set out in the section headed "Directors' attendance". The resolutions considered and approved mainly include:

- To receive and consider the audited consolidated financial statements for the year ended 31 December 2020 together with the directors' and independent auditor's reports;
- To declare a final dividend of HK$2.10 per share and a special dividend of HK$0.32 per share for the year ended 31 December 2020;
- To re-elect retiring Directors and to authorise the Board to fix its Directors' remuneration;
- To re-appoint external auditor and to authorise the Board to fix their remuneration; and
- To grant a general mandate to the Directors to issue new shares of the Company and repurchase shares of the Company.

The full text of the above resolutions was set out in the Notice of the AGM of the Company dated 7 April 2021. The poll result of the AGM was published on the websites of the Stock Exchange and the Company.

Investor Relations

The Company values the opinion from shareholders, investors and the public, therefore the Company established an investor relations department, which is responsible for communicating with institutional and other investors regularly, so as to enhance the transparency of the Group and collect opinions from the market.

Regular investor relations activities are conducted to facilitate the communications, including projects visits, non-deal roadshows, investor conferences, etc.

Shareholders, investors and the media can make enquiries to the Company through the following means:

Hotline telephone number:	(852) 2528 5666/(86) 316 2599928
By fax:	(852) 2865 7204
By post:	Rooms 3101–04, 31st Floor, Tower 1, Lippo Centre, No. 89 Queensway, Hong Kong
Attention:	Ms. Shirley Kwok/Ms. Grace Wei
By email:	ir@enn.cn

The latest information on investor relations is uploaded on the link http://ir.ennenergy.com.

Amendments to the Memorandum and Articles of Association

During the year, the memorandum and articles of association were not amended by the Company. The latest consolidated version of the Company's memorandum and articles of association has been published on the websites of the Company and the Stock Exchange.

By order of the Board
WANG YUSUO
Chairman

18 March 2022

DIRECTORS' REPORT

The Directors are pleased to present this Annual Report together with the Group's audited Consolidated Financial Statements (the "Consolidated Financial Statements") for the year ended 31 December 2021.

Principal Activities

The Company is an investment holding company. The Group is principally engaged in investment and construction, as well as operation and management of gas pipeline infrastructures, integrated energy stations and vehicle and ship refuelling stations, the sales and distribution of piped gas, liquefied natural gas and other multi-energy products, and energy trading business and provision of other services in relation to energy supply in the PRC.

A list of principal subsidiaries as of 31 December 2021 and their particulars are set out in Note 56 to the Consolidated Financial Statements.

Business Review

The Group's revenue is driven primarily from business activities conducted in China, an analysis of the Group's performance for the year by operating segment is set out in Note 7 to the Consolidated Financial Statements. The Company is committed to providing a more detailed and comprehensive review in different sections of this Annual Report about the Group's business in 2021, the relevant disclosures are set out below:

Disclosures		Relevant sections
(1)	Fair review of the Group's business for the year ended 31 December 2021 (including an analysis using financial key performance indicators)	• Chairman's Statement (pages 16 to 18) • Management Discussion and Analysis (pages 19 to 24)
(2)	Description of the principal risks and uncertainties facing by the Group	• Management Discussion and Analysis (pages 19 to 24) • Notes 5 and 53 to the Consolidated Financial Statements
(3)	Particulars of important events affecting the Group that have occurred since the end of the financial year 2021	• There were no important events after the reporting period
(4)	Future development in the Group's business	• Chairman's Statement (pages 16 to 18) • Management Discussion and Analysis (pages 19 to 24)
(5)	Compliance with the relevant laws and regulations that have a significant impact on the Company	• Section in this report • Corporate Governance Report (pages 32 to 52) • 2021 Environmental, Social and Governance Report
(6)	The Group's environmental policies and performance	• Section in this report • Chairman's Statement (pages 16 to 18) • 2021 Environmental, Social and Governance Report
(7)	The Group's relationship with key stakeholders	• Section in this report • 2021 Environmental, Social and Governance Report

Business Review *(continued)*

Environmental Policies and Performance

The Group's mission is "Building a Modern Energy System, Co-building a Better Ecology". With an aim to meet customers' needs, the Group leverages its clean energy reserve and transportation resources accumulated for a long time and develops the most efficient tailor-made energy solutions for clients through its system efficiency technology platforms. The Group reduced the harm to the environment caused by economic development by promoting clean energy and conducting energy saving and emission reduction projects. In 2021, the Group recorded a volume of 33.097 billion cubic meters of natural gas sales for city-gas and energy trading business, equivalent to reducing 42.40 million tons of standard coal and reducing 43.13 million tons of carbon dioxide. A total of 150 integrated energy projects had been put into operation during the year, the Group recorded 19.07 billion Kwh of energy sales for cooling, heat, electricity and steam etc., equivalent to reducing 2.12 million tons of standard coal for customers' energy consumption, and reducing 6,666,714 tons of carbon dioxide emission.

Compliance with Laws and Regulations

The Group understands the importance of complying regulatory requirements. The existing compliance procedures of the Group are in place to ensure adherence to applicable laws, rules and regulations, in particular those which have significant impact on the Group. The Board reviews and monitors the Group's policies and practices on compliance with relevant legal and regulatory requirements in a regular basis. Any changes in the applicable laws, rules and regulations are brought to the attention of relevant employees and relevant operation units from time to time.

During the year under review, to the best of our knowledge, the Group has complied with the Companies Laws of the Cayman Islands, Cap. 622 of the Hong Kong Companies Ordinance, the Listing Rules, the Securities and Futures Ordinances, and other relevant rules and regulations. In addition, the subsidiaries of the Group continue to comply with applicable local laws and relevant laws and regulations that have a significant impact on their business and operations. During the year, the Company was not aware of any special laws and regulations that have a significant impact on the business and operation of the Group.

Relationships with Key Stakeholders

The Group's success depends on the support from key stakeholders which comprise shareholders, customers, suppliers and employees, etc.. Therefore, the Group attaches great importance to the valuable opinions from the stakeholders, and actively understands their demands and expectations of the Group through two-way communication via different channels and platforms, and these provide a strong basis for the formulation or adjustment to the Group's sustainable development strategies.

Shareholders

The Group targets to foster business development for achieving sustainable earnings growth and rewarding shareholders by stable dividend payouts, taking into account capital adequacy levels, liquidity positions and business expansion needs of the Group.

Customers

Providing stable energy supply and quality services to customers are the foundation for sustainable development of the Company. The Group continues to promote the improvement of service quality, creates diversified services and communication channels, and is committed to providing customers with high quality services and safe energy and value added products. During the year, the percentage of the revenue attributable from the Group's five largest customers was approximately 5%, while the largest customer was approximately 1.4%. None of the Directors, their associates or any shareholder (which to the knowledge of the Directors own more than 5% of the Company's share capital) had an interest in the major customers' noted above.

Suppliers

Suppliers are important partners for the sustainable development of the Company. The Group continues to optimise the supply chain management system, drives partners to grow together. During the year, the percentage of the purchases attributable from the Group's five largest suppliers was approximately 15%, while the largest supplier was approximately 3.8%. None of the Directors, their associates or any shareholder (which to the knowledge of the Directors own more than 5% of the Company's share capital) had an interest in the major suppliers noted above.

Business Review *(continued)*

Employees

We know the success of our Company depends on the contributions of our employees, so we regard our employees as valuable assets of the Group. The Group has different talent training programs for employees to participate in to ensure that employees continue to add value and make the greatest contribution to the Group. The Group also has a system to encourage employees to mobilise internally between different departments, strengthen collaboration, cultivate more "all-rounded" talents who have deepened understanding about the Group's business, and provide special training to potential management trainees for succession planning of the Group.

More than 99% of the Group's employees work in China. The Group determines remuneration based on individual performance, job nature and responsibilities involved. The Group provides on-the-job training as well as optimal benefits packages for employees, including medical welfare, retirement plans, year-end bonuses and other incentives. The Group also encourages employees to work and rest in an orderly manner, and adopt a work-life balance.

The remuneration of directors and senior management are recommended by the remuneration committee of the Company for the Board's approval, having regard to comparable companies' paid remuneration, working hours, responsibilities assumed, and employment conditions for other positions of the Group. No Directors or executives, nor any of his/her associates, is involved in deciding his/her own remuneration. Details are set out in Note 12 to the Consolidated Financial Statements and the Corporate Governance Report on pages 32 to 52 of this Annual Report.

Results and Appropriation

The results of the Group for the year ended 31 December 2021 are set out in the consolidated statement of profit or loss and other comprehensive income on page 72 in this Annual Report.

The Company's dividend policy allows shareholders to share the Company's profits while reserving sufficient reserves for the Group's future development. Provided the Group is profitable and without affecting the normal operation of the Group, the Company intends to share its profit with shareholders in the form of annual dividend in an amount of no less than 15% of the Group's annual consolidated profit attributable to the owners of the Company. Proposed dividends, if any, will be declared at the discretion of the Board and will depend upon, among others things, the Group's general financial conditions and strategies, expected operating cash flows and capital expenditure needed for future expansion, surplus, contractual restrictions, actual and expected government financial conditions, macroeconomics and such other factors as the Board may deem relevant. Beginning in fiscal year 2021, the Company distributes its full-year dividends by two tranches.

The Directors recommend the payment of a final dividend of HK$2.11 (equivalent to approximately RMB1.72) per ordinary share to the shareholders on the register of members on Thursday, 26 May 2022. The distributions to shareholders are subject to the approval by shareholders at the 2022 annual general meeting to be held on Wednesday, 18 May 2022. For the purpose of ascertaining shareholders who are entitled to the final dividend, the register of members of the Company will be closed from Wednesday, 25 May 2022 to Thursday, 26 May 2022, both days inclusive, during which period no transfer of shares of the Company will be effected. Together with the interim dividend paid, the total dividend amount for the year is approximately RMB2,498 million, and remaining profit for the year of approximately RMB5,407 million is retained.

Financial Summary

Details of the summary of the published financial information of the Group for the past ten financial years are set out on pages 14 to 15 of this Annual Report.

Property, Plant and Equipment

Details of the movements during the year in property, plant and equipment of the Group are set out in Note 16 to the Consolidated Financial Statements.

Share Capital

Details of movements during the year in the share capital of the Company are set out in Note 39 to the Consolidated Financial Statements.

Equity-Linked Agreements

Save for Share Option Schemes and Share Award Scheme as disclosed in this Annual Report, no equity-linked agreements were entered into during the year or subsisted at the end of the year.

Pre-emptive Rights

There are no provisions for pre-emptive rights under the Company's articles of association, or the laws of the Cayman Islands, which would oblige the Company to offer new shares on a pro-rata basis to existing shareholders.

Purchase, Sale or Redemption of Listed Securities

During the year, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities.

Reserves

According to the applicable laws of the Cayman Islands, the Company's reserve available for distribution as at 31 December 2021 amounted to RMB2,198 million.

Details of movements during the year in the reserves of the Group and the Company are set out in the consolidated statement of changes in equity on page 75 of this Annual Report and Note 57 to the Consolidated Financial Statements.

Bank and Other Loans

Details of bank and other loans of the Group are set out in Note 40 to the Consolidated Financial Statements.

Directors

The list of Directors of the Company during the year and up to the date of this report is set out below:

Executive Directors:

Mr. Wang Yusuo
Mr. Zheng Hongtao
Ms. Wu Xiaojing (appointed on 20 December 2021)
Mr. Wang Dongzhi

Non-executive Directors:

Mr. Wang Zizheng
Mr. Jin Yongsheng
Mr. Zhang Yuying (re-designated from executive director to non-executive director on 20 December 2021)

Independent Non-executive Directors:

Mr. Ma Zhixiang
Mr. Yuen Po Kwong
Mr. Law Yee Kwan, Quinn
Ms. Yien Yu Yu, Catherine

In accordance with article 99 of the Company's Article of Association, Ms. Wu Xiaojing shall retire at the forthcoming annual general meeting ("AGM") of the Company, while in accordance with article 116 of the Company's Article of Association, Mr. Wang Dongzhi, Mr. Zhang Yuying, Mr. Law Yee Kwan, Quinn and Ms. Yien Yu Yu, Catherine, shall retire by rotation at the forthcoming AGM of the Company. All the above retiring Directors are eligible and offer themselves for re-election. Details of these Directors proposed for re-election are set out in the circular sent together with this Annual Report.

Ms. Wu Xiaojing had been appointed as executive director of the Company on 20 December 2021. Mr. Zhang Yuying had been re-designated from executive director to non-executive director of the Company due to job reallocation on the same date. He has confirmed that he has no disagreement with the Board and there is no matters in relation to his re-designation that needs to be brought to the attention of the shareholders of the Company or The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

As of 31 December 2021, none of the Directors had entered, or proposed to enter, into any service contract with any members of the Group which does not expire or is not determinable by the Group within one year without compensation (other than statutory compensation).

The Company has received an annual confirmation from each Independent Non-executive Director with each confirming his/her independence pursuant to rule 3.13 of the Listing Rules, and the Company still considers such Directors as independent of the Company.

The biographical details of the Directors of the Company are set out on pages 28 to 31 of this Annual Report.

Permitted Indemnity Provision

The articles of association of the Company provides that every director shall be indemnified out of the assets of the Company against all loss or liability incurred or sustained by him as such director in defending any proceedings, whether civil or criminal, in which judgment is given in his favour, or in which he is acquitted.

The Company has taken out insurance against the liabilities and costs associated with defending any proceedings which may be brought against the Directors of the Company.

Disclosure of Interests

Directors' interests or short positions in shares, underlying shares and debentures

As at 31 December 2021, the interests and short positions of each Director and chief executive of the Company in the shares, underlying shares and debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance ("SFO")) as recorded in the register required to be kept under section 352 of Part XV of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers ("Model Code"), Appendix 10 to the Rules Governing the Listing of Securities ("Listing Rules") on the Stock Exchange, were as follows:

(a) The Company

Name of Director	Capacity	Personal interests	Corporate interests	Interests in shares pursuant to share options	Interest in Awarded shares	Total aggregate interests	Approximate percentage of the Company's total issued share capital
Wang Yusuo ("Mr. Wang")	Beneficial owner and interest of controlled corporation	–	369,175,534 (Note)	320,000	–	369,495,534	32.69%
Zheng Hongtao	Beneficial owner	1,000	–	–	330,000	331,000	0.03%
Wu Xiaojing	Beneficial owner	–	–	262,500	–	262,500	0.02%
Wang Dongzhi	Beneficial owner	–	–	270,000	–	270,000	0.02%
Wang Zizheng	Beneficial owner	–	–	320,000	–	320,000	0.03%
Zhang Yuying	Beneficial owner	–	–	133,925	80,000	213,925	0.02%
Ma Zhixiang	Beneficial owner	–	–	60,000	–	60,000	0.01%
Yuen Po Kwong	Beneficial owner	–	–	60,000	–	60,000	0.01%
Law Yee Kwan, Quinn	Beneficial owner	–	–	44,000	–	44,000	0.00%
Yien Yu Yu, Catherine	Beneficial owner	66,000	–	60,000	–	126,000	0.01%

Note:

Such shares are beneficially owned by Mr. Wang and Ms. Zhao Baoju ("Ms. Zhao"), the spouse of Mr. Wang through their controlled corporations, including ENN Yingchuang Technology Co., Ltd. ("EYCT"), Langfang City Natural Gas Company Limited ("LCNG"), ENN Investment Holdings Company Limited ("EIH"), ENN Group International Investment Limited ("EGII"), ENN Natural Gas Co., Ltd. ("ENN-NG") and Xinneng (Hong Kong) Energy Investment Limited ("Xinneng HK").

Details of the Directors' interests in share options and award shares granted by the Company are set out under the heading "Share-based Compensation Scheme" in this report.

Disclosure of Interests *(continued)*

Directors' interests or short positions in shares, underlying shares and debentures *(continued)*

(b) Associated corporation

Company Name	Name of Director	Capacity	Number of shares	Subscribed share capital RMB	Percentage of share capital
EYCT*	Mr. Wang	Beneficial owner (Note 1)	–	58.60 million	100%
LCNG*	Mr. Wang	Beneficial owner and interest of controlled corporation (Note 1)	–	123 million	100%
EIH*	Mr. Wang	Interest of controlled corporation	8,000,000,000	–	100%
EGII	Mr. Wang	Interest of controlled corporation	1,000	–	100%
ENN-NG	Mr. Wang	Beneficial owner and interest of controlled corporation	1,966,053,704	–	75.62%
Xinneng HK	Mr. Wang	Interest of controlled corporation	2,132,377,984	–	75.62%
Beijing Xinyi Aite Art Development Company Limited*	Mr. Wang	Beneficial owner and interest of controlled corporation	–	10 million	100%
Xinyi Theater (Langfang) Culture Development Company Limited*	Mr. Wang	Beneficial owner and interest of controlled corporation	–	10 million	100%
ENN Group Co., Ltd.*	Mr. Wang	Beneficial owner and interest of controlled corporation	4,987,777,000	–	99.76%
Yicheng Yijia Internet Technology Company Limited*	Wang Zizheng	Beneficial owner	–	80 million	20%
Xi'an Data IT Company Limited*	Wang Zizheng	Beneficial owner	–	40 million	20%
ENN-NG	Zheng Hongtao	Beneficial owner (Note 2)	1,000,000	–	0.04%
ENN-NG	Zhang Yuying	Beneficial owner (Note 2)	500,000	–	0.02%
ENN-NG	Wang Dongzhi	Beneficial owner (Note 2)	800,000	–	0.03%
ENN-NG	Wu Xiaojing	Beneficial owner (Note 2)	400,000	–	0.01%

* For identification purpose only

Notes:

1. Such shares are beneficially owned by Mr. Wang and Ms. Zhao.
2. Such interests refer to the restricted ordinary shares of ENN-NG granted and to be issued to them pursuant to the restricted share award scheme adopted by the company on 26 March 2021. These restricted ordinary shares are subject to the restrictions on sale of the scheme and shall be lifted in batches according to the relevant terms after meeting the conditions for lifting the restrictions. Details of the scheme are set out in the announcements of ENN-NG (stock code: 600803.SH) published on the Shanghai Stock Exchange on 21 January 2021, 9 February 2021 and 27 March 2021 respectively.

Save as disclosed above, as at 31 December 2021, there were no other interests or short positions of the Directors and chief executives in any shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) in the register maintained by the Company pursuant to section 352 of Part XV of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

Share-based Compensation Scheme

The Company operates share option schemes ("Share Option Scheme") and share award scheme ("Share Award Scheme") for the purpose of attracting, retaining and incentivising major employees. The eligible persons for the schemes are employees (including directors) and business consultants who contributed to the success of the Group. The company has also formulated Shares and Options Management Regulations as the Company's management guidelines for granting share options and Award Shares. The purpose of this management regulations refers to the implementation of the Company's concept of value sharing, co-creation and sharing, aligning the interests of selected persons and shareholders, focusing on the Company's medium and long-term business, and promoting the long-term sustainable development of the group.

The number of share options granted to employees (including directors) and business consultants under the Share Option Schemes depends on their roles. Three to four years as a cycle, and the granted share options would be vested equally in three or four years. If the roles of the employees (including directors) and business consultants granted during the cycle are adjusted or their evaluation results exceed expectations or there are newly selected participants, the Company may grant them Award Shares as a supplement, the vesting conditions and mechanisms will be consistent with the Share Option Scheme. The chairman of the Board and non-executive directors of the Company do not have performance targets, but they must be remained employed by the company by the time of vesting. Moreover, other directors and employees are subject to performance targets. The performance targets cover both financial indicators and non-financial indicators, among them, financial indicators mainly include sales revenue, net profit, and per capita profit, while non-financial indicators include sales volume, capacity building, industrial coordination, risk management and control. Those performance targets are formulated and allocated based on the Group's long-term development goals, annual guidance and prioritised works. The performance target is set at the beginning of each year and strictly appraised at the beginning of the following year. In case of failure to meet the performance targets, unless in the discretion of the Board, the share options would be lapsed.

The Company's Shares and Options Management Regulations has a return/withdrawal mechanism. The regulations state that if the grantee makes mistakes, errors, omissions, breaks rules or commits frauds during the performance of his duties, depending to the extent of loss brought to the Company and the seriousness, to decide whether to take action to return/withdraw current year's or unvested share options and/or Awarded Shares. In addition, the share options and/or Awarded Shares may be lapsed for other reasons such as resignation, dismissal and job re-designation.

Share Option Schemes

The Company has adopted the "2012 Scheme" of the share option schemes pursuant to an ordinary resolution passed at an annual general meeting of the Company held on 26 June 2012. Pursuant to the 2012 Scheme, the Company granted 12,000,000 share options ("2012 Scheme – Batch 1") and 12,328,000 share options ("2012 Scheme – Batch 2") on 9 December 2015 and 28 March 2019 respectively to employees (including directors) and business consultants who contributed to the success of the Group.

The following table discloses details of the Company's share options held by the employees (including directors) and business consultants, and movements in such holdings under the 2012 Scheme during the year:

Grantee	Date of grant	Exercise period (Note 1)	Exercise price (HK$)	Number of shares subject to outstanding options as at 1 January 2021	Exercised during the year (Note 3)	Lapsed during the year	Reclassified during the year	Number of shares subject to outstanding options as at 31 December 2021 (Note 2)
2012 Scheme – Batch 1								
Directors	09.12.2015	01.04.2017–08.12.2025	40.34	160,000	(145,000)	–	–	15,000
	09.12.2015	01.04.2018–08.12.2025	40.34	160,000	(145,000)	–	–	15,000
	09.12.2015	01.04.2019–08.12.2025	40.34	160,000	(145,000)	–	–	15,000
	09.12.2015	01.04.2020–08.12.2025	40.34	160,525	(145,000)	–	42,500	58,025
Employees	09.12.2015	01.04.2017–08.12.2025	40.34	131,100	(19,000)	(15,600)	–	96,500
	09.12.2015	01.04.2018–08.12.2025	40.34	151,924	(22,500)	(50)	–	129,374
	09.12.2015	01.04.2019–08.12.2025	40.34	230,550	(55,750)	–	–	174,800
	09.12.2015	01.04.2020–08.12.2025	40.34	441,911	(75,950)	(12,125)	(42,500)	311,336
Sub-total				1,596,010	(753,200)	(27,775)	–	815,035

Share-based Compensation Scheme *(continued)*

Share Option Schemes *(continued)*

Grantee	Date of grant	Exercise period (Note 1)	Exercise price (HK$)	Number of shares subject to outstanding options as at 1 January 2021	Exercised during the year (Note 3)	Lapsed during the year	Reclassified during the year	Number of shares subject to outstanding options as at 31 December 2021 (Note 2)
2012 Scheme – Batch 2								
Directors	28.3.2019	01.04.2020–27.03.2029	76.36	15,000	–	–	–	15,000
	28.3.2019	01.04.2021–27.03.2029	76.36	528,200	(292,600)	(100,000)	73,400	209,000
	28.3.2019	01.04.2022–27.03.2029	76.36	528,400	–	–	73,300	601,700
	28.3.2019	01.04.2023–27.03.2029	76.36	528,400	–	–	73,300	601,700
Employees	28.3.2019	01.04.2020–27.03.2029	76.36	449,600	(177,425)	(77,925)	–	194,250
	28.3.2019	01.04.2021–27.03.2029	76.36	2,748,400	(528,942)	(796,533)	(73,400)	1,349,525
	28.3.2019	01.04.2022–27.03.2029	76.36	2,749,900	–	(242,792)	(73,300)	2,433,808
	28.3.2019	01.04.2023–27.03.2029	76.36	2,749,900	–	(242,792)	(73,300)	2,433,808
Business	28.3.2019	01.04.2020–27.03.2029	76.36	91,500	(18,500)	–	–	73,000
Consultants	28.3.2019	01.04.2021–27.03.2029	76.36	178,500	–	(13,500)	–	165,000
	28.3.2019	01.04.2022–27.03.2029	76.36	178,500	–	–	–	178,500
	28.3.2019	01.04.2023–27.03.2029	76.36	178,500	–	–	–	178,500
Sub-total				10,924,800	(1,017,467)	(1,473,542)	–	8,433,791
Total				12,520,810	(1,770,667)	(1,501,317)	–	9,248,826

Notes:

1. The vesting period of the share options is from the date of the grant until the commencement of the exercise period.
2. A total number of 9,240,526 shares, representing 0.82% of the issued share capital of the Company as at the date of this report are available for issue under the 2012 Scheme. The vesting of certain part of the 9,240,526 share options is subject to the fulfilment of performance target.
3. The weighted average closing price of the Company's shares immediately before the dates on which the share options were exercised is approximately HK$141.88.
4. The maximum entitlement of each eligible participant under the 2012 Scheme should not exceed 1% of the shares in issue in any 12-month period, and the share options granted to substantial shareholders or independent non-executive directors in any year should not exceed 0.1% of the shares in issue and with a value in excess of HK$5,000,000. Any grant exceeding the maximum entitlement of each participant must be separately approved by shareholders of the Company in a general meeting with such participant and his/her associates abstaining from voting.
5. A share option may be accepted by a participant within 28 days from the date of the offer and HK$1.00 is payable by the participant to the Company on acceptance of the offer.

Details of the share options are set out in Note 45 to the Consolidated Financial Statements.

Share-based Compensation Scheme *(continued)*

Directors' right to acquire shares

Pursuant to the Company's Share Option Schemes, the Company has granted options to subscribe for the Company's ordinary shares in favour of certain Directors, the details of which are as follows:

Name of Director	Date of grant	Exercise period (Note 1)	Exercise price (HK$)	Number of shares subject to outstanding options as at 1 January 2021	Exercised during the year (Note 2)	Lapsed during the year (Note 2)	Reclassified during the year (Note 2)	Number of shares subject to outstanding options as at 31 December 2021
Wang Yusuo	09.12.2015	01.04.2017–08.12.2025	40.34	145,000	(145,000)	–	–	–
	09.12.2015	01.04.2018–08.12.2025	40.34	145,000	(145,000)	–	–	–
	09.12.2015	01.04.2019–08.12.2025	40.34	145,000	(145,000)	–	–	–
	09.12.2015	01.04.2020–08.12.2025	40.34	145,000	(145,000)	–	–	–
	28.03.2019	01.04.2021–27.03.2029	76.36	160,000	(160,000)	–	–	–
	28.03.2019	01.04.2022–27.03.2029	76.36	160,000	–	–	–	160,000
	28.03.2019	01.04.2023–27.03.2029	76.36	160,000	–	–	–	160,000
Wu Xiaojing (Notes 3,4)	09.12.2015	01.04.2020–08.12.2025	40.34	–	–	–	42,500	42,500
	28.03.2019	01.04.2021–27.03.2029	76.36	–	–	–	73,400	73,400
	28.03.2019	01.04.2022–27.03.2029	76.36	–	–	–	73,300	73,300
	28.03.2019	01.04.2023–27.03.2029	76.36	–	–	–	73,300	73,300
Wang Dongzhi (Note 3)	28.03.2019	01.04.2021–27.03.2029	76.36	106,600	(50,000)	–	–	56,600
	28.03.2019	01.04.2022–27.03.2029	76.36	106,700	–	–	–	106,700
	28.03.2019	01.04.2023–27.03.2029	76.36	106,700	–	–	–	106,700
Wang Zizheng (Note 3)	09.12.2015	01.04.2017–08.12.2025	40.34	15,000	–	–	–	15,000
	09.12.2015	01.04.2018–08.12.2025	40.34	15,000	–	–	–	15,000
	09.12.2015	01.04.2019–08.12.2025	40.34	15,000	–	–	–	15,000
	09.12.2015	01.04.2020–08.12.2025	40.34	15,000	–	–	–	15,000
	28.03.2019	01.04.2021–27.03.2029	76.36	120,000	–	(100,000)	–	20,000
	28.03.2019	01.04.2022–27.03.2029	76.36	120,000	–	–	–	120,000
	28.03.2019	01.04.2023–27.03.2029	76.36	120,000	–	–	–	120,000
Zhang Yuying (Note 3)	09.12.2015	01.04.2020–08.12.2025	40.34	525	–	–	–	525
	28.03.2019	01.04.2021–27.03.2029	76.36	66,600	(66,600)	–	–	–
	28.03.2019	01.04.2022–27.03.2029	76.36	66,700	–	–	–	66,700
	28.03.2019	01.04.2023–27.03.2029	76.36	66,700	–	–	–	66,700
Ma Zhixiang	28.03.2019	01.04.2021–27.03.2029	76.36	20,000	–	–	–	20,000
	28.03.2019	01.04.2022–27.03.2029	76.36	20,000	–	–	–	20,000
	28.03.2019	01.04.2023–27.03.2029	76.36	20,000	–	–	–	20,000
Yuen Po Kwong	28.03.2019	01.04.2021–27.03.2029	76.36	20,000	–	–	–	20,000
	28.03.2019	01.04.2022–27.03.2029	76.36	20,000	–	–	–	20,000
	28.03.2019	01.04.2023–27.03.2029	76.36	20,000	–	–	–	20,000
Law Yee Kwan, Quinn	28.03.2019	01.04.2021–27.03.2029	76.36	20,000	(16,000)	–	–	4,000
	28.03.2019	01.04.2022–27.03.2029	76.36	20,000	–	–	–	20,000
	28.03.2019	01.04.2023–27.03.2029	76.36	20,000	–	–	–	20,000
Yien Yu Yu, Catherine	28.03.2019	01.04.2020–27.03.2029	76.36	15,000	–	–	–	15,000
	28.03.2019	01.04.2021–27.03.2029	76.36	15,000	–	–	–	15,000
	28.03.2019	01.04.2022–27.03.2029	76.36	15,000	–	–	–	15,000
	28.03.2019	01.04.2023–27.03.2029	76.36	15,000	–	–	–	15,000
Total				2,240,525	(872,600)	(100,000)	262,500	1,530,425

Share-based Compensation Scheme *(continued)*

Directors' right to acquire shares *(continued)*

Notes:

1. The vesting period of the share options is from the date of grant until the commencement of the exercise period.
2. "Year" refers to the period from 1 January 2021 to 31 December 2021.
3. The vesting of share options is subject to the fulfilment of performance target.
4. Ms. Wu Xiaojing had been appointed as the executive director of the Company on 20 December 2021, the 262,500 share options held by her was reclassified from share options held by employees to share options held by directors.

Save as disclosed above, no share option was granted, exercised, lapsed or cancelled during the year.

Share Award Scheme

On 30 November 2018, the Company adopted the Share Award Scheme under which the shares of the Company (the "Awarded Shares") may be granted to selected employees (including, without limitation, any executive directors and independent non-executive directors) of any members of the Group (the "Selected Employees") pursuant to the terms of the Share Award Scheme and the trust deed of the Share Award Scheme. As discussed above, the Share Award Scheme is mainly used as a supplement to the Share Option Scheme. The Share Award Scheme became effective on the adoption date and, unless otherwise terminated or amended, will remain in force for 10 years from the date, i.e. till 29 November 2028.

The aggregate number of Award Shares permitted to be granted under the Share Award Scheme is limited to 5% of the issued share capital of the Company from time to time. The maximum number of Awarded Share which may be awarded to each Selected Employee shall not in aggregate over 1% of the issued share capital of the Company from time to time.

When a Selected Employee has satisfied all vesting conditions, which might include service and/or performance conditions, specified by the Board at the time of making the award and become entitled to the shares of the Company forming the subject of the award, the trustee shall transfer the relevant Award Shares to that employee at once.

As at 31 December 2021, there were 2,685,100 shares of the Company held in the trust under the Share Award Scheme, approximately 0.24% of the issued share capital of the Company. During the year, the Company has granted notional gain of 866,600 Award Shares to certain outperformed employees under the scheme to reflect their changes in roles and commitment subsequent to the grant of share options to them under the 2012 Scheme, the Award Prices were also HK$76.36, and the vesting of the notional gains (if any) were subject to the fulfillment of their respective performance targets.

The following table discloses details of the Company's Awarded Shares held by the selected employees (including directors) and their movement in such holdings:

Grantee	Financial year to which the performance targets relate (Note 1)	Award Price (HK$) (Note 2)	Outstanding as at 1 January 2021 (Note3)	Granted during the year	Vested during the year (Note 4)	Lapsed during the year	Outstanding as at 31 December 2021
Directors	2020	76.36	–	160,000	(70,000)	–	90,000
	2021	76.36	–	160,000	–	–	160,000
	2022	76.36	–	160,000	–	–	160,000
Employees	2020	76.36	31,000	128,867	(21,000)	–	138,867
	2021	76.36	15,500	128,867	–	–	144,367
	2022	76.36	15,500	128,866	–	–	144,366
Total			62,000	866,600	(91,000)	–	837,600

Notes:

1. Awarded Shares act as a supplement to Share Options Scheme, the financial year to which the performance targets relate is consistent with respect to the Share Options Scheme.
2. The award price is the exercise price of vesting the Awarded Shares by the selected employees, which is consistent with the exercise price of share options granted in 2012 Scheme – Batch 2.
3. Notional gains of the Awarded Shares can be vested to the grantees as early as on 1 April in the year following the financial year to which the respective performance conditions relate, or they can opt for deferral or vesting of the notional gains.
4. Notional gains vested during the year were paid with funds in the designated account under the Share Award Scheme.

Share-based Compensation Scheme *(continued)*

Share Award Scheme *(continued)*

The interest of each director and chief executive in the Awarded Shares of the Company as at 31 December 2021 were as follows：

Grantee	Financial Year to which the performance target	Awards Price (HK$)	Outstanding as at 1 January 2021	Granted during the year (Note 1)	Vested during the year (Note 1)	Lapsed during the year (Note 1)	Outstanding as at 31 December 2021
Zheng Hongtao (Note 2)	2020	76.36	–	120,000	(30,000)	–	90,000
	2021	76.36	–	120,000	–	–	120,000
	2022	76.36	–	120,000	–	–	120,000
Zhang Yuying (Note 2)	2020	76.36	–	40,000	(40,000)	–	–
	2021	76.36	–	40,000	–	–	40,000
	2022	76.36	–	40,000	–	–	40,000
Total			–	480,000	(70,000)	–	410,000

Notes:

1. "Year" refers to the period from 1 January 2021 to 31 December 2021.

2. The vesting of share options is subject to the fulfilment of performance target.

Save as disclosed above, at no time during the year was the Company or its subsidiaries a party to any arrangements to enable the Directors or the chief executives or any of their spouse or children under 18 years of age to acquire benefits by means of the acquisition of shares in, underlying shares or debentures of, the Company or any other body corporate.

Directors' Rights to Acquire Shares or Debentures

Other than the Share Option Schemes as set out in the section headed "Share-based Compensation Scheme" and disclosed in Note 45 to the Consolidated Financial Statements, and the Shares Award Scheme as set out in the section headed "Share-based Compensation Scheme" in this report, the Company had no other outstanding convertible securities, options, warrants or other similar rights as at 31 December 2021. At no time during the year was the Company, its parent company, or any of its subsidiaries a party to any arrangements to enable the directors to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other corporate.

Management Contracts

Except the employment contracts with employees, no contract concerning the management and administration of the whole or any substantial part of the business of the company was entered into or existed during the year.

Substantial Shareholders

As at 31 December 2021, the interests and short positions of every person, other than Directors of the Company, in the shares and underlying shares of the Company as recorded in the register required to be kept under section 336 of Part XV of the SFO were as follows:

Name of shareholder	Capacity	Corporate interests	Interests in shares pursuant to share options	Total aggregate interests in shares and underlying shares (Note 6)	Approximate percentage of the Company's total issued share capital
Mr. Wang	Beneficial owner and interest of controlled corporation	369,175,534 (Note 1, 2 ,3, 4 & 5)	320,000 (Note 5)	369,495,534 (L)	32.69%
Ms. Zhao	Interest of controlled corporation and interest of spouse	369,175,534 (Note 1, 2, 3, 4 & 5)	320,000 (Note 5)	369,495,534 (L)	32.69%
EYCT*	Interest of controlled corporation	369,175,534 (Note 1, 2, 3 & 4)	–	369.175,534 (L)	32.67%
LCNG*	Interest of controlled corporation	369,175,534 (Note 1, 2 & 3)	–	369,175,534 (L)	32.67%
EIH*	Interest of controlled corporation	369,175,534 (Note 1 & 2)	–	369,175,534 (L)	32.67%
EGII	Interest of controlled corporation	369,175,534 (Note 1)	–	369,175,534 (L)	32.67%
ENN-NG	Interest of controlled corporation	369,175,534 (Note 1)	–	369,175,534 (L)	32.67%
Xinneng HK	Beneficial owner	369,175,534 (Note 1)	–	369,175,534 (L)	32.67%
The Capital Group Companies, Inc.	Beneficial owner	168,264,635	–	168,264,635 (L)	14.89%
JPMorgan Chase & Co.	Interest of controlled corporation, investment manager, person having a security interest in shares, trustee and approved lending agent	72,566,970	–	72,566,970 (L) (including 2,551,716 (S) 44,463,284 (P))	6.42%
BlackRock, Inc.	Interest of controlled corporation	60,285,615	–	60,285,615 (L) (including 709,800 (S))	5.33%

* For identification purpose only

Substantial Shareholders *(continued)*

Notes:

1. EGII holds 48.16% interests of ENN-NG, therefore it holds 32.67% of the issued share capital of the Company through Xinneng HK, a wholly owned subsidiary of ENN-NG. EGII is beneficially owned as to 50% by Mr. Wang and 50% by Ms. Zhao, the spouse of Mr. Wang.
2. On 30 November 2018, Mr. Wang and Ms. Zhao entered into an equity entrustment agreement with EIH, pursuant to which each of Mr. Wang and Ms. Zhao entrusts EIH to manage their respective shareholding of 50% in EGII till 31 December 2040. Pursuant to the agreement, EGII is controlled by EIH. Accordingly, EIH is deemed to be interested in the shares in which EGII is interested in (1) above. In addition, EIH directly and indirectly holds 21.72% interests of ENN-NG.
3. EIH is a wholly-owned subsidiary of LCNG, LCNG hence is deemed to be interested in the shares in which EIH is interested in (1) and (2) above.
4. LCNG is 100% beneficially owned by Mr. Wang, Ms. Zhao and EYCT (beneficially owned as to 50% by Mr. Wang and 50% by Ms. Zhao) hence they are deemed to be interested in the shares in which LCNG is interested in (1), (2) and (3) above. In addition, Mr. Wang holds 0.07% interests of ENN-NG.
5. As Mr. Wang's spouse, Ms. Zhao is deemed as holding Mr. Wang's interests in shares.
6. (L) represents Long Position; (S) represents Short Position; (P) represents Lending Pool.

Save for the shareholders as disclosed herein, the Directors are not aware of any persons who, as at 31 December 2021, were entitled to exercise or control the exercise of 5% or more of the voting power at general meetings of the Company and were also, as a practicable matter, able to direct or influence the management of the Company.

Save as disclosed above, as at 31 December 2021, the Company had not been notified of any other person who had interest or short position in the shares or underlying shares of the Company, which are required to be recorded in the register maintained by the Company pursuant to section 336 of Part XV of the SFO and Listing Rules.

Controlling shareholder and Directors' Interests in Competing Business

Set out below is information disclosed pursuant to Rule 8.10 of the Listing Rules. Mr. Wang and his spouse, Ms. Zhao, hold 32.67% of the issued share capital of the Company through Xinneng HK, a wholly-owned subsidiary of ENN-NG (a controlling shareholder of the Company). Four directors of the Company, namely Mr. Wang, Mr. Wang Zizheng, Mr. Zheng Hongtao, and Mr. Wang Dongzhi, being directors of ENN-NG and/or certain subsidiary(ies) (for this purpose excluding the Group) and/or associate(s) of ENN-NG (the "ENN-NG Group"), are considered as having an interest in ENN-NG Group under Rule 8.10(1) and (2) of the Listing Rules.

The business of ENN-NG Group (excluding the Group) mainly includes the gas sales based on obtaining upstream natural gas resources (including the import and production of liquefied natural gas), energy engineering and energy chemical business. Among them, gas sales business may be considered as competing business for the Group. However, the Group's gas sales are mainly to match the needs of downstream customers. Given the Group has extensive experience in gas sales business, diversified distribution channels, and large and sticky customer base, it is capable of carrying on independently of ENN-NG Group (excluding the Group).

For safeguarding the interests of the Group, the Company established an independent board committee composed of all independent non-executive directors of the Company in 2020 to review the situation of the Group from time to time to ensure that (among other things) the Group and ENN-NG Group operate gas sales business based on their respective interest.

Save as disclosed above, during the year, none of the directors or the management shareholders of the Company or their respective associates had an interest in a business which compete with the business of the Group.

Connected Transactions

During the year, the Group has entered into the transactions and arrangements as described below with connected persons for the purposes of the Listing Rules.

Continuing Connected Transactions

During the year, the Group carried out the following transactions which constituted continuing connected transactions under Chapter 14A of the Listing Rules and were subject to annual review.

The following table sets out the continuing connected transactions between the Group and the Wang Family Companies for the year ended 31 December 2021:

Transaction details		Annual Cap (RMB)	Transaction Sum (RMB)
(A)	Equipment Purchasing and Modification Services (Note 3)		
	On 30 November 2018, the Company entered into a Master Equipment Purchasing and Modification Services Agreement with EIH for a term commencing from 1 January 2019 and expiring on 31 December 2021, whereby the Wang Family Companies agreed to provide equipment as well as equipment modification and enhancement services to the Group.	259,200,000	153,000,000
(B)	Construction Services (Note 3)		
	On 30 November 2018, the Company entered into a Master Construction Services Agreement with EIH for a term commencing from 1 January 2019 and expiring on 31 December 2021, whereby the Wang Family Companies agreed to provide the Group with engineering design and construction services.	1,828,000,000	1,161,000,000
(C)	Information Technology Services (Note 3)		
	On 30 November 2018, the Company entered into a Master Information Technology Services Agreement with EIH for a term commencing from 1 January 2019 and expiring on 31 December 2021, whereby the Wang Family Companies agreed to provide the Group with information technology services.	357,180,000	296,000,000
(D)	Natural Gas Purchasing		
	On 30 November 2020, the Company entered into a Master Natural Gas Purchasing Agreement with ENN-NG for a term commencing from 1 January 2021 and expiring on 31 December 2023, whereby the Wang Family Companies agreed to provide the Group with natural gas supply.	2,200,000,000	2,019,000,000
(E)	LNG Terminal Usage Services		
	On 28 September 2018, the Company entered into a Master LNG Terminal Usage Services Agreement with LCNG for a term commencing from 1 October 2018 and expiring on 31 December 2028, whereby the Wang Family Companies agreed to provide LNG terminal usage services to the Group, such that the Group will be able to receive imported LNG through Zhoushan LNG Terminal.	924,000,000	728,000,000
(F)	Logistic Services		
	On 17 November 2021, the Company entered into a Master Logistic Services Agreement with ENN-NG, whereby the Group agreed to provide logistic services to ENN-NG from 17 November 2021 to 31 December 2023.	62,000,000	28,000,000

Notes:

1. Wang Family Company is a company controlled (entitled to exercise, or control the exercise of 30% or more of the voting power at any general meeting of the relevant company) by Mr. Wang, the Chairman, an Executive Director and a controlling shareholder of the Company, and/or his associates (including Ms. Zhao, a controlling shareholder of the Company and the spouse of Mr. Wang), thereby being connected persons of the Group during the year.
2. Wang Family Companies refers to the Wang Family Company and its subsidiaries and associates (as the case may be).
3. Since these Agreements would expire on 31 December 2021 and the Company would continue to have similar transactions. Thus, on 17 November 2021, the Company renewed the Master Construction Services Agreement with ENN-NG, and Master Equipment Purchasing and Modification Services Agreement and Master Information Technology Services Agreement with LCNG.

Connected Transactions *(continued)*

Continuing Connected Transactions *(continued)*

The continuing connected transactions mentioned above have been reviewed by the independent non-executive directors of the Company. The independent non-executive directors of the Company have confirmed that the transactions have been entered into:

(i) in the ordinary and usual course of business of the Group;

(ii) on normal commercial terms; and

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

Pursuant to Rule 14A.56 of the Listing Rules, the Board engaged the Auditor of the Company to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The Auditor has issued its unqualified letter containing its findings and conclusions in respect of the continuing connected transactions disclosed by the Group on pages 66 to 67 of this Annual Report in accordance with Rule 14A.56 of the Listing Rules. A copy of the Auditor's letter has been provided by the Company to the Stock Exchange.

The Board confirmed that the disclosure requirements of Chapter 14A of the Listing Rules have been complied with.

Details of the related party transactions undertaken in the normal course of business are set out in Note 55 to the Consolidated Financial Statements. In relation to parts of those related party transactions that also constituted connected transactions under the Listing Rules, they are in compliance with applicable requirements under the Listing Rules and are reported in this Annual Report in accordance with the Listing Rules.

Other Connected Transactions

Save as disclosed above, the Group did not enter into other connected transactions during the year.

Directors' Interests in Transactions, Arrangement or Contracts of Significance

Save as disclosed in the section headed "Connected Transactions", no other transaction, arrangement or contract that is significant in relation to the Group's business to which the Company or any of its subsidiaries was a party and in which a Director or an entity connected with a Director had, directly or indirectly, a material interest subsisted at the end of or at any time during the year ended 31 December 2021.

Loan Agreements Imposing Specific Performance Obligations on Controlling Shareholders

The Company issued 5-year bonds on 24 July 2017 (the "2022 Unsecured Bonds") which was due on 2022. The terms and conditions of the bond requires Mr. Wang, the controlling shareholder of the Company, to retain his interests in the Company of at least 20% of the total issued share capital of the Company throughout the term of the bonds. The principal loan balances of the bond is USD600 million (equivalent to RMB4,066 million). As at 31 December 2021, the outstanding balance is USD565 million (equivalent to RMB3,601 million) respectively.

Moreover, the Company issued 10-year green senior notes on 17 September 2020 (the "Green Senior Notes") in an aggregate amount of USD750 million (equivalent to RMB5,137 million). The terms and conditions of the Green Senior Notes requires Mr. Wang and Ms. Zhao, controlling shareholders of the Company, collectively to retain their interest in the Company of at least 20% of the total issued share capital of the Company throughout the terms of the notes. As at 31 December 2021, the outstanding balance is USD750 million (equivalent to RMB4,722 million).

Charitable Donations

Charitable donations made by the Group during the year amounted to RMB50.77 million (2020: RMB52.85 million).

Public Float

Based on the information that is publicly available to the Company and within the knowledge of the Directors, as at the date of this Annual Report, there is sufficient public float of not less than 25% of the Company's issued shares as required under the Listing Rules.

Review of Financial Result

A meeting of the Audit Committee was held on 17 March 2022 to review with the Company's external auditor on the Group's annual results and the Audited Consolidated Financial Statements for the year ended 31 December 2021. Based on the relevant reviews and discussions with the Management, the Audit Committee was satisfied that the Consolidated Financial Statements have been prepared in accordance with applicable accounting standards, and it presents fairly the financial position and results of the Group for the year ended 31 December 2021.

Auditor

The Consolidated Financial Statements for the year ended 31 December 2021 have been audited by Deloitte Touche Tohmatsu who would retire at the 2022 annual general meeting and, being eligible, offer themselves for re-appointment. A resolution to re-appoint Deloitte Touche Tohmatsu as the auditor of the Company and authorise the Board to fix their remuneration will be proposed at the 2022 annual general meeting.

The other sections, reports and notes in the Annual Report as mentioned above form parts of this Directors' Report.

On behalf of the Board
WANG Yusuo
Chairman

18 March 2022

INDEPENDENT AUDITOR'S REPORT

Deloitte. 德勤

TO THE SHAREHOLDERS OF ENN ENERGY HOLDINGS LIMITED
(incorporated in the Cayman Islands with limited liability)

Opinion

We have audited the consolidated financial statements of ENN Energy Holdings Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 72 to 176 of this Annual Report, 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, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the 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 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 matter	How our audit addressed the key audit matter
Impairment assessment of goodwill allocated to integrated energy business	
We identified the impairment assessment of goodwill attributable to integrated energy business (the "Integrated Energy CGU") as a key audit matter owing to the significance of the carrying amount of this goodwill and the significant estimates made by the management in determining the recoverable amounts of the Integrated Energy CGU, including revenue growth rate and discount rate as disclosed in Note 5 to the consolidated financial statements. As disclosed in Note 19 to the consolidated financial statements, the carrying amount of goodwill attributable to integrated energy business amounted to RMB2,028 million as at 31 December 2021.	Our audit procedures in relation to impairment assessment of goodwill allocated to the Integrated Energy CGU included: • Evaluating management's methodology for impairment assessment of goodwill and corroborating the discount rate used based on the market information with the assistance of internal valuation expert; and • Evaluating the discounted cash flows prepared by the management in deriving the recoverable amounts of the Integrated Energy CGU for the impairment assessment by checking the mathematical accuracy of discounted cash flow calculation, assessing the reasonableness of the key assumptions adopted by the management in the model with reference to the Group's historical performances and external market data, and reviewing the budget of the underlying projects approved by the management on a sample basis.

Key Audit Matters *(continued)*

Key audit matter	How our audit addressed the key audit matter
Fair value measurement of commodity derivative contracts We identified the fair value measurement of commodity derivative contracts as disclosed in Note 24 to the consolidated financial statements as a key audit matter due to the judgment and estimation required in establishing the relevant valuation techniques and inputs. The carrying amount of commodity derivative asset amounted to RMB2,407 million and of commodity derivative liability amounted to RMB1,665 million as at 31 December 2021. As further disclosed in Notes 5 and 53 to the consolidated financial statements, any changes in these factors could affect the fair values of commodity derivative contracts.	Our audit procedures in relation to the fair value measurement of commodity derivative contracts included: • Understanding the design and implementation of key controls over the valuation of commodity derivative contracts; • Testing the completeness of commodity derivative contracts by arranging confirmation to the counterparties; and • With the assistance of internal valuation expert, performing the following procedures on sample basis: – evaluating the appropriateness of management's valuation methodology; – checking the relevant inputs used by the management to our independently sourced market inputs; and – comparing the valuation based on our inputs with the management's results and investigating any differences.

Other Information

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include 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 Directors and Those Charged with Governance for the Consolidated Financial Statements

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the 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.

Those charged with governance are responsible 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 solely to you, as a body, in accordance with our agreed terms of engagement, 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 judgment 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.
- 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 those charged with governance 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 those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, 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 Lam Kam Chiu.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong
18 March 2022

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2021

	Notes	**2021 RMB million**	2020 RMB million
Revenue	6	**93,113**	71,617
Cost of sales		**(79,057)**	(59,285)
Gross profit		**14,056**	12,332
Other income	8	**1,077**	952
Other gains and losses	9	**984**	282
Distribution and selling expenses		**(1,122)**	(951)
Administrative expenses		**(3,725)**	(3,230)
Share of results of associates		**261**	306
Share of results of joint ventures		**438**	476
Finance costs	10	**(576)**	(609)
Profit before tax	11	**11,393**	9,558
Income tax expense	13	**(2,398)**	(2,227)
Profit for the year		**8,995**	7,331
Other comprehensive income			
Items that will not be reclassified to profit or loss:			
Fair value change of equity instruments at fair value through other comprehensive income ("FVTOCI")		**15**	65
Fair value change of a property transferred from property, plant and equipment to investment properties		**16**	–
Income tax relating to items that will not be reclassified to profit or loss		**(7)**	(16)
		24	49
Items that have been reclassified or may be reclassified subsequently to profit or loss:			
Exchange differences arising on translating foreign operations		**5**	1
Fair value change of derivative financial instruments under hedge accounting		**164**	(122)
Income tax relating to items that may be reclassified subsequently to profit and loss		**(37)**	14
Other comprehensive income for the year		**156**	(58)
Total comprehensive income for the year		**9,151**	7,273
Profit for the year attributable to:			
Owners of the Company		**7,755**	6,278
Non-controlling interests		**1,240**	1,053
		8,995	7,331
Total comprehensive income for the year attributable to:			
Owners of the Company		**7,905**	6,220
Non-controlling interests		**1,246**	1,053
		9,151	7,273

		RMB	RMB
Earnings per share	15		
– Basic		**6.88**	5.59
– Diluted		**6.86**	5.57

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2021

	Notes	**2021 RMB million**	2020 RMB million
Non-current Assets			
Property, plant and equipment	16	**46,793**	41,861
Right-of-use assets	17	**2,119**	2,129
Investment properties	18	**288**	261
Goodwill	19	**2,520**	2,511
Intangible assets	20	**4,311**	4,446
Interests in associates	21	**3,655**	3,619
Interests in joint ventures	22	**5,063**	4,141
Other receivables	23	**18**	73
Derivative financial instruments	24	**946**	292
Financial assets at fair value through profit or loss ("FVTPL")	25	**4,406**	4,760
Equity instruments at FVTOCI	26	**266**	211
Amounts due from associates	29	**21**	6
Amounts due from joint ventures	30	**4**	10
Deferred tax assets	32	**1,212**	1,370
Deposits paid for investments		**60**	1
Prepayment and deposits paid for acquisition of property, plant and equipment, land use rights and right of operation		**126**	134
Restricted bank deposits	34	**622**	650
		72,430	66,475
Current Assets			
Inventories	33	**1,508**	1,285
Trade and other receivables	23	**10,568**	9,053
Contract assets	28	**775**	732
Derivative financial instruments	24	**1,585**	336
Financial assets at FVTPL	25	**152**	70
Amounts due from associates	29	**1,165**	892
Amounts due from joint ventures	30	**2,440**	2,106
Amounts due from related companies	31	**318**	348
Restricted bank deposits	34	**363**	116
Cash and cash equivalents	34	**8,684**	8,630
		27,558	23,568

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2021

	Notes	**2021 RMB million**	2020 RMB million
Current Liabilities			
Trade and other payables	36	**10,172**	8,302
Contract liabilities	37	**14,908**	14,242
Deferred income	38	**48**	38
Amounts due to associates	29	**424**	319
Amounts due to joint ventures	30	**1,249**	976
Amounts due to related companies	31	**964**	925
Taxation payables		**909**	971
Lease liabilities	35	**75**	89
Derivative financial instruments	24	**956**	401
Bank and other loans	40	**6,150**	4,590
Corporate bonds	41	**2,099**	–
Unsecured bonds	43	**3,601**	–
Senior notes	42	**–**	2,380
Share-based payment liabilities	45	**24**	–
		41,579	33,233
Net Current Liabilities		**(14,021)**	(9,665)
Total Assets less Current Liabilities		**58,409**	56,810
Capital and Reserves			
Share capital	39	**117**	117
Reserves		**35,660**	30,444
Equity attributable to owners of the Company		**35,777**	30,561
Non-controlling interests		**6,373**	5,611
Total Equity		**42,150**	36,172
Non-current Liabilities			
Contract liabilities	37	**2,993**	3,212
Deferred income	38	**789**	729
Amounts due to associates	29	**215**	–
Amounts due to joint ventures	30	**325**	585
Lease liabilities	35	**280**	310
Derivative financial instruments	24	**806**	526
Bank and other loans	40	**3,318**	2,078
Corporate bonds	41	**–**	2,097
Senior notes	42	**4,722**	4,827
Unsecured bonds	43	**–**	3,712
Deferred tax liabilities	32	**2,785**	2,562
Financial guarantee liabilities		**21**	–
Share-based payment liabilities	45	**5**	–
		16,259	20,638
		58,409	56,810

The consolidated financial statements on pages 72 to 176 of this Annual Report were approved and authorised for issue by the board of directors on 18 March 2022 and are signed on its behalf by:

Wang Yusuo
DIRECTOR

Wang Dongzhi
DIRECTOR

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2021

	Equity attributable to owners of the Company													
	Share capital RMB million (Note 39)	Treasury stocks RMB million	Share premium RMB million	Special reserve RMB million (Note a)	Revaluation reserve RMB million	Share options reserve RMB million	Exchange reserve RMB million	Surplus reserve fund RMB million (Note b)	Hedging reserve RMB million (Note 44)	Designated safety fund RMB million (Note c)	Retained earnings RMB million	Total RMB million	Non-controlling interests RMB million	Total equity RMB million
At 1 January 2020	116	(151)	2,690	(82)	23	128	–	2,648	–	59	20,437	25,868	5,152	31,020
Profit for the year	–	–	–	–	–	–	–	–	–	–	6,278	6,278	1,053	7,331
Other comprehensive income for the year	–	–	–	–	49	–	1	–	(108)	–	–	(58)	–	(58)
Total comprehensive income for the year	–	–	–	–	49	–	1	–	(108)	–	6,278	6,220	1,053	7,273
Cumulative loss transferred to initial carrying value of hedged items (Note 44)	–	–	–	–	–	–	–	–	71	–	–	71	–	71
Recognition of equity-settled share-based payment (Note 45)	–	–	–	–	–	70	–	–	–	–	–	70	–	70
Issue of ordinary shares upon exercise of share options (Notes 39 & 45)	1	–	163	–	–	(51)	–	–	–	–	–	113	–	113
Purchase of shares under Share Award Scheme	–	(17)	–	–	–	–	–	–	–	–	–	(17)	–	(17)
Acquisition of subsidiaries and businesses (Notes 47 & 48)	–	–	–	–	–	–	–	–	–	–	–	–	178	178
Disposal/deregistration of subsidiaries	–	–	–	–	–	–	–	–	–	–	–	–	(161)	(161)
Acquisition of additional interests in subsidiaries	–	–	–	(45)	–	–	–	–	–	–	–	(45)	(123)	(168)
Disposal of partial interest in a subsidiary	–	–	–	–	–	–	–	–	–	–	–	–	4	4
Capital contribution from non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	–	–	97	97
Dividends appropriation (Note 14)	–	–	(1,719)	–	–	–	–	–	–	–	–	(1,719)	–	(1,719)
Dividends paid to non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	–	–	(589)	(589)
Transfer to surplus reserve fund (Note b)	–	–	–	–	–	–	–	478	–	–	(478)	–	–	–
Transfer to designated safety fund (Note c)	–	–	–	–	–	–	–	–	–	8	(8)	–	–	–
At 31 December 2020	117	(168)	1,134	(127)	72	147	1	3,126	(37)	67	26,229	30,561	5,611	36,172
Profit for the year	–	–	–	–	–	–	–	–	–	–	7,755	7,755	1,240	8,995
Other comprehensive income for the year	–	–	–	–	18	–	5	–	127	–	–	150	6	156
Total comprehensive income for the year	–	–	–	–	18	–	5	–	127	–	7,755	7,905	1,246	9,151
Cumulative loss transferred to initial carrying value of hedged items (Note 44)	–	–	–	–	–	–	–	–	29	–	–	29	–	29
Recognition of share-based payment expenses (Note 45)	–	–	–	–	–	20	–	–	–	–	–	20	–	20
Issue of ordinary shares upon exercise of share options (Notes 39 & 45)	–	–	119	–	–	(29)	–	–	–	–	–	90	–	90
Acquisition of a subsidiary (Note 48)	–	–	–	–	–	–	–	–	–	–	–	–	229	229
Disposal/deregistration of subsidiaries	–	–	–	–	–	–	–	–	–	–	–	–	(16)	(16)
Acquisition of additional interests in subsidiaries	–	–	–	(1)	–	–	–	–	–	–	–	(1)	–	(1)
Capital contribution from non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	–	–	51	51
Capital reduction from non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	–	–	(1)	(1)
Dividends appropriation (Note 14)	–	–	–	–	–	–	–	–	–	–	(2,827)	(2,827)	–	(2,827)
Dividends paid to non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	–	–	(747)	(747)
Transfer to surplus reserve fund (Note b)	–	–	–	–	–	–	–	420	–	–	(420)	–	–	–
Transfer to designated safety fund (Note c)	–	–	–	–	–	–	–	–	–	17	(17)	–	–	–
At 31 December 2021	117	(168)	1,253	(128)	90	138	6	3,546	119	84	30,720	35,777	6,373	42,150

Notes:

a. The balance represents the difference between the fair values of consideration paid and the carrying values of net assets attributable to the additional interests of subsidiaries acquired or disposed of with no change in control.

b. In accordance with the People's Republic of China ("PRC") regulations, the surplus reserve fund retained by subsidiaries in the PRC is non-distributable.

c. Pursuant to relevant PRC regulation, the Group is required to transfer 1.5% on revenue generated from construction and installation, transportation of gas or other dangerous chemical into a designated fund. The fund will be used for installation and repair and maintenance of safety facilities. The movement during the year represents the difference between the amount provided and the amount utilised during the year.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2021

	Note	2021 RMB million	2020 RMB million
OPERATING ACTIVITIES			
Profit before tax		**11,393**	9,558
Adjustments for:			
Share of results of associates		**(261)**	(306)
Share of results of joint ventures		**(438)**	(476)
Exchange differences		**(214)**	(553)
Net loss of financial assets at FVTPL		**43**	45
Net gain on fair value change of derivative financial instruments		**(980)**	(102)
Impairment loss under expected credit loss model, net of reversal		**123**	129
Impairment losses on property, plant and equipment		**37**	70
Loss on disposal of property, plant and equipment		**26**	128
Gain on disposal of right-of-use assets		**(4)**	(18)
(Gain) loss on disposal of subsidiaries	49	**(41)**	62
Loss (gain) on disposal of joint ventures		**4**	(4)
Gain on disposal of associates		**(9)**	–
Loss on deemed disposal of an associate		**9**	–
Loss on repurchase of unsecured bonds		**1**	9
Dividends income from financial assets at FVTPL		**(197)**	(73)
Dividends income from equity instruments at FVTOCI		**(6)**	(1)
Decrease in fair value of investment properties		**6**	7
Share-based payment expenses		**49**	70
Depreciation of property, plant and equipment		**1,783**	1,603
Depreciation of right-of-use assets		**156**	174
Amortisation of intangible assets		**324**	304
Interest income on bank deposits and loan receivables		**(200)**	(204)
Finance costs		**576**	609
Gain on disposal of an financial asset at FVTPL		**(10)**	–
Financial guarantee income		**(2)**	–
		12,168	11,031
Movements in working capital:			
Increase in inventories		**(234)**	(117)
Increase in trade and other receivables		**(1,291)**	(1,297)
(Increase) decrease in contract assets		**(47)**	36
Increase in contract liabilities		**447**	1,480
Increase in amounts due from associates		**(102)**	(57)
Increase in amounts due from joint ventures		**(147)**	(84)
Increase in amounts due from related companies		**(42)**	(49)
Increase in trade and other payables		**1,508**	348
Increase in amounts due to joint ventures		**138**	201
Increase (decrease) in amounts due to associates		**141**	(13)
Increase in deferred income		**70**	91
Increase (decrease) in amounts due to related companies		**30**	(165)
Cash generated from operations		**12,639**	11,405
PRC enterprise income tax paid		**(2,173)**	(1,709)
Net cash generated from operating activities		**10,466**	9,696

	Notes	**2021 RMB million**	2020 RMB million
INVESTING ACTIVITIES			
Dividends received from joint ventures		**232**	405
Dividends received from associates		**251**	208
Dividends received from financial assets at FVTPL		**214**	56
Dividends received from equity instruments at FVTOCI		**6**	1
Gross cash outflow from derivative financial instruments		**(1,516)**	(133)
Gross cash inflow from derivative financial instruments		**1,558**	143
Option premium paid in relation to derivative financial instruments		**(10)**	(7)
Interest received		**200**	204
Purchases of property, plant and equipment		**(6,253)**	(5,515)
Acquisition of intangible assets		**(37)**	(61)
Proceeds from disposal of property, plant and equipment		**155**	179
Purchases of wealth management products		**(10,733)**	(10,364)
Redemptions of wealth management products		**10,651**	10,310
Addition of right-of-use assets		**(102)**	(80)
Deposits paid for investments		**(59)**	–
Deposits paid for acquisition of right-of use assets		**(6)**	(13)
Net cash outflow on acquisition of subsidiaries	47&48	**(726)**	(636)
Net cash inflow on disposal of subsidiaries	49	**19**	246
Proceeds from refund of financial assets at FVTPL		**24**	36
Proceeds from disposal of joint ventures		**31**	28
Proceeds from disposal of associates		**279**	12
Proceeds from disposal of right-of-use assets		**28**	31
Proceeds from disposal of financial assets at FVTPL		**297**	–
Purchases of equity instruments at FVTOCI		**(40)**	(23)
Investments in joint ventures		**(155)**	(211)
Investments in associates		**(319)**	(225)
Addition of restricted bank deposits		**(922)**	(547)
Release of restricted bank deposits		**703**	793
Amounts advanced to third parties		**(2,661)**	(1,421)
Amounts repaid by third parties		**2,430**	1,233
Amounts advanced to associates		**(296)**	(105)
Amounts repaid by associates		**100**	166
Amounts advanced to joint ventures		**(276)**	(1,097)
Amounts repaid by joint ventures		**94**	34
Amounts advanced to related companies		**–**	(139)
Amounts repaid by related companies		**73**	1
Net cash used in investing activities		**(6,766)**	(6,491)

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2021

	2021 **RMB million**	2020 RMB million
FINANCING ACTIVITIES		
Interest paid	**(686)**	(756)
Advanced from banks and other financial institutions	**2,700**	10,830
Amounts repaid to banks and other financial institutions	**(2,700)**	(10,830)
Purchase of shares under Share Award Scheme	**–**	(17)
Net proceeds from ordinary shares issued upon exercise of share options	**90**	113
Proceeds from issuance of Green Senior Notes	**–**	5,065
Capital contribution from non-controlling shareholders	**51**	97
Capital reduction of non-controlling shareholders	**(13)**	–
Net cash outflow on acquisition of additional interest in subsidiaries	**–**	(154)
Net cash inflow on disposal of partial interest in a subsidiary	**–**	6
Dividends paid to non-controlling shareholders	**(747)**	(589)
Dividends paid to shareholders	**(2,827)**	(1,719)
New bank loans raised	**11,182**	9,941
Repayment of bank loans	**(8,245)**	(13,586)
Repayment of senior notes	**(2,372)**	–
Repayment of unsecured bonds	**(34)**	(208)
Repayment of lease liabilities	**(98)**	(107)
Advanced from associates	**271**	144
Amounts repaid to associates	**(92)**	(1)
Advanced from joint ventures	**183**	214
Amounts repaid to joint ventures	**(308)**	(374)
Advanced from related companies	**15**	33
Amounts repaid to related companies	**(6)**	(3)
Net cash used in financing activities	**(3,636)**	(1,901)
Net increase in cash and cash equivalents	**64**	1,304
Cash and cash equivalents at the beginning of the year	**8,630**	7,373
Effect of foreign exchange rate changes	**(10)**	(47)
Cash and cash equivalents at the end of the year	**8,684**	8,630

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

1. GENERAL INFORMATION

ENN Energy Holdings Limited (the "Company") is an exempted company incorporated in the Cayman Islands under the Companies Law and its shares are listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The addresses of its registered office and principal place of business are disclosed in the section headed "Corporate Information" of the Company's Annual Report.

The consolidated financial statements of the Company and its subsidiaries (collectively referred to the "Group") are presented in Renminbi ("RMB"), which is the same as the functional currency of the Company.

The Company is an investment holding company. The activities of its principal subsidiaries are set out in Note 56.

2. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

As at 31 December 2021, the Group has net current liabilities of approximately RMB14,021 million. The directors of the Company (the "Directors") have given careful consideration to the Group's future financial resource when preparing the consolidated financial statements. Taking into account the continuity and availability of financial resources to the Group, among other things, the cash flows generated from its principal operations, availability of banking facilities and its expected future working capital requirements, the Directors are therefore satisfied that the Group will be able to meet in full its financial obligations when they fall due and continue its existing operation in the foreseeable future. Accordingly, the consolidated financial statements for the year ended 31 December 2021 have been prepared on a going concern basis.

3. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs")

Amendments to HKFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the following amendments to HKFRSs issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the first time, which are mandatorily effective for the annual periods beginning on or after 1 January 2021 for the preparation of the consolidated financial statements:

Amendments to HKFRS 16	Covid-19-Related Rent Concessions
Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16	Interest Rate Benchmark Reform – Phase 2

In addition, the Group applied the agenda decision of the IFRS Interpretations Committee (the "Committee") of the International Accounting Standards Board issued in June 2021 which clarified the costs an entity should include as "estimated costs necessary to make the sale" when determining the net realisable value of inventories.

The application of the amendments to HKFRSs in the current year has had no material impact on the Group's financial positions and performance for the current and prior periods and/or on the disclosures set out in these consolidated financial statements.

3. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") *(continued)*

New and amendments to HKFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to HKFRSs that have been issued but are not yet effective:

HKFRS 17	Insurance Contracts and the related Amendments[3]
Amendments to HKFRS 3	Reference to the Conceptual Framework[2]
Amendments to HKFRS 10 and HKAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[4]
Amendment to HKFRS 16	Covid-19-Related Rent Concessions beyond 30 June 2021[1]
Amendments to HKAS 1	Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)[3]
Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies[3]
Amendments to HKAS 8	Definition of Accounting Estimates[3]
Amendments to HKAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction[3]
Amendment to HKAS 16	Property, Plant and Equipment – Proceeds before Intended Use[2]
Amendment to HKAS 37	Onerous Contracts – Cost of Fulfilling a Contract[2]
Amendment to HKFRSs	Annual Improvements to HKFRSs 2018–2020[2]

1 Effective for annual periods beginning on or after 1 April 2021

2 Effective for annual periods beginning on or after 1 January 2022

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

4 Effective for annual periods beginning on or after a date to be determined

Except for the new and amendments to HKFRSs mentioned below, the management anticipates that the application of all other new and amendments to HKFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

Amendments to HKAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments narrow the scope of the recognition exemption of deferred tax liabilities and deferred tax assets in paragraphs 15 and 24 of HKAS 12 Income Taxes so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences.

As disclosed in Note 4, the Group applies HKAS 12 requirements to the relevant assets and liabilities separately. Temporary differences on initial recognition of the relevant assets and liabilities are not recognised due to application of the initial recognition exemption.

Upon the application of the amendments, the Group will recognise a deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised) and a deferred tax liability for all deductible and taxable temporary differences associated with the right-of-use assets and the lease liabilities.

The amendments are effective for annual reporting periods beginning on or after 1 January 2023, with early application permitted. As at 31 December 2021, the carrying amounts of right-of-use assets and lease liabilities which are subject to the amendments amounted to RMB333 million and RMB355 million, respectively. The Group is still in the process of assessing the full impact of the application of the amendments. The cumulative effect of initially applying the amendments will be recognised as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of the earliest comparative period presented.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

Basis of preparation of consolidated financial statements

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The "Stock Exchange" (the "Listing Rules") and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis, except for certain properties and financial instruments, which are measured at fair values 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 these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of HKFRS 2 "Share-based Payment", leasing transactions that are accounted for in accordance with HKFRS 16 "Leases", and measurements that have some similarities to fair value but are not fair value, such as net realisable value in HKAS 2 "Inventories" or value in use in HKAS 36 "Impairment of Assets".

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

For financial instruments and investment properties which are transacted at fair value and a valuation technique that unobservable inputs is to be used to measure fair value in subsequent periods, the valuation technique is calibrated so that at initial recognition the results of the valuation technique equals the transaction price.

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 principal accounting policies are set out below.

Significant accounting policies

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 where 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Basis of consolidation (continued)

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.

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 the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When 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.

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.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interests (if any) are derecognised. A gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities attributable to the owners of the Company. All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable HKFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under HKFRS 9 "Financial Instruments" or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

Business combinations or asset acquisition

Optional concentration test

The Group can elect to apply an optional concentration test, on a transaction-by-transaction basis, that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. The gross assets under assessment exclude cash and cash equivalents, deferred tax assets, and goodwill resulting from the effects of deferred tax liabilities. If the concentration test is met, the set of activities and assets is determined not to be a business and no further assessment is needed.

Asset acquisitions

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

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Business combinations or asset acquisition (continued)

Business combinations

Acquisitions of businesses 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.

Except for certain recognition exemptions, the identifiable assets acquired and liabilities assumed must meet the definitions of an asset and a liability in the "Framework for the Preparation and Presentation of Financial Statements (replaced by the "Conceptual Framework for Financial Reporting" issued in October 2010).

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that:

(a) deferred tax assets or liabilities, and liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with HKAS 12 "Income Taxes" and HKAS 19 "Employee Benefits" respectively;

(b) liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with HKFRS 2 at the acquisition date;

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

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

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 amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after 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 relevant subsidiary'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 or at fair value.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date, and the resulting gain or loss, if any, is recognised in profit or loss or other comprehensive income, as appropriate. Amounts arising from interests in the acquiree prior to the acquisition date that have been recognised in other comprehensive income and measured under HKFRS 9 would be accounted for on the same basis as would be required if the Group had disposed directly of the previously held equity interest.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted retrospectively during the measurement period (which cannot exceed one year from the acquisition date), and additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Goodwill

Goodwill arising on an acquisition of a business is carried at cost less accumulated impairment losses, if any, and is presented separately in the consolidated statement of financial position.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units ("CGUs") (or groups of CGUs) 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.

A CGUs (or group of CGUs) to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. For goodwill arising on acquisition in a reporting period, the CGU (or group of CGUs) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount of the CGU 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 pro-rata basis based on the carrying amount of each asset in the unit (or group of CGUs). Any impairment loss for goodwill is recognised directly in profit or loss in the consolidated statement of profit or loss and other comprehensive income. An impairment loss recognised for goodwill is not reversed in subsequent periods.

On disposal of the relevant CGUs or any of the CGU within the group of CGUs, 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 CGU (or a CGU within a group of CGUs), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the CGU) disposed of and the portion of the CGU (or the group of CGUs) retained.

The Group's policy for goodwill arising on the acquisition of an associate and joint venture is described below.

Investments in associates and joint ventures

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.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment, or a portion thereof, is classified as held for sale, in which case it is or the portion so classified is accounted for in accordance with HKFRS 5. Any retained portion of an investment in an associate or a joint venture that has not been classified as held for sale shall be accounted for using the equity method. The financial statements of associates and joint ventures 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 or a joint venture 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 or joint venture. Changes in net assets of the associate or joint venture other than profit or loss and other comprehensive income are not accounted for unless such changes resulted in changes in ownership interest held by the Group. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), 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 the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and 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 the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Investments in associates and joint ventures (continued)

The Group assesses whether there is an objective evidence that the interest in an associate or a joint venture may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with HKAS 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 recognised is not allocated to any assets, including goodwill that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in the investee with a resulting gain or loss being recognised in profit or loss. When the Group retains an interest in the former associate or joint venture and the retained interest is a financial asset within the scope of HKFRS 9, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition. The difference between the carrying amount of the associate or joint venture and the fair value of any retained interest and any proceeds from disposing of the relevant interest in the associate or joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognised in other comprehensive income in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in other comprehensive income by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) upon disposal/partial disposal of the relevant associate or joint venture.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no remeasurement to fair value upon such changes in ownership interests.

When a group entity transacts with an associate or a joint venture of the Group, profits or losses resulting from the transactions with the associate or joint venture are recognised in the consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

Revenue from contracts with customers

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 or 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Revenue from contracts with customers (continued)

Performance obligations for contracts with customers

The Group recognises revenue from the following sources:

(1) Retail gas sales

The Group sells natural gas to customers through pipelines, including both residential households and commercial and industrial customers. Revenue is recognised when the piped natural gas is transferred to and consumed by customers of which the volume of gas sold is measured by gas meters installed at customer sites.

The Group also operates vehicle gas refuelling stations to refuel vehicles with liquefied natural gas ("LNG") and compressed natural gas ("CNG"). Revenue is recognised when the refuelling is completed at the refuelling stations, being the time when LNG or CNG is transferred to customers.

(2) Sales of integrated energy

The Group supplies various energy products, such as gas, electricity, cooling, heating and steam. Revenue from sales of integrated energy is recognised when the energy is transferred to and consumed by the customers.

(3) Construction and installation

The Group provides construction and installation service under construction contracts with its customers. Such contracts are entered into for customers to gain access to the Group's gas pipelines or supply of integrated energy. Revenue is recognised over time based on the completion status of respective construction. The construction period is typically less than one year. The management considers that this output method is an appropriate measure of the progress towards complete satisfaction of the performance obligation.

(4) Wholesale of gas

The Group supplies LNG to wholesale customers. Revenue is recognised when control of LNG has transferred, being when the LNG has been bulk delivered to the customers' specific location.

(5) Value added business

The Group provides customers with a variety of value added services, including but not limit to kitchen solutions, heating systems and security systems. The performance obligations transferred are integral. Revenue is recognised when installation service is rendered, being at the point the customers accept the services.

In addition, the Group also sells construction materials and other energy products to commercial and industrial customers. Revenue is recognised when control of goods has transferred being at the point the customers purchase the goods.

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 HKFRS 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.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

Contracts with multiple performance obligations (including allocation of transaction price)

For contracts that contain more than one performance obligation, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis.

The stand-alone selling price of the distinct good or service underlying each performance obligation is determined at contract inception. It represents the price at which the Group would sell a promised good or service separately to a customer. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Revenue from contracts with customers (continued)

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation

The progress towards complete satisfaction of a performance obligation is measured based on output method, which is to recognise revenue on the basis of direct measurement of the value of the goods or services transferred to the customer to date relative to the remaining goods or services promised under the contract, that best depict the Group's performance in transferring control of goods or services.

Existence of significant financing component

In determining the transaction price, the Group adjusts the promised amount of consideration for the effects of the time value of money if the timing of payments agreed (either explicitly or implicitly) provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract.

For advance payments received from customers before the transfer of the associated goods or services in which the Group adjusts for the promised amount of considerations for a significant financing component, the Group applies a discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. The relevant interest expenses during the period between the advanced payments were received and the transfer of the associated goods and services are accounted for on the same basis as other borrowing costs.

Principal versus agent

When another party is involved in providing goods or services to a customer, the Group determines whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the Group is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the Group is an agent).

The Group is a principal if it controls the specified good or service before that good or service is transferred to a customer.

The Group is an agent if its performance obligation is to arrange for the provision of the specified good or service by another party. In this case, the Group does not control the specified good or service provided by another party before that good or service is transferred to the customer. When the Group acts as an agent, it recognises revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party.

Lease

Definition of a lease

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

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

The Group as a lessee

Allocation of consideration to components of a contract

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

The Group applies practical expedient not to separate non-lease components from lease component, and instead account for the lease component and any associated non-lease components as a single lease component.

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

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Lease (continued)

The Group as a lessee *(continued)*

Short-term leases

The Group applies the short-term lease recognition exemption to leases of various offices, warehouses, equipment and vehicles that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. Lease payments on short-term leases are recognised as expense on a straight-line basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received; and
- any initial direct costs incurred by the Group.

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

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

The Group presents right-of-use assets that do not meet the definition of investment property as a separate line item on the consolidated statement of financial position.

Refundable rental deposits

Refundable rental deposits paid are accounted for under HKFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

Lease liabilities

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

The lease payments include:

- fixed payments less any lease incentives receivable;
- variable lease payments that depend on an index or a rate; and
- amounts expected to be paid under residual value guarantees.

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

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

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

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

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Lease (continued)

The Group as a lessee *(continued)*

Lease modifications

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

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

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

The Group as a lessor

Classification and measurement of leases

Lease for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset, and such costs are recognised as an expense on a straight-line basis over the lease term except for investment properties measured under fair value model.

Allocation of consideration to components of a contract

When a contract includes both leases and non-lease components, the Group applies HKFRS 15 “Revenue from Contracts with Customers” to allocate consideration in a contract to lease and non-lease components. Non-lease components are separated from lease component on the basis of their relative stand-alone selling prices.

Lease modification

Changes in considerations of lease contracts that were not part of the original terms and conditions are accounted for as lease modifications, including lease incentives provided through forgiveness or reduction of rentals.

The Group accounts for a modification to an operating lease as a new lease from the effective date of the modification, considering any prepaid or accrued lease payments relating to the original lease as part of the lease payments for the new lease.

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity’s functional currency (foreign currencies) are recognised at the rates of exchanges 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 carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Foreign currencies (continued)

Exchange differences are recognised in profit or loss in the period in which they arise except for:

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into to hedge certain foreign currency risks (see below under financial instruments/ hedge accounting); and
- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur in the foreseeable future (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the net investment.

For the purposes of presenting 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 expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences are recognised in other comprehensive income and accumulated in equity under the heading of exchange reserve (attributed to non-controlling interests as appropriate). Such exchange differences are reclassified in profit or loss in the period in which the foreign operation is disposed of.

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

Goodwill and fair value adjustments to identifiable assets acquired and liabilities assumed through acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised in other comprehensive income.

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 the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

To the extent that variable rate borrowings are used to finance a qualifying asset and are hedged in an effective cash flow hedge of interest rate risk, the effective portion of the derivative is recognised in other comprehensive income and reclassified to profit or loss when the qualifying asset impacts profit or loss.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in the profit or loss in the period in which they are incurred.

Government grants

Government grants are not recognised until there is a 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 related to income 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Employee benefits

Retirement benefit scheme contribution

Payable to the Mandatory Provident Fund Scheme and the retirement funds scheme managed by local social security bureau in accordance with the government regulations of the PRC, are recognised as an expense when employees have rendered service entitling them to the contributions.

Short-term and other long-term employee benefit

Short-term employee benefits are recognised at the undiscounted amount of the benefits to be paid as and when employees rendered the service. All short-term employee benefits are recognised as expense unless another HKFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave after deducting any amount already paid.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date. Any changes in the liabilities' carrying amounts resulting from service cost, interest and remeasurements are recognised in profit or loss except to the extent that another HKFRS requires or permits their inclusions in the cost of an asset.

Share-based payment

Equity-settled share-based payment transactions

Share options granted by the Company to employees (including Directors)

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value of the equity-settled share-based payments determined at the grant date without taking into consideration all non-market vesting conditions is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (share options reserve). Vesting conditions, other than market condition, shall not be taken into account when estimating the fair value of the share options at the measurement date. Instead, vesting conditions, i.e. a specified service period with or without a performance target, shall be taken into account in estimating the number of equity instrument that will ultimately vest. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the share options reserve.

When share options are exercised, the amount previously recognised in share options reserve will be transferred to share capital and share premium. When the share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognised in share options reserve will be transferred to retained earnings.

Cash-settled share-based payment transactions

For cash-settled share-based payments, a liability is recognised for the goods or services acquired, measured initially at the fair value of the liability. The fair value of the cash-settled share-based payments is determined without taking into consideration all non-market vesting conditions.

At the end of each reporting period until the liability is settled, and at the date of settlement, the liability is remeasured to fair value. For cash-settled share-based payments that are already vested, any changes in fair value are recognised in profit or loss for the year. For cash-settled share-based payments which are still subject to non-market vesting conditions, the effects of vesting and non-vesting conditions are accounted on the same basis as equity-settled share-based payments.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

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 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 base 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 difference to the extent that 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 difference associated with investments in subsidiaries and interests in associates and joint ventures, 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 the 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.

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 rates (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 amounts of its assets and liabilities.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognises the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 requirements to right-of-use assets and lease liabilities separately. Temporary differences relating to right-of-use assets and lease liabilities are not recognised due to application of the initial recognition exemption. Temporary differences arising from subsequent revision to the carrying amounts of right-of-use assets and lease liabilities, resulting from remeasurement of lease liabilities and lease modifications, that are not subject to initial recognition exemption are recognised on the date of remeasurement or modification.

For the purposes of measuring deferred tax for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. The presumption is rebutted when the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment property over time, rather than through sale, expect for freehold land, which is always presumed to be recovered entirely through sale.

Current and deferred tax are recognised in profit or loss, except when it relates 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 initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Property, plant and equipment

Property, plant and equipment are tangible assets included building and leasehold land (classified as finance lease) that are held for use in the production or supply of goods or services, or for administrative purposes (other than properties under construction as described below), are stated in the consolidated statement of financial position at cost or deemed cost for properties transferred from investment properties, less subsequent accumulated depreciation and accumulated impairment losses, if any.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Ownership interests in leasehold land and building

When the Group makes payments for ownership interests of properties which includes both leasehold land and building elements, the entire consideration is allocated between the leasehold land and the building elements in proportion to the relative fair values at initial recognition.

To the extent the allocation of the relevant payments can be made reliably, interest in leasehold land that is accounted for as an operating lease is presented as "right-of-use assets" in the consolidated statement of financial position except for those that are classified and accounted for as investment properties under the fair value model. When the consideration cannot be allocated reliably between non-lease building element and undivided interest in the underlying leasehold land, the entire properties are classified as property, plant and equipment.

Depreciation is recognised so as to write off the costs or deemed cost of assets (other than properties under construction) less their residual values over their estimated useful lives, using the straight-line method. 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.

If a property becomes an investment property because its use has changed as evidenced by end of owner-occupation, any difference between the carrying amount and the fair value of that item (including the relevant leasehold land classified as right-of-use) at the date of transfer is recognised in other comprehensive income and accumulated in revaluation reserve. On the subsequent sale or retirement of the property, the relevant revaluation reserve will be transferred directly to retained earnings.

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 the profit or loss.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation.

Investment properties are measured initially at cost, including any directly attributable expenditure. Subsequent to initial recognition, investment properties are measured at their fair values, adjusted to exclude any prepaid or accrue operating lease income.

Gains or losses arising from changes in the fair value of investment property are included in profit or loss for the period in which they arise.

An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use or no future economic benefits are expected from its disposals. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the profit or loss in the period in which the property is derecognised.

For a transfer from investment property to property, plant and equipment, the investment property is measured at the fair value at the date of transfer. The fair value of the investment property will be recognised as the deemed cost of the property for subsequent accounting in accordance with the accounting policy of property, plant and equipment as set out above.

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 (see the accounting policy in respect of impairment losses on property, plant and equipment, right-of-use assets and intangible assets other than goodwill below). Amortisation 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.

An internally-generated intangible asset arising from development 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Intangible assets (continued)

Internally-generated intangible assets – research and development expenditure *(continued)*

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 charged to 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 that are acquired separately.

Intangible assets acquired in a business combination

Intangible assets that are 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 costs less accumulated amortisation and any accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

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 at the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the profit or loss in the period when the asset is derecognised.

Impairment losses on property, plant and equipment, right-of-use assets and intangible assets other than goodwill (see the accounting policy in respect of goodwill above)

At the end of the reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets and intangible assets with finite useful lives to determine whether there is any indication that those 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. Intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that they may be impaired.

The recoverable amounts of property, plant and equipment, right-of-use assets and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the asset belongs.

In testing a CGU for impairment, corporate assets are allocated to the relevant cash-generating unit when a reasonable and consistent basis of allocation can be established, or otherwise they are allocated to the smallest group of cash generating units for which a reasonable and consistent allocation basis can be established. The recoverable amount is determined for the CGU or group of CGUs to which the corporate asset belongs, and is compared with the carrying amount of the relevant cash-generating unit or group of CGUs.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Impairment losses on property, plant and equipment, right-of-use assets and intangible assets other than goodwill (see the accounting policy in respect of goodwill above) (continued)

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 for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or a CGU) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a CGU, the Group compares the carrying amount of a group of CGUs, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of CGUs, with the recoverable amount of the group of CGUs. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if applicable), 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.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a CGU) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

Inventories

Inventories, including construction materials, gas appliances, natural gas, other energy inventories, spare parts and consumables and integrated energy appliances are stated at the lower of cost and net realisable value. Costs of inventories are determined using weighted average cost formula. Net realisable value represents the estimated selling price for inventories less all estimated costs to completion and the costs necessary to make the sale. Costs necessary to make the sale include incremental costs directly attributable to the sale and non-incremental costs which the Group must incur to make the sale.

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 day 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.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with HKFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at 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 at FVTPL are recognised immediately in profit or loss.

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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

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 FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL, except that at 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 HKFRS 3 “Business Combinations” applies.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that are required to be measured at the amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

(i) Amortised cost and interest income

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 revaluation reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to retained earnings.

Dividends from these investments in equity instruments are 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

Financial assets *(continued)*

Classification and subsequent measurement of financial assets (continued)

(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 to the extent they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial asset and is included in the "other gains and losses" line item.

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade receivables and part of other receivables, restricted bank deposits, cash and cash equivalents, amounts due from associates/joint ventures/related companies) and other items (contract assets and financial guarantee contracts) which are subject to impairment assessment under HKFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month 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 trade receivables and contract assets. The ECL on these assets are assessed individually for debtors with significant balances and collectively using a provision matrix with appropriate groupings for the remaining.

For all other financial assets at amortised cost, the Group measures the loss allowance equal to 12-month ECL, unless there has been a significant increase in credit risk since initial recognition, in which 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.

(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 (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor; and
- 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

Financial assets *(continued)*

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (continued)

(i) Significant increase in credit risk *(continued)*

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a debt instrument has not increased significantly since initial recognition if the debt instrument is determined to have low credit risk at the reporting date. A debt instrument is determined to have low credit risk if i) it has a low risk of default; ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Group considers a debt instrument to have low credit risk when it has an external credit rating of "investment grade" as per globally understood definitions.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

(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).

Default has been considered occurred when the instrument is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events 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 lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;

(d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; 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, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings, whichever occurs sooner. 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.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

Financial assets *(continued)*

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (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 ECL 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 debtors or any other party.

For ECL on financial guarantee contracts for which the effective interest rate cannot be determined, 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.

Lifetime ECL for trade receivables, contract assets and amounts due from associates/joint ventures/related companies arising from contracts with customers are considered individually for debtors with significant balances and collectively for the remaining taking into consideration past due information and relevant credit information such as forward-looking macroeconomic information.

For collective assessment, the Group takes into consideration the following characteristics when formulating the grouping:

- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Expect for financial guarantee contracts, the Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade and other receivables, contract assets and amounts due from associate/joint ventures/related companies where the corresponding adjustment is recognised through a loss allowance account.

Financial liabilities and equity instruments

Classification as debt or equity

Debt and equity instruments issued by a group entity 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.

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

Financial liabilities and equity instruments *(continued)*

Financial liabilities

All financial liabilities are measured subsequently at amortised cost using the effective interest method or at FVTPL.

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, and financial guarantee contracts issued by the Group, are measured in accordance with the specific accounting policies set out below.

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; (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.

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on changes in fair value recognised in profit or loss to the extent that they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the “other gains and losses” line item in profit or loss.

Financial liabilities at amortised cost

Financial liabilities (including trade and other payables, amounts due to associates/joint ventures/related companies, bank and other loans, corporate bonds, senior notes and unsecured bonds) that are not (i) contingent consideration of an acquirer in a business combination; (ii) held-for trading, or (iii) designated as at FVTPL, are measured subsequently at amortised cost, using the effective interest method.

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 payment when due in accordance with the original or modified terms of a debt instrument.

A financial guarantee contract issued by the Group is initially measured at its fair value and if not designated as at FVTPL, are subsequently measured at the higher of: (i) the amount of the loss allowance determined in accordance with HKFRS 9; and (ii) the amount initially recognised less, where appropriate, cumulative amortisation. Amount initially recognised is amortised over the duration of the guarantee using the straight-line method.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

Derecognition

The Group derecognises a financial asset only when the rights to receive cash flows from the assets expire or, when it transfers the financial assets and substantially all the risks and rewards of ownership of the assets 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, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

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

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

Embedded derivatives

Derivatives embedded in hybrid contracts that contain financial asset hosts within the scope of HKFRS 9 are not separated. The entire hybrid contract is classified and subsequently measured in its entirety as either amortised cost or fair value as appropriate.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of HKFRS 9 are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

Generally, multiple embedded derivatives in a single instrument that are separated from the host contracts are treated as a single compound embedded derivative unless those derivatives relate to different risk exposures and are readily separable and independent of each other.

Hedge accounting

The Group designates certain derivatives as hedging instruments for cash flow hedges.

At the inception of the hedging relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

For the purpose of determining whether a forecast transaction (or a component thereof) is highly probable, the Group assumes that the interest rate benchmark on which the hedged cash flows (contractually or non-contractually specified) are based is not altered as a result of interest rate benchmark reform.

Assessment of hedging relationship and effectiveness

For hedge effectiveness assessment, the Group considers whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationships meet all of the following hedge effectiveness requirements:

- there is an economic relationship between the hedged item and the hedging instrument;
- the effect of credit risk does not dominate the value changes that result from that economic relationship; and
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Significant accounting policies *(continued)*

Financial instruments (continued)

Assessment of hedging relationship and effectiveness *(continued)*

The Group designates only the intrinsic value of option contracts as a hedged item, i.e. excluding the time value of the option. The changes in the fair value of the aligned time value of the option are recognised in other comprehensive income and accumulated in the cost of hedging reserve. If the hedged item is transaction-related, the time value is reclassified to profit or loss when the hedged item affects profit or loss. If the hedged item is time period related, the amount accumulated in the cost of hedging reserve is reclassified to profit or loss on a straight-line basis. Those reclassified amounts are recognised in profit or loss in the same line as the hedged item. If the hedged item is a non-financial item, then the amount accumulated in the cost of hedging reserve is removed directly from equity and included in the initial carrying amount of the recognised non-financial item. Furthermore, if the Group expects that some or all of the loss accumulated in cost of hedging reserve will not be recovered in the future, that amount is immediately reclassified to profit or loss.

Cash flow hedges

The effective portion of changes in the fair value of derivatives and other qualifying hedging instruments that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedge reserve, limited to the cumulative change in fair value of the hedged item from inception of the hedge. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'other gains and losses' line item.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognised in other comprehensive income and accumulated in equity are removed from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability. This transfer does not affect other comprehensive income. Furthermore, if the Group expects that some or all of the loss accumulated in the cash flow hedge reserve will not be recovered in the future, that amount is immediately reclassified to profit or loss.

Discontinuation of hedge accounting

The Group discontinues hedge accounting prospectively only when the hedging relationship (or a part thereof) ceases to meet the qualifying criteria (after rebalancing, if applicable). This includes instances when the hedging instrument expires or is sold, terminated or exercised. Discontinuing hedge accounting can either affect a hedging relationship in its entirety or only a part of it (in which case hedge accounting continues for the remainder of the hedging relationship).

For cash flow hedge, any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

5. KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 4, the Directors are required to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and underlying 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 ongoing basis. Revisions to accounting estimates are recognised in the reporting period in which the estimate is revised if the revision affects only that reporting period, or in the reporting period of the revision and future reporting periods if the revision affects both current and future reporting periods.

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.

Recognition of intangible assets acquired in business acquisition

The Group accounts for acquisitions of businesses by using the acquisition method, and the consideration transferred for the business acquisition is allocated to the identifiable assets acquired and liabilities assumed based on their respective fair values as at acquisition date, including intangible assets. The Group usually determines the fair value of intangible assets using excess earning method, which requires a set of estimations and determination of key inputs, including the future cash flow, gross profit margins, revenue growth rates and discount rates. Any changes to these inputs may have significant impact on the fair value of intangible assets, and will consequently have further impact on the goodwill or the profit or loss in the case of a bargain purchase.

Impairment assessment of goodwill and intangible assets

Determining whether goodwill and intangible assets are impaired requires the estimation of the recoverable amount of the CGUs to which goodwill and intangible assets have been allocated which is the higher of the fair value less costs of disposal and its value in use. The value in use calculation requires the Group to estimate the future cash flows expected to arise from the CGU and a suitable inputs, including revenue growth rate and discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, or changes in facts and circumstances which results in downward revision of future cash flows or upward revision of discount rate, a material impairment loss or further impairment loss may arise.

As at 31 December 2021, the carrying amounts of goodwill and intangible assets are RMB2,520 million and RMB4,311 million (2020: RMB2,511 million and RMB4,446 million), respectively. Details of the impairment assessment is set out in Note 19.

Fair value measurement of financial instruments

Certain of the Group's financial instruments, including unlisted equity securities and derivative financial instruments, amounting to RMB4,939 million (2020: RMB3,871 million) as at 31 December 2021 are measured at fair values with fair values being determined based on various valuation techniques and unobserved inputs. Judgment and estimation are required in establishing the relevant valuation techniques and the relevant inputs such as liquidity discount, estimates of future prices, market price volatility and credit risk. Changes in these factors could affect the fair values of these instruments. Further disclosures are set out in Note 53.

Depreciation of property, plant and equipment

Property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives, after taking into account the estimated residual value. The Group assesses annually the residual value and the useful life of the property, plant and equipment and if the expectation differs from the original estimates, such differences from the original estimates will impact the depreciation charges in the year in which the estimates change. As at 31 December 2021, the carrying amount of property, plant and equipment is RMB46,793 million (2020: RMB41,861 million).

6. REVENUE

Revenue from contract with customers comprises the following:

	2021 **RMB million**	2020 RMB million
Sales of goods		
Retail gas sales business	**49,247**	40,510
Integrated energy business	**7,138**	4,611
Wholesale of gas	**25,634**	17,936
Value added business	**2,154**	1,471
	84,173	64,528
Provision of services		
Construction and installation	**8,086**	6,444
Integrated energy business	**667**	431
Value added business	**187**	214
	8,940	7,089
	93,113	71,617

Disaggregation of revenue from contracts with customers

	2021			2020		
	Sales of goods RMB million	**Provision of services RMB million**	**Total RMB million**	Sales of goods RMB million	Provision of services RMB million	Total RMB million
Types of goods or services						
Retail gas sales business	**49,247**	**–**	**49,247**	40,510	–	40,510
Integrated energy business	**7,138**	**667**	**7,805**	4,611	431	5,042
Wholesale of gas	**25,634**	**–**	**25,634**	17,936	–	17,936
Construction and installation	**–**	**8,086**	**8,086**	–	6,444	6,444
Value added business	**2,154**	**187**	**2,341**	1,471	214	1,685
Total	**84,173**	**8,940**	**93,113**	64,528	7,089	71,617

The performance obligations of the Group are for periods of one year or less. As permitted under HKFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

7. SEGMENT INFORMATION

Information reported to the vice chairman of the board of directors of the Company, being the chief operating decision maker (the "CODM"), for the purposes of resource allocation and performance assessment among segments focuses specifically on different type of goods and services.

Segment revenue and results

Segment profit represents the profit earned by each segment without allocation of full amount of administrative costs, distribution and selling expenses, share of results of associates and joint ventures, other income, other gains and losses and finance costs. This is the measure reported to the CODM for the purposes of resource allocation and performance assessment.

Inter-segment sales are charged at prevailing market rates.

The following is an analysis of the Group's revenue and results by reportable segments which are also the operating segments for the year:

2021	**Retail gas sales business RMB million**	**Integrated energy business RMB million**	**Wholesale of gas RMB million**	**Construction and installation RMB million**	**Value added business RMB million**	**Total RMB million**
Segment revenue	**71,195**	**7,880**	**61,328**	**9,593**	**7,798**	**157,794**
Inter-segment sales	**(21,948)**	**(75)**	**(35,694)**	**(1,507)**	**(5,457)**	**(64,681)**
Revenue from external customers	**49,247**	**7,805**	**25,634**	**8,086**	**2,341**	**93,113**
Segment profit before depreciation and amortisation	**7,317**	**1,558**	**362**	**4,831**	**1,727**	**15,795**
Depreciation and amortisation	**(1,153)**	**(193)**	**(4)**	**(385)**	**(4)**	**(1,739)**
Gross profit	**6,164**	**1,365**	**358**	**4,446**	**1,723**	**14,056**

2020	Retail gas sales business RMB million	Integrated energy business RMB million	Wholesale of gas RMB million	Construction and installation RMB million	Value added business RMB million	Total RMB million
Segment revenue	57,875	5,099	38,451	7,434	6,391	115,250
Inter-segment sales	(17,365)	(57)	(20,515)	(990)	(4,706)	(43,633)
Revenue from external customers	40,510	5,042	17,936	6,444	1,685	71,617
Segment profit before depreciation and amortisation	7,576	1,049	366	3,616	1,315	13,922
Depreciation and amortisation	(1,085)	(146)	(4)	(352)	(3)	(1,590)
Gross profit	6,491	903	362	3,264	1,312	12,332

7. SEGMENT INFORMATION *(continued)*

Segment assets and liabilities

An analysis of the Group's total assets and liabilities by segments is as follows:

2021	**Retail gas sales business RMB million**	**Integrated energy business RMB million**	**Wholesale of gas RMB million**	**Construction and installation RMB million**	**Value added business RMB million**	**Total RMB million**
Assets:						
Segment assets	**38,494**	**10,953**	**3,846**	**11,357**	**4,322**	**68,972**
Interests in associates						**3,655**
Interests in joint ventures						**5,063**
Unallocated corporate assets						**22,298**
Consolidated total assets						**99,988**
Liabilities:						
Segment liabilities	**14,205**	**4,249**	**757**	**14,572**	**2,472**	**36,255**
Bank and other loans						**9,468**
Corporate bonds						**2,099**
Senior notes						**4,722**
Unsecured bonds						**3,601**
Unallocated corporate liabilities						**1,693**
Consolidated total liabilities						**57,838**

2020	Retail gas sales business RMB million	Integrated energy business RMB million	Wholesale of gas RMB million	Construction and installation RMB million	Value added business RMB million	Total RMB million
Assets:						
Segment assets	34,274	7,997	2,649	9,364	2,998	57,282
Interests in associates						3,619
Interests in joint ventures						4,141
Unallocated corporate assets						25,001
Consolidated total assets						90,043
Liabilities:						
Segment liabilities	11,281	3,509	577	12,246	2,048	29,661
Bank and other loans						6,668
Corporate bonds						2,097
Senior notes						7,207
Unsecured bonds						3,712
Unallocated corporate liabilities						4,526
Consolidated total liabilities						53,871

7. SEGMENT INFORMATION *(continued)*

Segment assets and liabilities *(continued)*

For the purposes of monitoring segment performances and allocating resources between segments:

- all assets are allocated to reportable segments other than unallocated corporate assets, mainly including unallocated property, plant and equipment, right-of-use assets, intangible assets, goodwill, investment properties, interests in associates, interests in joint ventures, deferred tax assets, certain other receivables, deposits, amounts due from associates, joint ventures and related companies, equity instruments at FVTOCI, financial assets at FVTPL, derivative financial instruments, restricted bank deposits and cash and cash equivalents. Assets used jointly by segments are allocated on the basis of the revenues earned by individual segments; and
- all liabilities are allocated to reportable segments other than unallocated corporate liabilities, mainly including certain other payables, amounts due to associates, joint ventures and related companies, taxation payables, lease liabilities, bank and other loans, corporate bonds, senior notes, derivative financial instruments, unsecured bonds and deferred tax liabilities. Liabilities for which segments are jointly liable are allocated in proportion to segments assets.

For the purposes of presenting segment revenue, results, assets and liabilities, the Group allocates certain property, plant and equipment, intangible assets and right-of-use assets to certain segments with the related depreciation and amortisation of right-of-use assets to those segments.

Other segment information

Amounts included in the measurement of segment profit and segment assets:

	Retail gas sales business RMB million	**Integrated energy business** RMB million	**Wholesale of gas** RMB million	**Construction and installation** RMB million	**Value added business** RMB million	**Total** RMB million
2021						
Additions to non-current assets (Note b)	**4,808**	**1,601**	**129**	**923**	**32**	**7,493**
Depreciation and amortisation	**1,153**	**193**	**4**	**385**	**4**	**1,739**
2020						
Additions to non-current assets (Note b)	4,938	1,497	105	874	22	7,436
Depreciation and amortisation	1,085	146	4	352	3	1,590

	Additions to non-current assets (note b)		**Depreciation and amortisation**	
	2021 **RMB million**	2020 RMB million	**2021** **RMB million**	2020 RMB million
Segment total	**7,493**	7,436	**1,739**	1,590
Adjustments (Note a)	**65**	62	**524**	491
Total	**7,558**	7,498	**2,263**	2,081

Notes:

a. Adjustments represent amounts incurred for corporate headquarters and are not allocated to operating segments.

b. Non-current assets include property, plant and equipment, right-of-use assets, goodwill and intangible assets.

There is no single customer contribute more than 10% of the total revenue of the Group.

Substantially all of the Group's revenue and non-current assets are located in the PRC. For the year ended 31 December 2021, the revenues from the PRC and overseas were RMB92,843 million (2020: RMB71,450 million) and RMB270 million (2020: RMB167 million), respectively. As of 31 December 2021, the non-current assets located in the PRC were RMB66,135 million (2020: RMB60,461 million) and overseas were RMB12 million (2020: RMB12 million).

8. OTHER INCOME

	2021 RMB million	2020 RMB million
Other income mainly includes:		
Incentive subsidies (Note)	**317**	350
Dividends income from equity instruments at FVTOCI	**6**	1
Dividends income from financial assets at FVTPL	**197**	73
Interest income on bank deposits	**81**	77
Interest income on loan receivables from joint ventures, associates and related parties	**37**	29
Interest income on loan receivables from third parties	**82**	98
Rental income from investment properties	**7**	10
Rental income from equipment	**59**	42

Note: The amount mainly represents refunds of various taxes as incentives and other incentives related to the Group's operation by the government authorities in various cities of the PRC.

9. OTHER GAINS AND LOSSES

	2021 RMB million	2020 RMB million
Net (loss) gain on disposal of:		
– Property, plant and equipment	**(26)**	(128)
– Right-of-use assets	**4**	18
– Subsidiaries (Note 49)	**41**	(62)
– Joint ventures	**(4)**	4
– Associates	**9**	–
– A financial asset at FVTPL	**10**	–
Decrease in fair value of investment properties (Note 18)	**(6)**	(7)
Loss on deemed disposal of an associate	**(9)**	–
Net (loss) gain of:		
– Financial assets at FVTPL (Note 25)	**(43)**	(45)
– Derivative financial instruments (Note 24)	**980**	102
Impairment losses under expected credit loss model, net of reversal		
– Trade and other receivables	**(109)**	(106)
– Contract assets	**(4)**	9
– Amounts due from associates/joint ventures/related companies	**(10)**	(32)
Impairment loss recognised in respect of property, plant and equipment	**(37)**	(70)
Loss on repurchase of unsecured bonds	**(1)**	(9)
Gain on foreign exchange, net (Note)	**189**	608
	984	282

Note: Included in the amount for the year ended 31 December 2021 is an exchange gain of approximately RMB230 million (2020: exchange gain of approximately RMB605 million) arising from the translation of senior notes, unsecured bonds and bank loans denominated in United States dollars ("USD") to RMB.

10. FINANCE COSTS

	2021 RMB million	2020 RMB million
Interest on:		
Bank and other loans	**232**	288
Senior notes	**188**	198
Corporate bonds	**89**	90
Unsecured bonds	**124**	139
Lease liabilities	**21**	27
	654	742
Less: Amount capitalised under construction in progress (Note)	**(126)**	(181)
	528	561
Fair value loss reclassified from equity on foreign currency derivative designated as cash flow hedges for USD debts	**48**	48
	576	609

Note: Borrowing costs capitalised during both years were incurred on funds borrowed specifically and generally for the purpose of expenditure on qualifying assets. In respect of funds borrowed generally for the purpose of expenditure on qualifying assets, the amount of borrowing costs capitalised during the year was calculated by applying a capitalisation rate of 3.08% (2020: 3.43%) per annum.

11. PROFIT BEFORE TAX

	2021 RMB million	2020 RMB million
Profit before tax has been arrived at after charging (crediting):		
Share-based payment expenses, including directors' emoluments (included in administrative expenses)	**54**	70
Other staff costs, including directors' emoluments	**3,810**	3,364
Less: Amount of other staff costs capitalised under construction in progress	**(150)**	(168)
	3,714	3,266
Depreciation and amortisation:		
Property, plant and equipment	**1,783**	1,603
Intangible assets	**324**	304
Right-of-use assets	**156**	174
Total depreciation and amortisation (Note)	**2,263**	2,081
Auditors' remuneration	**19**	20
Expense relating to short-term lease and other leases with lease terms ended within 12 months of the date of initial application of HKFRS 16	**33**	24

11. PROFIT BEFORE TAX *(continued)*

Note: The amount of total staff costs and depreciation and amortisation included in cost of sales, distribution and selling expenses and administrative expenses are as follows:

	2021 **RMB million**	2020 RMB million
Staff costs included in:		
Cost of sales	**1,144**	1,094
Distribution and selling expenses	**718**	656
Administrative expenses	**1,852**	1,516
	3,714	3,266
Depreciation and amortisation included in:		
Cost of sales	**1,739**	1,590
Distribution and selling expenses	**117**	96
Administrative expenses	**407**	395
	2,263	2,081

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS

a. Directors' emoluments

Emoluments paid and payable to the Directors for the year were as follows:

	2021					
Name of director	**Fee RMB'000**	**Salaries and allowance RMB'000**	**Discretionary performance bonus RMB'000**	**Share-based payment RMB'000**	**Retirement benefit scheme contributions RMB'000**	**Total emoluments RMB'000**
Executive Directors: (Note a)						
Wang Yusuo	**–**	**2,900**	**–**	**1,601**	**–**	**4,501**
Zheng Hongtao*	**–**	**2,000**	**2,780**	**13,524**	**130**	**18,434**
Wu Xiaojing**	**–**	**59**	**120**	**159**	**2**	**340**
Wang Dongzhi	**–**	**1,900**	**1,400**	**1,067**	**99**	**4,466**
Sub-total	**–**	**6,859**	**4,300**	**16,351**	**231**	**27,741**
Non-executive directors:						
Wang Zizheng***	**500**	**–**	**–**	**1,064**	**15**	**1,579**
Jin Yongsheng****	**500**	**–**	**–**	**–**	**–**	**500**
Zhang Yuying*****	**–**	**2,100**	**2,220**	**5,048**	**132**	**9,500**
Sub-total	**1,000**	**2,100**	**2,220**	**6,112**	**147**	**11,579**
Independent Non-executive Directors: (Note b)						
Ma Zhixiang	**500**	**–**	**–**	**200**	**–**	**700**
Yuen Po Kwong	**500**	**–**	**–**	**200**	**–**	**700**
Law Yee Kwan, Quinn	**500**	**–**	**–**	**200**	**–**	**700**
Yien Yu Yu, Catherine	**500**	**–**	**–**	**200**	**–**	**700**
Sub-total	**2,000**	**–**	**–**	**800**	**–**	**2,800**
Total	**3,000**	**8,959**	**6,520**	**23,263**	**378**	**42,120**

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS *(continued)*

a. Directors' emoluments *(continued)*

	2020					
Name of director	Fee RMB'000	Salaries and allowance RMB'000	Discretionary performance bonus RMB'000	Share-based payment RMB'000	Retirement benefit scheme contributions RMB'000	Total emoluments RMB'000
Executive Directors: (Note a)						
Wang Yusuo	–	2,850	–	2,817	–	5,667
Cheung Yip Sang******	–	450	–	824	7	1,281
Han Jishen*******	–	2,409	–	1,771	106	4,286
Wang Dongzhi	–	1,900	1,100	1,877	–	4,877
Zhang Yuying*****	–	1,750	4,546	1,164	105	7,565
Zheng Hongtao*	–	362	1,472	–	22	1,856
Sub-total	–	9,721	7,118	8,453	240	25,532
Non-executive directors:						
Wang Zizheng***	396	368	–	2,062	16	2,842
Jin Yongsheng****	417	–	–	15	–	432
Sub-total	813	368	–	2,077	16	3,274
Independent Non-executive Directors: (Note b)						
Ma Zhixiang	483	–	–	350	–	833
Yuen Po Kwong	483	–	–	350	–	833
Law Yee Kwan, Quinn	483	–	–	350	–	833
Yien Yu Yu, Catherine	483	–	–	322	–	805
Sub-total	1,932	–	–	1,372	–	3,304
Total	2,745	10,089	7,118	11,902	256	32,110

* Mr. Zheng Hongtao was appointed as an executive director of the Company on 14 September 2020.

** Ms. Wu Xiaojing was appointed as an executive director of the Company on 20 December 2021.

*** Mr. Wang Zizheng was re-designated as a non-executive director of the Company from an executive director of the Company since 16 March 2020.

**** Mr. Jin Yongsheng was appointed as a non-executive director of the Company on 16 March 2020.

***** Mr. Zhang Yuying was re-designated as a non-executive director of the Company from an executive director of the Company since 20 December 2021. The amount was inclusive of the emoluments paid for his service as an executive director of the Company during the year ended 31 December 2021.

****** Mr. Cheung Yip Sang retired on 13 May 2020.

******* Mr. Han Jishen resigned on 2 November 2020.

Notes:

a. The executive directors' emoluments shown above were mainly for their services in connection with the management of the affairs of the Company and the Group.

b. The independent non-executive directors' emoluments shown above were mainly for their services as directors of the Company.

None of the Directors waived any emoluments or received any compensation for loss of office or as inducement to join the Company during both years. The discretionary performance bonus is determined by reference to the Group's performance during the year.

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS *(continued)*

b. Five highest paid individuals

None of the five highest paid individuals received any compensation for loss of office or as inducement to join the Company during both years,

The five highest paid employees of the Group during the year included two (2020: two) directors, details of whose remuneration are set out in Note 12(a) above. Details of the remuneration for the year of the remaining three (2020: three) highest paid employees who are neither a director nor chief executive of the Company are as follows:

	2021 RMB'000	2020 RMB'000
Salaries and allowance	**6,550**	5,800
Discretionary performance bonus	**11,155**	11,433
Share-based payment	**1,440**	2,878
Retirement benefits scheme contributions	**347**	383
	19,492	20,494

The number of the highest paid employees included the Directors whose remuneration fell within the following bands is as follows:

	2021 Number of employees	2020 Number of employees
HK$6,000,001 to HK$6,500,000	**–**	1
HK$7,000,001 to HK$7,500,000	**–**	1
HK$7,500,001 to HK$8,000,000	**2**	1
HK$8,000,001 to HK$8,500,000	**1**	1
HK$8,500,001 to HK$9,000,000	**–**	1
HK$11,000,001 to HK$11,500,000	**1**	–
HK$22,000,001 to HK$22,500,000	**1**	–
	5	5

13. INCOME TAX EXPENSE

	2021 RMB million	2020 RMB million
Current tax	**2,139**	1,736
Underprovision (overprovision) in prior years	**2**	(10)
Withholding tax	**30**	63
Overprovision of withholding tax in prior years	**(60)**	(71)
	2,111	1,718
Deferred tax (Note 32)	**287**	509
	2,398	2,227

The expense substantially represents PRC Enterprise Income Tax for both years.

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 PRC group entities is 25%.

13. INCOME TAX EXPENSE *(continued)*

Certain subsidiaries of the Company are qualified as "High and New Technology Enterprises", which are subject to PRC Enterprise Income Tax at the preferential rate of 15% of the estimated assessable profit as determined in accordance with relevant tax rules and regulations in the PRC. This preferential rate could be applied for three years and the subsidiaries are eligible to apply the tax concession again upon expiry of the three-year period.

Hong Kong Profits Tax is calculated at 16.5% of the estimated assessable profit.

Income tax expense for the year can be reconciled to the profit before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	2021 **RMB million**	2020 RMB million
Profit before tax	**11,393**	9,558
Tax at the PRC Enterprise Income Tax rate of 25% (2020: 25%)	**2,848**	2,390
Tax effects of share of results of associates	**(65)**	(77)
Tax effects of share of results of joint ventures	**(110)**	(119)
Tax effects of income not taxable for tax purpose	**(55)**	(44)
Tax effects of expenses not deductible for tax purpose	**169**	107
Tax effects of tax losses not recognised	**227**	113
Utilisation of tax losses previously not recognised	**(134)**	(80)
Utilisation of temporary differences not recognised	**(101)**	(23)
Tax concession and exemption granted to certain PRC subsidiaries	**(249)**	(143)
Effect of different tax rates of subsidiaries operating in Hong Kong	**(144)**	(30)
Underprovision (overprovision) in prior years	**2**	(10)
Withholding tax on undistributed profit of PRC entities	**10**	143
Income tax expense for the year	**2,398**	2,227

14. DIVIDENDS

	2021 **RMB million**	2020 RMB million
Dividends declared and paid		
Interim dividend	**554**	–
Final dividend	**1,972**	1,719
Special dividend	**301**	–
	2,827	1,719

Note a: The interim dividend declared in 2021 of HK$0.59 (equivalent to approximately RMB0.49) per share, the final dividend declared in the financial year 2020 of HK$2.10 (equivalent to approximately RMB1.77) per share and the special dividend of HK$0.32 (equivalent to approximately RMB0.27) per share, amounting to approximately RMB2,827 million in aggregate was paid during the year ended 31 December 2021.

Note b: The 2019 final dividend of HK$1.67 (equivalent to approximately RMB1.50) per share or approximately RMB1,719 million in aggregate was paid during the year ended 31 December 2020.

Note c: After the end of the reporting period, the Board has recommended a final dividend of HK$2.11 per share (equivalent to approximately RMB1.72 per share) for the year ended 31 December 2021, and is subject to approval by the shareholders in the forthcoming Annual General Meeting ("AGM"). The final dividend proposed after the end of the reporting period has not been recognised as a liability in the consolidated financial statements.

15. EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share attributable to owners of the Company is based on the following data:

Basic earnings per share

Basic earnings per share for the years ended 31 December 2021 and 2020 are calculated by dividing the profit attributable to owners of the Company by the weighted average number of ordinary shares in issue during the year.

	2021	2020
Profit for the year attributable to the owners of the Company (RMB million)	**7,755**	6,278
Weighted average number of ordinary shares	**1,126,611,575**	1,123,467,932
Basic earnings per share (RMB)	**6.88**	5.59

Diluted earnings per share

Diluted earnings per share for the years ended 31 December 2021 and 2020 are calculated assuming all dilutive potential shares were converted during the year.

	2021	2020
Earnings		
Earnings for the purpose of diluted earnings per share (RMB million)	**7,755**	6,278
Number of shares		
Weighted average number of shares for the purpose of basic earnings per share	**1,126,611,575**	1,123,467,932
Effect of dilutive potential shares:		
– share options	**4,177,613**	2,714,693
Weighted average number of shares for the purpose of diluted earnings per share	**1,130,789,188**	1,126,182,625
Diluted earnings per share (RMB)	**6.86**	5.57

16. PROPERTY, PLANT AND EQUIPMENT

	Leasehold land and buildings RMB million	Pipelines RMB million	Machinery and equipment RMB million	Motor vehicles RMB million	Office equipment RMB million	Properties under construction RMB million	Total RMB million
COST							
At 1 January 2020	4,644	29,408	3,261	472	1,960	6,175	45,920
Acquisition of subsidiaries (Notes 47 & 48)	127	317	81	6	1	26	558
Additions	37	70	226	75	252	5,048	5,708
Reclassification	487	4,383	557	–	73	(5,500)	–
Transfer to investment properties	(3)	–	–	–	–	–	(3)
Disposal of subsidiaries (Note 49)	(202)	(219)	(165)	(2)	(7)	(4)	(599)
Disposals	(140)	(222)	(146)	(86)	(32)	(7)	(633)
At 31 December 2020	4,950	33,737	3,814	465	2,247	5,738	50,951
Acquisition of subsidiaries (Notes 47 & 48)	26	679	26	1	–	9	741
Additions	56	120	365	49	193	5,596	6,379
Reclassification	730	5,344	1,254	–	38	(7,366)	–
Transfer to investment properties	(18)	–	–	–	–	–	(18)
Disposal of subsidiaries (Note 49)	(10)	(153)	(29)	(9)	(4)	(1)	(206)
Disposals	(51)	(295)	(110)	(40)	(40)	(15)	(551)
At 31 December 2021	5,683	39,432	5,320	466	2,434	3,961	57,296
DEPRECIATION AND IMPAIRMENT							
At 1 January 2020	783	5,011	870	273	1,028	–	7,965
Provided for the year	165	938	261	50	189	–	1,603
Impairment loss	17	–	53	–	–	–	70
Disposal of subsidiaries	(61)	(53)	(99)	(2)	(7)	–	(222)
Eliminated on disposals	(30)	(114)	(84)	(75)	(23)	–	(326)
At 31 December 2020	874	5,782	1,001	246	1,187	–	9,090
Provided for the year	167	1,015	360	50	191	–	1,783
Impairment loss	6	–	31	–	–	–	37
Disposal of subsidiaries	(3)	(4)	(21)	(8)	(1)	–	(37)
Eliminated on disposals	(12)	(213)	(82)	(33)	(30)	–	(370)
At 31 December 2021	1,032	6,580	1,289	255	1,347	–	10,503
CARRYING VALUES							
At 31 December 2021	4,651	32,852	4,031	211	1,087	3,961	46,793
At 31 December 2020	4,076	27,955	2,813	219	1,060	5,738	41,861

16. PROPERTY, PLANT AND EQUIPMENT *(continued)*

The above items of property, plant and equipment, other than properties under construction, are depreciated on a straight-line basis as follows:

Leasehold land and buildings	Over the shorter of 30 years or the term of the leases
Pipelines	Over the shorter of 30 years or the term of the leases
Machinery and equipment	10–15 years
Motor vehicles	6 years
Office equipment	6 years

At the end of the reporting period, except for certain land and buildings with carrying value of RMB35 million (2020: RMB35 million) which are located in Hong Kong, the remaining land and buildings are located in the PRC.

At the end of the reporting period, the Group is in the process of applying for ownership certificates for its buildings in the PRC amounting to approximately RMB508 million (2020: RMB421 million).

17. RIGHT-OF-USE ASSETS

	Land use rights RMB million	**Leasehold land and buildings** RMB million	**Motor vehicles** RMB million	**Equipment** RMB million	**Total** RMB million
As at 1 January 2020	1,653	501	29	2	2,185
Acquisition of subsidiaries (Note 47)	97	–	–	–	97
Additions	115	80	1	6	202
Disposal of subsidiaries (Note 49)	(41)	(105)	–	–	(146)
Disposals	(15)	(20)	–	–	(35)
Depreciation	(57)	(98)	(17)	(2)	(174)
As at 31 December 2020	1,752	358	13	6	2,129
Acquisition of subsidiaries (Note 47)	31	–	–	–	31
Additions	116	92	–	–	208
Disposal of subsidiaries (Note 49)	(31)	(4)	–	–	(35)
Disposals	(28)	(30)	–	–	(58)
Depreciation	(54)	(89)	(10)	(3)	(156)
As at 31 December 2021	1,786	327	3	3	2,119

	2021 **RMB million**	2020 RMB million
Expense relating to short-term lease	**33**	24
Variable lease payments not included in the measurement of lease liabilities	**4**	6
Total cash outflow for leases	**135**	137

The Group leases various offices, warehouses, equipment and vehicles for its operations. Lease contracts are entered into for fixed term of 1 month to 50 years, but may have extension and termination options. Lease terms are negotiated on an individual basis and contain different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

At the end of the reporting period, the Group is in the process of applying for the land use right certificates for the land in the PRC amounting to approximately RMB114 million (2020: RMB101 million). In the opinion of the Directors, the Group is not required to incur additional cost in obtaining the land use right certificates.

The Group entered into several short-term leases for various offices, warehouses, equipment and vehicles. As at 31 December 2021, the total outstanding commitments of such leases is RMB9 million (2020: RMB8 million).

18. INVESTMENT PROPERTIES

	RMB million
FAIR VALUE	
At 1 January 2020	268
Exchange realignment	(3)
Net decrease in fair value recognised in profit or loss (Note 9)	(7)
Transfer from property, plant and equipment	3
At 31 December 2020	261
Exchange realignment	(1)
Net decrease in fair value recognised in profit or loss (Note 9)	(6)
Transfer from property, plant and equipment	34
At 31 December 2021	288

All of the Group's property interests held under operating leases to earn rentals or for capital appreciation purposes are measured using the fair value model and are classified and accounted for as investment properties. These investment properties include land and buildings which comprise operating leases in respect of properties situated in the PRC and Hong Kong.

The fair value of the Group's investment properties at 31 December 2021 and 2020 has been arrived at on the basis of a valuation carried out on those dates by Knight Frank Petty Limited, a firm of independent valuers. The fair value was determined based on the income approach, where the market rentals of all lettable units of the properties are assessed and discounted at the market yield expected by investors for this type of properties. A significant increase in the market rent used would result in a significant increase in fair value, and vice versa. The Group's investment properties were classified in the Level 3 of fair value hierarchy as at 31 December 2021 and 2020.

In estimating the fair value of the properties, the highest and best use of the properties is their current use.

19. GOODWILL

	2021 RMB million	2020 RMB million
COST		
At 1 January	**2,562**	2,430
Acquisition of subsidiaries (Note 47)	**10**	148
Disposal of subsidiaries (Note 49)	**(1)**	(16)
At 31 December	**2,571**	2,562
IMPAIRMENT		
At 1 January and 31 December	**(51)**	(51)
CARRYING VALUES		
At 31 December	**2,520**	2,511

19. GOODWILL *(continued)*

Note: The Group tests goodwill for impairment annually, or more frequently if there are indications that goodwill might be impaired.

For the purposes of impairment testing, goodwill has been allocated to the following CGUs. At the end of the reporting period, the carrying value of goodwill mainly represents goodwill arising from the acquisition of:

	2021 **RMB million**	2020 RMB million
Integrated energy business located in the PRC	**2,028**	2,028
Sale of piped gas business located in Xuancheng, the PRC	**100**	100
Sale of piped gas business located in Linyi, the PRC	**15**	15
Sale of piped gas business located in Pujiang, the PRC	**27**	27
Sale of piped gas business located in Inner Mongolia, the PRC	**21**	21
Sale of piped gas business located in Jiangsu, the PRC	**62**	52
Sale of piped gas business located in Haerbin, the PRC	**18**	18
Other CGUs of sales of piped gas business, the PRC	**249**	250
	2,520	2,511

For the purpose of impairment testing, the recoverable amounts of the CGUs are determined from value in use calculations.

CGU of integrated energy business in the PRC

The Group prepares cash flow projection for integrated energy business in the PRC covering a 5 year (2020: 5 year) period and the cash flow beyond the 5 year (2020: 5 year) period was extrapolated using a steady growth rate of 3% (2020: 3%). For the 5 year (2020: 5 year) period, the first three years are based on financial budgets approved by management and based on the pattern consistent with the track record of the respective entity taking into account the stage of the development of the respective integrated energy projects. The revenues beyond the 3 year period but within the fifth (2020: fifth) year were estimated using an annualised growth rates of 9.73% (2020: 8.83%). The growth rates are based on the management's estimation on the respective entities projected market share and do not exceed average long-term growth rate for the relevant industry. The gross profit margin will be assumed the same beyond the 5 year (2020: 5 year) period.

The Directors estimate discount rate using pre-tax rate that reflect current market assessment of the time value of money and the risks specific to the CGU and determined the discount rate to be 15.17% (2020: 15.23%).

CGUs of sales of piped gas business in the PRC

For the CGUs of sales of piped gas business in the PRC, the Group prepares a cash flow projection based on management best estimate. The cash flow projections for the first three years are based on financial budgets approved by management which are prepared based on the pattern consistent with the track record of the respective entities taking into account the stage of the development of the respective gas projects. From the fourth to the tenth year, cash flow are extrapolated using an estimated growth pattern at an annualised growth rates of revenue for each CGU ranging from 2.85% to 4.98% (2020: 3.97% to 8.13%). For cash flow on the remaining contractual operating period, i.e. beyond the tenth year, a steady growth rate of 3% will be adopted.

The growth rates are based on the management's estimation on the respective entity's projected market share and will not exceed the growth rate of natural gas consumption projected by the relevant government authorities.

The Directors estimate discount rates using pre-tax rates that reflect current market assessments of the time value of money and the risks specific to the CGUs and determined the discount rate to be 16.39% to 18.60% (2020: 14.56% to 16.40%).

The Directors believe that any reasonably possible change in any of these assumptions would not cause the carrying amounts of goodwill to exceed the recoverable amount of respective CGUs.

20. INTANGIBLE ASSETS

	Right of operation RMB million	Customer base RMB million	Software RMB million	Technology RMB million	Development cost RMB million	Total RMB million
COST						
At 1 January 2020	4,410	51	179	549	11	5,200
Acquisition of subsidiaries (Notes 47 & 48)	684	40	–	–	–	724
Additions	28	–	7	–	26	61
Reclassification	–	–	13	–	(13)	–
Disposal of subsidiaries (Note 49)	(221)	–	–	–	–	(221)
At 31 December 2020	4,901	91	199	549	24	5,764
Acquisition of subsidiaries (Note 47)	152	–	–	–	–	152
Additions	–	–	6	–	31	37
Reclassification	–	–	45	–	(45)	–
At 31 December 2021	5,053	91	250	549	10	5,953
AMORTISATION						
At 1 January 2020	901	24	26	74	–	1,025
Charge for the year	223	2	24	55	–	304
Disposal of subsidiaries (Note 49)	(11)	–	–	–	–	(11)
At 31 December 2020	1,113	26	50	129	–	1,318
Charge for the year	238	6	25	55	–	324
At 31 December 2021	1,351	32	75	184	–	1,642
CARRYING VALUES						
At 31 December 2021	3,702	59	175	365	10	4,311
At 31 December 2020	3,788	65	149	420	24	4,446

Right of operation and customer base are amortised on a straight-line method over the operation periods ranging from 10 to 50 years and from 15 to 50 years, respectively.

Software and technology is amortised on a straight-line method over the periods ranging from 1 to 10 years.

Development cost mainly represents expenditure incurred during the development phase of the Group's integrated energy service technologies and online LNG data platform.

21. INTERESTS IN ASSOCIATES

	2021 RMB million	2020 RMB million
Cost of investments	**2,509**	2,500
Share of post-acquisition profits, net of dividends received	**1,120**	1,093
	3,629	3,593
Deemed capital contribution		
Financial guarantee	**26**	26
	3,655	3,619

Included in the interests in associates is goodwill of approximately RMB56 million (2020: RMB47 million) arising on acquisitions.

In the opinion of the Directors, none of the associates principally affected the results or net assets of the Group. To give details of the associates of the Group would, in the opinion of the Directors, result in particulars of excessive length.

The associates are accounted for using the equity method in these consolidated financial statements.

21. INTERESTS IN ASSOCIATES *(continued)*

Aggregate information of associates:

	2021 RMB million	2020 RMB million
Profit and total comprehensive income for the year	**336**	575
Group's share of profit and total comprehensive income from associates for the year	**261**	306
Aggregate carrying amount of the Group's interests in these associates	**3,655**	3,619

22. INTERESTS IN JOINT VENTURES

	2021 RMB million	2020 RMB million
Cost of investments	**3,281**	2,612
Share of post-acquisition profits, net of dividends received	**1,702**	1,472
	4,983	4,084
Deemed capital contribution		
Financial guarantee	**76**	53
Fair value adjustments on interest-free advances	**4**	4
	80	57
	5,063	4,141

Included in the interests in joint ventures is goodwill of approximately RMB259 million (2020: RMB192 million) arising on acquisitions.

The joint ventures are accounted for using the equity method in these consolidated financial statements.

Details of the Group's principal joint ventures as at 31 December 2021 and 2020 are as follows:

Name of company	**Form of business structure**	**Place of establishment/ operation**	**Proportion of nominal value of registered capital held by the Group**		**Principal activities**
			2021	2020	
東莞新奥燃氣有限公司 ("Dongguan Xinao") (Note)	Incorporated	The PRC	**55%**	55%	Investment in gas pipeline infrastructure and sales of piped gas and gas appliances
煙台新奥燃氣發展有限公司 ("Yantai Xinao") (Note)	Incorporated	The PRC	**50%**	50%	Sales of piped gas, integrated energy and services and provision of construction and installation services

Note: The Group holds 50% or more than 50% of the registered capital of these entities but it does not have the power to appoint sufficient number of directors to control these entities and the joint venture partners in each entity control jointly on the operational and financial policies of each entity. Accordingly, these entities are classified as joint ventures of the Group.

The table above lists the joint ventures of the Group which, in the opinion of the Directors, principally affected the results or net assets of the Group. To give details of other joint ventures of the Group would, in the opinion of the Directors, result in particulars of excessive length.

22. INTERESTS IN JOINT VENTURES *(continued)*

Summarised financial information of material joint ventures

Summarised financial information in respect of the Group's material joint ventures is set out below. The summarised financial information below represents amounts shown in the joint venture's financial statements prepared in accordance with HKFRSs.

Dongguan Xinao

	2021 **RMB million**	2020 RMB million
Current assets	**767**	731
Non-current assets	**3,897**	3,390
Current liabilities	**2,919**	2,433
Non-current liabilities	**32**	77
Non-controlling interests	**200**	183

The above amounts of assets and liabilities include the following:

	2021 **RMB million**	2020 RMB million
Cash and cash equivalents	**163**	361
Current financial liabilities (excluding trade and other payables)	**533**	233

	2021 **RMB million**	2020 RMB million
Revenue	**5,959**	4,295
Profit and total comprehensive income for the year	**185**	218
Dividends received from Dongguan Xinao during the year	**55**	78

The above profit for the year includes the following:

	2021 **RMB million**	2020 RMB million
Depreciation and amortisation	**147**	143
Interest income	**26**	34
Interest expense	**46**	38
Income tax expense	**20**	87

Reconciliation of the above summarised financial information to the carrying amount of the interest in Dongguan Xinao is recognised in the consolidated financial statements:

	2021 **RMB million**	2020 RMB million
Net assets of Dongguan Xinao	**1,513**	1,428
Proportion of the Group's ownership interest in Dongguan Xinao	**832**	785
Goodwill	**31**	31
Carrying amount of the Group's interest in Dongguan Xinao	**863**	816

22. INTERESTS IN JOINT VENTURES *(continued)*

Summarised financial information of material joint ventures *(continued)*

Yantai Xinao

	2021 RMB million	2020 RMB million
Current assets	**760**	613
Non-current assets	**1,359**	1,190
Current liabilities	**1,045**	840
Non-current liabilities	**29**	24
Non-controlling interests	**5**	2

The above amounts of assets and liabilities include the following:

	2021 RMB million	2020 RMB million
Cash and cash equivalents	**272**	357
Current financial liabilities (excluding trade and other payables)	**184**	160

	2021 RMB million	2020 RMB million
Revenue	**2,027**	1,603
Profit and total comprehensive income for the year	**189**	171
Dividends received from Yantai Xinao during the year	**43**	40

The above profit for the year includes the following:

	2021 RMB million	2020 RMB million
Depreciation and amortisation	**52**	58
Interest income	**3**	6
Interest expense	**6**	10
Income tax expense	**63**	61

Reconciliation of the above summarised financial information to the carrying amount of the interest in Yantai Xinao is recognised in the consolidated financial statements:

	2021 RMB million	2020 RMB million
Net assets of Yantai Xinao	**1,040**	937
Proportion of the Group's ownership interest in Yantai Xinao	**520**	469
Goodwill	**7**	7
Capitalisation of financial guarantee	**1**	1
Carrying amount of the Group's interest in Yantai Xinao	**528**	477

22. INTERESTS IN JOINT VENTURES *(continued)*

Summarised financial information of material joint ventures *(continued)*

Aggregate information of joint ventures that are not individually material:

	2021 RMB million	2020 RMB million
Profit and total comprehensive income for the year	517	488
Group's share of profit and total income from joint ventures for the year	242	270
Aggregate carrying amount of the Group's interests in these joint ventures	3,672	2,848

23. TRADE AND OTHER RECEIVABLES

	2021 RMB million	2020 RMB million
Trade receivables	4,072	2,519
Less: Allowance for credit losses	(442)	(335)
	3,630	2,184
Bills receivable (Note)	1,354	1,441
Other receivables	664	702
Loan receivables	566	379
	2,584	2,522
Less: Allowance for credit losses	(24)	(22)
	2,560	2,500
Deductible input value added tax and prepayment of other taxes and charges	1,596	1,499
Advances to suppliers and prepayments	2,800	2,943
Total trade and other receivables	10,586	9,126
Analysed for reporting purpose as:		
Current portion	10,568	9,053
Non-current portion	18	73

Note: The bills receivable were endorsed by PRC banks for guarantee payments and the default risk is considered to be minimal.

The following is an aged analysis of trade receivables, net of allowance for credit losses presented based on invoice date at the end of the reporting period:

	2021 RMB million	2020 RMB million
0 to 3 months	2,663	1,418
4 to 6 months	343	301
7 to 9 months	212	181
10 to 12 months	113	16
More than one year	299	268
	3,630	2,184

23. TRADE AND OTHER RECEIVABLES *(continued)*

As at 1 January 2020, trade receivables, net of allowance for credit losses amounted to RMB2,362 million.

As at 31 December 2021, total bills receivable amounting to RMB1,354 million (2020: RMB1,441 million) are with a maturity period of less than one year.

As at 31 December 2021, included in the Group's trade receivables balance are debtors with aggregate carrying amount of RMB1,015 million (2020: RMB779 million) which are past due at the end of the reporting period and is not considered as in default because the Group has assessed the historical payment pattern of the debtors and the credit quality of these customers.

Details of impairment assessment of trade and other receivables for the year ended 31 December 2021 are set out in Note 53.

24. DERIVATIVE FINANCIAL INSTRUMENTS

	2021 RMB million	2020 RMB million
Derivative financial assets		
Derivatives designated as cash flow hedges:		
Foreign currency derivative contracts (Note a)	**–**	2
Commodity derivative contracts (Note b)	**124**	–
Derivatives not designated in hedge accounting:		
Commodity derivative contracts (Note b)	**2,407**	626
	2,531	628
Derivative financial liabilities		
Derivatives designated as cash flow hedges:		
Foreign currency derivative contracts (Note a)	**97**	135
Commodity derivative contracts (Note b)	**–**	62
Derivatives not designated in hedge accounting:		
Commodity derivative contracts (Note b)	**1,665**	730
	1,762	927
Analysed for reporting purpose as:		
Assets		
Current portion	**1,585**	336
Non-current portion	**946**	292
Liabilities		
Current portion	**956**	401
Non-current portion	**806**	526

For the year ended 31 December 2021

	Commodity Derivatives RMB million	**Foreign Currency Derivatives RMB million**	**Total RMB million**
Net unrealised gain (loss) included in other gains and losses			
Derivatives designated as cash flow hedges – ineffective portion	**14**	**(14)**	**–**
Derivatives not designated in hedge accounting	**782**	**–**	**782**
	796	**(14)**	**782**
Net realised gain included in other gains and losses			
Derivatives not designated in hedge accounting	**198**	**–**	**198**
	994	**(14)**	**980**

24. DERIVATIVE FINANCIAL INSTRUMENTS *(continued)*

For the year ended 31 December 2020

	Commodity Derivatives RMB million	Foreign Currency Derivatives RMB million	Total RMB million
Net unrealised gain (loss) included in other gains and losses			
Derivatives designated as cash flow hedges – ineffective portion	(13)	–	(13)
Derivatives not designated in hedge accounting	45	6	51
	32	6	38
Net realised gain (loss) included in other gains and losses			
Derivatives designated as cash flow hedges – ineffective portion	–	(55)	(55)
Derivatives not designated in hedge accounting	171	(52)	119
	171	(107)	64
	203	(101)	102

Notes:

a. The Group is exposed to exchange rate risk mainly arising from various bonds and bank loans denominated in USD. To manage and mitigate the foreign exchange exposure, the Group entered into various foreign currency derivative contracts (the "Foreign Currency Derivatives") with certain financial institutions. As at 31 December 2021, the Foreign Currency Derivatives have a total notional amount of USD550 million (2020: USD750 million), of which the maturity dates match to the maturity dates of certain debts denominated in USD. The Foreign Currency Derivatives will enable the Group to buy USD at the predetermined RMB/USD exchange rates on maturity dates. The Foreign Currency Derivatives are designated as hedging instruments and accounted for under hedge accounting.

b. The Group has entered into sale and purchase agreements to acquire LNG from certain international suppliers. The purchase prices of these arrangements are linked to certain commodity price indexes. Details of these arrangements are set out in Note 50.

   In order to manage and mitigate the commodity price risk arising from the highly probable forecast LNG purchases under these agreements, the Group has entered into various commodity derivative contracts (the "Commodity Derivatives") with certain financial institutions. Certain Commodity Derivatives are designated as hedging instruments and accounted for under hedge accounting.

25. FINANCIAL ASSETS AT FVTPL

	2021 RMB million	2020 RMB million
Financial assets at FVTPL		
Listed equity interest in Shanghai Dazhong Public Utilities (Group) Co., Ltd ("Shanghai Utilities") (Note a)	**181**	244
Unlisted equity interest in Sinopec Marketing Co., Ltd ("Sinopec Marketing") (Note b)	**4,170**	4,170
Unlisted equity securities (Note c)	**55**	346
Unlisted wealth management products	**152**	70
	4,558	4,830
Analysed for reporting purpose as:		
Assets		
Current portion	**152**	70
Non-current portion	**4,406**	4,760

	2021 RMB million	2020 RMB million
Net unrealised (loss) gain included in other gains and losses		
Listed equity interest in Shanghai Utilities (Note a)	**(63)**	(43)
Other unlisted equity securities (Note c)	**20**	(2)
	(43)	(45)

25. FINANCIAL ASSETS AT FVTPL *(continued)*

Notes:

a. The above listed investment represents 4.38% of the total issued share capital of Shanghai Utilities (1635.HK). During the year ended 31 December 2021, the Group received dividend income of approximately RMB6 million (2020: RMB7 million) from Shanghai Utilities.

b. The above investment represents 1.13% unlisted equity interest in Sinopec Marketing Co., Ltd ("Sinopec Marketing"). During the year ended 31 December 2021, the Group received dividend income of approximately RMB191 million (2020: RMB66 million) from Sinopec Marketing.

c. The unlisted investments represent investments in unlisted equity securities issued by private entities incorporated in the PRC.

26. EQUITY INSTRUMENTS AT FVTOCI

	2021 RMB million	2020 RMB million
Listed equity securities	**113**	62
Unlisted equity securities	**153**	149
	266	211

The above unlisted investments represent investments in unlisted equity securities issued by private entities incorporated in the PRC. The Directors have elected to designate these investments as equity instruments at FVTOCI as they believe that the Group will hold these investments for strategic cooperation purpose and has no intention to dispose of these investments in the foreseeable future.

27. TRANSFER OF FINANCIAL ASSETS

The following were the Group's financial assets as at 31 December 2021 and 2020 that were transferred to banks or suppliers by discounting, pledging to banks or endorsing those receivables on a full recourse basis. As the Group has not transferred the significant risks and rewards relating to these receivables, it continues to recognise the full carrying amount of the receivables and the corresponding liabilities included in secured borrowings or trade payables respectively. These financial assets are carried at amortised cost in the consolidated statement of financial position.

At 31 December 2021

	Bills receivable discounted or pledged to banks RMB million	**Bills receivable endorsed to suppliers RMB million**	**Total RMB million**
Carrying amount of transferred assets	**390**	**677**	**1,067**
Carrying amount of associated liabilities	**(390)**	**(677)**	**(1,067)**
	–	**–**	**–**

At 31 December 2020

	Bills receivable discounted or pledged to banks RMB million	Bills receivable endorsed to suppliers RMB million	Total RMB million
Carrying amount of transferred assets	112	523	635
Carrying amount of associated liabilities	(112)	(523)	(635)
	–	–	–

28. CONTRACT ASSETS

	2021 RMB million	2020 RMB million
Gas pipeline installation	667	650
Integrated energy construction contracts	108	82
	775	732

As at 1 January 2020, contract assets amounted to RMB757 million.

29. AMOUNTS DUE FROM/TO ASSOCIATES

	2021 RMB million	2020 RMB million
Amounts due from associates:		
Current portion	1,165	892
Non-current portion	21	6
	1,186	898
Amounts due to associates:		
Current portion	424	319
Non-current portion	215	–
	639	319

Included in the amounts due from/to associates are trade receivables amounting to approximately RMB589 million (2020: RMB531 million) and trade payables amounting to approximately RMB212 million (2020: RMB71 million).

The aged analysis presented based on the invoice date, at the end of the reporting period is as follows:

	2021 RMB million	2020 RMB million
Trade receivables due from associates		
0 to 3 months	342	229
4 to 6 months	74	130
7 to 9 months	13	64
10 to 12 months	46	14
More than one year	114	94
	589	531

There is no formal credit period applied and the balance was repayable on demand. Owing to the strategic relationship with the associates, the Directors are of the view that the balance is not considered as in default.

The amounts due from/to associates are unsecured, interest-free and repayable on demand except for the amounts due from/to associates detailed in the following table.

At 31 December 2021

	Maturity date	Effective interest rate per annum	2021 RMB million
Loan receivables from associates			
Unsecured	11/01/2022–10/03/2024	3.85%–8.00%	113
Loan payables to associates			
Savings in ENN Finance Company Limited (“ENN Finance”)		0.35%	193
Unsecured	14/10/2024	3.70%	215
			408

29. AMOUNTS DUE FROM/TO ASSOCIATES *(continued)*

At 31 December 2020

	Maturity date	Effective interest rate per annum	2020 RMB million
Loan receivables from associates			
Unsecured	28/03/2021–16/01/2023	4.35%–8.00%	191
Loan payables to associates			
Savings in ENN Finance		0.35%	144
Unsecured	20/12/2021	4.35%	35
			179

Details of impairment assessment of amounts due from associates are set out in Note 53.

30. AMOUNTS DUE FROM/TO JOINT VENTURES

	2021 RMB million	2020 RMB million
Amounts due from joint ventures:		
Current portion	**2,440**	2,106
Non-current portion	**4**	10
	2,444	2,116
Amounts due to joint ventures:		
Current portion	**1,249**	976
Non-current portion	**325**	585
	1,574	1,561

Included in the amounts due from joint ventures was approximately RMB355 million (2020: RMB245 million) arising from the deposits placed for purchases of gas by the Group from the joint ventures. The balance approximates its fair value and is repayable on demand.

Included in the amounts due from/to joint ventures are trade receivables amounting to approximately RMB501 million (2020: RMB735 million) and trade payables amounting to approximately RMB924 million (2020: RMB786 million) and the aged analysis presented based on invoice date, is as follows:

	2021 RMB million	2020 RMB million
Trade receivables due from joint ventures		
0 to 3 months	**345**	533
4 to 6 months	**22**	40
7 to 9 months	**22**	24
10 to 12 months	**16**	7
More than one year	**96**	131
	501	735

30. AMOUNTS DUE FROM/TO JOINT VENTURES *(continued)*

	2021 **RMB million**	2020 RMB million
Trade payables due to joint ventures		
0 to 3 months	**340**	566
4 to 6 months	**150**	102
7 to 9 months	**90**	51
10 to 12 months	**62**	26
More than one year	**282**	41
	924	786

There is no formal credit period applied and the balance was repayable on demand. Owing to the strategic relationship with the joint ventures, the Directors are of the view that the balance is not considered as in default.

The amounts due from/to joint ventures are unsecured, interest-free and repayable on demand except for the amounts due from/to joint ventures detailed in the following table:

At 31 December 2021

	Maturity date	**Effective interest rate per annum**	**2021** **RMB million**
Loan receivables from joint ventures			
Unsecured	26/05/2022–17/12/2022	4.35%–6.00%	**360**
Loan payables to joint ventures			
Unsecured	13/08/2023–29/11/2023	4.35%–4.75%	**325**
Savings in ENN Finance		0.35%	**195**
			520

At 31 December 2020

	Maturity date	Effective interest rate per annum	2020 RMB million
Loan receivables from joint ventures			
Unsecured	15/06/2021–26/09/2022	4.35%–6.00%	532
Loan payables to joint ventures			
Unsecured	12/02/2021–29/12/2022	0.35%–5.00%	623
Savings in ENN Finance		0.35%	57
			680

Details of impairment assessment of amounts due from joint ventures are set out in Note 53.

31. AMOUNTS DUE FROM/TO RELATED COMPANIES

	2021 RMB million	2020 RMB million
Amounts due from companies controlled by a director and shareholder with significant influence	**318**	348
Amounts due to companies controlled by a director and shareholder with significant influence	**964**	925

The related companies are controlled by Mr. Wang Yusuo ("Mr. Wang") who is a director and shareholder of the Company with significant influence. The maximum amount outstanding during the year in respect of the amounts due from companies controlled by Mr. Wang is RMB461 million (2020: RMB510 million).

Included in the amounts due from/to related companies are trade receivables amounting to approximately RMB216 million (2020: RMB209 million) and trade payables amounting to approximately RMB891 million (2020: RMB861 million) and the aged analysis presented based on invoice date, at the end of the reporting period is as follow:

	2021 RMB million	2020 RMB million
Trade receivables due from related companies		
0 to 3 months	**43**	51
4 to 6 months	**20**	24
7 to 9 months	**30**	32
10 to 12 months	**63**	9
More than one year	**60**	93
	216	209

	2021 RMB million	2020 RMB million
Trade payables due to related companies		
0 to 3 months	**639**	577
4 to 6 months	**58**	98
7 to 9 months	**65**	53
10 to 12 months	**43**	34
More than one year	**86**	99
	891	861

There is no formal credit period applied and the balance was repayable on demand. Owing to the strategic relationship with the related companies, the Directors are of the view that the balance is not considered as in default.

Details of impairment assessment of amounts due from related companies are set out in Note 53.

32. DEFERRED TAXATION

	2021 RMB million	2020 RMB million
Deferred tax assets	**1,212**	1,370
Deferred tax liabilities	**(2,785)**	(2,562)
	(1,573)	(1,192)

The following are the major deferred tax assets and liabilities recognised and movements thereon during the years ended 31 December 2021 and 2020:

	Intangible assets RMB million	**Capitalisation of interest in property, plant and equipment** RMB million	**Undistributed retained profits of PRC entities from 1 January 2008** RMB million (Note)	**Deferred income** RMB million	**Unrealised profits** RMB million	**Equipment for one time deduction from 1 January 2018** RMB million	**Others** RMB million	**Total** RMB million
At 1 January 2020	848	212	182	(1,070)	(345)	727	(26)	528
Acquisition of subsidiaries (Note 47)	209	–	–	–	–	–	–	209
(Credit) charge to profit or loss	(60)	36	151	9	(78)	483	(32)	509
Charge to other comprehensive income	–	–	–	–	–	–	2	2
Disposal of subsidiaries (Note 49)	(56)	–	–	–	–	–	–	(56)
At 31 December 2020	941	248	333	(1,061)	(423)	1,210	(56)	1,192
Acquisition of subsidiaries (Note 47)	50	–	–	–	–	–	–	50
(Credit) charge to profit or loss	(66)	21	40	30	(134)	300	96	287
Charge to other comprehensive income	–	–	–	–	–	–	44	44
At 31 December 2021	925	269	373	(1,031)	(557)	1,510	84	1,573

Note: The amount represents deferred taxation in respect of the temporary differences attributable to the undistributed retained profits earned after 1 January 2008 by the group entities registered in the PRC. The amount has been provided based on the amount of undistributed retained profits of certain PRC entities from 1 January 2008 attributable to non-PRC parent entities at a withholding tax rate of 10% or 5% as the Directors consider the amount will be probably reversed in the foreseeable future upon distribution of profit by the respective group entities.

Deferred taxation of approximately RMB1,164 million (2020: RMB930 million) has not been provided for in the consolidated financial statements in respect of temporary differences attributable to undistributed retained profits of certain PRC subsidiaries as the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

32. DEFERRED TAXATION *(continued)*

As at 31 December 2021, the Group has unused tax losses of approximately RMB2,309 million (2020: RMB1,924 million) available for offset against future profits. No deferred tax asset has been recognised in respect of the unused tax losses due to the uncertainty of future profit streams. The unrecognised tax losses will be expired in the following years ending 31 December:

	2021 RMB million	2020 RMB million
2021	**–**	80
2022	**90**	96
2023	**237**	446
2024	**648**	848
2025	**427**	454
2026	**907**	–
	2,309	1,924

As at 31 December 2021, the Group has no other deductible temporary differences (2020: RMB403 million). Prior year balance were mainly arising from impairment of trade and other receivables and unrealised profits within the Group. No deferred tax asset has been recognised in relation to such other deductible temporary differences as it is not probable that taxable profit will be available for offsetting against which the deductible temporary differences can be utilised.

33. INVENTORIES

	2021 RMB million	2020 RMB million
Construction materials	**770**	787
Gas appliances	**240**	178
Natural gas	**408**	233
Other energy inventories	**30**	34
Spare parts and consumables	**8**	6
Integrated energy appliances	**52**	47
	1,508	1,285

The cost of inventories recognised as an expense during the year was approximately RMB72,632 million (2020: RMB55,280 million).

34. CASH AND CASH EQUIVALENTS/RESTRICTED BANK DEPOSITS

	2021 RMB million	2020 RMB million
Cash and cash equivalents	**8,684**	8,630
Restricted bank deposits		
Current portion	**363**	116
Non-current portion	**622**	650
	985	766

	2021 RMB million	2020 RMB million
Bank deposits secured for:		
Letter of credit	**–**	15
Right of operation	**36**	59
Mandatory reserves in the People's Bank of China ("PBOC")	**443**	465
Energy supplies	**154**	76
Bills payable	**352**	151
	985	766

Cash and cash equivalents include bank balances with original maturities less than three months carrying interest at market rates which range from 0.01% to 2.75% (2020: 0.03% to 4.18%) per annum as at 31 December 2021. The bank balances denominated in RMB are deposited with banks in the PRC.

At the end of the reporting period, the cash and cash equivalents denominated in foreign currencies other than the functional currency of respective group entities is RMB1,067 million (2020: RMB684 million), of which approximately RMB1,024 million (2020: RMB578 million) and approximately RMB43 million (2020: RMB101 million) are denominated in USD and HK$, respectively.

As at 31 December 2021, the restricted bank deposits carry fixed interest rate ranging from 0.30% to 4.13% (2020: from 0.03% to 3.71%) per annum. Except for the amount of mandatory reserves in the PBOC, other restricted bank deposits will be released upon the settlement of bank loans, the expiry of purchase contracts or right of operation. The mandatory reserves in the PBOC classified as non-current assets are deposits placed by ENN Finance and the reserves amount is subject to change with respect to the savings accepted by ENN Finance and the PBOC reserve rate is adjusted from time to time.

35. LEASE LIABILITIES

	2021 RMB million	2020 RMB million
Lease liabilities payables:		
Within one year	**75**	89
More than one year, but not more than two years	**60**	66
More than two years, but not more than five years	**116**	116
More than five years	**104**	128
	355	399
Less: Amounts due within one year shown under current liabilities	**(75)**	(89)
Amounts shown under non-current liabilities	**280**	310

The weighted average incremental borrowing rates applied to lease liabilities range from 3.04% to 5.23% (2020: from 3.04% to 5.23%).

36. TRADE AND OTHER PAYABLES

	2021 RMB million	2020 RMB million
Trade payables	**7,623**	6,186
Accrued staff cost	**624**	618
Other tax payables	**235**	203
Accrued charges and other payables	**1,690**	1,295
	10,172	8,302

The following is an aged analysis of trade payables presented based on the invoice date at the end of the reporting period.

	2021 RMB million	2020 RMB million
0 to 3 months	**5,087**	3,472
4 to 6 months	**1,038**	1,094
7 to 9 months	**389**	535
10 to 12 months	**261**	236
More than one year	**848**	849
	7,623	6,186

The average credit period on purchases of goods is 30 to 90 days.

37. CONTRACT LIABILITIES

	2021 RMB million	2020 RMB million
Deposit for gas charges and other sales (Note a)	**7,821**	7,082
Deposit for construction and installation contracts (Note b)	**6,790**	6,893
Deferred income (Note c)	**3,290**	3,479
	17,901	17,454
Analysed for reporting purpose as:		
Current portion	**14,908**	14,242
Non-current portion	**2,993**	3,212
	17,901	17,454

As at 1 January 2020, contract liabilities amounted to RMB15,915 million.

Contract liabilities are classified as current and non-current based on the Group's earliest obligation to transfer goods or services to the customers.

The amount of revenue recognised in the current year relates to carried-forward contract liabilities were RMB12,230 million (2020: RMB10,431 million).

Notes:

a. The Group requires the customers to deposit gas charges into magnetic cards which connected to the gas meters. When the customers consume the natural gas, corresponding value of deposits will be recognised as revenue in line with the volume of gas consumed at pre-determined unit price. The deposit would be typically consumed within one year.

b. For construction and installation contracts, the Group normally receives a deposit before construction work commences. The Group continues to recognise revenue over time and apply output method in estimating the performance obligations satisfied throughout the construction and the installation period.

c. The deferred income represents fees received from certain customers for maintaining the ongoing deliverability to supply gas at the discretion of the customers. The period to supply gas would be consistent with the operating period as stated in the right of operation.

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38. DEFERRED INCOME

	Government grants RMB million
GROSS	
At 1 January 2020	758
Additions	123
Disposal of subsidiaries (Note 49)	(11)
At 31 December 2020	870
Additions	109
Acquisition of subsidiaries (Note 47)	2
At 31 December 2021	981
RECOGNITION	
At 1 January 2020	75
Release to profit or loss	32
Disposal of subsidiaries	(4)
At 31 December 2020	103
Release to profit or loss	41
At 31 December 2021	144
CARRYING VALUES	
At 31 December 2021	837
At 31 December 2020	767

	2021 **RMB million**	2020 RMB million
Analysed for reporting purposes as:		
Current portion	**48**	38
Non-current portion	**789**	729
	837	767

39. SHARE CAPITAL

	2021 **Number of shares**	2020 Number of shares	**2021** **HK$ million**	2020 HK$ million
Shares of HK$0.10 each				
Authorised:				
At beginning and end of the year	**3,000,000,000**	3,000,000,000	**300**	300
Issued and fully paid:				
At beginning of the year	**1,128,365,108**	1,125,477,108	**113**	112
Issue of shares upon exercise of share options (Note)	**1,770,667**	2,888,000	**–**	1
At end of the year	**1,130,135,775**	1,128,365,108	**113**	113

39. SHARE CAPITAL *(continued)*

	2021 RMB million	2020 RMB million
Presented in consolidated financial statements as:		
At beginning of the year	**117**	116
Issue of shares upon exercise of share options	**–**	1
At end of the year	**117**	117

Note: During the year ended 31 December 2021, 753,200 shares and 1,017,467 shares (2020: 2,212,800 shares and 475,200 shares) were issued at the exercise price of HK$40.34 and HK$76.36 per ordinary share under Scheme 2012, respectively, in relation to the exercise of outstanding share options. These shares rank pari passu with the then existing shares in all respects as set out in Note 45.

Save as disclosed above and in Note 45, none of the Company's subsidiaries purchased, sold or redeemed any of the Company's listed securities up to 31 December 2021.

40. BANK AND OTHER LOANS

	2021 RMB million	2020 RMB million
Bank loans		
Secured	**652**	456
Unsecured	**8,720**	6,099
	9,372	6,555
Other loans		
Secured	**–**	16
Unsecured	**96**	97
	96	113
	9,468	6,668

	2021 RMB million	2020 RMB million
The bank and other loans are repayable:		
On demand or within one year	**6,150**	4,590
More than one year, but not more than two years	**693**	64
More than two years, but not more than five years	**1,754**	753
More than five years	**871**	1,261
	9,468	6,668
Less: Amounts due within one year shown under current liabilities	**(6,150)**	(4,590)
Amounts shown under non-current liabilities	**3,318**	2,078

As at 31 December 2021, all the bank and other loans are denominated in the functional currency of respective group entities except for approximately RMB3,672 million (2020: RMB1,631 million) which are denominated in USD.

The secured bank and other loans are secured by property, plant and equipment, rights to receive fee income of certain subsidiaries and joint ventures as set out in Note 52.

40. BANK AND OTHER LOANS *(continued)*

Details of the terms of the Group's borrowings are set out below:

At 31 December 2021

	Maturity date	Effective interest rate per annum	Carrying amount RMB million
Fixed-rate borrowings			
Unsecured RMB bank loans	07/01/2022–20/10/2029	1.85%–4.80%	**3,328**
Unsecured RMB other loans	31/12/2022	3.79%	**96**
Secured RMB bank loans	03/03/2022–25/12/2024	3.35%–4.41%	**652**
Unsecured USD bank loans	06/01/2022–24/01/2022	0.64%–0.70%	**3,672**
Total fixed-rate borrowings			**7,748**
Floating-rate borrowings			
Unsecured RMB bank loans at PBOC base rate	05/08/2024–07/11/2032	3.50%–5.39%	**1,720**
Total borrowings			**9,468**

At 31 December 2020

	Maturity date	Effective interest rate per annum	Carrying amount RMB million
Fixed-rate borrowings			
Unsecured RMB bank loans	12/02/2021–21/12/2029	1.70%–4.80%	3,494
Unsecured RMB other loans	31/12/2021	3.79%	97
Secured RMB bank loans	23/02/2021–25/12/2024	3.40%–4.41%	456
Secured RMB other loan	23/08/2022	4.35%	16
Unsecured USD bank loans	22/01/2021–05/02/2021	2.40%–2.53%	652
Total fixed-rate borrowings			4,715
Floating-rate borrowings			
Unsecured RMB bank loans at PBOC base rate	30/01/2021–07/11/2032	4.30%–5.39%	974
Unsecured USD bank loan at London Interbank Offered Rate ("LIBOR")	30/11/2021	1.23%	979
Total floating-rate borrowings			1,953
Total borrowings			6,668

41. CORPORATE BONDS

Details of the terms of the three tranches' corporate bonds issued by Xinao (China) Gas Investment Company Limited ("Xinao (China)") are set out below:

Date of issuance	**22 January 2019**	**8 March 2019**	**11 November 2019**
Principal amount	**RMB500 million**	**RMB1,000 million**	**RMB600 million**
Interest rate	**4.19%**	**4.20%**	**3.98%**
Maturity date	**22 January 2022**	**8 March 2022**	**12 November 2022**
Net proceeds after deducting transaction costs	**RMB498 million**	**RMB996 million**	**RMB599 million**
Date of listing on the Shanghai Stock Exchange	**20 February 2019**	**29 March 2019**	**22 November 2019**
Effective interest rate after the adjustment for transaction costs	**4.36%**	**4.36%**	**4.04%**

41. CORPORATE BONDS *(continued)*

The corporate bonds recognised in the consolidated statement of financial position are calculated cumulatively as follows:

	2021 RMB million	2020 RMB million
Nominal value of corporate bonds	**2,100**	2,100
Issue costs	**(7)**	(7)
Fair value at date of issuance	**2,093**	2,093
Cumulative effective interest recognised	**237**	148
Cumulative interest paid/payable	**(231)**	(144)
Carrying amount at 31 December	**2,099**	2,097

42. SENIOR NOTES

a. 2021 Senior Notes

On 13 May 2011, the Company issued 6% senior notes with an aggregated nominal value of USD750 million (equivalent to approximately RMB4,863 million) (the "2021 Senior Notes") at face value. The net proceeds, after deducting the issuance costs, amounted to USD735 million (equivalent to approximately RMB4,765 million).

The 2021 Senior Notes recognised in the consolidated statement of financial position are calculated cumulatively as follows:

	2021 RMB million	2020 RMB million
Nominal value of 2021 Senior Notes	**4,863**	4,863
Issue costs	**(98)**	(98)
Fair value at date of issuance	**4,765**	4,765
Repurchased (Note)	**(2,603)**	(2,603)
Repayment upon maturity	**(2,372)**	–
Cumulative effective interest recognised	**2,296**	2,241
Cumulative interest paid/payable	**(2,225)**	(2,175)
Exchange loss	**139**	152
Carrying amount at 31 December	**–**	2,380

Note: In September 2015 and December 2016, the Company repurchased in aggregate of principal amount of USD35,000,000 and USD349,457,000 (equivalent to approximately RMB222 million and RMB2,410 million) in the open market. The remaining balance of the 2021 Senior Notes was matured and fully repaid on 13 May 2021.

b. Green Senior Notes

On 17 September 2020, the Company issued 2.63% green senior notes with an aggregated nominal value of USD750 million (equivalent to approximately RMB5,137 million) (the "Green Senior Notes") at face value. The net proceeds, after deducting the issuance costs, amounted to USD739 million (equivalent to approximately RMB5,065 million). The Green Senior Notes will be matured on 17 September 2030. The Green Senior Notes are listed on the Stock Exchange and dealt in over-the-counter market through a financial institution as the principal agent.

42. SENIOR NOTES *(continued)*

b. Green Senior Notes *(continued)*

According to the terms of the Green Senior Notes, the Company may, at any time and from time to time redeem the Green Senior Notes. The applicable Green Senior Notes will be redeemable at: (A) prior to 17 June 2030, the greater of (1) 100% of the principal amount of the applicable Green Senior Notes to be redeemed and (2) the sum of the present values of the remaining scheduled payments of principal and interest on the applicable Green Senior Notes to be redeemed, discounted to the date of redemption on a semi-annual basis at the Adjusted Treasury Rate (as defined in the offering memorandum dated 10 September 2020) plus 50 basis points, plus accrued and unpaid interest on the applicable Green Senior Notes to be redeemed; or (B) on or after 17 June 2030, 100% of the principal amount of the Green Senior Notes to be redeemed, plus accrued and unpaid interest, if any.

The fair value of the early redemption right is insignificant at initial recognition and at the end of the reporting periods. The effective interest rate is approximately 2.81% per annum after the adjustment for transaction costs.

The Green Senior Notes recognised in the consolidated statement of financial position are calculated cumulatively as follows:

	2021 **RMB million**	2020 RMB million
Nominal value of Green Senior Notes	**5,137**	5,137
Discount cost	**(43)**	(43)
Issue costs	**(29)**	(29)
Fair value at date of issuance	**5,065**	5,065
Cumulative effective interest recognised	**173**	40
Cumulative interest paid/payable	**(165)**	(38)
Exchange gain	**(351)**	(240)
Carrying amount at 31 December	**4,722**	4,827

43. UNSECURED BONDS

On 24 July 2017, the Company issued 3.25% unsecured bonds with an aggregate nominal value of USD600 million (equivalent to approximately RMB4,066 million) (the "Unsecured Bonds"). The net proceeds after discounting and deducting the issuance costs amounted to USD596 million (equivalent to approximately RMB4,037 million). The Unsecured Bonds will mature on 24 July 2022. The Unsecured Bonds are listed on the Stock Exchange and dealt in over-the-counter market through a financial institution as the principal agent.

According to the terms and conditions of Unsecured Bonds, the Company may at any time and from time to time, on giving not less than 30 nor more than 60 days' notice to the holders of the Unsecured Bonds, redeem the Unsecured Bonds, in whole but not in part, at a make whole price as of, with an accrued and unpaid interest, if any, to (but excluding), the redemption date. The make whole price means, with respect to a bond at the option redemption date, the amount calculated by the quotation agent that is the greater of (1) the present value of the principal amount of the Unsecured Bonds, assuming a scheduled repayment thereof on the maturity date plus all required remaining scheduled interest repayments due on such bond through the maturity date (but excluding accrued and unpaid interest to the option redemption date), computed using a discount rate equalled to the adjusted treasury rate plus 50 basis points, and (2) the principal amount of such bonds.

The estimated fair value of the early redemption right is insignificant at initial recognition and at the end of the reporting periods. The effective interest rate is approximately 3.44% per annum after deducting the adjustment for transaction costs for Unsecured Bonds.

43. UNSECURED BONDS *(continued)*

The Unsecured Bonds recognised in the consolidated statement of financial position are calculated cumulatively as follows:

	2021 RMB million	2020 RMB million
Nominal value of Unsecured Bonds	**4,066**	4,066
Discount cost	**(5)**	(5)
Issue costs	**(24)**	(24)
Fair value at date of issuance	**4,037**	4,037
Repurchased and cancelled (Note)	**(232)**	(199)
Cumulative effective interest recognised	**598**	474
Cumulative interest paid/payable	**(574)**	(455)
Exchange gain	**(228)**	(145)
Carrying amount at 31 December	**3,601**	3,712

Note: In October 2020, November 2020, and January 2021 the Company repurchased in aggregate of principal amount of USD19,564,000, USD10,100,000 and USD5,000,000 (equivalent to approximately RMB132 million, RMB67 million and RMB33 million) in the open market. The principal amount of USD565 million (2020: USD570 million) was outstanding as at 31 December 2021.

44. HEDGING RESERVE

The hedging reserve includes cash flow hedge reserve and cost of hedging reserve. The following table provides a reconciliation of the hedging reserve in respect of foreign exchange risk and commodity risk.

	Foreign exchange risk RMB million	**Commodity risk RMB million**	**Total RMB million**
Cash flow hedge reserve			
At 1 January 2021	**19**	**(43)**	**(24)**
(Loss) gain arising on changes in fair value of hedging instruments	**(146)**	**140**	**(6)**
Gain reclassified to profit or loss – hedged item has affected profit or loss	**126**	**–**	**126**
Cumulative loss transferred to initial carrying amount of hedged items	**–**	**29**	**29**
Income tax relating to items that may be reclassified subsequently	**–**	**(28)**	**(28)**
At 31 December 2021	**(1)**	**98**	**97**
Of which:			
Balance related to continuing cash flow hedges	**97**		
Balance related to discontinued cash flow hedges	**–**		

	Foreign exchange risk RMB million	**Commodity risk RMB million**	**Total RMB million**
Cost of hedging reserve			
At 1 January 2021	**17**	**(30)**	**(13)**
Changes in fair value of time value/foreign currency basis components of time period related hedged items	**11**	**–**	**11**
Changes in the fair value in relation to time period related hedged items	**–**	**56**	**56**
Amortisation to profit or loss on changes in fair value in relation to time period related hedged items	**(23)**	**–**	**(23)**
Income tax relating to items that may be reclassified subsequently	**–**	**(9)**	**(9)**
At 31 December 2021	**5**	**17**	**22**
	4	**115**	**119**

44. HEDGING RESERVE *(continued)*

The cash flow hedging reserve represents the cumulative effective portion of gains and losses arising on changes in fair value of hedging instruments entered into for cash flow hedges. The cumulative gain and loss arising from changes in fair value of the hedging instrument that are recognised and accumulated under the heading of cash flow hedging reserve will be reclassified to profit or loss when the hedged transaction affects the profit or loss or when the hedged forecast transaction is no longer expected to occur. When the hedged forecast transaction results in the recognition of a non-financial item, the cumulative gain or loss is included in the initial measurement of the cost of such item.

The cost of hedging reserve represents the changes in fair value of the time value of options and foreign currency basis spread of hedging instruments and will be reclassified to profit or loss only when the hedged transaction affects profit or loss, or included as a basis adjustment to the non-financial hedged item.

The following table provides a reconciliation of the hedging reserve in respect of foreign exchange risk and commodity price risk during the prior period.

	Foreign exchange risk RMB million	Commodity risk RMB million	Total RMB million
Cash flow hedge reserve			
At 1 January 2020	–	–	–
Loss arising on changes in fair value of hedging instruments	(299)	(122)	(421)
Gain reclassified to profit or loss – hedged item has affected profit or loss	323	–	323
Loss reclassified to profit or loss – forecast transaction no longer expected to occur	(5)	–	(5)
Cumulative loss transferred to initial carrying amount of hedged items	–	71	71
Income tax relating to items that may be reclassified subsequently	–	8	8
At 31 December 2020	19	(43)	(24)
Of which:			
Balance related to continuing cash flow hedges	(24)		
Balance related to discontinued cash flow hedges	–		

44. HEDGING RESERVE *(continued)*

	Foreign exchange risk RMB million	Commodity risk RMB million	Total RMB million
Cost of hedging reserve			
At 1 January 2020	–	–	–
Changes in fair value of time value/foreign currency basis component of time period related hedged items	45	–	45
Changes in fair value of time value of transaction related hedged items	–	(36)	(36)
Amortisation to profit or loss of changes in fair value in relation to time period related hedged items	(26)	–	(26)
Gain arising on changes in fair value in relation to reclassified to profit or loss – forecast transaction no longer expected to occur	(2)	–	(2)
Income tax relating to items that may be reclassified subsequently	–	6	6
At 31 December 2020	17	(30)	(13)
	36	(73)	(37)

45. SHARE BASED PAYMENT TRANSACTIONS

The Company has adopted a share option scheme pursuant to an ordinary resolution passed at an annual general meeting of the Company held on 26 June 2012 (the "Scheme 2012").

The Company has adopted a share award scheme pursuant to the board resolution of the Company dated 30 November 2018 (the "Share Award Scheme") to use as a supplement to the Scheme 2012.

a. Scheme 2012

On 9 December 2015, the Company granted share options to the Directors and certain employees (the "2015 Grantees") to subscribe for a total of 12,000,000 ordinary shares of the Company under the Scheme 2012. Among the share options granted, 2,659,000 share options were granted to the Directors and the remaining were granted to certain employees of the Group. Vesting of the share options is conditional upon the fulfilment of certain vesting conditions as set out in the respective offer letters of the 2015 Grantees, which may involve fulfilment of performance targets.

On 28 March 2019, the Company granted share options to Directors and certain employees of the Company, and business consultants who contribute to the success of the Company (the "2019 Grantees") to subscribe for a total of 12,328,000 ordinary shares of the Company under the Scheme 2012. Among the share options granted above, 2,480,000 share options were granted to the Directors and the remaining were granted to certain employees of the Group and business consultants. Vesting of the share options is conditional upon the fulfilment of certain vesting conditions as set out in the respective offer letters of the 2019 Grantees, which may involve fulfilment of performance targets.

2015 Grantees and 2019 Grantees should satisfy stipulated minimum service periods and performance targets for the attainment of the designated vesting conditions and periods. The vesting period of the share options is from the date of the grant until the commencement of the exercisable period.

45. SHARE BASED PAYMENT TRANSACTIONS *(continued)*

a. Scheme 2012 *(continued)*

The following tables disclose details of the Company's share options held by the grantees and movements in such holdings under the share option scheme during the current year:

		Date of grant	Exercise period	Exercise price (HK$)	Outstanding at 1.1.2021	Number of options Exercised during the year	Forfeited during the year	Reclassified during the year	Outstanding at 31.12.2021
Scheme 2012- batch 1									
Directors	Tranche 1	9.12.2015	1.4.2017 to 8.12.2025	40.34	160,000	(145,000)	–	–	15,000
	Tranche 2	9.12.2015	1.4.2018 to 8.12.2025	40.34	160,000	(145,000)	–	–	15,000
	Tranche 3	9.12.2015	1.4.2019 to 8.12.2025	40.34	160,000	(145,000)	–	–	15,000
	Tranche 4	9.12.2015	1.4.2020 to 8.12.2025	40.34	160,525	(145,000)	–	42,500	58,025
Employees	Tranche 1	9.12.2015	1.4.2017 to 8.12.2025	40.34	131,100	(19,000)	(15,600)	–	96,500
	Tranche 2	9.12.2015	1.4.2018 to 8.12.2025	40.34	151,924	(22,500)	(50)	–	129,374
	Tranche 3	9.12.2015	1.4.2019 to 8.12.2025	40.34	230,550	(55,750)	–	–	174,800
	Tranche 4	9.12.2015	1.4.2020 to 8.12.2025	40.34	441,911	(75,950)	(12,125)	(42,500)	311,336
Subtotal					1,596,010	(753,200)	(27,775)	–	815,035
Exercisable at the end of the year									815,035
Weighted average exercise price									HK$40.34

		Date of grant	Exercise period	Exercise price (HK$)	Outstanding at 1.1.2021	Number of options Exercised during the year	Forfeited during the year	Reclassified during the year	Outstanding at 31.12.2021
Scheme 2012- batch 2									
Directors	Tranche 1	28.3.2019	1.4.2020 to 27.3.2029	76.36	15,000	–	–	–	15,000
	Tranche 2	28.3.2019	1.4.2021 to 27.3.2029	76.36	528,200	(292,600)	(100,000)	73,400	209,000
	Tranche 3	28.3.2019	1.4.2022 to 27.3.2029	76.36	528,400	–	–	73,300	601,700
	Tranche 4	28.3.2019	1.4.2023 to 27.3.2029	76.36	528,400	–	–	73,300	601,700
Employees	Tranche 1	28.3.2019	1.4.2020 to 27.3.2029	76.36	449,600	(177,425)	(77,925)	–	194,250
	Tranche 2	28.3.2019	1.4.2021 to 27.3.2029	76.36	2,748,400	(528,942)	(796,533)	(73,400)	1,349,525
	Tranche 3	28.3.2019	1.4.2022 to 27.3.2029	76.36	2,749,900	–	(242,792)	(73,300)	2,433,808
	Tranche 4	28.3.2019	1.4.2023 to 27.3.2029	76.36	2,749,900	–	(242,792)	(73,300)	2,433,808
Business Consultants	Tranche 1	28.3.2019	1.4.2020 to 27.3.2029	76.36	91,500	(18,500)	–	–	73,000
	Tranche 2	28.3.2019	1.4.2021 to 27.3.2029	76.36	178,500	–	(13,500)	–	165,000
	Tranche 3	28.3.2019	1.4.2022 to 27.3.2029	76.36	178,500	–	–	–	178,500
	Tranche 4	28.3.2019	1.4.2023 to 27.3.2029	76.36	178,500	–	–	–	178,500
Subtotal					10,924,800	(1,017,467)	(1,473,542)	–	8,433,791
Exercisable at the end of the year									2,055,775
Weighted average exercise price									HK$76.36
Total					12,520,810	(1,770,667)	(1,501,317)	–	9,248,826

45. SHARE BASED PAYMENT TRANSACTIONS *(continued)*

a. Scheme 2012 *(continued)*

The following tables disclose details of the Company's share options held by the grantees and movements in such holdings under the share option scheme during the prior year:

		Date of grant	Exercise period	Exercise price (HK$)	Outstanding at 1.1.2020	Number of options: Exercised during the year	Forfeited during the year	Reclassified during the year	Outstanding at 31.12.2020
Scheme 2012- batch 1									
Directors	Tranche 1	9.12.2015	1.4.2017 to 8.12.2025	40.34	230,500	(106,000)	–	35,500	160,000
	Tranche 2	9.12.2015	1.4.2018 to 8.12.2025	40.34	442,575	(167,700)	–	(114,875)	160,000
	Tranche 3	9.12.2015	1.4.2019 to 8.12.2025	40.34	538,775	(176,025)	–	(202,750)	160,000
	Tranche 4	9.12.2015	1.4.2020 to 8.12.2025	40.34	581,250	(217,975)	(96,575)	(106,175)	160,525
Employees	Tranche 1	9.12.2015	1.4.2017 to 8.12.2025	40.34	205,250	(38,650)	–	(35,500)	131,100
	Tranche 2	9.12.2015	1.4.2018 to 8.12.2025	40.34	366,261	(329,212)	–	114,875	151,924
	Tranche 3	9.12.2015	1.4.2019 to 8.12.2025	40.34	560,474	(514,924)	(17,750)	202,750	230,550
	Tranche 4	9.12.2015	1.4.2020 to 8.12.2025	40.34	1,425,000	(662,314)	(426,950)	106,175	441,911
Subtotal					4,350,085	(2,212,800)	(541,275)	–	1,596,010
Exercisable at the end of the year									1,596,010
Weighted average exercise price									HK$40.34

		Date of grant	Exercise period	Exercise price (HK$)	Outstanding at 1.1.2020	Number of options: Exercised during the year	Forfeited during the year	Reclassified during the year	Outstanding at 31.12.2020
Scheme 2012- batch 2									
Directors	Tranche 1	28.3.2019	1.4.2020 to 27.3.2029	76.36	15,000	–	–	–	15,000
	Tranche 2	28.3.2019	1.4.2021 to 27.3.2029	76.36	768,200	–	–	(240,000)	528,200
	Tranche 3	28.3.2019	1.4.2022 to 27.3.2029	76.36	768,400	–	–	(240,000)	528,400
	Tranche 4	28.3.2019	1.4.2023 to 27.3.2029	76.36	768,400	–	–	(240,000)	528,400
Employees	Tranche 1	28.3.2019	1.4.2020 to 27.3.2029	76.36	1,061,300	(365,700)	(246,000)	–	449,600
	Tranche 2	28.3.2019	1.4.2021 to 27.3.2029	76.36	2,539,900	–	(31,500)	240,000	2,748,400
	Tranche 3	28.3.2019	1.4.2022 to 27.3.2029	76.36	2,541,400	–	(31,500)	240,000	2,749,900
	Tranche 4	28.3.2019	1.4.2023 to 27.3.2029	76.36	2,541,400	–	(31,500)	240,000	2,749,900
Business	Tranche 1	28.3.2019	1.4.2020 to 27.3.2029	76.36	201,000	(109,500)	–	–	91,500
Consultants	Tranche 2	28.3.2019	1.4.2021 to 27.3.2029	76.36	201,000	–	(22,500)	–	178,500
	Tranche 3	28.3.2019	1.4.2022 to 27.3.2029	76.36	201,000	–	(22,500)	–	178,500
	Tranche 4	28.3.2019	1.4.2023 to 27.3.2029	76.36	201,000	–	(22,500)	–	178,500
Subtotal					11,808,000	(475,200)	(408,000)	–	10,924,800
Exercisable at the end of the year									556,100
Weighted average exercise price									HK$76.36
Total					16,158,085	(2,688,000)	(949,275)	–	12,520,810

45. SHARE BASED PAYMENT TRANSACTIONS *(continued)*

a. Scheme 2012 *(continued)*

Exercise price of the share options granted on 9 December 2015 is HK$40.34 per share, which represents the highest of (i) the closing price of HK$39.00 per share as stated in the daily quotations sheet of the Stock Exchange on 9 December 2015, being the date of grant; (ii) the average closing price of HK$40.34 per share as stated in the daily quotations sheets of the Stock Exchange for the five trading days immediately preceding the date of grant; and (iii) the nominal value of the share.

Exercise price of the share options granted on 28 March 2019 is HK$76.36 per share, which represents the highest of (i) the closing price of HK$74.10 per share as stated in the daily quotations sheet of the Stock Exchange on 28 March 2019, being the date of grant; (ii) the average closing price of HK$76.36 per share as stated in the daily quotations sheets of the Stock Exchange for the five trading days immediately preceding the date of grant; and (iii) the nominal value of the share.

No share options were granted in both years presented. 1,770,667 (2020: 2,688,000) share options were exercised and 1,501,317 (2020: 949,275) share options were forfeited. As at 31 December 2021, the number of outstanding share options is 9,248,826 (2020: 12,520,810). During the year, the Group recognised share-based payment expenses of RMB20 million (2020: RMB70 million) and transferred RMB29 million (2020: RMB51 million) from share options reserve to share premium upon exercise of share options.

b. Share Award Scheme

Pursuant to the Share Award Scheme, the Company may from time to time at its absolute discretion grant shares of the Company (the "Awarded Shares") at no consideration to selected employees of any members of the Group. Vesting of the Awarded Shares granted is conditional upon the fulfilment of vesting conditions as specified in the grant notice issued to each grantee.

On 12 March 2019, pursuant to the terms of the Share Award Scheme and the trust deed, the Company established a trust (the "Trust") and appointed a trustee (the "Trustee") to administer the Share Award Scheme. During the effective period of the Share Award Scheme, the board of directors of the Company may from time to time contribute funds to the Trust and instruct the Trustee to purchase shares of the Company on the Stock Exchange or in off-market transactions. Shares held under the Trustee are non-transferrable prior to vesting and have no voting rights.

During the year ended 31 December 2021, no shares were purchased by the Trustee (2020: 270,000 shares). As at 31 December 2021, 2,685,100 shares (31 December 2020: 2,685,100 shares) were held by the Trustee. The cost of the shares purchased was recognised in equity as treasury stocks.

During the year ended 31 December 2021, 866,600 awarded shares (2020: 62,000 awarded shares) with an award price of HK$76.36 (2020: HK$76.36) had been nominally granted to certain directors and employees in tranches. Vesting of such shares is subject to satisfying relevant performance conditions and a service condition requiring continuous service until the respective vesting dates, and can occur as early as on 1 April in the year following the financial year to which the corresponding performance conditions related. Hence, the vesting period of these shares is from the date of the grant to the respective vesting dates.

During the exercise period from the relevant vesting dates to the expiry date, i.e. 27 March 2029, the grantees may exercise the right to receive in cash the notional gain (if any) of the vested Awarded Shares, which is the excess of the fair value of such shares on the exercise date over the award price.

45. SHARE BASED PAYMENT TRANSACTIONS *(continued)*

b. Share Award Scheme *(continued)*

The following table discloses details of the awarded shares held by the grantees and movements in such holdings under the Share Award Scheme during the current period:

		Financial year to which the performance conditions relate	Exercise price	Number of awarded shares: Outstanding at 1.1.2021	Granted during the year	Exercised during the year	Forfeited during the year	Outstanding at 31.12.2021
Directors	Tranche 1	2020	HK$76.36	–	160,000	(70,000)	–	90,000
	Tranche 2	2021	HK$76.36	–	160,000	–	–	160,000
	Tranche 3	2022	HK$76.36	–	160,000	–	–	160,000
Employees	Tranche 1	2020	HK$76.36	31,000	128,867	(21,000)	–	138,867
	Tranche 2	2021	HK$76.36	15,500	128,867	–	–	144,367
	Tranche 3	2022	HK$76.36	15,500	128,866	–	–	144,366
Total				62,000	866,600	(91,000)	–	837,600
Exercisable at the end of the year								201,867
Weighted average exercise price								HK$76.36

The Group recognised share-based payment expenses of RMB34 million during the year ended 31 December 2021 in respect of these awarded shares. As at 31 December 2021, the Group has recorded liabilities of RMB29 million. The fair values for these awarded shares granted were calculated using the Binomial Option Pricing Model.

46. RETIREMENT BENEFITS SCHEME

	2021 RMB million	2020 RMB million
Retirement benefits scheme contribution made during the year	**237**	27

According to the relevant laws and regulations in the PRC, the PRC subsidiaries within the Group are required to contribute a certain percentage of the payrolls of their employees to the retirement benefits scheme to fund the retirement benefits of their employees. The Group operates a Mandatory Provident Fund Scheme (the "MPF Scheme") for all qualifying employees in Hong Kong. The assets of the schemes are held separately from those of the Group, in funds under the control of trustees. The Group contributes 5% of relevant payroll costs to the MPF Scheme, contribution of which is matched by employees. The maximum monthly amount of contribution is limited to HK$1,500 per employee. During the years ended 31 December 2021 and 2020, the Group had no forfeited contributions under the MPF Scheme which may be used by the Group to reduce existing level of contributions. No forfeited contributions were also available at 31 December 2021 and 2020 for the Group to reduce contribution payables in future years, if applicable.

47. ACQUISITION OF BUSINESSES

a. Acquisition of businesses during the year ended 31 December 2021

Acquisition date	Company acquired	Registered capital acquired	Consideration RMB million	Nature of business
27 July 2021	彩虹（南通）能源有限公司 ("Nantong")	100.00%	37	Retail gas sales business
26 September 2021	唐山新奧新能源發展有限公司 ("Tangshan")	40.00%	3	Retail gas sales business
29 September 2021	洛陽順和能源有限公司 ("Luoyang")	100.00%	77	Retail gas sales business
13 December 2021	中廣核雙閶燃氣江蘇有限公司 (Zhongguanghe")	100.00%	96	Retail gas sales business

47. ACQUISITION OF BUSINESSES *(continued)*

a. Acquisition of businesses during the year ended 31 December 2021 *(continued)*

Nantong, Tangshan, Luoyang and Zhongguanghe were acquired (collectively referred to as "2021 Companies Acquired") with the objective of expansion in market coverage of the Group's business.

The amounts of fair value of the assets and liabilities at the date of acquisition are as follows:

	Nantong RMB million	Tangshan RMB million	Luoyang RMB million	Zhongguanghe RMB million	Total RMB million
Non-current assets					
Property, plant and equipment	5	14	51	99	169
Intangible assets	50	–	29	73	152
Right-of-use assets	1	–	15	15	31
Current assets					
Inventories	–	–	–	8	8
Trade and other receivables	–	2	–	40	42
Cash and cash equivalents	2	–	–	9	11
Current liabilities					
Trade and other payables	(8)	(8)	(5)	(127)	(148)
Bank and other loans – due within one year	–	–	–	(5)	(5)
Non-current liabilities					
Deferred tax liabilities	(13)	–	(13)	(24)	(50)
Deferred income	–	–	–	(2)	(2)
Net assets acquired	37	8	77	86	208
Goodwill arising on acquisition					
Total consideration	37	3	77	96	213
Add: Fair value of interest previously held	–	5	–	–	5
Less: Fair value of identified net assets acquired by the Group	(37)	(8)	(77)	(86)	(208)
Goodwill arising on acquisition	–	–	–	10	10
Total consideration satisfied by:					
Cash	37	3	62	96	198
Consideration payables	–	–	15	–	15
	37	3	77	96	213
Net cash outflow arising on acquisition:					
Cash consideration paid	(37)	(3)	(62)	(96)	(198)
Less: Cash and cash equivalents acquired	2	–	–	9	11
	(35)	(3)	(62)	(87)	(187)

47. ACQUISITION OF BUSINESSES *(continued)*

a. Acquisition of businesses during the year ended 31 December 2021 *(continued)*

The fair value of property, plant and equipment and intangible assets at the date of acquisition was provisional and pending for the valuation carried out by an independent firm of professional valuer.

Included in the profit for the year ended 31 December 2021 was RMB1 million of profit attributable to the additional businesses generated by 2021 Companies Acquired. Revenue for the year ended 31 December 2021 includes RMB39 million generated from 2021 Companies Acquired.

Had the acquisitions of 2021 Companies Acquired been completed on 1 January 2021, the revenue of the Group for the year ended 31 December 2021 would have been approximately RMB93,260 million, and the profit for the year would have been approximately RMB8,878 million. The pro forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisitions been completed on 1 January 2021, nor is intended to be a projection of future results.

In determining the "pro-forma" revenue and profit of the Group, had 2021 Companies Acquired been acquired on 1 January 2021, the Directors have calculated the depreciation and amortisation of property, plant and equipment and intangible assets acquired on the basis of the fair values rather than the carrying amounts recognised in the pre-acquisition financial statements.

b. Acquisition of businesses during the year ended 31 December 2020

Acquisition date	Company acquired	Registered Capital acquired	Consideration RMB million	Nature of business
26 March 2020	浙江省浦江高峰管道燃氣有限公司 ("Pujiang")	90.00%	155	Retail gas sales business
31 March 2020	內蒙古華億能源股份有限公司 ("Huayi")	100.00%	180	Retail gas sales business
10 August 2020	興化東方燃氣有限公司 ("Xinghua")	65.00%	29	Retail gas sales business
17 August 2020	江蘇能源控股有限公司 ("Jiangsu")	70.00%	284	Retail gas sales business
29 December 2020	雙城中慶燃氣有限公司 ("Shuangcheng")	100.00%	121	Retail gas sales business
29 December 2020	上海中芬熱電有限公司 ("Zhongfen")	51.00%	85	Sales of integrated energy and services

Pujiang, Huayi, Xinghua, Jiangsu, Shuangcheng and Zhongfen were acquired (collectively referred to as "2020 Companies Acquired") with the objective of expansion in market coverage of the Group's business.

47. ACQUISITION OF BUSINESSES *(continued)*

b. Acquisition of businesses during the year ended 31 December 2020 *(continued)*

The amounts of fair value of the assets and liabilities at the date of acquisition are as follows:

	Pujiang RMB million	Huayi RMB million	Jiangsu RMB million	Others RMB million	Total RMB million
Non-current assets					
Property, plant and equipment	67	124	162	192	545
Intangible assets	163	54	335	161	713
Right-of-use assets	13	22	1	61	97
Current assets					
Inventories	4	3	–	7	14
Trade and other receivables	38	37	69	43	187
Contract assets	2	–	–	–	2
Cash and cash equivalents	38	1	7	34	80
Current liabilities					
Trade and other payables	(87)	(34)	(95)	(123)	(339)
Contract liabilities	(10)	(25)	(5)	(36)	(76)
Bank and other loans – due within one year	(50)	(2)	(23)	(15)	(90)
Non-current liabilities					
Deferred tax liabilities	(41)	(21)	(89)	(58)	(209)
Bank and other loans – due after one year	–	–	(30)	(41)	(71)
Net assets acquired	137	159	332	225	853
Capital injection by the Group	–	–	–	29	29
Net assets acquired including capital injection by the Group	137	159	332	254	882
Goodwill arising on acquisition					
Total consideration	155	180	284	235	854
Add: Non-controlling interests	9	–	100	67	176
Less: Fair value of identified net assets acquired including capital injection by the Group	(137)	(159)	(332)	(254)	(882)
Goodwill arising on acquisition (determined on a provisional basis)	27	21	52	48	148
Total consideration satisfied by:					
Cash	153	152	284	–	589
Consideration payables	2	28	–	206	236
Capital injection by the Group	–	–	–	29	29
	155	180	284	235	854
Net cash (outflow) inflow arising on acquisition:					
Cash consideration paid	(153)	(152)	(284)	–	(589)
Less: Cash and cash equivalents acquired	38	1	7	34	80
	(115)	(151)	(277)	34	(509)

48. ACQUISITION OF ASSETS THROUGH ACQUISITIONS OF SUBSIDIARIES

a. Acquisition of assets through acquisition of a subsidiary during the year ended 31 December 2021

To facilitate the Group's expansion, the Group will from time to time liaise with the local PRC governments and potential vendors to acquire the local rights of operation, gas assets and integrated energy related assets through acquisition of subsidiaries. During the year ended 31 December 2021, the Group has acquired assets through the acquisition of the following subsidiary:

Acquisition date	Company acquired	Registered capital acquired	Consideration
			RMB million
16 July 2021	河南新奧中裕燃氣管道有限公司	60.00%	343

The transaction was accounted for as acquisition of assets through acquisition of a subsidiary and the fair value of the consideration allocated to the assets and liabilities acquired are as follows:

	RMB million
Non-current assets	
Property, plant and equipment	572
Net assets acquired	572
Less: Non-controlling interests	(229)
Total consideration	343

	RMB million
Total consideration satisfied by:	
Cash	343
Net cash outflow arising on acquisition:	
Cash consideration paid	(343)

48. ACQUISITION OF ASSETS THROUGH ACQUISITIONS OF SUBSIDIARIES *(continued)*

b. Acquisition of assets through acquisitions of subsidiaries during the year ended 31 December 2020

To facilitate the Group's expansion, the Group will from time to time liaise with the local PRC governments and potential vendors to acquire the local rights of operation, gas assets and integrated energy related assets through acquisition of subsidiaries. During the year ended 31 December 2020, the Group has acquired assets through the acquisitions of the following subsidiaries:

Acquisition date	Company acquired	Registered capital acquired	Consideration RMB million
7 January 2020	澄城縣華興燃氣有限公司	80.00%	6
26 August 2020	雲南新奧售電有限公司 (Note a)	51.00%	14
4 November 2020	常山新奧燃氣有限公司 (Note b)	51.00%	2

Notes:

a. The Group acquired the remaining 51.00% of the equity interest of 雲南新奧售電有限公司, which then became a 100% owned subsidiary of the Group from a joint venture.

b. The Group acquired the remaining 51.00% of the equity interest of 常山新奧燃氣有限公司, which then became a 100% owned subsidiary of the Group from a joint venture.

The transaction was accounted for as acquisition of asset through acquisitions of subsidiaries and the fair value of the consideration allocated to the assets and liabilities acquired are as follows:

	RMB million
Non-current assets	
Property, plant and equipment	13
Intangible assets	11
Current assets	
Trade and other receivables	26
Cash and cash equivalents	5
Current liabilities	
Trade and other payables	(15)
Contract liabilities	(1)
Net assets acquired	39
Less: Non-controlling interests	(2)
Less: Fair value of previously held interest	(15)
Total consideration	22

	RMB million
Total consideration satisfied by:	
Cash	21
Consideration payables	1
	22
Net cash outflow arising acquisition:	
Cash consideration paid	(21)
Less: Deposit paid in the prior year	14
Less: Cash and cash equivalents acquired	5
	(2)

49. DISPOSAL OF SUBSIDIARIES

a. Disposal of subsidiaries during the year ended 31 December 2021

Disposal date	Company disposed	Registered capital disposed	Consideration
			RMB million
5 February 2021	東光縣新奧燃氣有限公司	100.00%	1
15 March 2021	滕州新奧能源發展有限公司	100.00%	14
8 July 2021	淮安新奧車用燃氣有限公司	100.00%	10
15 July 2021	衡水新奧車用燃氣有限公司	80.00%	1
6 August 2021	湛江新奧燃氣高壓管網有限公司	100.00%	109
8 September 2021	上海大眾九環化工儲運經營有限公司	60.00%	7
30 December 2021	廣州裕淮貿易有限公司	100.00%	54

	RMB million
Non-current assets	
Property, plant and equipment	**169**
Right-of-use assets	**35**
Current assets	
Inventories	**19**
Trade and other receivables	**33**
Cash and cash equivalents	**12**
Current liabilities	
Trade and other payables	**(46)**
Lease liabilities	**(4)**
Non-current liabilities	
Bank and other loans – due after one year	**(60)**
Net assets	**158**
Less: Non-controlling interests	**(4)**
Net assets attributable to the owners of the Company disposed of	**154**

The loss on disposal of subsidiaries recognised in profit or loss was calculated as below:

	RMB million
Fair value of interest in a joint venture	**109**
Consideration received	**32**
Consideration receivable	**55**
Less: Goodwill derecognised	**(1)**
Less: Net assets attributable to owners of the Company derecognised	**(154)**
Gain on disposal of subsidiaries	**41**
Net cash inflow arising from the disposal:	
Cash consideration received	**32**
Less: Deposit received in the prior year	**(1)**
Less: Cash and bank balance disposed of	**(12)**
	19

49. DISPOSAL OF SUBSIDIARIES *(continued)*

b. Disposal of subsidiaries during the year ended 31 December 2020

Disposal date	Company disposed	Registered capital disposed	Consideration
			RMB million
30 April 2020	溫縣新奧交通清潔能源有限公司	100.00%	2
5 June 2020	東莞市新奧車用燃氣發展有限公司	55.00%	55
10 June 2020	邢台新奧車用燃氣有限公司	98.18%	13
8 September 2020	合肥新奧中汽能源發展有限公司	51.00%	20
24 September 2020	巢湖市安燃燃氣發展有限公司	100.00%	9
29 September 2020	沁陽新奧交通清潔能源有限公司	100.00%	3
15 October 2020	山東新燃供氣有限公司	70.00%	10
26 October 2020	保定新奧新能源有限公司	100.00%	1
26 October 2020	元氏縣新奧車用燃氣有限公司	100.00%	1
5 November 2020	武陟新奧交通清潔能源有限公司	100.00%	18
20 November 2020	懷仁新奧燃氣有限公司	90.00%	164
9 December 2020	安陽新奧清潔能源有限公司	100.00%	3
16 December 2020	濟源新奧交通清潔能源有限公司	100.00%	2
16 December 2020	河北新奧清潔能源有限公司	100.00%	4
31 December 2020	淄博新奧燃氣有限公司	60.00%	1

The net assets at the dates of disposal were as follow:

	RMB million
Non-current assets	
Property, plant and equipment	377
Right-of-use assets	146
Intangible assets	210
Interest in a joint venture	33
Current assets	
Inventories	15
Trade and other receivables	56
Cash and cash equivalents	31
Current liabilities	
Trade and other payables	(79)
Bank and other loans – due within one year	(7)
Contract liabilities	(18)
Lease liabilities	(9)
Non-current liabilities	
Deferred tax liabilities	(56)
Deferred income	(7)
Lease liabilities	(101)
Net assets	591
Less: Non-controlling interests	(152)
Net assets attributable to the owners of the Company disposed of	439

49. DISPOSAL OF SUBSIDIARIES *(continued)*

b. Disposal of subsidiaries during the year ended 31 December 2020 *(continued)*

The loss on disposal of subsidiaries recognised in profit or loss was calculated as below:

	RMB million
Consideration received	277
Consideration receivable	29
Consideration payables derecognised	87
Less: Goodwill derecognised	(16)
Less: Net assets attributable to the owners of the Company derecognised	(439)
Loss on disposal of subsidiaries	(62)
Net cash inflow arising from the disposal:	
Cash consideration received	277
Less: Cash and bank balance disposed of	(31)
	246

50. COMMITMENTS

a. Capital commitments

	2021 RMB million	2020 RMB million
Capital expenditure in respect of acquisition of property, plant and equipment contracted for but not provided in the consolidated financial statements	**824**	899
Capital commitments in respect of		
– investments in joint ventures	**479**	518
– investments in associates	**445**	469
– other equity investments	**2**	2

b. Other commitments

The Group has entered into medium to long-term sale and purchase agreements to acquire LNG from three international suppliers. The Group is obliged to make “take-or-pay” payment to suppliers for the quantity contracted but not delivered.

In the opinion of the Directors, such agreements are entered into and continued to be held in accordance with the Group’s expected LNG purchase requirements to meet the domestic gas demands of its customers. Accordingly, these agreements qualify for own use exemption, and hence are not considered as derivative financial instruments within the scope of financial instruments standards since initial recognition.

The LNG pricing under these agreements are linked to certain oil and gas price indexes and are denominated in USD, which are common in international practice. The Directors assessed the economic characteristics and risks of the embedded derivatives and concluded that they are closely related to the economic characteristics and risks of the relevant host contracts. Accordingly, the embedded derivatives are not split from these arrangements and not separately recognised as derivative financial instruments in the consolidated financial statements.

51. OPERATING LEASING ARRANGEMENTS

The Group as lessor

The Group's investment properties are held for rental purposes. Property rental income earned during the year was RMB7 million (2020: RMB10 million). All of the properties held have committed tenants for terms ranging from one to twenty years.

Undiscounted lease payments receivable on leases are as follow:

	2021 **RMB million**	2020 RMB million
Within one year	**27**	16
In the second year	**14**	12
In the third year	**12**	8
In the fourth year	**7**	5
In the fifth year	**5**	4
After five years	**35**	34
	100	79

52. PLEDGE OF ASSETS

At the end of the reporting period, the Group pledged certain assets as securities for bank and other loans, bill facilities and contracts granted to the Group, associates and joint ventures as follows:

	2021 **RMB million**	2020 RMB million
Carrying amount of:		
Property, plant and equipment	**28**	23
Restricted bank deposits	**542**	301
Right-of-use assets	**–**	4
Bills receivable	**390**	112
Intangible assets	**99**	52

In addition to the above, the Group has also pledged its rights to receive construction and installation and gas supply fee income of certain subsidiaries in favour of banks to secure banking facilities amounting to RMB400 million (2020: RMB400 million) granted to the Group, of which RMB100 million (2020: RMB400 million) has been utilised up to 31 December 2021.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS

a. Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern, to maintain the confidence of creditors, to sustain future development of the entities and to maximise the return to the equity holders of the Company. The capital structure of the Group consists of net debt (borrowings disclosed in Notes 40, 41, 42 and 43, net of cash and cash equivalents) and total equity of the Group.

The Group manages its capital base through net gearing ratio. The Directors review the capital structure on a semi-annual basis. The Group has a target of net gearing ratio below 100% and will maintain the ratio within target by issue of new debts, repayment of debts, issue of new shares, repurchase of shares or payment of dividends. The Group's overall strategy remains unchanged from prior year. The Group repurchased certain senior notes in order to better manage its net gearing ratio. The net gearing ratio at the end of the reporting period was as follows:

	2021 **RMB million**	2020 RMB million
Bank and other loans	**9,468**	6,668
Corporate bonds	**2,099**	2,097
Senior notes	**4,722**	7,207
Unsecured bonds	**3,601**	3,712
	19,890	19,684
Less: Cash and cash equivalents	**(8,684)**	(8,630)
Net debt	**11,206**	11,054
Total equity	**42,150**	36,172

	2021 **%**	2020 %
Net debt to total equity ratio	**26.6**	30.6

b. 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:

	2021 **RMB million**	2020 RMB million
Financial assets		
Financial assets at FVTPL	**4,558**	4,830
Derivative financial instruments	**2,531**	628
Equity instruments at FVTOCI	**266**	211
Financial assets at amortised cost	**19,350**	17,094
Financial liabilities		
Derivative financial instruments	**1,762**	927
Financial liabilities at amortised cost	**33,239**	30,791
Financial guarantee contracts	**21**	–

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risks, and price risk), credit risk, liquidity risk and risks arising from the interest rate benchmark reform.

The Group's treasury department identifies, evaluates and monitors financial risks in close co-operation with the Group's operating units, focusing on the unpredictability of financial markets. The Group seeks to minimise the effects of financial risks by using different derivative financial instruments to manage these exposures. All derivative financial instruments are used for the financial risk management and not for speculative purposes.

The Board provides written principal for overall risk management. The Group has written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, the use of derivative financial instruments and non-derivatives financial instruments and cash management. Exposure to foreign exchange rates, interest rates and prices risk movements are regularly reviewed and positions are amended in compliance with internal guidelines and limits.

The Group treasury department reports regularly or on demand basis to the Financial Risk Management Working Group, an independent body that monitor risks and policies implemented to mitigate risk exposures.

Foreign currency risk management

The functional currency of the Group's most entities is RMB in which most of the transactions are denominated. However, certain loans, senior notes and unsecured bonds issued by the Group, certain bank balances kept by the Group are denominated in foreign currencies.

To mitigate the foreign exchange exposure, the Group entered into various Foreign Currency Derivatives with certain financial institutions during the current and prior years as set out in Note 24. The management of the Group monitors foreign exchange exposure and designates all derivatives as hedging instruments for cash flow hedges. The foreign exchange forward contracts must be in the same currency as the hedged item. On this basis, the Group has entered into such forward contracts in relation to the foreign currency denominated monetary assets and monetary liabilities amounting to USD550 million (2020: USD750 million), equivalent to RMB3,507 million (2020: RMB4,894 million). It is the Group's policy to negotiate the terms of the hedge derivatives, to the extent possible, to match or approximate the terms of the hedged items to maximise hedge effectiveness (see Notes 24 and 44 for details).

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:

	Assets		**Liabilities**	
	2021	2020	**2021**	2020
	RMB million	RMB million	**RMB million**	RMB million
Foreign currency:				
USD	**1,024**	578	**11,995**	12,549
HK$	**43**	101	**–**	–

The following table details the Group's sensitivity to a reasonable possible change in exchange rate of each foreign currency against RMB, while all other variables are held constant. The sensitivity adjusts their translations at the end of the reporting period for a change in foreign currency exchange rate as set out below:

	USD		**HK$**	
	2021	2020	**2021**	2020
	%	%	**%**	%
Possible change in foreign exchange rate	**5**	5	**5**	5

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Foreign currency risk management (continued)

	USD		HK$	
	2021	2020	**2021**	2020
	RMB million	RMB million	**RMB million**	RMB million
(Decrease) increase in profit after taxation for the year:				
– if RMB weakens against foreign currencies	**(460)**	(431)	**2**	5
– if RMB strengthens against foreign currencies	**477**	457	**(2)**	(5)
(Decrease) increase in other comprehensive income				
– if RMB weakens against foreign currencies	**–**	(2)	**–**	–
– if RMB strengthens against foreign currencies	**(4)**	(4)	**–**	–

In the opinion of the Directors, the sensitivity analysis is unrepresentative of the inherent foreign exchange risk as the year end exposure and does not reflect the exposure during the year, and some of the Group's foreign currency exposure has been reduced due to the offsetting effect of the Foreign Currency Derivatives.

Hedges of foreign currency risk

The Group designates cross currency swaps and foreign currency options as hedging instruments in cash flow hedges and does not separate the forward and spot element of a currency forward contract but instead designates the currency forward contract in its entirety in a hedging relationship. Correspondingly, the hedged item is measured based on the forward exchange rate. Foreign currency basis spread of financial instruments may be separated and excluded from the designated hedging instruments. As at 31 December 2021 and 2020, the notional profile of USD550 million and USD750 million, with maturity of less than 1 year and less than 5 years, respectively.

The Group applies a hedge ratio of 1:1 and determines the existence of an economic relationship between the foreign currency borrowings and Foreign Currency Derivatives based on their currency types, currency amounts and the timing of their respective cash flows.

The following table summarises the effect of the hedge accounting on financial position and performance of the Group for the reporting period:

					Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness									
	Average exchange rate	Notional value: USD	Notional value: RMB	Carrying amount of the hedging instruments	Cumulative hedging instruments	Cumulative hedging items	Hedging losses recognised in cash flow hedge reserve	Hedge ineffectiveness recognised in profit or loss	Cost of hedging recognised in OCI	From cash flow hedge reserve due to hedged item affecting profit or loss	Amount reclassified from cost of hedging reserve to profit or loss	Line item in profit or loss in which hedge ineffectiveness is included	Line items in profit or loss affected by the reclassification	Balance in cash flow hedge reserve for continuing hedge
		USD million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million			RMB million
Cash flow hedges														
Cross currency swaps	6.64	250	1,660	(81)	(215)	220	94	(2)	(18)	(68)	16	Other gains	Other gains	(2)
Foreign currency options*	6.73	300	2,019	(16)	(68)	14	4	12	16	(7)	(8)	and losses	and	3
													losses &	
													Finance costs	

*Note: The foreign currency options contain an average capped exchange rate at 7.26.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Interest rate risk management

The Group does not have any specific interest rate hedging policy except that the Group would regularly review the market interest rates to capture the potential opportunities to reduce the cost of borrowings. Accordingly, the Group will enter into interest rate swap arrangement to mitigate the interest rate risk if appropriate.

Fair value interest rate risk

The Group's fair value interest rate risk relates primarily to non-current amounts due from associates and joint ventures, amounts due to associates and joint ventures, and fixed-rate bank and other loans, corporate bonds, senior notes and unsecured bonds (see Notes 29, 30, 40, 41, 42 and 43 for details of these amounts, loans, bonds and notes respectively).

The fair value interest rate risk on bank balance and deposits is insignificant as the terms of the fixed deposits are relatively short.

Cash flow interest rate risk

The Group's cash flow interest rate risk relates primarily to floating-rate bank loans (see Note 40 for details of these amounts). The Directors consider that the Group is not exposed to significant cash flow interest rate risk relating to bank deposits, which are primarily short-term in nature and basically carried at stable market interest rates.

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates ("IBORs") with alternative nearly risk-free rates. Details of the impacts on the Group's risk management strategy arising from the interest rate benchmark reform and the progress towards implementation of alternative benchmark interest rates are set out under "Interest rate benchmark reform" in this note.

The Group's sensitivity to cash flow interest rate risk has been determined based on the exposure to interest rates for the floating-rate bank loans. The analysis is prepared assuming that the amount of liabilities outstanding at the end of the reporting period was outstanding for the whole year and excluding the interest expected to be capitalised.

	2021 **%**	2020 %
Possible change in interest rate	**50 basis points**	50 basis points

	2021 **RMB million**	2020 RMB million
(Decrease) increase in profit after taxation for the year		
– as a result of increase in interest rate	**(6)**	(9)
– as a result of decrease in interest rate	**6**	9

The possible change in the interest rate does not affect the equity of the Group in both years.

Commodity price risk

In the normal course of business, the Group imported LNG to satisfy the demands of downstream customers under long-term "take-or-pay" purchase agreements as set out in Note 50. Accordingly, the Group is exposed to fluctuations in prevalent crude oil/gas market prices, which are used for the determination of the price of LNG. This exposure is managed with the use of derivative financial instruments by the Group. The profit or loss generated from these derivatives is dependent on the combination of contracts which generate payoffs in any particular range of commodity prices.

Derivative financial instruments are used solely for financial risk management purposes and the Group does not hold or issue derivative financial statements for speculation purposes. The management of the Group monitors commodity price risk exposure regularly and designates certain derivatives as cash flow hedge of highly probable purchases.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Commodity price risk (continued)

The following table summarises the commodity options designated as cash flow hedges outstanding at the end of the reporting period, which expires through December 2023, as well as the effect on financial position and performance of the Group for the reporting period. Commodity options are presented in the line 'Derivative financial instruments' within the consolidated statement of financial position (see Note 24 for further details):

					Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness					
	Strike price range	Remaining quantity	Carrying amount of the hedging instruments	Cumulative hedging instruments	Cumulative hedged items	Hedging losses recognised in cash flow hedge reserve	Hedge ineffectiveness recognised in profit or loss	Cost of hedging recognised in OCI	Line item in profit or loss in which hedge ineffectiveness is included	Amount from cash flow hedge reserve transferred to inventory
		bbl	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million		RMB million
Cash flow hedges										
Collar for Brent Oil	47.9 – 69	1,320,000	91	28	(5)	(139)	(14)	(56)	Other gains and losses	29

A increase of 20% (2020: decrease of 10%) in relevant commodity prices at the end of the year ended 31 December 2021 would have affected profit or loss for the years by amount shown below. As a result of the expected volatile oil market in 2022, the management adjusted the sensitivity rate from decrease of 10% to increase of 20% for the purpose of assessing commodity price risk. These amounts represent the change in fair value of commodity derivative contracts at the reporting date.

	2021	2020
	RMB million	RMB million
Increase (decrease) in profit before taxation for the year	**56**	(40)
Increase (decrease) in other comprehensive income	**96**	(35)

Other price risk

The Group is mainly exposed to price risk through equity instruments measured at FVTPL and FVTOCI. The Directors do not implement specific measurements to mitigate the price risk.

If the market price of equity instruments measured at FVTPL and FVTOCI increased or decreased by 5%, the Group would recognise additional gains or losses of RMB220 million (2020: RMB238 million) and the OCI change of RMB13 million (2020:RMB11 million), respectively.

Credit risk and impairment assessment

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. The Group does not hold any collateral or other credit enhancements to cover its credit risks associated with its financial assets, except that the credit risks associated with loan receivables is mitigated because they are secured over equipment, receivables and certain entities' equities and settlement of certain trade receivables are backed by bills issued by reputable financial institutions.

Trade receivables and contract assets 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. Other monitoring procedures are in place to ensure that follow-up action is taken to recover overdue debts. In addition, the Group performs impairment assessment under ECL model upon application of HKFRS 9 on trade balances based on individually assessment for significant balances and on provision matrix for the remaining.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Credit risk and impairment assessment (continued)

Other receivables, amounts due from associates/joint ventures/related companies and cash and cash equivalents

In order to minimise the credit risk, the Group performs impairment assessment under ECL model upon application of HKFRS 9 on other receivables and on amounts due from associates/joint ventures/related companies individually. Other monitoring procedures are in place to ensure that follow-up action is taken to recover overdue debts.

The credit risks on cash and cash equivalents are limited because the counterparties are reputable international and PRC banks and other financial institutions with high credit ratings assigned by international credit-rating agencies regulated by the PRC government.

Other than concentration of credit risk on liquid funds which are deposited with several banks with high credit ratings, the Group does not have any other significant concentration of credit risk.

Financial guarantee contracts

At the end of the reporting period, the management has performed impairment assessment, and concluded that there has been no significant increase in credit risk since initial recognition of the financial guarantee contracts. Accordingly, the loss allowance for financial guarantee contracts issued by the Group is measured at an amount equal to 12-month ECL. No loss allowance was recognised in the profit or loss. Details of the financial guarantee contracts are set out in Note 55.

The tables below detail the credit risk exposures of the Group's financial assets, which are subject to ECL assessment:

	Notes	External credit rating	Internal credit rating	12-month or lifetime ECL	Gross carrying amount 2021 RMB million	Gross carrying amount 2020 RMB million
Financial assets at amortised cost						
Amounts due from associates*	29	N/A	(Note a)	12-month ECL	**590**	394
				Lifetime ECL (not credit impaired)	**599**	540
					1,189	934
Amounts due from joint ventures*	30	N/A	(Note a)	12-month ECL	**1,582**	1,400
				Lifetime ECL (not credit impaired)	**509**	746
					2,091	2,146
Amounts due from related companies*	31	N/A	(Note a)	12-month ECL	**74**	142
				Lifetime ECL (not credit impaired)	**220**	213
					294	355
Restricted bank deposits	34	AA	N/A	12-month ECL	**985**	766
Cash and cash equivalents	34	AA+	N/A	12-month ECL	**8,684**	8,630
Other receivables	23	N/A	(Note a)	12-month ECL	**664**	702
Loan receivables	23	N/A	(Note a)	12-month ECL	**566**	379
Trade receivables	23	N/A	(Note b)	Lifetime ECL (provision matrix)	**3,857**	2,350
				Lifetime ECL (not credit impaired)	**28**	30
				Credit-impaired	**187**	139
					4,072	2,519
Bills receivable	23	N/A	(Note a)	12-month ECL	**1,354**	1,441
Contract assets	28	N/A	(Note b)	Lifetime ECL (provision matrix)	**796**	751
				Credit-impaired	**3**	1
					799	752

* The gross carrying amounts disclosed above include both trade nature receivables and non-trade nature receivables. All trade nature receivables are applying lifetime ECL.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Credit risk and impairment assessment (continued)

Notes:

a. For the purposes of internal credit risk management, the Group uses past due information to assess whether credit risk has increased significantly since initial recognition.

2021

	Past due RMB million	Not past due/ No fixed terms of repayment RMB million	Total RMB million
Amounts due from associates	**–**	**1,189**	**1,189**
Amounts due from joint ventures	**–**	**2,091**	**2,091**
Amounts due from related companies	**–**	**294**	**294**
Bills receivable	**3**	**1,351**	**1,354**
Other receivables	**–**	**664**	**664**
Loan receivables	**–**	**566**	**566**

2020

	Past due RMB million	Not past due/ No fixed terms of repayment RMB million	Total RMB million
Amounts due from associates	–	934	934
Amounts due from joint ventures	–	2,146	2,146
Amounts due from related companies	–	355	355
Bills receivable	–	1,441	1,441
Other receivables	–	702	702
Loan receivables	–	379	379

b. For trade receivables and contract assets, the Group has applied the simplified approach in HKFRS 9 to measure the loss allowance at lifetime ECL. Except for debtors with significant outstanding balances, the Group determines the ECL on these items by using a provision matrix, grouped by past due status.

As part of the Group's credit risk management, the Group uses debtors' aging to assess the impairment for its customers in relation to its operation because these customers consist of a large number of small 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 trade receivables and contract assets which are assessed based on provision matrix as at 31 December 2021 within lifetime ECL. A full provision was made for debtors that were credit-impaired.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Credit risk and impairment assessment (continued)

Gross carrying amount

	2021		2020	
	Average loss rate	**Trade receivables and contract assets RMB million**	Average loss rate	Trade receivables and contract assets RMB million
0 to 3 months	**0.42%**	**3,333**	0.40%	2,012
4 to 6 months	**8.11%**	**421**	7.06%	414
7 to 9 months	**9.97%**	**281**	9.30%	237
10 to 12 months	**12.85%**	**155**	12.11%	42
1 to 2 years	**29.62%**	**329**	28.59%	297
2 to 3 years	**41.85%**	**134**	39.44%	99
		4,653		3,101

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.

As at 31 December 2021, the Group provided RMB229 million (2020: RMB170 million) and RMB21 million (2020: RMB19 million) impairment allowance for trade receivables and contract assets respectively, based on the provision matrix. Impairment allowance of RMB187 million (2020: RMB139 million) and RMB3 million (2020: RMB1 million) were made for trade receivables and contract assets respectively, based on debtors that were credit-impaired.

The following table shows reconciliation of loss allowances that have been recognised for trade receivables, contract assets, bills receivable, other receivables, amounts due from associates, joint ventures, related companies.

	12-month ECL RMB million	**Lifetime ECL (not credit-impaired)** RMB million	**Lifetime ECL (credit-impaired)** RMB million	**Total** RMB million
As at 1 January 2020	20	23	278	321
Changes due to financial instruments recognised				
– Transfer to credit-impaired	(2)	(26)	28	–
– Impairment losses recognised	62	100	32	194
– Impairment losses reversed	(28)	(36)	(1)	(65)
As at 31 December 2020	52	61	337	450
Changes due to financial instruments recognised				
– Transfer to credit-impaired	(2)	(41)	43	–
– Impairment losses recognised	74	100	51	225
– Impairment losses reversed	(58)	(43)	(1)	(102)
As at 31 December 2021	66	77	430	573

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, whichever occurs earlier.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Liquidity risk management

To manage the liquidity risk, the Group takes into account the continuity and availability of financial resources to the Group, including the cash flows generated from its principal operations, availability of banking facilities, the level of cash and cash equivalents and capital expansion plans as to meet its expected future working capital requirements and mitigate the fluctuation in cash flows level.

The Group also relies on various bonds and bank and other loans as a significant source of liquidity, detail of which are set out in Notes 40, 41, 42 and 43. The Group reviews the utilisation of borrowings and ensures the compliance of loan covenants regularly.

The following table details the Group's remaining contractual maturity for its financial liabilities based on the agreed repayment terms. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. To the extent that interest flows are carried at floating rate, the undiscounted amount is derived from interest rate existed at the end of the reporting period.

	Weighted average interest rate %	Repayable on demand or within one year RMB million	Within the second year RMB million	Within the third year RMB million	Within the fourth year RMB million	Within the fifth year RMB million	Over five years RMB million	Total undiscounted cash flow RMB million	Carrying amount at end of the reporting period RMB million
At 31 December 2021									
Non-derivative financial liabilities									
Trade and other payables		10,172	–	–	–	–	–	10,172	10,172
Amounts due to associates	1.35	454	8	222	–	–	–	684	639
Amounts due to joint ventures	1.02	1,294	338	–	–	–	–	1,632	1,574
Amounts due to related companies		964	–	–	–	–	–	964	964
Bank and other loans									
– fixed rate	2.34	6,196	646	558	32	32	620	8,084	7,748
– variable rate	4.02	115	125	743	116	105	817	2,021	1,720
Lease liabilities	4.88	92	73	61	49	32	123	430	355
Corporate bonds	4.13	2,134	–	–	–	–	–	2,134	2,099
Senior notes	2.63	126	126	126	126	126	5,252	5,882	4,722
Unsecured bonds	3.25	3,673	–	–	–	–	–	3,673	3,601
Financial guarantee contracts		520	–	–	–	–	–	520	520
		25,740	1,316	1,710	323	295	6,812	36,196	34,114
Derivatives									
– inflow		(5,940)	(309)	(6)	–	–	–	(6,255)	
– outflow		5,442	74	2	–	–	–	5,518	

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Liquidity risk management (continued)

	Weighted average interest rate %	Repayable on demand or within one year RMB million	Within the second year RMB million	Within the third year RMB million	Within the fourth year RMB million	Within the fifth year RMB million	Over five years RMB million	Total undiscounted cash flow RMB million	Carrying amount at end of the reporting period RMB million
At 31 December 2020									
Non-derivative financial liabilities									
Trade and other payables		8,302	–	–	–	–	–	8,302	8,302
Amounts due to associates	0.64	320	–	–	–	–	–	320	319
Amounts due to joint ventures	0.11	977	585	–	–	–	–	1,562	1,561
Amounts due to related companies		925	–	–	–	–	–	925	925
Bank and other loans									
– fixed rate	3.28	3,678	49	529	55	12	582	4,905	4,715
– variable rate	3.16	1,043	91	41	251	36	768	2,230	1,953
Lease liabilities	5.02	109	81	60	48	37	154	489	399
Corporate bonds	4.13	91	2,131	–	–	–	–	2,222	2,097
Senior notes	3.74	2,573	128	128	128	128	5,504	8,589	7,207
Unsecured bonds	3.25	121	3,792	–	–	–	–	3,913	3,712
Financial guarantee contracts		775	–	–	–	–	–	775	–
		18,914	6,857	758	482	213	7,008	34,232	31,190
Derivatives									
– inflow		(2,114)	(3,984)	(40)	–	–	–	(6,138)	
– outflow		2,285	4,113	73	–	–	–	6,471	

The amounts included above for financial guarantee contracts are the maximum amounts the Group could be required to settle under the arrangement for the full guaranteed amount if that amount is claimed by the counterparty to the guarantees. Based on the expectations at the end of the reporting period, the Group considers that it is more likely than not that no amount will be payable under the arrangement. However, these estimates are subject to change depending on the probability of the counterparties claiming under the guarantees in case that the financial receivables held by the counterparties suffer credit losses.

The amounts included above for variable interest rate instruments for non-derivative financial liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

The contractual expiry periods of financial guarantee contracts at the end of the reporting period are as follows:

	2021		2020	
	RMB million	**Expiry period**	RMB million	Expiry period
Guarantees issued to banks to secure loan facilities granted to an associate and joint ventures	**520**	**2029**	775	2029

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

c. Financial risk management objectives and policies *(continued)*

Interest rate benchmark reform

As listed in Note 40, several of the Group's LIBOR bank loans may be subject to the interest rate benchmark reform. The Group is closely monitoring the market and managing the transition to new benchmark interest rates, including announcements made by the relevant IBOR regulators.

LIBOR

The Financial Conduct Authority has confirmed all LIBOR settings will either cease to be provided by any administrator or no longer be representative:

- immediately after 31 December 2021, in the case of all sterling, euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month US dollar settings; and
- immediately after 30 June 2023, in the case of the remaining US dollar settings.

(i) Risks arising from the interest rate benchmark reform

The following are the risks for the Group that may arise from the transition:

Interest rate related risks

For contracts which have not been transitioned to the relevant alternative benchmark rates and without detailed fallback clauses, if the bilateral negotiations with the Group's counterparties are not successfully concluded before the cessation of LIBORs, there are significant uncertainties with regard to the interest rate that would apply. This gives rise to additional interest rate risk that was not anticipated when the contracts were entered into.

There are fundamental differences between IBORs and the various alternative benchmark rates. IBORs are forward looking term rates published for a period (e.g. 3 months) at the beginning of that period and include an inter-bank credit spread, whereas alternative benchmark rates are typically risk-free overnight rates published at the end of the overnight period with no embedded credit spread. These differences will result in additional uncertainty regarding floating rate interest payments.

Liquidity risk

The additional uncertainty on various alternative rates which are typically published on overnight basis will require additional liquidity management. The Group's liquidity risk management policy has been updated to ensure sufficient liquid resources to accommodate unexpected increases in overnight rates.

Litigation risk

If no agreement is reached to implement the interest rate benchmark reform on contracts which have not been transitioned to the relevant alternative benchmark rates (e.g. arising from differing interpretation of existing fallback terms), there is a risk of prolonged disputes with counterparties which could give rise to additional legal and other costs. The Group is working closely with all counterparties to avoid this from occurring.

Interest rate basis risk

Interest rate basis risk may arise if a non-derivative instrument and the derivative instrument held to manage the interest risk on the non-derivative instrument transition to alternative benchmark rates at different times. This risk may also arise where back-to-back derivatives transition at different times. The Group will monitor this risk against its risk management policy which has been updated to allow for temporary mismatches of up to 12 months and transact additional basis interest rate swaps if required.

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

d. Fair value measurement of financial instruments

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

The Group measures its following financial instruments at fair value at the end of the reporting period on a recurring basis:

	Fair value as at 31 December		Fair value hierarchy	Valuation technique and key input
	2021 RMB million	2020 RMB million		
Financial assets				
Derivative financial instruments	**2,531**	628	Level 2	Discounted cash flow for swaps Present value of estimated future cash flows are based on forward rates and contract rates, discounted at a rate that reflects the credit risk of the relevant counterparty or own credit risk, when applicable Black-Scholes Model for options Fair value estimated based on strike price, commodity price, time to expiration, volatility and risk-free interest rate
Listed equity securities, equity interest in Shanghai Utilities	**181**	244	Level 1	Fair values are derived from quoted bid prices in an active market
Unlisted wealth management products	**152**	70	Level 3	Discounted cash flow Future cash flows are estimated based on the recoverable amount expected, discounted at a rate that reflects the credit risk of the counterparty
1.13% equity interest in Sinopec Marketing	**4,170**	4,170	Level 3	Estimated based on the P/B ratio of comparable listed companies and a liquidity discount rate
Other unlisted equity securities – FVTPL	**55**	346	Level 3	Fair value are derived from price multiples of similar assets that have been traded in the market
Unlisted equity securities – FVTOCI	**153**	149	Level 3	Fair values are derived from the fair value of the underlying assets and liabilities held by the investee
Listed equity securities – FVTOCI	**113**	62	Level 1	Fair values are derived from quoted bid prices in an active market
Financial liabilities				
Derivative financial instruments	**1,762**	927	Level 2	Discounted cash flow for swaps Present value of estimated future cash flows are based on forward rates and contract rates, discounted at a rate that reflects the credit risk of the relevant counterparty or own credit risk, when applicable Black-Scholes Model for options Fair value estimated based on strike price, commodity price, time to expiration, volatility and risk-free interest rate

53. CAPITAL MANAGEMENT AND FINANCIAL INSTRUMENTS *(continued)*

d. Fair value measurement of financial instruments *(continued)*

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

The Group's 1.13% equity interest in Sinopec Marketing which is classified as financial assets at FVTPL under Level 3 hierarchy amounted to RMB4,170 million as at 31 December 2021 under HKFRS 9. The significant unobservable input is the liquidity discount rate. The higher liquidity discount rate, the lower fair value of the financial assets at fair value will be. A 5% increase/decrease in the liquidity discount rate, holding all other variables constant, the fair value of the investments would decrease/increase by RMB26 million as at 31 December 2021.

During the year ended 31 December 2021, additions and reductions to investment costs of unlisted wealth management products amounted to RMB152 million and RMB70 million, respectively. No fair value change on the said investments were noted during the year.

During the year ended 31 December 2021, reductions and disposal on investment costs of other unlisted equity securities – FVTPL amounted to RMB23 million and RMB287 million, respectively. Fair value change of RMB19 million on the said investments were noted.

During the year ended 31 December 2021, additions to investment costs of unlisted equity securities – FVTOCI amounted to RMB2 million. Fair value change of RMB2 million on the said investments were noted.

(ii) Fair value of the Group's 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 liabilities recorded at amortised cost in the consolidated statement of financial position approximate their fair values:

	2021		2020	
	Carrying amount RMB million	**Fair value RMB million**	Carrying amount RMB million	Fair value RMB million
Fixed-rate bank and other loans	**7,748**	**7,505**	4,715	4,518
Senior notes	**4,722**	**4,877**	7,207	7,345
Unsecured bonds	**3,601**	**3,724**	3,712	3,823
Corporate bonds	**2,099**	**2,115**	2,097	2,115

In the above table, other than the fair values of bank and other loans disclosed which are under the fair value hierarchy of Level 3, the rest of the fair values disclosed are under the fair value hierarchy of Level 2. The fair values of the senior notes and unsecured bonds are derived from the quoted prices in an over-the-counter market, and the fair values of corporate bonds are derived from the inactive quoted prices in the Shanghai Stock Exchange. The fair values of the rest of the financial liabilities at amortised cost are derived from discount cash flow technique by reference to the market interest rate of the loans with comparable maturity and credit risk of the respective group entities at the end of the reporting period.

54. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details 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 consolidated statement of cash flows as cash flows from financing activities.

	Bank and other loans RMB million (Note 40)	Lease liabilities RMB million (Note 35)	Corporate bonds RMB million (Note 41)	Unsecured bonds RMB million (Note 43)	Senior notes RMB million (Note 42)	Others RMB million (Note)	Total RMB million
At 1 January 2021	6,668	399	2,097	3,712	7,207	1,251	21,334
Financing cash flows	2,910	(98)	–	(34)	(2,372)	(3,344)	(2,938)
Acquisition of subsidiaries	5	–	–	–	–	–	5
Loss on repurchase of unsecured bonds	–	–	–	1	–	–	1
Disposal of subsidiaries	(60)	(4)	–	–	–	–	(64)
Disposal of lease liabilities	–	(34)	–	–	–	–	(34)
Foreign exchange translation	(55)	–	–	(83)	(123)	58	(203)
New leases entered	–	92	–	–	–	–	92
Dividends paid to shareholders	–	–	–	–	–	2,827	2,827
Interest expense	–	–	2	5	10	637	654
At 31 December 2021	9,468	355	2,099	3,601	4,722	1,429	21,674

	Bank and other loans RMB million (Note 40)	Lease liabilities RMB million (Note 35)	Corporate bonds RMB million (Note 41)	Unsecured bonds RMB million (Note 43)	Senior notes RMB million (Note 42)	Others RMB million (Note)	Total RMB million
At 1 January 2020	10,343	550	2,094	4,169	2,539	1,222	20,917
Financing cash flows	(3,645)	(107)	–	(208)	5,065	(2,663)	(1,558)
Loss on repurchase of unsecured bonds	–	–	–	9	–	–	9
Acquisition of subsidiaries	161	–	–	–	–	–	161
Disposal of subsidiaries	(7)	(110)	–	–	–	–	(117)
Foreign exchange translation	(184)	–	–	(265)	(405)	249	(605)
New leases entered	–	66	–	–	–	–	66
Dividends paid to shareholders	–	–	–	–	–	1,719	1,719
Interest expense	–	–	3	7	8	724	742
At 31 December 2020	6,668	399	2,097	3,712	7,207	1,251	21,334

Note: The amounts include the interest payables, non-trade payables due to joint ventures, associates and related companies.

55. RELATED PARTY TRANSACTIONS

Apart from the related party balances as stated in Notes 29, 30 and 31 and the equity transactions as stated in Notes 47 and 48, the Group had the following transactions with certain related parties:

	2021 **RMB million**	2020 RMB million
Nature of transaction		
Associates:		
– Sales of gas to	**2,391**	928
– Sales of materials to	**132**	310
– Purchase of gas from	**986**	384
– Purchase of equipment from	**2**	3
– Loan interest received from	**9**	14
– Provision of gas transportation services to	**2**	1
– Provision of gas transportation services from	**48**	55
– Deposit interest paid to	**2**	2
– Provision of supporting services to	**18**	7
– Provision of supporting services from	**–**	1
– Provision of construction and installation services to	**149**	5
– Loan interest paid to	**4**	–
– Provision of training service to	**2**	2
Joint ventures:		
– Sales of gas to	**3,634**	2,537
– Sales of materials to	**512**	274
– Purchase of gas from	**4,230**	3,419
– Provision of gas transportation services to	**439**	373
– Loan interest received from	**20**	12
– Loan interest paid to	**4**	3
– Provision of supporting services to	**35**	42
– Purchase of equipment from	**4**	5
– Deposit interest paid to	**1**	2
– Provision of construction services by	**8**	25
– Provision of supporting services by	**–**	5
– Lease of vehicles to	**2**	3
– Provision of technology service by	**–**	6
– Provision of construction and installation services to	**276**	12
– Provision of gas transportation services from	**41**	19
– Provision of training service to	**4**	3
– Lease of premises to	**1**	–

55. RELATED PARTY TRANSACTIONS *(continued)*

The following related party transactions are also connected transactions under Chapter 14A of the Listing Rules:

	2021 **RMB million**	2020 RMB million
Nature of transaction – continued		
Companies controlled by Mr. Wang:		
Transactions exempt from shareholders' approval:		
– Purchase of equipment from	**153**	128
– Provision of construction services by	**1,161**	974
– Provision of information technology services by	**296**	195
– Purchase of natural gas from	**2,019**	136
– Provision of LNG terminal usage services by	**728**	644
– Provision of logistic service to	**28**	–
Transactions fully exempt from shareholders' approval, annual review and all disclosure requirement:		
– Sales of gas, gasoline and diesel to	**24**	64
– Sales of materials to	**50**	59
– Provision of construction and installation services to	**30**	14
– Provision of property management services by	**16**	16
– Provision of property management services to	**2**	4
– Lease of premises to	**4**	8
– Lease of premises from	**5**	3
– Provision of supporting services by	**58**	54
– Provision of supporting services to	**67**	40
– Provision of outsourcing services by	**38**	63
– Provision of electronic business services by	**17**	9
– Provision of technology services to	**69**	63
– Provision of energy efficiency technology services to	**24**	12
– Loan interest received from	**8**	3
– Provision of training service to	**19**	22
– Disposal of equity interest to	**5**	–
– Provision of logistic service to	**68**	–

The Company issued senior notes on 17 September 2020 and unsecured bonds on 24 July 2017. The terms and conditions of these debts require Mr. Wang and any affiliate of him to retain certain percentage of shareholding over the Company, failing which the Company would be required to repay or repurchase all outstanding debts at predetermined prices.

Compensation of key management personnel

The remuneration of the Directors who are also the members of key management personnel during the years ended 31 December 2021 and 2020 was disclosed in Note 12.

Financial guarantee contracts

As at 31 December 2021, the guaranteed facilities amount utilised by an associate and the joint ventures were RMB520 million (2020: RMB775 million).

During the year ended 31 December 2021, the fair value of a financial guarantee contract of the Group is RMB23 million with a carrying amount of RMB21 million. In addition, the Directors do not consider it probable that a claim will be made against the Group under any of these guarantees.

56. PARTICULAR OF PRINCIPAL SUBSIDIARIES

Name of Company	Place of incorporation/ establishment	Issued and fully paid share capital/ registered capital	Proportion of ownership interest/voting power held by the Group 2021	2020	Principal activities
ENN Gas Investment Group Limited ("ENN Gas")	British Virgin Islands	USD1,000	**100.00%**	100.00%	Investment holding
北京新奧華鼎貿易有限公司 Beijing Xinao Huading Trading Company Limited	PRC	USD23,800,000	**100.00%**	100.00%	Retail of gas pipelines, related materials and equipment
長沙新奧燃氣有限公司 Changsha Xinao Gas Company Limited	PRC	RMB120,000,000	**55.00%**	55.00%	Investment in gas pipeline infrastructure and sales of piped gas
常州新奧燃氣發展有限公司 Changzhou Xinao Gas Development Company Limited	PRC	USD600,000	**60.00%**	60.00%	Sales of piped gas
常州新奧燃氣工程有限公司 Changzhou Xinao Gas Engineering Company Limited	PRC	USD5,000,000	**60.00%**	60.00%	Investment in gas pipeline infrastructure
泉州市燃氣有限公司 Quanzhou City Gas Company Limited	PRC	RMB450,000,000	**60.00%**	60.00%	Investment in gas pipeline infrastructure and sales of piped gas
晉江新奧燃氣有限公司 Jinjiang Xinao Gas Company Limited	PRC	RMB60,000,000	**60.00%**	60.00%	Investment in gas pipeline infrastructure and sales of piped gas
洛陽新奧華油燃氣有限公司 Luoyang Xinao Huayou Gas Company Limited	PRC	RMB160,000,000	**70.00%**	70.00%	Investment in gas pipeline infrastructure and sales of piped gas
石家莊新奧燃氣有限公司 Shijiazhuang Xinao Gas Company Limited	PRC	RMB300,000,000	**60.00%**	60.00%	Investment in gas pipeline infrastructure and sales of piped gas
肇慶新奧燃氣有限公司 Zhaoqing Xinao Gas Company Limited	PRC	RMB52,700,000	**100.00%**	100.00%	Investment in gas pipeline infrastructure and sales of piped gas
蚌埠新奧燃氣發展有限公司 Bengbu Xinao Gas Development Company Limited	PRC	USD600,000	**70.00%**	70.00%	Sales of piped gas
青島新奧新城燃氣有限公司 Qingdao Xinao Xincheng Gas Company Limited	PRC	USD839,000,000	**90.00%**	90.00%	Sales of piped gas
浙江新奧智能裝備貿易有限公司 Zhejiang Xinao Intelligent Equipment Trading Company Limited	PRC	RMB10,000,000	**100.00%**	100.00%	Retail of gas pipelines and intelligent equipments
新奧泛能網絡科技有限公司 ENN Ubiquitous Energy Network Technology Company Limited	PRC	RMB103,000,000	**100.00%**	100.00%	Solutions and operating services of integrated energy
新奧能源物流有限公司 Xinao Energy Logistics Company Limited	PRC	USD22,230,000	**100.00%**	100.00%	Transportation of oil products and gas

56. PARTICULAR OF PRINCIPAL SUBSIDIARIES *(continued)*

Name of Company	Place of incorporation/ establishment	Issued and fully paid share capital/ registered capital	Proportion of ownership interest/voting power held by the Group 2021	2020	Principal activities
新奧能源貿易有限公司 Xinao Energy Sales Company Limited	PRC	USD30,200,000	**100.00%**	100.00%	Wholesale and retail of LNG and CNG, piped gas facilities, gas equipment, appliances and others
新奧液化天然氣貿易有限公司 ENN LNG Trading Company Limited (ENN LNG Trading)	Hong Kong	HK$1,000	**100.00%**	100.00%	Sourcing and sales of LNG
新奧財務 ENN Finance	PRC	RMB2,000,000,000	**100.00%**	100.00%	Provision of financial services in accordance to the Financial License granted by the China Banking Regulatory Commission
新奧燃氣發展有限公司 Xinao Gas Development Company Limited	PRC	USD620,000,000	**100.00%**	100.00%	Sourcing of compressed pipeline gas and investment in gas pipeline infrastructure and sales of piped gas
新奧新能源工程技術有限公司 Xinao New Energy Engineering Technology Company Limited	PRC	USD7,000,000	**100.00%**	100.00%	Investment in gas pipeline infrastructure
新奧(中國) Xinao (China)*	PRC	USD231,778,124	**100.00%**	100.00%	Investment holding
廊坊新奧燃氣有限公司 Langfang Xinao Gas Company Limited	PRC	USD9,333,900	**100.00%**	100.00%	Investment in gas pipeline infrastructure and sales of piped gas
廊坊新奧智能科技有限公司 Langfang Xinao Intelligent Technology Company Limited	PRC	USD15,000,000	**100.00%**	100.00%	Retail of gas pipelines and intelligent equipments
舟山新奧能源貿易有限公司 Zhoushan Xinao LNG Trading Company Limited	PRC	RMB50,000,000	**100.00%**	100.00%	Wholesale and retail of LNG and CNG, piped gas facilities, gas equipment, appliances and others
淮安新奧燃氣有限公司 Huaian Xinao Gas Company Limited	PRC	RMB35,000,000	**100.00%**	100.00%	Investment in gas pipeline infrastructure and sales of piped gas
寧波城際能源貿易有限公司 Ningbo Chengji Energy Trading Company Limited	PRC	RMB5,000,000	**100.00%**	100.00%	Sourcing and sales of LNG

* Foreign-invested enterprise

56. PARTICULAR OF PRINCIPAL SUBSIDIARIES *(continued)*

All of the above subsidiaries, except for ENN Gas, ENN LNG Trading and Xinao (China), are indirectly held by the Company.

All of the above subsidiaries operate principally in the places of their incorporation/establishment respectively, except that ENN Gas operates principally in Hong Kong. The above table lists the subsidiaries of the Company which, in the opinion of the Directors, principally affected the results or net assets of the Group. Giving the details of other subsidiaries would, in the opinion of the Directors, result in particulars of excessive length.

None of the subsidiaries issued any debt securities as at 31 December 2021 or at any time during the year except for Xinao (China) which has issued the following debt securities.

	2021 RMB million	2020 RMB million
Corporate bonds	**2,099**	2,097

There were no subsidiaries that have non-controlling interests that are material to the company as at 31 December 2021.

57. STATEMENT OF FINANCIAL POSITION OF THE COMPANY

	2021 RMB million	2020 RMB million
Non-current Assets		
Investments in subsidiaries	**10,864**	9,664
Investment in an associate	**–**	39
Financial assets at FVTPL	**–**	287
Amounts due from a subsidiary	**3,881**	4,444
	14,745	14,434
Current Assets		
Derivative financial instruments	**–**	2
Amounts due from subsidiaries	**4,089**	3,923
Cash and cash equivalents	**219**	152
	4,308	4,077
Current Liabilities		
Other payables	**90**	131
Taxation payables	**52**	112
Amounts due to subsidiaries	**4,355**	1,377
Bank loans – due within one year	**3,672**	652
Senior notes	**–**	2,380
Derivative financial instruments	**99**	92
Unsecured bonds	**3,601**	–
Share-based payment liabilities	**24**	–
	11,893	4,744
Net Current Liabilities	**(7,585)**	(667)
Total Assets less Current Liabilities	**7,160**	13,767
Capital and Reserves		
Share capital	**117**	117
Reserves	**2,172**	3,945
Total Equity	**2,289**	4,062
Non-current Liabilities		
Bank loans – due after one year	**–**	979
Senior notes	**4,722**	4,827
Unsecured bonds	**–**	3,712
Derivative financial instruments	**–**	43
Deferred tax liabilities	**144**	144
Share-based payment liabilities	**5**	–
	4,871	9,705
	7,160	13,767

57. STATEMENT OF FINANCIAL POSITION OF THE COMPANY *(continued)*

The statement of changes in equity is as follow:

	Share capital RMB million	Treasury stocks RMB million	Share premium RMB million	Hedging reserve RMB million	Share options reserve RMB million	Retained earnings RMB million	Total RMB million
At 1 January 2020	116	(151)	2,690	–	128	883	3,666
Profit and total comprehensive income for the year	–	–	–	36	–	1,913	1,949
Recognition of share-based payment expenses (Note 45)	–	–	–	–	70	–	70
Purchase of shares under Share Award Scheme	–	(17)	–	–	–	–	(17)
Issue of ordinary shares upon exercise of share options (Notes 39 & 45)	1	–	163	–	(51)	–	113
Dividends appropriation (Note 14)	–	–	(1,719)	–	–	–	(1,719)
At 31 December 2020	117	(168)	1,134	36	147	2,796	4,062
Profit and total comprehensive income for the year	–	–	–	(32)	–	976	944
Recognition of share-based payment expenses (Note 45)	–	–	–	–	20	–	20
Issue of ordinary shares upon exercise of share options (Notes 39 & 45)	–	–	119	–	(29)	–	90
Dividends appropriation (Note 14)	–	–	–	–	–	(2,827)	(2,827)
At 31 December 2021	117	(168)	1,253	4	138	945	2,289

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