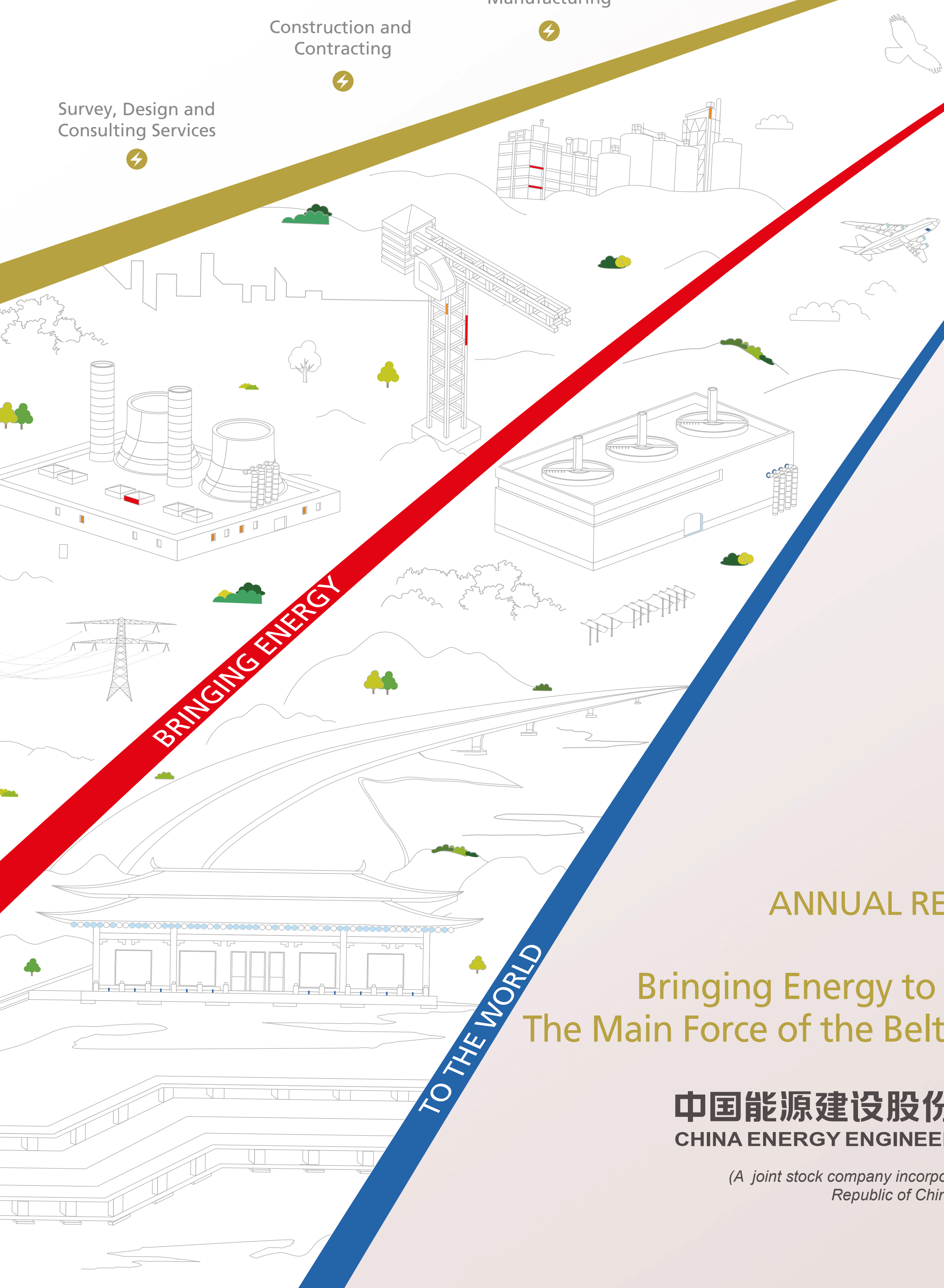
中国能建
ENERGY CHINA

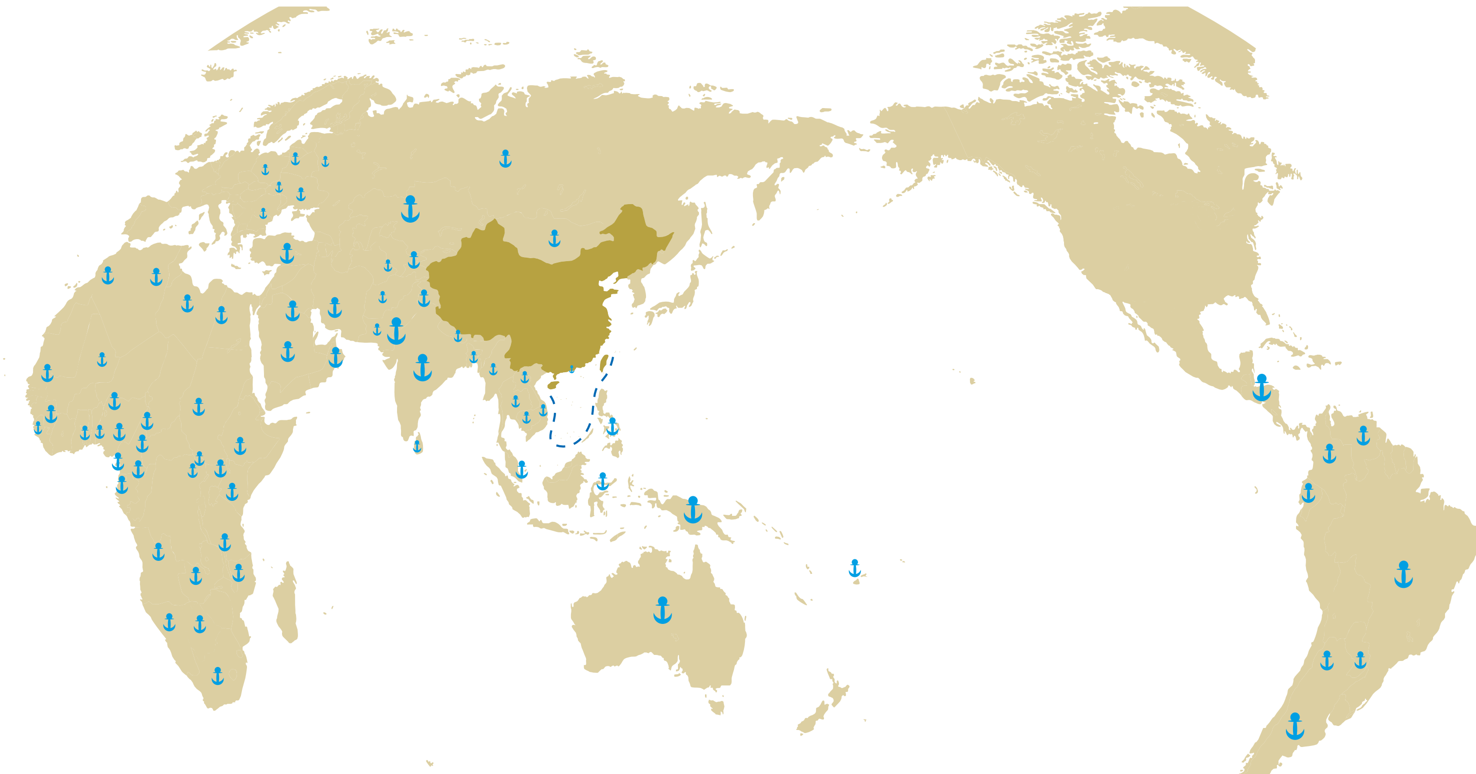


ANNUAL REPORT 2019

Bringing Energy to the World
The Main Force of the Belt and Road

中国能源建设股份有限公司
CHINA ENERGY ENGINEERING CO., LTD.

(A joint stock company incorporated in the People's Republic of China with limited liability)
(Stock Code: 3996)



COMPANY PROFILE

Founded on 19 December 2014, the Company is a joint stock company with limited liability established and co-sponsored by China Energy Engineering Group Co., Ltd. (a central enterprise supervised and administered by the State-owned Assets Supervision and Administration Commission of the State Council), and its wholly-owned subsidiary, Electric Power Planning and Engineering Institute Co., Ltd. The Company issued H shares under the initial public offering on 10 December 2015 and got listed on the main board of The Stock Exchange of Hong Kong Limited (Stock Code: 3996.HK).

The Company is a comprehensive and ultra-large group company offering holistic solutions and full-chain services in energy power, infrastructure and real estate sectors in China and the world at large. Its businesses cover energy power, water conservancy and waterworks, railways and highways, ports and navigation channels, municipal engineering, urban rail, eco-environment protection and housing construction, with a complete industrial chain integrating planning and consulting, evaluations and review, survey and design, construction and contracting and management, operational maintenance and investment operation, technical services, equipment manufacturing, and building materials. The Company is committed to becoming an internationally top-notch engineering company with global competitiveness being "technology-based, well-managed, international and diversified". The Company successfully entered Fortune's Global 500 for six consecutive years and obtained front-row rankings in ENR Top 150 Global Engineering Design Firms, Top 225 International Design Firms, Top 250 Global Contractors and Top 250 International Contractors. The Company obtained the credit rating of A-(A3) issued by Fitch and Moody's, the authoritative rating agencies internationally. The Company has set up over 200 overseas branch offices in more than 80 countries and regions across the world with its businesses extending to all provinces and regions in China and over 140 countries and regions outside China.

The Company serves the national strategies and leads industry development by virtue of its leading technological levels and superb innovation capabilities. Since its establishment, the Company has won more than 800 science and technology progress awards at state, provincial and industry levels, 8 China Construction Engineering Luban Prizes and 33 National Quality Engineering Gold Awards. As of the end of 2019, the Company had 2 state-level enterprise technology centers, 3 academician expert workstations, 10 work stations of postdoctoral scientific researchers, 47 provincial research institutions and 91 high and new technology enterprises. It had a total of 9,208 patents in force. It formulated and revised 600-plus national and industry standards, making important contribution to more than 90% of China's thermal power stations, conventional islands and nuclear power station and power grid survey and design standards. It undertook more than 65% of the engineering work of the Three Gorges Hydropower Project which defines the highest technical level of building construction in the world, and designed and built a great number of world-leading ultra-supercritical thermal power projects, the world's first Generation III nuclear power conventional island project, the world's largest wind power and solar photovoltaic power generation, storage and transmission project, the ultra-high voltage power transmission project of the world's highest voltage level, the world's first multi-terminal flexible direct current transmission project and other high-level projects.

Shouldering an institutional mission of "Bringing Energy to the World" and adhering to a strategic vision of being an "industry-leading and world-class" company, the Company upholds the corporate tenet of "lean creates value, quality leads the future" and sticks to the new development philosophies of being innovative, coordinated, green, open and sharing. The Company adheres to high-quality corporate development throughout its workflow, and strives to strengthen its competitiveness, innovation, control, impact and risk resistance to serve the purpose of creating the biggest value for customers, shareholders, employees and the society by delivering first-class quality projects to China and the world.

CONTENTS

COMPANY INFORMATION

COMPANY INFORMATION

Chinese Name:	中國能源建設股份有限公司
English Name:	China Energy Engineering Corporation Limited
Registered Office:	Building 106, Lize Zhongyuan, Chaoyang District, Beijing, the PRC
Head Office in the PRC:	Building 1, No. 26A West Dawang Road, Chaoyang District, Beijing, the PRC
Principal Place of Business in Hong Kong:	31/F, Tower Two, Times Square, 1 Matheson Street, Causeway Bay, Hong Kong

Company's Website: www.ceec.net.cn
Tel.: +86 (10)59098818
Fax: +86 (10)59098711
E-mail: zgnj3996@ceec.net.cn

STOCK INFORMATION OF THE COMPANY

Stock Category:	H Shares
Stock Exchange:	The Stock Exchange of Hong Kong Limited
Stock Name:	CH ENERGY ENG
Stock Code:	3996

EXECUTIVE DIRECTORS

Mr. WANG Jianping *(Chairman)*
Mr. DING Yanzhang *(Vice Chairman)*
Mr. ZHANG Xianchong
(resigned on 14 January 2020)

NON-EXECUTIVE DIRECTORS

Mr. MA Chuanjing
Mr. LIU Xueshi
Mr. SI Xinbo

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. DING Yuanchen
Mr. ZHENG Qiyu
(passed away in December 2019)
Mr. CHEUNG Yuk Ming

SUPERVISORS

Mr. WANG Zengyong *(Chairman)*
Mr. FU Dexiang
Mr. WEI Zhongxin
Mr. LI Fangyi
Mr. KAN Zhen

AUTHORIZED REPRESENTATIVES

Mr. WANG Jianping
Mr. DUAN Qiurong

STRATEGY COMMITTEE

Mr. WANG Jianping *(Chairman)*
Mr. DING Yanzhang
Mr. MA Chuanjing
Mr. SI Xinbo

NOMINATION COMMITTEE

Mr. WANG Jianping *(Chairman)*
Mr. DING Yuanchen
Mr. CHEUNG Yuk Ming

Company Information

REMUNERATION AND ASSESSMENT COMMITTEE

Mr. ZHENG Qiyu *(Chairman)*
(passed away in December 2019)
Mr. CHEUNG Yuk Ming
Mr. LIU Xueshi

AUDIT COMMITTEE

Mr. DING Yuanchen *(Chairman)*
Mr. MA Chuanjing
Mr. CHEUNG Yuk Ming

JOINT COMPANY SECRETARIES

Mr. DUAN Qiurong
Ms. LEUNG Suet Wing

H SHARE REGISTRAR

Computershare Hong Kong Investor Services Limited
Shops 1712-1716, 17/F, Hopewell Centre,
183 Queen's Road East, Wanchai, Hong Kong

INTERNATIONAL AUDITOR

KPMG
Registered Public Interest Entity Auditor under
the *Financial Reporting Council Ordinance*
8/F, Prince's Building,
10 Chater Road, Central, Hong Kong

LEGAL ADVISERS

As to Hong Kong and U.S. Laws: Clifford Chance
27/F, Jardine House,
One Connaught Place, Central, Hong Kong

As to PRC Law: Jia Yuan Law Offices
Room F407, Ocean Plaza, 158 Fuxing Men Nei Avenue,
Beijing, the PRC

PRINCIPAL BANKS

China Construction Bank Beijing Jin'an Sub-branch
China Everbright Bank Beijing Fengtai Sub-branch

FINANCIAL SUMMARY

1 SUMMARY OF CONSOLIDATED STATEMENT OF PROFIT OR LOSS

	For the year ended 31 December					
	2019	2018	2017	2016	2015	Changes of 2019 over 2018
	(RMB in million)	(RMB in million)	(RMB in million)	(RMB in million)	(RMB in million)	(%)
Revenue:						
Survey, design and consulting services	**13,154.0**	12,216.3	13,282.6	12,972.6	12,454.7	7.68
Construction and contracting [(1)]	**185,425.1**	163,295.4	168,751.7	161,058.2	153,172.8	13.55
Industrial manufacturing	**23,710.6**	21,819.6	19,958.9	18,799.6	17,578.3	8.67
Clean energy, environmental protection and water utilities	**16,173.2**	20,826.1	23,982.5	15,323.0	7,911.5	(22.34)
Investment and other business [(1)]	**19,534.8**	17,572.1	19,830.8	22,175.1	21,163.2	11.17
Inter-segment elimination and adjustment	**(10,706.7)**	(11,695.1)	(11,436.4)	(8,157.5)	(6,587.6)	(8.45)
Total	**247,291.0**	224,034.3	234,370.1	222,171.0	205,692.9	10.38
Gross profit	**32,337.2**	29,763.4	27,628.7	25,312.8	23,058.1	8.65
Profit before taxation	**13,307.9**	11,676.8	11,955.3	9,647.0	8,585.8	13.97
Profit for the year	**9,600.4**	8,551.5	9,064.2	7,438.6	6,470.4	12.27
Profit for the year attributable to equity holders of the Company	**5,078.5**	4,570.7	5,261.1	4,281.3	4,235.7	11.11
Basic and diluted earnings per share (RMB)	**0.17**	0.15	0.18	0.14	0.19	13.33

Note:

(1) As at 31 December 2019, the Group reorganised the reportable segment to the CODM by moving power engineering debugging and project operation and maintenance businesses from investment and other business to construction and contracting. See note 4 to the "Consolidated Financial Statement" of this annual report.

2 SUMMARY OF CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at 31 December					
	2019	2018	2017	2016	2015	Changes of 2019 over 2018
	(RMB in million)	(RMB in million)	(RMB in million)	(RMB in million)	(RMB in million)	(%)
Current assets	**264,677.0**	257,593.0	242,329.4	212,729.1	184,877.1	2.75
Non-current assets	**156,993.3**	131,792.6	101,557.7	79,928.4	75,720.8	19.12
Total assets	**421,670.3**	389,385.5	343,887.1	292,657.5	260,597.9	8.29
Current liabilities	**224,982.0**	226,312.8	204,337.1	163,742.2	151,934.7	(0.59)
Non-current liabilities	**83,397.9**	67,908.8	59,694.3	54,926.3	47,870.9	22.81
Total liabilities	**308,379.9**	294,221.6	264,031.4	218,668.5	199,805.6	4.81
Total equity	**113,290.4**	95,163.9	79,855.7	73,989.0	60,792.3	19.05
Total equity and liabilities	**421,670.3**	389,385.5	343,887.1	292,657.5	260,597.9	8.29

CHAIRMAN'S STATEMENT

Wang Jianping
Chairman

Dear shareholders,

As time passes by, a new chapter has begun. We have tided over the extraordinary year of 2019 hand-in-hand. On behalf of the Board of Directors of the Company, I would like to express my sincere gratitude to the shareholders for giving the Company care and support in the past year.

In 2019, with such complex and grim domestic and foreign development environments, we held firmly to the general guideline of maintaining stability while seeking progress and pursuing the concept of new development. We ensured to be in line with the overall requirements of "maintaining stable growth, expediting transformation, promoting reform, preventing risks and strengthening Party building", focused on transformation, upgrading, and improvement of quality and efficiency, and accelerated the promotion of high-quality development. Thanks to these efforts, we successfully accomplished various targets and missions in the year and stepped up a notch in all kinds of tasks.

Steady growth of main operation indicators. New contracts signed for the year amounted to RMB520.398 billion, revenue amounted to RMB247.291 billion and total profit amounted to RMB13.308 billion, representing a year-on-year increase of 12.65%, 10.38% and 13.97%, respectively, which exceeded the annual targets. The new historical high laid a solid foundation for the successful conclusion of the Company's 13th Five-Year Plan.

Market expansion has been effective. The value of newly signed contracts of the Company exceeded RMB500 billion for the first time. Among which, the domestic newly contracted value and the international newly contracted value grew by 14.56% and 8.35% year-on-year, respectively, recording a historical high. The Company fully engaged in implementing major national strategies. The growth of newly signed contract value in the Guangdong-Hong Kong-Macao Greater Bay Area market exceeded 100% year-on-year, that in Hainan Free Trade Zone market increased by

We wish to cooperate with domestic and overseas peers in good faith to achieve mutual development, share results of development and create a desired future!

17% year-on-year, and the Company signed contracts for a number of high-quality projects in the markets in Xiong'an New Area and the protection of Yangtze River. The newly signed contract values of domestic power engineering, non-power engineering and foreign exchange projects grew by 18.69%, 10.43% and 10.57% respectively. The Company actively participated in the construction of the "One Belt and One Road", the value of new contracts signed by countries along the "Belt and Road" increased by 15.22% year-on-year, accounting for more than 80% of newly contracted value of international projects. The value of new contracts signed for international power projects amounted to 110.225 billion, being at the forefront of the industry; the development of international mid-to-high-end regional markets achieved new breakthroughs, and a number of new significant contracts were signed in Western Asia and European countries such as Saudi Arabia, the United Arab Emirates, Poland, Spain and Greece.

Business transformation achieved positive progress. The Company continued to improve its corporate layout, optimized its internal resources allocation, and accelerated the transformation and development. The turnover of domestic new business model increased by 49.06% year-on-year, the small equity participation drove a significant increase in the new contract value of contracting business, and the new contract value of domestic new business models completed by construction investment companies grew by 68.65% year-on-year. The economies of scale of non-power engineering and EPC business increased steadily. The value of new contracts signed increased by 20.02% and 0.01% year-on-year respectively. The revenue increased by 40.17% and 21.23% year-on-year respectively; the international non-power engineering contracts increased by 84.78% year-on-year; it actively utilized the driving role of investment, and the investment amount during the year increased by 29.44% year-on-year. The Company made solid progress in supplementing its qualifications and shortcomings, and 48 qualifications were newly added or upgraded during the year, including 25 non-power engineering grade A qualifications, which supported the transformation and development of enterprises.

The internal reform was push forward solidly and deeply. Mixed ownership reform and the comprehensive reform "Double-hundred Action" have made progress. Management measures of enterprise specification were revised, and measurement and assessment of enterprise specification were carried out, leading to the high quality development of its enterprises. It continued to deepen the reform of three systems, comprehensively built the "1+N" cadre management system, and strengthened the performance-linked remuneration allocation system. Some of its enterprises implemented professional subsidiary transformation, merger and reorganization of internal enterprises, and improved their organizational structure, which effectively stimulated the endogenous power of enterprise development.

Operational quality has been steadily improved. The Company has always focused on improving the quality of development and enhancing economic benefits, and vigorously implemented the improvement of quality and efficiency. It deeply carried out reduction of leverage ratio and liabilities, and the gearing ratio has decreased by 2.43 percentage points as compared with the beginning of the year. It strengthened the management and control on costs and expenses as well as inventory and receivables. The proportion of three expenses in revenue decreased by 0.50 percentage point year-on-year, while the growth of expenses in inventories and receivables was lower than that of the revenue by 5.93 percentage points. It further promoted capital concentration and insurance concentration, the capital concentration increased by 14.46 percentage points as compared with the beginning of the year, whereas the centralized procurement of insurance decreased by 40%. It optimized the management of centralized procurement bidding and reduced the comprehensive cost of procurement by 4.38 percentage points. It strengthened the management of ongoing engineering projects and control of construction procedures, and maintained stable safe production, which kept the quality and environmental protection indicators under control.

Normative operation was strengthened constantly. The Company firmly established the concept of operation in accordance with laws and regulations, and continuously strengthened the normative operation. It formulated the lists of event for decision-making, management, and authorization, clarified the boundaries between power and responsibilities, and standardized management. It strengthened the establishment of the Board of Directors, improved the system framework and work mechanisms, strengthened the management of connected transactions, intensified information disclosure, promoted the management of market value and investor relations, and enhanced the continuous improvement of corporate governance. It further promoted the corporate governance by law, conducted corporate risk assessment comprehensively, carried out special investigations of "Three Prohibitions" and "Ten Forbidden Items", and strictly controlled the legal review. It exerted the role of the Supervision to further carry out the standardized project management and implementation of the Eight Rules of the Party Central Committee, and international project supervision and inspection. It effectively rectified the issues discovered in auditing, inspection and examination, which closed the management loopholes and consolidated the foundation of development.

Science and technology innovation was pushed forward continuously. Throughout the year, the Company won 157 awards above the industry level, and won the special prize of National Science and Technology Progress Award as the main unit which participated in the construction for hydraulic complex in the Three Gorges of the Yangtze River; obtained 1,418 patent licenses, including 201 invention patents; took part in the formulation and revision of 41 national and industry standards, and formulated and officially issued the first national standard for offshore wind farms as the chief editor unit. A number of major construction undertook by the Company were put into operation and transferred, which were awarded 8 National Quality Engineering Gold Awards, 20 National Quality Engineering Awards, and other important awards, such as Luban Prizes and FIDIC Engineering Project Awards. These demonstrated the Company's strength as the main force and pioneer in the field of energy construction.

Chairman's Statement

The year 2020 will be the wrap-up year for the country to build a moderately prosperous society in all respects, as well as the critical year for achieving the short-term objective of building the Company into an internationally competitive engineering company. Despite the difficulties and challenges of the Company brought about by the currently complicated and severe external and internal situations, it marks the time when there will still be a favourable prospect for international and domestic infrastructures and energy construction market and the Company's development is still in a period with strategic opportunities for great development. The Company will focus on the strategic goal of building an internationally competitive engineering company, always adhere to the confidence in development, endeavor to seize opportunities for development, further consolidate the achievements of business transformation and management foundation, improve the institutional mechanism and system, deepen various reforms, enhance development quality, accelerate the promotion of high-quality development of enterprises, and ensure the fulfillment of all strategic goals comprehensively. The Company will lay stress on five aspects:

First, the Company will ensure the realization of high-quality stable growth. The Company will implement in-depth innovation-driven strategies, actively promote innovative business model, and spare no effort in opening up international and domestic markets to ensure the achievement of greater results. We will continue to deepen quality improvement and efficiency enhancement, strengthen the management and control of costs and expenses, debt ratio and debt scale, overall process of management on inventory and receivables, and management of capital centralization, continuously improve the quality and efficiency of corporate development, and enhance the creating capacity of corporate value. We will further promote the management improvement, treat project management as the top priority of enterprise management, attach great importance to on-debt management, quality environmental protection supervision and management, and project subcontracting management of on-going engineering projects, and speed up the institutionalization, standardization, process and informationization of management to constantly consolidate our management foundation. We will carry out investment actively and prudently, drive and promote principal construction businesses based on investment and build the core enterprise competitiveness, steadily push forward investment in areas including power, infrastructure, environmental protection and water utilities, civil explosives, cement, and gravel aggregates. We will give full play to the role of corporate finance platform to deepen the integration of industry and finance and promote investment development.

Second, the Company will focus on improving corporate governance. The Company will scientifically formulate the "14th Five-Year Plan" of the Company, and establish policy system, institutional system and measures guarantee system for high-quality development of the "14th Five-Year Plan" to guide the Company towards a high-quality development in the future. The Company will continue to perfect the corporate governance structure, constantly improve the market-oriented mechanism, and speed up the construction of a standardized board of directors; continuously optimize its corporate mechanism, and strive to formulate regulations and procedures which are systematically well-established, scientifically standardized and efficiently operated. We will constantly improve the capacity in corporate management and control, and explore the construction of a "three-level operational system" in which the Company's headquarters focus on significant investment and strategic projects, headquarters of second-level subsidiaries focus on the investment and operating projects of the principal businesses, and third-level subsidiaries focus on production and operation in accordance with the positioning of "Strategic + Operational Management of Headquarters"; make efforts in standardizing the order of collaborative operation among internal enterprisers and improve the quality of collaborative operation.

Third, the Company will focus on intensifying the guidance of scientific and technologcal innovation. In respect of market development, production and operation, and transformation and upgrading, we will implement in-depth innovation-driven development strategies. The Company will increase input in science and technology, accelerate the implementation of the Company's 2019-2020 Action Plan for Scientific and Technological Innovation, and focus on key and core technologies in aspects of internet of things for electricity, green energy, intelligent construction, water utilities and environmental protection, utility tunnel, and high-end equipment to tackle scientific and technological problems. We will improve the collaborative and efficient scientific and technological innovation system, further strengthen the top-level design of scientific and technological innovation and the implementation of basic work, enhance the innovative collaboration between enterprises and upstream and downstream of the industrial chain, and actively carry out international cooperation on science and technology. The Company will put more efforts in training and recruitment of talents in science and technology, increase incentives for scientific and technological innovation, and stimulate vitality of scientific and technological innovation in an all-round manner.

Fourth, the Company will keep deepening internal reform. The Company will continue to explore and gradually implement the professional manager system, and refine the market-oriented standardized employment system; strictly implement the remuneration allocation system of the Company, and reasonably form the gap in the income distribution; implement policies regarding, for instance, equity interest incentives for listed companies, equity and dividend incentives for scientific and technological enterprises, and enhance the vitality of micro entities, as well as proactively carry out reforms including the mixed ownership reform and "Double-hundred Action" to ensure substantive breakthroughs. The Company will take the initiatives to encourage well-qualified enterprises in making up for shortcomings in development, facilitate the professional, regional and large-scale internal reorganization and integration accordingly. We will solidly advance the specialized management on key loss-making subsidiaries, continuously reduce the number of existing legal entities, and resolutely retire non-core enterprises with weak profitability and sustained losses.

Fifth, the Company will push forward the normative operation of enterprises. The Company will continue to enhance the "Three Important and One Major" decision-making system and lists of event, and standardize the decision-making process and process management to ensure that the decisions are in compliance with laws and regulations. We will strengthen risk prevention and control in key areas, comprehensively strengthen the construction of the compliance system, deepen the "three" legal reviews, and strive to prevent legal compliance risks; strengthen analysis of major investment decisions, management supervision, follow-up evaluation and post-project evaluation, intensify the accountability for illegal operation investment, and put more efforts in preventing risks of investment and mergers and acquisitions; strengthen supervision and management on financing, guarantee, transfer of property rights, advances and other business areas, and focus on preventing capital and financial risks; strengthen the risk identification of key countries, industries, and projects, improve the whole-cycle risk management and control system for risk assessment, monitoring and early warning and emergency response, and emphasize on preventing risks arsing from international business; strengthen the management on insider information and connected transactions of the Company, and dedicate to preventing information disclosure risk. The Company will improve the Supervision system, focus on investment projects and engineering projects, as well as strengthen procedure supervision of key areas and critical links, such as material procurement, project subcontracting, project settlement and external guarantee, and large amount of capital transfer.

In 2020, the Company will endeavor to seize opportunities for development, and accelerate the pace of development with the faith of winning, vigorous spirit and perseverance. We will also strive to ensure the realization of various work objectives, and offer satisfactory results to society and shareholders with high quality development.

We hope that shareholders and all parties and friends who have been paying long-term attention to the Company will continue to give us help and support!

Wang Jianping
Chairman of the Board
31 March 2020

BUSINESS OVERVIEW

1. OVERVIEW OF INDUSTRY DEVELOPMENT

Fixed asset investment. In 2019, China's fixed asset investment (excluding rural households) totaled RMB55.1 trillion, up by 5.4% year-on-year, slowing down by 0.5 percentage points year-on-year. The investment in primary industry, secondary industry and tertiary industry increased by 0.6%, 3.2% and 6.5% year-on-year, respectively. The infrastructure investment was generally stable, grew by 3.8% year-on-year. Specifically, the railway transport investment declined by 0.1%; the road transport investment grew by 9.0%; the water conservation management investment grew by 1.4%; the public facilities management investment grew by 0.3%; investment in ecological protection and environmental governance increased by 37.2%. Region-specifically, the investment in the eastern area grew by 4.1% as compared with last year, that in the central area grew by 9.5%; that in the western area grew by 5.6%, and that in the northeast area declined by 3.0%.

Construction industry. In 2019, China's construction industry realized a total value of output of RMB24.8 trillion, rising by approximately 5.7% year-on-year, with its growth rate falling by 4.2 percentage points year-on-year. The annual added value of the construction industry amounted to RMB7.1 trillion, rising by approximately 5.6% year-on-year. The construction area of housing construction of China's construction industry was approximately 14,420 million square metres, which increased by 2.3% year-on-year.

Power industry. In 2019, China's total electricity consumption reached 7.2 trillion kilowatt hours, rising by 4.5% year-on-year, with the growth rate reducing by 4.0 percentage points over the same period of last year. China's power grid and power generation projects completed investment of RMB799.5 billion. Specifically, China's power grid projects completed investment of RMB485.6 billion, which declined by 9.6% year-on-year. The power generation projects of nationwide major power enterprises completed investment of RMB313.9 billion, which grew by 12.6% year-on-year. Among the power generation project investment completed, the hydropower investment was RMB81.4 billion, up by 16.3% year-on-year; the thermal power investment was RMB63.0 billion, down by 19.9% year-on-year; the nuclear power investment was RMB33.5 billion, down by 25.0% year-on-year; the wind power investment was RMB117.1 billion, up by 81.3% year-on-year.

Overseas contracting. In 2019, China's overseas contracting business completed a turnover of RMB1.2 trillion, up by 6.6% year-on-year. The value of newly signed contracts totaled RMB1.8 trillion, up by 12.2% year-on-year. China's enterprises signed 6,944 new contracts of overseas contracted engineering projects in countries along the "One Belt and One Road", with a value of USD154.89 billion, accounting for 59.5% of all the newly signed contracts of overseas contracted engineering projects of China in the same period, registering a year-on-year increase of 23.1%. A turnover of USD97.98 billion was completed, accounting for 56.7% of the total amount of the same period, up by 9.7% year-on-year.

Cement industry. In 2019, China's cement production totaled 2.33 billion tonnes, up by 6.1% year-on-year. The production of special equipment for cement was 387,000 tonnes, increasing by 3.7% year-on-year. The sales volume of cement was approximately 2.33 billion tonnes, with a sales-output ratio of 100.1%, and the inventory at the end of the year decreased by 4.7% as compared with the beginning of the year.

Civil explosives industry. With the accelerated pace of mergers and acquisitions of the backbone enterprises, the development pattern of regional development with advantageous enterprises as leaders and strengthened industrial concentration, dominated by service of blasting technology, has gradually emerged in China's civil explosives industry. In 2019, while accelerating the upgrading of the industrial structure, regulators were also strengthening the regulatory rectification for safety of the civil explosives industry.

Real estate industry. In 2019, the amount of national investment in property development, area of housing construction and new construction, sales of commodity properties, and other major indicators continued to go up. Specifically, the investment in real estate development grew by 9.9% year-on-year, with the growth rate increasing by 0.4 percentage point over last year; the area of housing construction of real estate development enterprises increased by 8.7% year-on-year, and the new area of construction increased by 8.5% year-on-year; sales of commodity properties increased by 6.5% year-on year.

Highway industry. In 2019, there were approximately 330,000 kilometers of highway rebuilt or expanded, and approximately 79,000 kilometers of rural roads improved under the improvement construction. More than 8,300 kilometers of roads for resources, tourism and industry have been constructed in rural areas; and road safety and life protection construction has been completed for 240,000 kilometers of roads at rural level and above.

Situation of PPP Projects. According to the statistics conducted by the national PPP comprehensive information platform, as of 12 March 2020, a total of 9,458 PPP projects have been included in the platform project database in the PRC, with a total project amount of approximately RMB14.4 trillion. Among which, in terms of project categories, the corresponding top three and the corresponding numbers were 3,805 municipal engineering PPP projects, 1,317 transportation PPP projects and 925 PPP projects for ecological construction and environmental protection. In terms of project investment amount, the top three and the corresponding amounts were transportation PPP projects of approximately RMB4.6 trillion, municipal engineering PPP projects of approximately RMB4.2 trillion and urban comprehensive development PPP projects of approximately RMB2.0 trillion.

2 OVERVIEW OF BUSINESS DEVELOPMENT

2.1 Survey, Design and Consulting Services Business

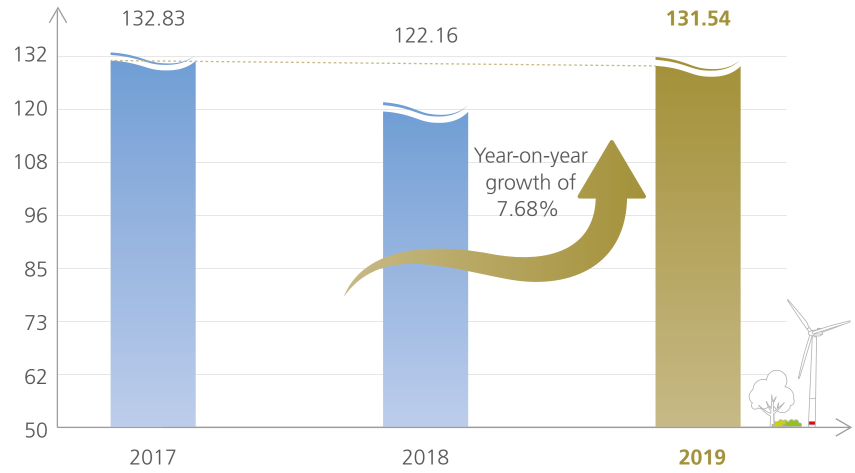
(1) The survey, design and consulting services business of the Company primarily provides survey, design and consulting services for power generation projects, power grid projects and non-power projects, planning and the policy consultation for the power industry, and estimation, assessment and supervision for power projects. The Company took the lead in the power survey and design technologies; has had the leading advantages in the aspects of advanced survey and design technologies, including the ultra-supercritical coal-fired units at million kilowatts level, nuclear power conventional islands, clean coal-fired power generation, air-cooling units, ultra-high voltage AC power transmission and transformation, and offshore wind farms.

In 2019, the value of the Company's newly signed contracts for the survey, design, and consulting services business amounted to RMB12.518 billion, up by 11.52% year-on-year. The revenue before inter-segment elimination of survey, design and consulting services business was RMB13.154 billion, representing a year-on-year increase of 7.68%.

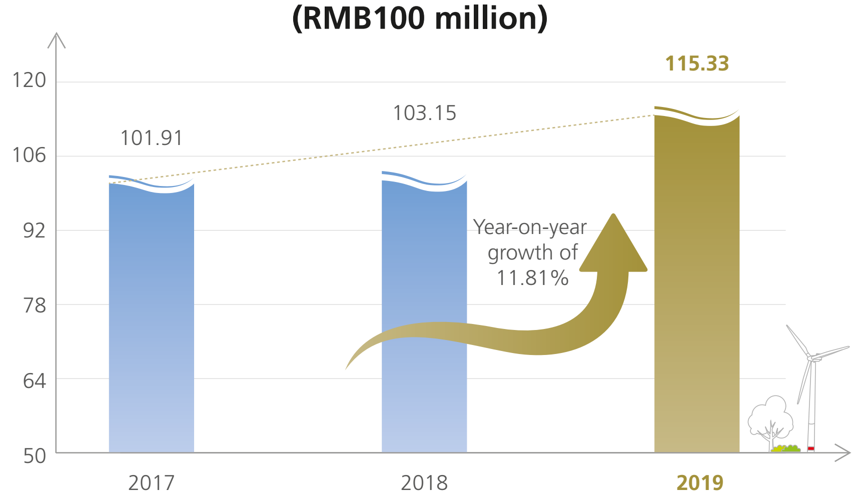
(2) Key operating indicators of survey, design, and consulting services business in the last three years

Name of indicators	2017	2018	**2019**	Year-on-year growth in 2019
Revenue of sector (RMB100 million)	132.83	122.16	**131.54**	7.68%
Including: Power engineering	125.45	115.82	**123.37**	6.52%
Non-power engineering	7.38	6.34	**8.17**	28.86%
Gross profit of sector (RMB100 million)	56.78	42.30	**46.47**	9.86%
Including: Power engineering	55.10	40.02	**43.90**	9.70%
Non-power engineering	1.68	2.28	**2.57**	12.72%
New contract amount of sector (RMB100 million)	109.00	112.25	**125.18**	11.52%
Including: Power engineering	101.91	103.15	**115.33**	11.81%
Including: Domestic power engineering	89.38	95.44	**106.31**	11.39%
International power engineering	12.53	7.71	**9.02**	16.99%
Non-power engineering	7.09	9.10	**9.85**	8.24%
Including: Domestic non-power engineering	7.03	9.00	**9.57**	6.33%
International non-power engineering	0.06	0.10	**0.28**	180%

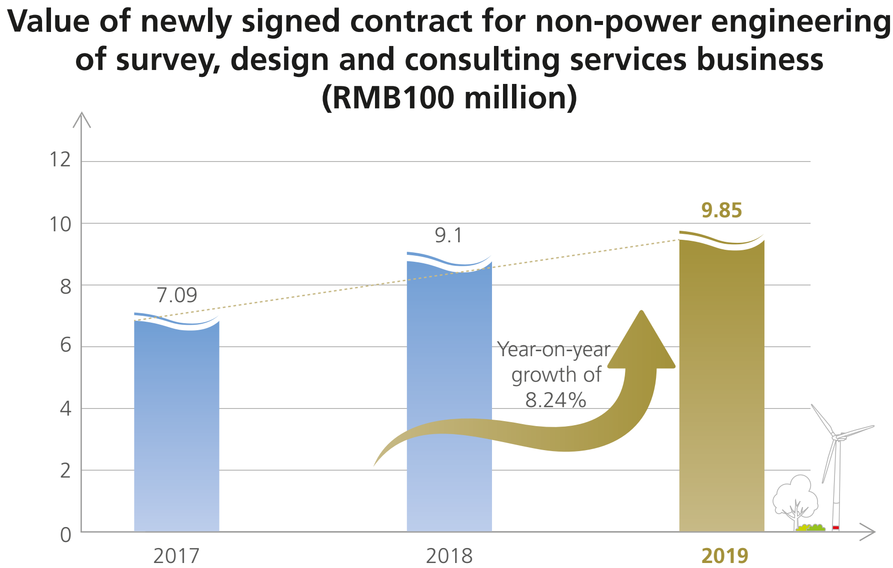
Revenue from survey, design, and consulting services business (RMB100 million)



Value of newly signed contract for power engineering of survey, design and consulting services business (RMB100 million)



Business Overview



(3) *Major contracted projects*

Name of projects	Note
1. Domestic projects	
Survey and design contract for 4×1000MW engineering project by Gansu Electric Power Investment Changle Power Generation Company Limited	Thermal power
Survey and design contract for pre-feasibility study, feasibility study, tender and design and design phase of working drawings of the Nanning Pumped Storage Power Plant	Waterworks and hydropower
Design and technical service subcontract for Units 3 and 4 Conventional Island of Hainan Changjiang Nuclear Power Plant and its BOP	Nuclear power
Survey and design contract for CECEP Yangjiang Nanpeng Island 300MW Offshore Wind Farm Project	New energy
Survey and design contract for the Sixth Section of the Direct Current Line and Grounding Electrode Line of Power Transmission Engineering Project from Wudongde Power Plant to Guangdong and Guangxi	Power transmission and transformation
Survey and design contract for survey and design, procurement, and construction EPC project of PPP project of the new-type urbanization project in East Area of Dianjiang County	Non-power
2. International projects	
Survey and design contract for Burlaceni 500MW Combined Cycle Power Plant engineering project in Moldova	Thermal power
Survey and design contract for Ben Tre 125MW Offshore Wind Farm Project in Vietnam	New energy

(4) Projects in progress

Name of projects	Note
1. Domestic projects	
Design and technical service subcontract for Units 1-4 Conventional Island of Zhangzhou Nuclear Power Plant	Nuclear power
Design contract for Shenhua Fujian Luoyuan Bay Coal Storage Integrated Power Plant Project	Thermal power
Survey and design contract for Qiaogong Hydropower Station Project	Waterworks and hydropower
Survey and design contract for Qianwei (Leshan-Yibin Section) Avionics engineering in Minjiang, Sichuan Province	Waterworks and hydropower
Preliminary development and technology consultancy contract for Offshore Wind Farm Project in Shenquan, Jieyang and Jinhai of State Power Investment Corporation	New energy
Survey and design contract for Three Gorges Renewables Yangxi Shapa 300MW Offshore Wind Farm Project	New energy
Survey and design contract for the Fourth Section of Receiving-end Converter Station and Grounding Electrode Line of UHV ±800kV DC Transformation and Transmission Project between Northwest Yunnan and Guangdong (from Xinsong, Yunnan to Dongfong, Guangdong)	Power transmission and transformation
Survey and design contract for the Fifth Section of the Receiving-end Converter Station and Grounding Electrode in Guangdong of the Power Transmission Engineering Project from Wudongde Power Plant to Guangdong and Guangxi (a demonstration project of UHV multi-terminal DC engineering)	Power transmission and transformation
Survey and design contract for preliminary design, tender and design and design phase of working drawings of Xijin Water Control Second-line Ship Lock Engineering Project	Waterworks and hydropower
2. International projects	
Design and service for preliminary implementation of Pacitan, 2*315MW and Longwan 3*315MW Coal fived Powers Plants in Indonesia	Thermal power
Survey and design contract for Hassyan 4*600MW (net output) Clean Coal-fired Power Plant in Dubai	Thermal power
Survey and design contract for Stung Atay Hydroelectric Power Project in Cambodia	Waterworks and hydropower
Construction positioning technical service contract for Kagu Luca Barcelona Hydropower Station in Angola	Waterworks and hydropower

2.2 Construction and Contracting Business

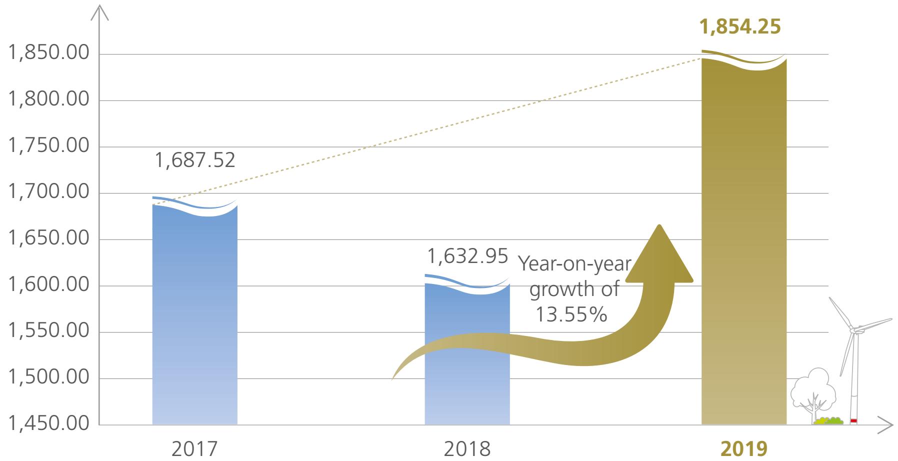
(1) The Company primarily undertakes large-scale power generation projects, power transmission and transformation projects and various infrastructure construction projects both domestically and internationally in its construction and contracting business. The Company possesses strong core competitiveness in the fields of power and large infrastructure investment and construction.

In 2019, the Value of the Company's newly signed contracts for the construction and contracting business amounted to RMB497.235 billion, up by 13.19% year-on-year. The revenue before inter-segment elimination of construction and contracting business was RMB185.425 billion, representing a year-on-year increase of 13.55%.

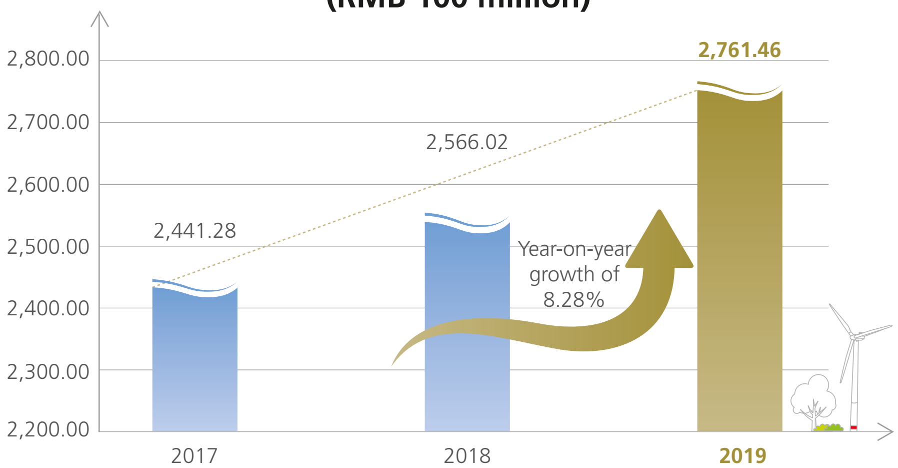
(2) Key operating indicators of construction and contracting business in the last three years

Name of indicators	2017	2018	**2019**	Year-on-year growth in 2019
Revenue of sector (RMB100 million)	1,687.52	1,632.95	**1,854.25**	13.55%
Including: Power engineering	1,364.45	1,272.51	**1,348.29**	5.96%
Non-power engineering	323.07	360.44	**505.96**	40.37%
Gross profit of sector (RMB100 million)	134.54	145.03	**155.14**	6.97%
Including: Power engineering	101.16	100.69	**100.71**	0.02%
Non-power engineering	33.38	44.34	**54.43**	22.76%
New contract amount of sector (RMB billion)	4,207.39	4,393.05	**4,972.35**	13.19%
Including: Power engineering	2,441.28	2,566.02	**2,778.39**	8.28%
Including: Domestic power engineering	1,530.90	1,379.79	**1,694.72**	21.24%
International power engineering	910.38	1,168.23	**1,083.67**	-7.24%
Non-power engineering	1,766.11	1,827.03	**2,193.96**	20.08%
Including: Domestic non-power engineering	1,377.33	1,590.28	**1,756.58**	10.46%
International non-power engineering	388.78	236.75	**437.38**	84.74%

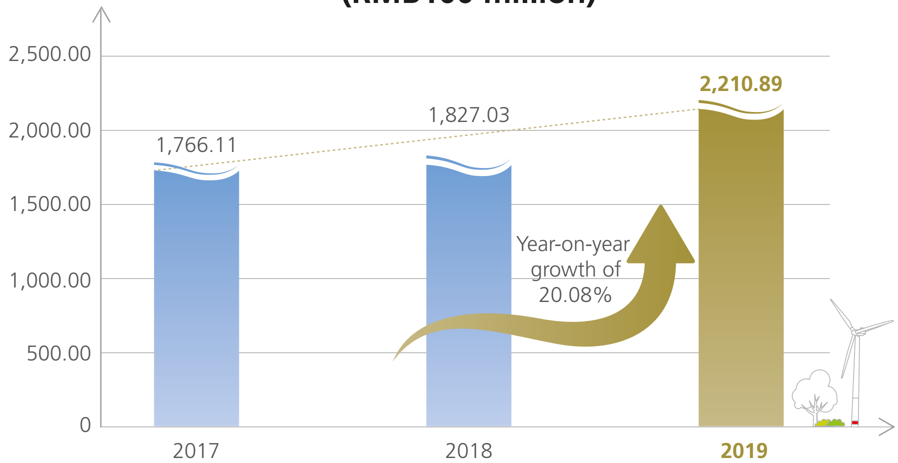
Revenue from construction and contracting business (RMB100 million)



Value of newly signed contracts for power engineering of construction and contracting business (RMB 100 million)



Value of newly signed contracts for non-power engineering of construction and contracting business (RMB100 million)



(3) Major contracted projects

Name of projects	Contract Amount (RMB100 million)	Note
1. Domestic projects		
Zhaoqing to Gaoming (Airport West) Expressway Project	282.15	Non-power
Xinjiang Dashixia Water Control PPP Project in Xinjiang	89.97	Waterworks and hydropower
Guizhou Nayong to Hezhang Expressway PPP Project in Guizhou	89.33	Non-power
The sub-standard water body comprehensive improvement work (Wuxiang, Da Nan Lianwei River Basin) EPC+O in Zhongshan (the third time)	47.00	Non-power
EPC general contract for of the Phase I Power Plant (2×660MW) of Shaanxi Fanhai Hongdunjie Integrated Coal-fired Power Plant Project	41.25	Thermal power
Hebei's Third (Xingtai) Garden Expo Park PPP project	32.64	Non-power
The new energy micro-grid demonstration project in Green Data Center of Zhangbei Cloud Computing Base of Zhangbei Green Giant New Energy Development Co., Ltd.	13.35	New energy
EPC general contract for CPECC Kumul Tower 50MW Solar Thermal Power Generation Project	13.49	New energy
2. International projects		
Erdente to the Baobate Railway Project in Mongolia	108.18	Non-power
Five cascade hydropower stations located at the headstream of Tentek River in Kazakhstan	102.94	Waterworks and hydropower
Kayang A Hydropower Project in Indonesia	100.95	Waterworks and hydropower
Petrolex 1200MW Combined Cycle Gas Turbine in Nigeria	89.29	Thermal power
EPC contract for Phu Ye 257MW Photovoltaic Project in Vietnam	16.78	New energy
Drzezewo 100MW Wind Farm Project in Poland	14.30	New energy
Dongyu-Payaji 500 kV Power Transmission and Transformation Project in Myanmar	5.87	Power transmission and transformation

(4) Projects in progress

Name of projects	Contract Amount (RMB100 million)	Note
1. Domestic projects		
EPC contract for Shenhua Shendong Electric Power Chongqing Wanzhou Power Plant 2* 1000MW new construction	59.80	Thermal power
EPC contract for Leilongwan Power Plant construction (21000MW) of Shaanxi Energy Zhaoshipan Coal and Electricity Co. Ltd	59.10	Thermal power
Civil construction and metal structure installation construction of Wudongde Hydropower Station Dam	42.00	Waterworks and hydropower
EPC construction contract for Zhuhai Jinwan Offshore Wind Farm	44.90	New energy
Inner Mongolia Happiness No.7 Wind Farm (Huade) Power Station engineering project	44.60	New energy
Hebei Tangshan Fengnan Infrastructure and Shantytowns Transformation engineering project	139.00	Non-power
Bazhong-Wanyuan expressway project, Sichuan Province	103.90	Non-power
2. International projects		
EPC project for Attarat 2*277MW Oil Shale-fueled Power Plant in Jordan	78.40	Thermal power
EPC contract for Hai Duong Power Plant (2*600MW) in Vietnam	59.10	Thermal power
Neelum–Jhelum Hydropower Plant Project in Pakistan	210.30	Waterworks and hydropower
Argentina Santa Cruz River.River President Néstor Kirchner – Governor Jorge Cepernic Hydropower Station Project	174.90	Waterworks and hydropower
General contract for PARAVANI Wind Farm and Photovoltaic Power Plant Construction Project in Georgia	22.80	New energy
Banha-Banlaike 25-Sekong Power Transformation and Transmission Project in Laos	21.60	Power transmission and transformation
Sekong-Banha Power Transformation and Transmission Project in Laos	6.53	Power transmission and transformation
Amur Gas Processing Plant Project in Russia	98.90	Non-power
E Section of the Large Pool and Pump Station Construction Project in Qatar	39.40	Non-power

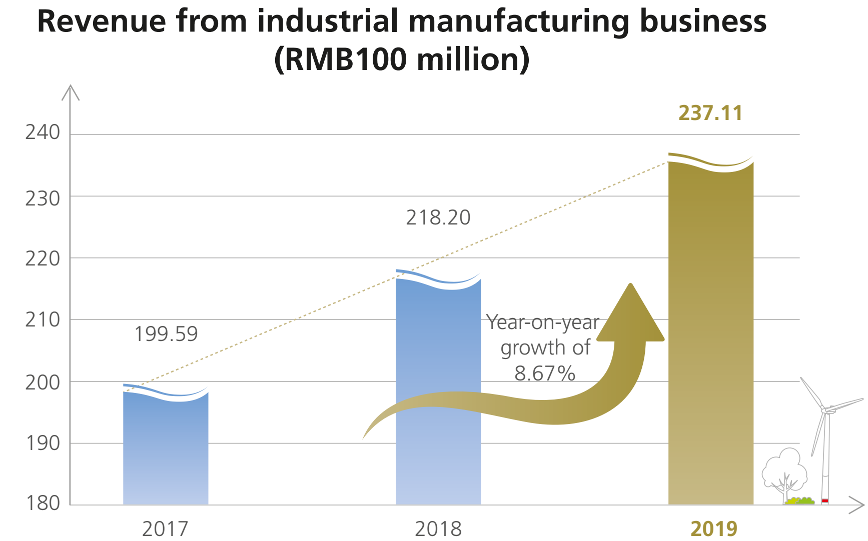
2.3 Industrial manufacturing business

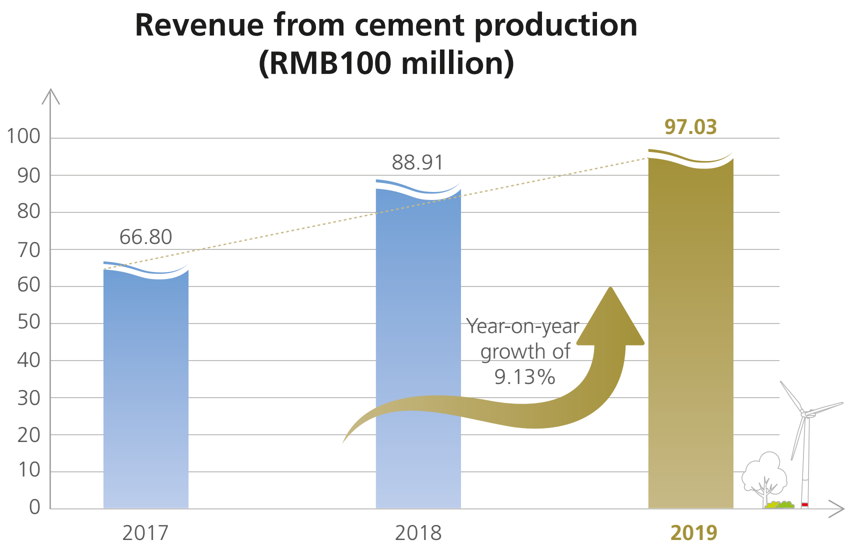
The industrial manufacturing business of the Company primarily includes cement production, civil explosives and equipment manufacturing businesses. The cement production business of the Company is equipped with a complete industrial chain covering research and development and manufacturing, new construction materials, environmental engineering, gravel aggregates, commercial concrete services, logistics and distribution, and technology consulting services, which plays an important role in the cement industry in China. The Company stucks to optimizing its civil explosives business structure and extending the industrial chain to consolidate the core status of civil explosives integration in the market. The business performance continued to be at the leading level in the country. The equipment manufacturing business of the Company is to design, manufacture and sell various segment equipment, environmental protection equipment and other related equipment in the power industry, and to provide integrated services. It is capable of providing complete sets of equipment and integrated services to large-scale power plants

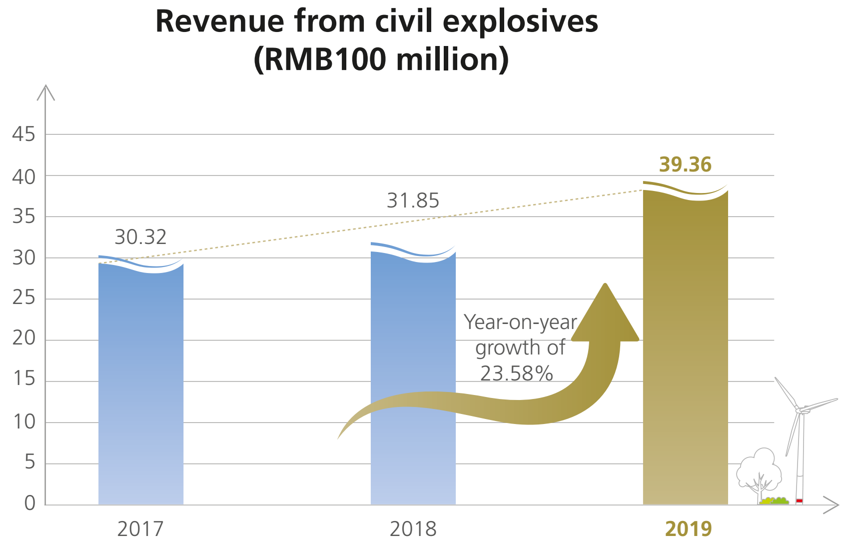
In 2019, the revenue before inter-segment elimination of industrial manufacturing business was RMB23.711 billion, representing a year-on-year increase of 8.67%.

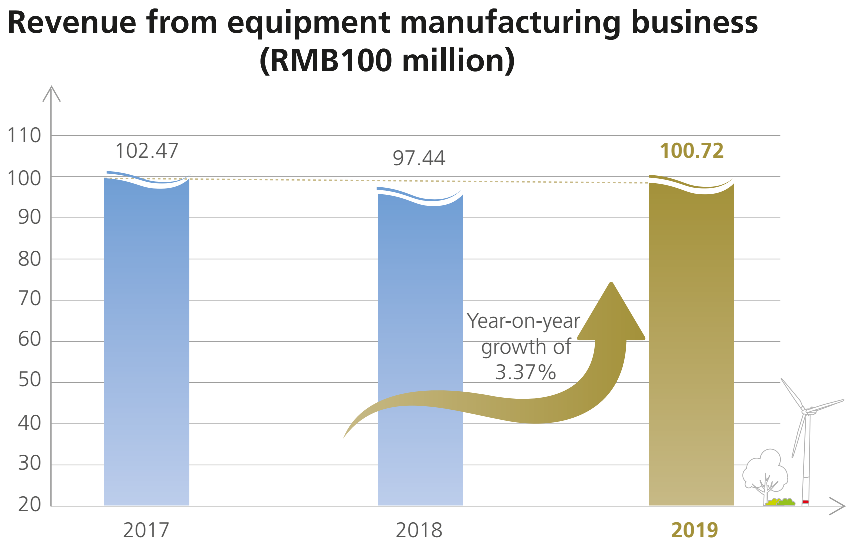
Name of indicators	2017	2018	**2019**	Year-on-year growth in 2019
Revenue of sector (RMB100 million)	199.59	218.20	**237.11**	8.67%
Including: Cement production	66.80	88.91	**97.03**	9.13%
Civil explosives	30.32	31.85	**39.36**	23.58%
Manufacturing of equipment	102.47	97.44	**100.72**	3.37%
Gross profit of sector (RMB100 million)	41.83	59.06	**64.67**	9.50%
Including: Cement production	20.81	37.12	**40.82**	9.97%
Civil explosives	6.96	7.51	**8.86**	17.98%
Manufacturing of equipment	14.06	14.43	**14.99**	3.88%
New contract amount of sector (RMB100 million)				
Including: Cement production	N/A	N/A	**N/A**	
Civil explosives	N/A	N/A	**N/A**	
Manufacturing of equipment	121.33	114.16	**106.45**	-6.75%
Indicators in relation to segments				
Cement capacity (10 thousand tonnes/year)	2,460.00	2,460.00	**2,550.00**	3.66%
Cement production (10 thousand tonnes)	2,233.22	2,322.74	**2,492.32**	7.30%
Cement and clinker sales (10 thousand tonnes)	2,337.04	2,542.00	**2,634.00**	3.62%
Industrial explosives capacity (10 thousand tonnes/year)	28.35	32.65	**32.65**	0.00%
Industrial explosives production (10 thousand tonnes)	22.48	27.50	**30.88**	12.29%
Industrial explosives sales (10 thousand tonnes)	22.48	27.50	**30.88**	12.29%

Business Overview






Revenue from civil explosives
(RMB100 million)
45
40
35
30
25
20
15
10
5
0
30.32
31.85
39.36
Year-on-year
growth of
23.58%
2017
2018
2019


Revenue from equipment manufacturing business
(RMB100 million)
110
100
90
80
70
60
50
40
30
20
102.47
97.44
100.72
Year-on-year
growth of
3.37%
2017
2018
2019

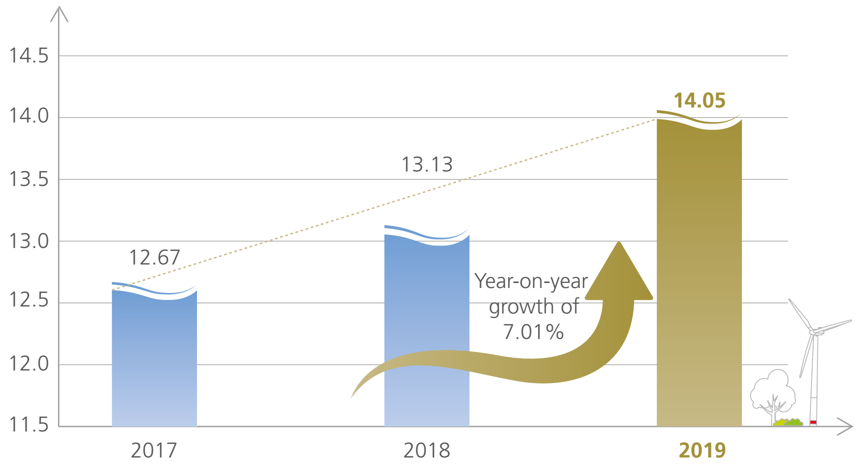
2.4 Clean Energy, Environmental Protection and Water Utilities Business

The clean energy, environmental protection and water utilities business includes businesses such as clean energy development and investment, renewable resource utilization, and environment governance, as well as water treatment and operation. The Company's clean energy business includes the investment, construction and operation of clean and efficient thermal power, hydropower, wind power and solar power; the Company's environmental protection business surrounds the themes of renewable resource utilization, hydro-environment treatment, sludge treatment, new road materials and solid waste treatment in a bid to establish an intensive investment layout. Among which, renewable resource utilization was at the forefront of the industry; the water treatment design capacity of the Company's water utilities business was up to 3 million tonnes/day and was distributed across Beijing, Tianjin, Shandong, Henan, Hebei, Hunan, Hubei, Sichuan, Zhejiang and other regions, and countries including Brazil, with its business layout becoming increasingly improved.

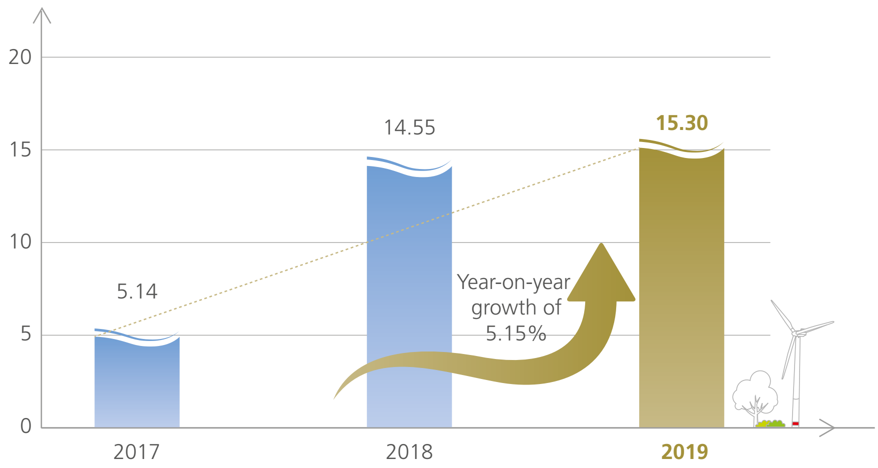
In 2019, the revenue before inter-segment elimination of clean energy, environmental protection and water utilities business of the Company was RMB16.173 billion, representing a year-on-year decrease of 22.34%. Among which, the revenue before inter-segment elimination of clean energy business was RMB1.405 billion, representing an year-on-year increase of 7.01%; the revenue before inter-segment elimination of environmental protection business was RMB13.238 billion, representing a year-on-year decrease of 26.69%; the revenue before inter-segment elimination of water utilities business was RMB1.530 billion, representing a year-on-year increase of 5.51%.

Name of indicators	2017	2018	**2019**	Year-on-year growth in 2019
Revenue of sector (RMB100 million)	239.83	208.26	**161.73**	-22.34%
Including: Clean Energy	12.67	13.13	**14.05**	7.01%
Environmental protection business	222.02	180.58	**132.38**	-26.69%
Water utilities business	5.14	14.55	**15.30**	5.15%
Gross profit of sector (RMB100 million)	3.00	11.09	**4.96**	-55.28%
Including: Clean Energy	5.33	6.61	**6.34**	-4.08%
Environmental protection business	-4.55	-1.84	**-7.36**	–
Water utilities business	2.22	6.32	**5.98**	-5.38%
Indicators in relation to segments				
Capacity of installed power units held by the Company (MW)	1,426	1,420	**1,533**	7.96%
Capacity of installed power units under construction (MW)	1,288	2,400	**2,687**	11.95%
Annual power output (KWH)	35.93	38.23	**39.16**	2.43%
Water handling capacity (million tonnes/day)	272.00	300.00	**330.00**	10.00%

Revenue from clean energy business (RMB100 million)



Revenue from water utilities business (RMB100 million)



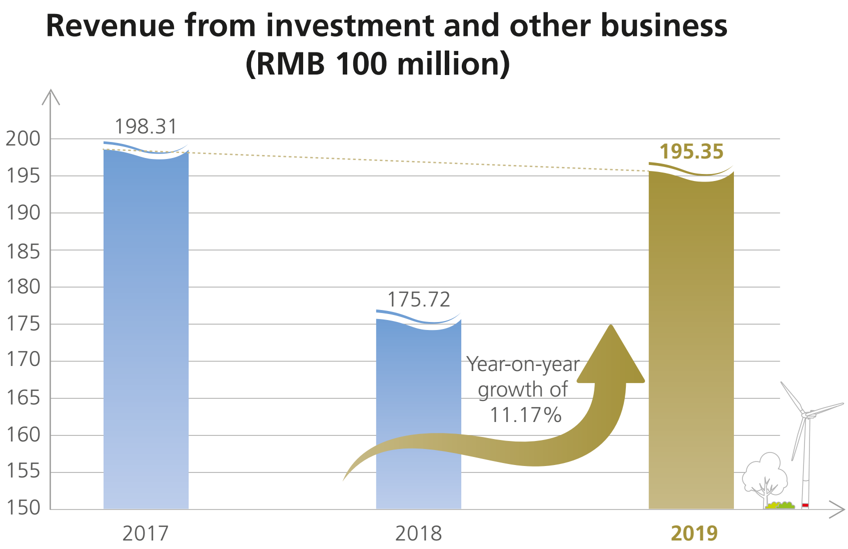
2.5 Investment and other business

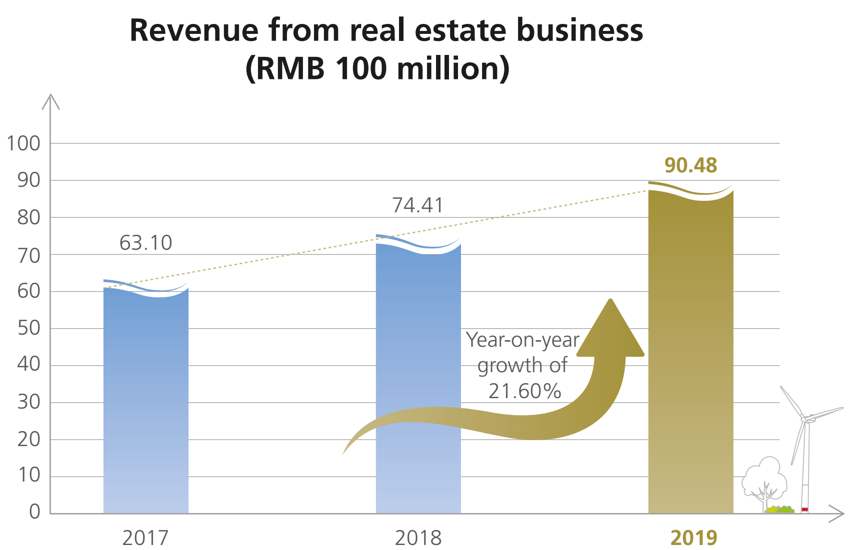
The Company's investment and other businesses cover real estate investment and development, expressway investment and operation, financial services and property leasing. The real estate business of the Company took the lead to develop a domestically leading "5G technology" system, practised green and technological residence concepts, and founded an international expert committee led by Academicians the Chinese Academy of Sciences, with its brand image being improved continuously. The Company actively pushed forward the "integration of investment construction and operation, and rolling development" model for expressways, with the operating expressways of total mileage of 477.69 kilometers. It transferred 100% equity interest in Daguangbei Expressway at the end of the period to improve capital use efficiency, which achieved economic benefits. The 9 in-construction expressways invested by the Company including the Sichuan Bawan Expressway and the Shaanxi Yanchang-Huanglong Expressway stretch a total of 1,008.87 kilometers and are progressing as scheduled. In 2019, the total investment amount of property development of the Company amounted to RMB 19,703 million, the total investment amount of expressway amounted to RMB30.510 billion, and the total investment amount of PPP projects was RMB32.603 billion. The financial business of the Company includes the financial business for financial companies, finance leases and industrial funds, strengthening centralized management of capital and the development of main business projects of its enterprises for the Company, enriching financing strategies and providing strong support for saving financing costs.

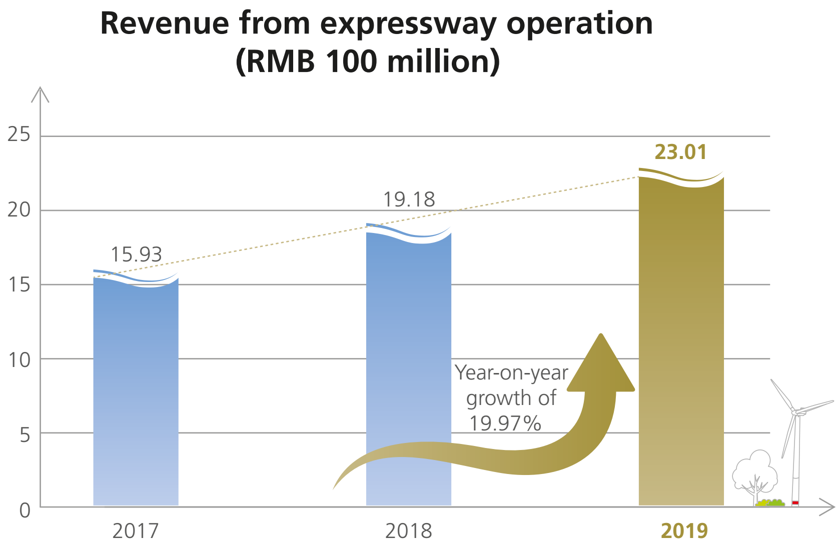
In 2019, the revenue before inter-segment elimination was RMB19.535 billion, representing a year-on-year increase of 11.17%. Among which, the revenue from real estate business was RMB9.048 billion, representing a year-on-year increase of 21.60%; the revenue from expressway operation business was RMB2.301 billion, representing a year-on-year increase of 19.97%; the revenue from financial business was RMB1.003 billion, representing a year-on-year increase of 51.97%; the revenue from other business was RMB7.183 billion, representing a year-on-year decrease of 4.90%.

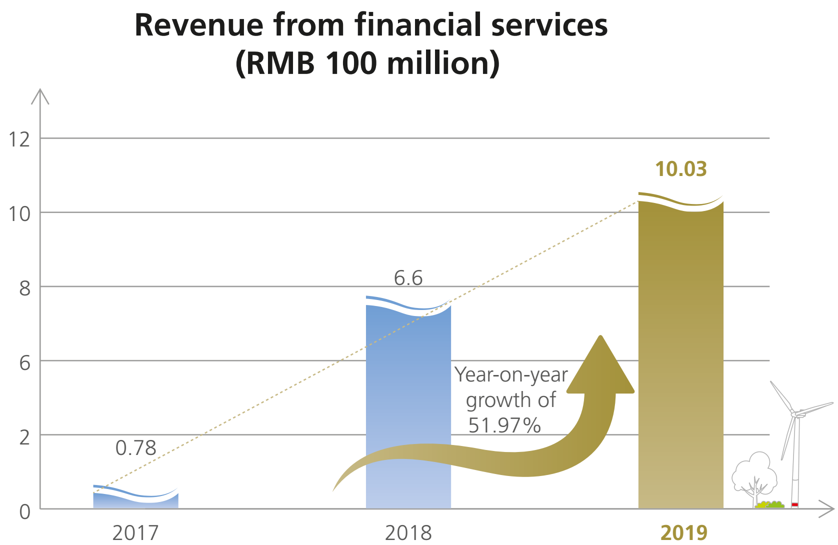
Business Overview

Name of indicators	2017	2018	**2019**	Year-on-year growth in 2019
Revenue of sector (RMB100 million)	198.31	175.72	**195.35**	11.17%
Including: Real estate business	63.10	74.41	**90.48**	21.60%
Expressway operation business	15.93	19.18	**23.01**	19.97%
Financial services	0.78	6.60	**10.03**	51.97%
Other businesses	118.50	75.53	**71.83**	-4.90%
Gross profit of sector (RMB100 million)	42.35	40.68	**53.93**	32.57%
Including: Real estate business	15.76	9.86	**16.61**	68.46%
Expressway operation business	9.6	11.8	**15.81**	33.98%
Financial service	0.31	4.41	**5.43**	23.13%
Other businesses	16.68	14.61	**16.08**	10.06%
Indicators in relation to segments				
Area of interests of new land reserves (square meters)	17.76	18.34	**25.06**	36.64%
Gross area of newly commenced work (square meters)	164.13	75.71	**70.54**	-6.83%
Gross area of completed projects for the year (square meters)	69.06	75.89	**128.65**	69.52%
Sales area (square meters)	68.89	42.52	**83.42**	96.19%
Contracted sales amount (RMB100 million)	159.26	101.31	**172.58**	70.35%
Mileage of expressways in operation (kilometers)	456.67	456.67	**477.67**	4.59%
Mileage of in-construction expressways (kilometers)	965.00	1,077.00	**1,008.87**	-6.33%


Revenue from investment and other business
(RMB 100 million)
200
195
190
185
180
175
170
165
160
155
150
198.31
175.72
195.35
Year-on-year growth of 11.17%
2017
2018
2019


Revenue from real estate business
(RMB 100 million)
100
90
80
70
60
50
40
30
20
10
0
63.10
74.41
90.48
Year-on-year growth of 21.60%
2017
2018
2019


Revenue from expressway operation
(RMB 100 million)
25
20
15
10
5
0
15.93
19.18
23.01
Year-on-year
growth of
19.97%
2017
2018
2019


Revenue from financial services
(RMB 100 million)
12
10
8
6
2
0
0.78
6.6
10.03
Year-on-year
growth of
51.97%
2017
2018
2019

2.6 Summary of Business Development

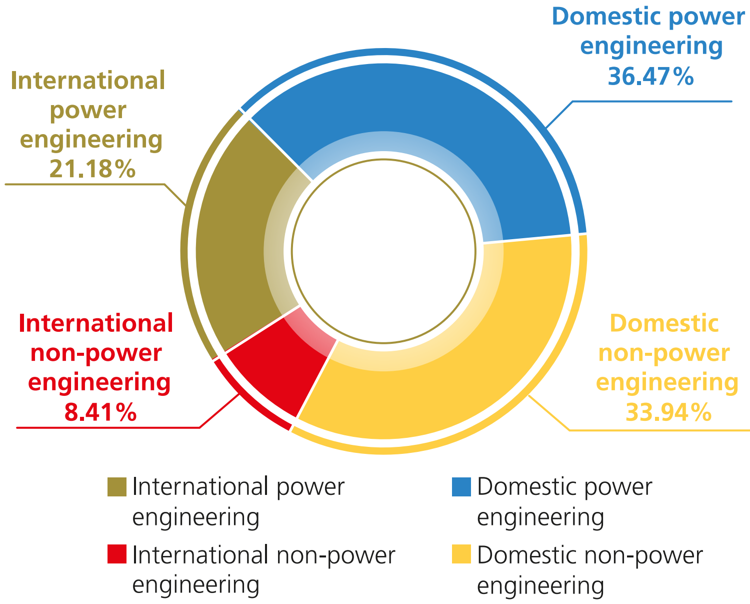
2.6.1 Value of Newly Signed Contracts

In 2019, the value of newly signed contracts of the Company was RMB520.398 billion, up by 12.65% year-on-year.

Statistics of Value of Newly Signed Contracts of the Company in 2019

No.	Name of indicators	Unit RMB	Value of Newly Signed Contracts		
			2018	**2019**	Year-on-year growth
I	**Classified by domestic and international projects**	100 million	4,619.46	**5,203.98**	12.65%
1	Domestic	100 million	3,198.27	**3,664.07**	14.56%
	Including: New business model	100 million	1,074.89	**1,265.68**	17.75%
	Including: PPP projects	100 million	1,064.17	**567.21**	-46.70%
2	International	100 million	1,421.19	**1,539.91**	8.35%
II	**Classified by power engineering and non-power engineering projects**	100 million	4,619.47	**5,203.98**	12.65%
1	Power engineering	100 million	2,783.33	**3,000.17**	7.79%
2	Non-power engineering	100 million	1,836.13	**2,203.81**	20.02%

2019 Value of Newly Signed Contracts Composition Figure



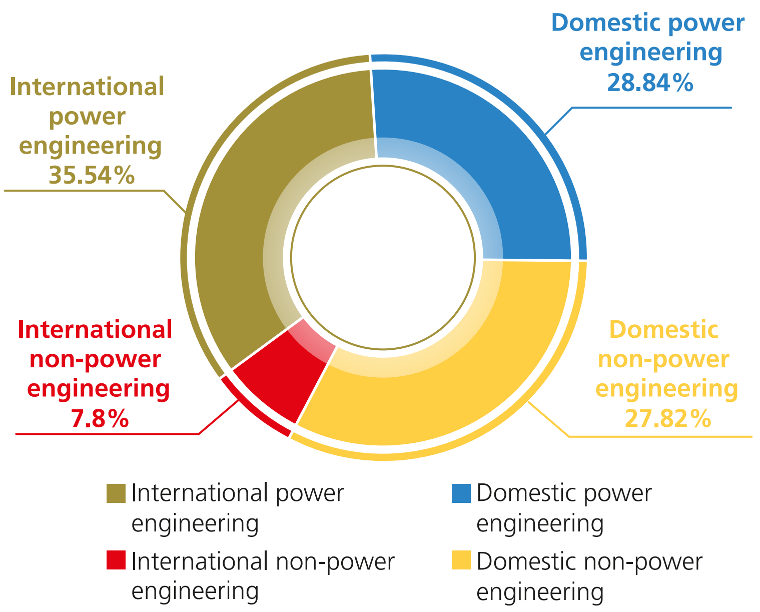
2.6.2 Outstanding Contract Value of the Company

As of the end of 2019, the outstanding contract value of the Company was RMB1,207.824 billion, representing an increase of 12.62% as compared with the end of 2018.

Statistics of Outstanding Contract Value of the Company as of the end of 2019

No.	Name of indicators	Unit RMB	Outstanding Contract Value		
			2018	**2019**	Year-on-year growth
I	**Outstanding Contract Value At The End Of The Year**	100 million	10,724.36	**12,078.24**	12.62%
1	Domestic	100 million	5,985.08	**6,843.50**	14.34%
	Including: New business model	100 million	1,999.36	**2,411.38**	20.61%
	Including: PPP projects	100 million	1,609.40	**1,400.49**	-12.98%
2	International	100 million	4,739.28	**5,234.74**	10.45%
II	**Classified by power engineering and non-power engineering projects**				
1	Power engineering	100 million	7,096.06	**8,449.94**	19.08%
2	Non-power engineering	100 million	4,303.01	**3,628.30**	-15.68%
III	**Classified by segments**				
1	Survey, Design and Consulting Services	100 million	311.61	**286.27**	-8.13%
2	Construction and Contracting	100 million	10,271.61	**11,661.86**	13.53%
3	Industrial Manufacturing	100 million	141.14	**130.11**	-7.81%

2019 Outstanding Contract Value Composition Figure



3 SCIENTIFIC AND TECHNOLOGICAL INNOVATION

In 2019, the Company firmly established the concept of "Innovation is the primary driving force for development", deeply implemented the innovation-driven development strategies, and continuously improved the scientific and technological innovation system. It has established a R&D system comprising 2 national and 47 provincial research institutions, 3 academician expert workstations, 10 work stations of postdoctoral scientific researchers, with its high-tech enterprises numbering as many as 91. The technological innovation capability was further elevated.

In 2019, the Company organized the 2019 Scientific and Technological Innovation Conference and issued the 2019-2020 Action Plan for Scientific and Technological Innovation. The conference unified the thoughts and consensus, and clarified the direction and objectives of "improving one system, implementing two key points, focusing on three combinations and leading from four perspectives" for the scientific and technological innovation in the future. It also formulated 28 major tasks in the fields including internet of things for electricity, green energy, green and smart construction, water utilities and environmental protection, comprehensive pipe gallery, and high-end equipment; proposed safeguard measures such as strengthening coordination, increasing investment and strengthening incentives.

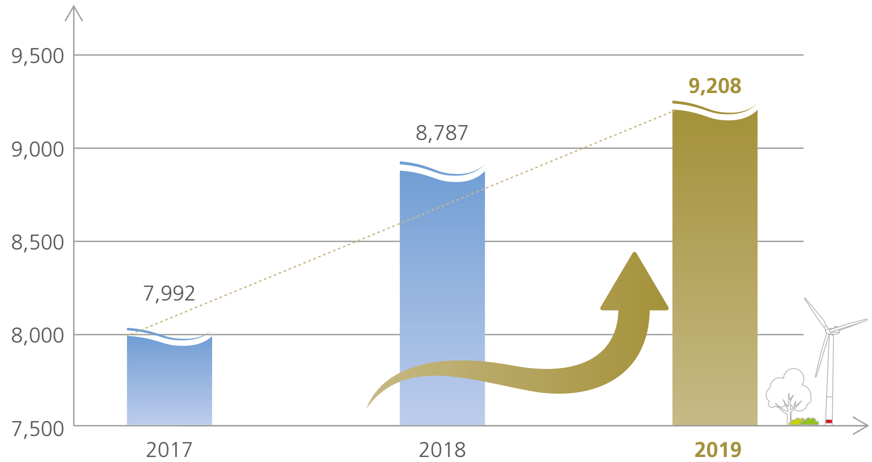
In 2019, with the guidance of implementing the "13th Five-Year" technological development plan, the Company focused on the scientific and technological research and development work in clean fuel-fired power generation, new energy, intelligent energy, smart construction, environmental protection, engineering safety and other fields by ways such as undertaking national science and technology projects, implementing special projects for significant technologies and special scientific and technological crowdfunding projects. First, the Company participated in 1 project by National Natural Science Foundation of China and 12 research projects by National Key R&D Program of China and achieved certain milestones. Second, it initiated the registration of twenty-eight key scientific and technological projects, such as the "application of the internet of things in smart power plants", among which the project descriptions of 4 key scientific and technological projects, including the "study and application of concrete intelligent construction technologies", have been approved and the projects have entered the research stage. Third, the Company strengthened the collaborative innovation, implemented and completed a number of special corporate scientific and technological crowdfunding projects. 8 special corporate scientific and technological crowdfunding projects, including the ''study of key technologies of ±1100kV ultra-high-voltage DC power transmission design", passed the completion acceptance, among which the "study of design and technologies of high-voltage and large-capacity flexible DC power transmission" overcame the key technical problems at the design level and reached the international advanced level, the "study of smart energy systems in parks" formed the overall solution of smart energy system in the parks.

In 2019, the total research and development expenses of the Company amounted to RMB5.512 billion, representing a year-on-year increase of 37.67%. The Company completed the research and development and application of key core technologies, such as "concrete high-strength construction and crack-proof technologies", "huge hydro-generator installation technologies", "key technologies of large rack and pinion climbing vertical ship lift", "key technologies and complete equipment for intelligent control of cement grouting of waterworks and hydropower projects", "key technologies of improving shock-resistance of main power building structure of large thermal power plants", "electromagnetic environment control technologies of alternating current transmission system", and "key technologies of precise load control of large-scales source-grid-load". Multiple research results were Award For Science and Technology which enhanced the market competitiveness of the Company. Throughout the year, the

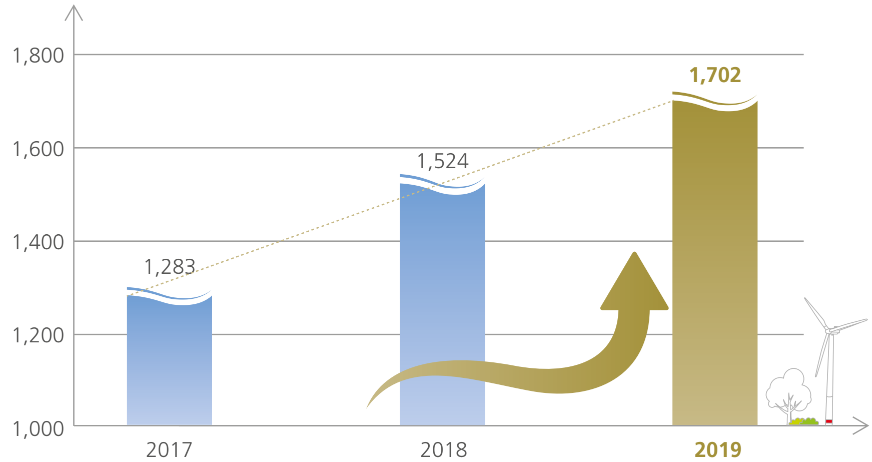
Company won 1 award at the national level and 156 awards at the provincial and industry level, among which it won the special prize of National Science and Technology Progress Award as the main unit which participated in the contruction for hydraulic complex in the Three Gorges of the Yangtze River, consolidating the Company's status as the main force in hydropower construction.

In 2019, the Company obtained 1,418 patent licenses, up by 10.8% year-on-year, including 201 invention patents, with the patents in force of the Company adding up to 9,208, including 1,702 invention patents; obtained 91 software copyrights; formulated and issued 1 international standards, and 41 national and industry standards. For the last three years, the number of effective patents owned by the Company increased continuously from 7,992 in 2017 to 9,208 in 2019, with an average growth rate of 7.34%. Specifically, the effective invention patents owned increased from 1,283 in 2017 to 1,702 in 2019, with an average growth rate of 15.18%. The conversion and application of research results in the hydropower, thermal power, power grids, new energy, environmental protection and water utilities and non-power projects constructed by the Company, has created significant economic and social benefits.

Number of Effective Patents Owned



Number of Effective Invention Patents Owned



4 OUTLOOK

According to the prediction of the Chinese Academy of Social Sciences, the growth rate of China's economy is 6.0% in 2020, representing a slowdown compared to 2019. In particular, the value-added growth of the primary industry is expected to be approximately 3.2%; the secondary industry is approximately 5.4% and the tertiary industry is approximately 6.9%.

4.1 Domestic Power Market

Looking forward to 2020, the energy and power structure of China will continue to be optimized and adjusted following a clean, low carbon, safe and efficient agenda. In recent years, the de-capacity of coal-fired power has achieved initial results. In order to ensure the safe and stable supply of power system, it is expected that there is still room for growth of coal-fired power. Meanwhile, the upgrading and transformation as well as the operation and maintenance of existing units, including flexible transformation and energy conservation transformation will have relatively larger markets; the natural gas power generation market has a larger room for expansion; nuclear power is expected to be developed continuously on the basis of ensuring safety; conventional hydropower and pumped storage market has a larger room for expansion; the development of wind power and photovoltaic power generation market remains broad; biomass power generation and waste-to-energy power generation will continue to accelerate, and the potential for large-scale development of energy storage is gradually emerging. The progress of power grid investment and construction will maintain a stable growth. In general, China's energy and power development remains the trend of long-term positive momentum.

4.2 Domestic Non-power Market

According to the prediction of the Chinese Academy of Social Sciences, the total fixed asset investment in China will reach approximately RMB71.6 trillion in 2020, representing an increase of 0.4 percentage point from 2019. Specifically, the nominal growth of investment in real estate, infrastructure and manufacturing will be 8.0%, 5.5% and 4.0%, respectively. In general, the domestic infrastructure construction market has a larger room for expansion, which is embodied in:

(1) Hydropower projects: Strengthening the ecological protection and system management of major rivers such as Yangtze River and Yellow River has become the primary principle of water-taming in China. In 2020, the Company will adhere to the water-taming approach of "prioritized water conservation, spatial balance, systematic management, and using both hands", ensure the flood control and safety, quality high resources, healthy water ecology and suitable water environment for living, and continue to promote the progress of major waterworks construction of water conservation and supply.

(2) Transport projects: In 2020, it is expected that around RMB1.8 trillion will be invested in highway and waterway in China and RMB800 billion in railway. The container railway-waterway combined shipping volume will grow by more than 12%, and the coverage rate of town and village express outlets will reach 98%, which will allow the access to passenger cars in towns and incorporated villages that meet the requirements. In 2020, Civil Aviation Administration of China will enhance infrastructure supply, and strives to increase investment to RMB90 billion.

(3) Urban infrastructure: In 2020, China will promote the urban development and construction with the focus shifting from incremental construction to the adjusted combination of upgrading and transformation of the existing ones and incremental construction, taking a new path of high-quality development of intensive urban and rural construction; it will promote the construction of a sponge city systematically; it will promote the construction of urban waste classification and non-hazardous treatment facilities for domestic waste comprehensively; it will continue to promote the construction of comprehensive underground pipe gallery; it will step up its efforts in treating wastewater and black and odorous water body, ensuring 90% elimination of the black odorous water body in cities at prefecture-city level and above by the end of the year.

(4) Housing construction: In 2020, long-term management and control mechanisms that can stabilize land prices, housing prices and expectations based on the location will be implemented in various areas. This can maintain the stable operation of the real estate market. The Ministry of Housing and Urban-Rural Development will continue to advance the shantytowns transformation with the estimated transformation volume of 5.5 million units, which is expected to drive the investment of RMB1.5 trillion.

The Company will continue to expand the grand construction landscape, increase the degree of domestic business diversification, enhance the market innovation capabilities, and form new core competitiveness.

4.3 International Market

In the medium and long term, the developing economies' infrastructure and energy and power construction market still have broad space and great potential, and the international market is still in a period of strategic opportunities. Going forward, in 2020, as China's all-round opening up continues, bilateral and multilateral cooperation between China and the rest of the world will be further deepened and promoted. Due to the "One Belt and One Road" initiative, the Sino-African cooperation, the China-Central and Eastern Europe 17+1 cooperation, and the cooperation between Shanghai Cooperation Organization member states will continue to proceed in depth, China's opening-up scope will keep expanding. The huge demand of the international market, the market space of developing countries and the great opportunities for international cooperation will become the foundation for the sustained and steady development of international business of Chinese enterprises.

(1) The room of expansion for power construction market in countries along the "One Belt and One Road" continues to grow. According to the estimation of International Energy Agency (IEA), the electricity demand of the countries along the "One Belt and One Road" will maintain a rapid growth in the future. It is expected that the newly installed capacity of renewable power and coal-fired plants of countries along the "One Belt and One Road" will reach approximately 1.94 billion KW and 696 million KW, respectively by 2030. In the future, the Company will advance its cooperation system for the "One Belt and One Road" with financial and insurance institutions. Meanwhile, with the support and promotion of the "One Belt and One Road" and the international capacity cooperation policies, it will continue to explore in depth the traditional markets in countries along the "One Belt and One Road" while extending businesses to emerging and mid-to-high-end markets such as the Central and Eastern Europe and the Latin America.

(2) The international non-power infrastructure construction market has a large room for expansion. According to the prediction of Global Infrastructure Outlook issued by the Global Infrastructure Hub (GIH), the global infrastructure investment per year will reach an average of USD3.7 trillion by 2040, with the global population increasing by 2 billion and the urban population increasing by 46%, mirroring a larger room for expansion in the non-power infrastructure construction market. The Company will continue to facilitate business transformation and upgrading, actively extend its businesses to non-power sectors such as the hydropower, housing construction, municipal administration, environmental protection, highways and bridges in the international market. The Company will actively participate in the comprehensive development and construction of economic corridors, logistic parks, industrial parks and ports and vigorously develop international non-power businesses to gradually form a business landscape centering around power construction and with diversified development.

In the future, the international market still has the potential to explore further. The Company will continue to implement the "One Belt and One Road" initiatives, proactively take part in international capacity cooperation, stick to the new development philosophies of being innovative, coordinated, green, open and sharing, further optimize the international market landscape, strengthen the core competitiveness of the international market, and promote high-quality development of international businesses.

4.4 Impact of the Epidemic

The novel coronavirus epidemic has had a great impact on the production and operation of the Company in the first quarter of 2020, among which the Company's construction and contracting business, industrial manufacturing business (cement, civil explosives, etc.), environmental protection and water utilities, expressway operation, real estate and financial services have been affected. It is expected that the Company's revenue, total profit and net profit for the first quarter will drop year-on-year. At the same time, the epidemic also has an impact on the Company's international market business to a certain extent.

Since the outbreak of the epidemic, the Company has set up a department for epidemic prevention and control in a timely manner, and has organized and held special meetings to study and assess the situation of the epidemic and deploy relevant work. The Company has successively formulated corresponding measures on matters including epidemic prevention and control, resumption of work and production, production and operation stabilization, safety control, and legal compliance risks prevention. Its enterprises discharged their responsibilities level by level, and made solid progress as scheduled. Along with the steady progress of the domestic epidemic prevention and control and the subsequent resumption of work and production, the new round of market opportunities brought about by increased domestic investment in new infrastructure will also benefit the Company's investment, construction and operation in aspects of energy and power, and infrastructure to make up for its shortcomings.

MANAGEMENT DISCUSSION AND ANALYSIS

Ding Yanzhang
Vice Chairman and
General Manager

1 OVERVIEW

In 2019, the Company achieved the revenue of RMB247,291.0 million, representing a year-on-year increase of 10.38%; the profit before taxation amounted to RMB13,307.9 million, representing a year-on-year increase of 13.97%; the net profit attributable to the equity holders of the Company was RMB5,078.5 million, representing a year-on-year increase of 11.11%. The revenue from domestic business was RMB206,711.7 million, representing a year-on-year increase of 11.71%; the revenue from power business was RMB140,448.8 million, representing a year-on-year increase of 10.96%; the revenue from non-power business was RMB106,842.2 million, representing a year-on-year increase of 9.63%.

2 CONSOLIDATED OPERATING RESULTS

Items	For the year ended 31 December		
	2019 **(RMB in million)**	2018 (RMB in million)	Percentage of change (%)
Revenue	**247,291.0**	224,034.3	10.38
Cost of sales	**(214,953.7)**	(194,271.0)	10.65
Other income	**2,110.1**	2,406.1	(12.30)
Net impairment losses on financial assets and contract assets	**(1,118.4)**	(851.5)	31.34
Other net gains and losses	**2,420.9**	795.4	204.36
Selling expenses	**(2,383.9)**	(2,372.0)	0.50
Administrative expenses	**(12,126.2)**	(12,014.2)	0.93
Research and development expenses	**(5,511.6)**	(4,003.6)	37.67
Finance income	**1,055.1**	795.5	32.63
Finance costs	**(4,355.7)**	(3,827.0)	13.81
Share of profits of joint ventures	**169.0**	304.4	(44.48)
Share of profits of associates	**711.2**	680.5	4.51
Profit before taxation	**13,307.9**	11,676.8	13.97
Income tax	**(3,707.5)**	(3,125.3)	18.63
Profit for the year	**9,600.4**	8,551.5	12.27

In 2019, the selling expenses of the Company amounted to RMB2,383.9 million, remaining steady on a year-on-year basis; the percentage of selling expenses to the revenue decreased from 1.06% in 2018 to 0.96% in 2019.

In 2019, the administrative expenses of the Company amounted to RMB12,126.2 million, remaining steady on a year-on-year basis; the percentage of administrative expenses to the revenue decreased from 5.36% in 2018 to 4.90% in 2019.

In 2019, the finance costs of the Company amounted to RMB4,355.7 million, increased by 13.81% year-on-year; primarily due to the increase in total long-term debts, the percentage of finance costs to the revenue increased from 1.71% in 2018 to 1.76% in 2019.

3 OPERATING RESULTS BY SEGMENTS

Industry segments	Conditions of Industry Segments of Principal Businesses (For the year ended 31 December)								
	2019			2018			Percentage of changes (%)/ percentage points		
	Revenue	**Cost of sales**	**Gross profit margin**	Revenue	Cost of sales	Gross profit margin	Revenue	Cost of sales	Gross profit margin
	(RMB in million)		**(%)**	(RMB in million)		(%)			(%)
Survey, design and consulting services	**13,154.0**	**8,506.4**	**35.33**	12,216.3	7,986.2	34.63	7.68	6.51	0.70
Construction and contracting	**185,425.1**	**169,910.9**	**8.37**	163,295.4	148,792.0	8.88	13.55	14.19	(0.51)
Industrial manufacturing	**23,710.6**	**17,243.5**	**27.28**	21,819.6	15,913.7	27.07	8.67	8.36	0.21
Clean energy, environmental protection and water utilities	**16,173.2**	**15,676.8**	**3.07**	20,826.1	19,715.5	5.33	(22.34)	(20.48)	(2.26)
Investment and other business	**19,534.8**	**14,141.7**	**27.61**	17,572.1	13,504.4	23.15	11.17	4.72	4.46
Inter-segment elimination(1)	**(10,706.7)**	**(10,526.6)**	**–**	(11,695.1)	(11,641.8)	–	–	–	–
Unallocated items(2)	**–**	**1.0**	**–**	–	1.0	–	–	–	–
Total	**247,291.0**	**214,953.7**	**13.08**	224,034.3	194,271.0	13.29	10.38	10.65	(0.21)

Notes:

(1) Inter-segment elimination mainly represents the provision of goods or services between business segments.

(2) Unallocated items mainly represent the provisions for impairment of inventories which could not be attributed to any business segment.

The revenue of the Company increased by 10.38% from RMB224,034.3 million in 2018 to RMB247,291.0 million in 2019. The increase was mainly attributed to the rapid growth in business segments including the survey, design and consulting services segment, the construction and contracting segment, the industrial manufacturing segment, and the investment and other business segment.

The cost of sales of the Company increased by 10.65% from RMB194,271.0 million in 2018 to RMB214,953.7 million in 2019. The increase was generally in line with the increase in revenue during the same period.

The gross profit of the Company was RMB29,763.4 million and RMB32,337.2 million in 2018 and 2019, respectively, and gross profit margin of the Company remained stable at 13.29% and 13.08% during the same period, respectively.

3.1 Survey, Design and Consulting Services Business

This business generates revenue primarily from providing survey and design services for thermal, hydropower, nuclear power, wind power, solar power projects and power grid projects in China and overseas. The Company also generates revenue from providing a wide range of consulting services in respect of power industry policies, as well as power project testing, assessment and supervision services.

Revenue before inter-segment elimination of survey, design and consulting services business of the Company increased by 7.68% from RMB12,216.3 million in 2018 to RMB13,154.0 million in 2019, mainly due to the increase in power transmission and transformation business and non-power businesses such as municipal construction, etc.

Cost of Sales before inter-segment elimination of survey, design and consulting services business of the Company increased by 6.51% from RMB7,986.2 million in 2018 to RMB8,506.4 million in 2019, which was slightly lower than the growth rate of revenue in the corresponding period.

The gross profit before inter-segment elimination of survey, design and consulting services business of the Company was RMB4,230.1 million and RMB4,647.6 million in 2018 and 2019, respectively, and gross profit margin remained stable at 34.63% and 35.33% in the same period, respectively.

3.2 Construction and Contracting Business

This business generates revenue primarily from providing construction services for projects in China and overseas.

Revenue before inter-segment elimination of construction and contracting business of the Company increased by 13.55% from RMB163,295.4 million in 2018 to RMB185,425.1 million in 2019, mainly due to the growth in the revenue of non-power businesses as a result of the large-scale construction of PPP projects.

Cost of sales before inter-segment elimination of construction and contracting business of the Company increased by 14.19% from RMB148,792.0 million in 2018 to RMB169,910.9 million in 2019, which was generally in line with the changes in revenue.

The gross profit before inter-segment elimination of construction and contracting business of the Company was RMB14,503.4 million and RMB15,514.2 million in 2018 and 2019, respectively, and gross profit margin was 8.88% and 8.37% in the same period, respectively, remaining steady on a year-on-year basis.

3.3 Industrial Manufacturing Business

This business generates revenue primarily from the design, manufacture and sale of equipment for use in the power industry, including ancillary equipment for power plants, power grid equipment, steel structure and energy conservation and environmental protection equipment, manufacture and sale of civil explosives and cement products, and the provision of explosive service.

Revenue before inter-segment elimination of industrial manufacturing business of the Company increased by 8.67% from RMB21,819.6 million in 2018 to RMB23,710.6 million in 2019, mainly due to the increase in sales volume of cement business and the growth of civil explosives business.

Cost of sales before inter-segment elimination of industrial manufacturing business of the Company increased by 8.36% from RMB15,913.7 million in 2018 to RMB17,243.5 million in 2019, which was generally in line with the changes in revenue.

The gross profit before inter-segment elimination of industrial manufacturing business of the Company was RMB5,905.9 million and RMB6,467.1 million in 2018 and 2019, respectively, and gross profit margin was 27.07% and 27.28% in the same period, respectively, remaining steady on a year-on-year basis.

3.4 Clean Energy, Environmental Protection and Water Utilities Business

This business generates revenue primarily from businesses including power generation business, environmental protection business and water plant construction and operation, etc.

Revenue before inter-segment elimination of clean energy, environmental protection and water utilities business of the Company decreased by 22.34% from RMB20,826.1 million in 2018 to RMB16,173.2 million in 2019, primarily due to the decrease in revenue of environmental protection segment business.

Cost of sales before inter-segment elimination of clean energy, environmental protection and water utilities business of the Company decreased by 20.48% from RMB19,715.5 million in 2018 to RMB15,676.8 million in 2019, which was generally in line with the changes in revenue.

The gross profit before inter-segment elimination of clean energy, environmental protection and water utilities business of the Company was RMB1,110.6 million and RMB496.4 million in 2018 and 2019, respectively, and gross profit margin was 5.33% and 3.07% in the same period, respectively, representing a slight year-on-year decrease. It was primarily due to the decline in profit margin of environmental protection business.

3.5 Investment and Other Business

This business generates revenue primarily from real estate development, expressway operation, financial services and other business.

Revenue before inter-segment elimination of investment and other business of the Company increased by 11.17% from RMB17,572.1 million in 2018 to RMB19,534.8 million in 2019, the increase was primarily due to the increase in revenue of real estate development business, expressway operation and financial services business.

Cost of sales before inter-segment elimination of investment and other business of the Company increased by 4.72% from RMB13,504.4 million in 2018 to RMB14,141.7 million in 2019, which was lower than the increase in revenue during the same period. It was primarily attributable to the fact that the growth rate of cost of real estate development and expressway operation, which are of higher proportion, was smaller than the growth rate of the revenue.

The gross profit before inter-segment elimination of investment and other business of the Company was RMB4,067.7 million and RMB5,393.1 million in 2018 and 2019, respectively. Gross profit margin increased from 23.15% in 2018 to 27.61% in 2019, primarily attributable to the increased gross profit margin of expressway operation business.

4 CASH FLOW

	For the year ended 31 December	
	2019 (RMB in million)	2018 (RMB in million)
Net cash (used in)/generated from operating activities	**10,963.6**	5,059.0
Net cash (used in)/generated from investing activities	**(14,513.3)**	(20,358.4)
Net cash (used in)/generated from financing activities	**(1,974.3)**	14,283.7
Net decrease in cash and cash equivalents	**(5,524.0)**	(1,015.7)
Cash and cash equivalents at the beginning of the year	**47,643.1**	47,699.8
Effects of exchange rate changes	**505.5**	959.0
Cash and cash equivalents at the end of the year	**42,624.6**	47,643.1

4.1 Cash Flow Generated from Operating Activities

The net cash generated from operating activities increased from RMB5,059.0 million in 2018 to RMB10,963.6 million in 2019, representing an increase of RMB5,904.6 million or 116.71%, which was mainly attributable to: (i) the net profit of operating activities during the year amounted to RMB17,870.2 million, representing an increase as compared to the same period of last year; (ii) the net cash inflow of RMB2,862.7 million due to the accelerated settlement for engineering projects with clients and the extension of settlement cycle to suppliers accordingly following the increase of business volume; (iii) at the same time, the net cash inflow of RMB4,526.9 million due to the corresponding increase of contract assets and contract liabilities. These increases were offset by the cash outflows of RMB3,347.6 million as a result of the increase in prepayments for construction contracts, the cash outflows of RMB5,226.1 million as a result of tax increase such as prepaid value added tax and paid income tax, the cash outflow of RMB3,969.1 million as a result of the purchase of financial assets under resale agreements by subsidiaries, and the cash outflows of RMB1,094.1 million as a result of purchase of inventories and product development.

4.2 Cash Flow Used in Investing Activities

Net cash used in investing activities decreased from RMB20,358.4 million in 2018 to RMB14,513.3 million in 2019, representing a decrease of RMB5,845.1 million or 28.71%, which was mainly attributable to: (i) payment of RMB14,362.2 million in the intangible assets, property, plant and equipment; (ii) increased payment of RMB3,280.9 million of the capital contributions to associates and joint ventures; (iii) payment of RMB3,635.7 million for the purchase of financial assets. These cash outflows were offset by the cash generated from disposal of subsidiaries of RMB3,466.6 million, the cash generated from disposal of financial assets of RMB2,062.0 million, and the receipt of interest income from bank deposits and others of RMB1,050.6 million.

4.3 Cash Flow used in Financing Activities

The net cash used in financing activities amounted to RMB1,974.3 million, the net cash generated in 2018 amounted to RMB14,283.7 million, representing a decrease of RMB16,258.0 million or 113.82%, which was mainly attributable to: (i) repayment of bank borrowings, other borrowings and corporate bonds of RMB54,998.1 million; (ii) payment of interests on borrowings and bonds of RMB5,748.2 million; (iii) repayment of bonds of RMB5,500.0 million as the renewal option of renewable corporate bonds were not exercised; (iv) payment of dividends to equity holders and perpetual capital instruments holders of RMB1,757.3 million. These cash outflows were offset by the newly increased borrowings and bonds of RMB51,039.6 million, RMB13,000.0 million from the issuance of perpetual capital instruments, and the increase of capital injections from non-controlling interests of RMB3,519.6 million.

5 CAPITAL EXPENDITURE

In the past, the Company incurred capital expenditures primarily for expenditures on property, plant and equipment, as well as intangible assets (such as concession rights of toll roads). The following table sets forth the components of capital expenditures of the Company for the periods indicated:

	For the year ended 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
Property, plant and equipment [(1)]	**6,084.0**	6,916.6
Prepaid lease payments [(1)]	**–**	1,324.9
Intangible assets	**12,459.8**	12,056.1
Investment properties	**–**	2.2
Total	**18,543.8**	20,299.8

Note:

(1) The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. See note 2 to the Consolidated Financial Statement of this annual report.

6 CAPITAL AND FINANCIAL POLICIES

The Finance and Property Department of the Company is responsible for the capital and financial policies for the Company's overall business operations. The Company expected to jointly finance its management capital and other capital needs from a variety of sources, including but not limited to internal financing and external financing at a reasonable market interest rate. The Company continued to focus on improving return on equity and assets while maintaining prudent capital and financial policies.

7 INDEBTEDNESS

As at 31 December 2019, the Company's total liabilities amounted to RMB308,379.9 million and total assets amounted to RMB421,670.3 million, with a gearing ratio of 73.13%, representing a decrease of 2.43 percentage points from 75.56% for last year. The Company's total indebtedness amounted to RMB106,040.3 million. The following table sets forth the details of bank borrowings, other borrowings and corporate bonds of the Company as at the dates indicated:

	As at 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
Long-term		
Bank borrowings		
Unsecured	**26,552.0**	24,280.5
Secured	**26,012.0**	16,107.7
Other borrowings		
Secured	**11.9**	501.7
Corporate bonds[1]	**18,393.6**	15,141.8
Subtotal	**70,969.5**	56,031.7
Short-term		
Bank borrowings		
Unsecured	**15,249.2**	32,813.2
Secured	**3,195.4**	6,421.6
Other borrowings		
Unsecured	**15,188.2**	11,846.8
Secured	**53.0**	144.5
Corporate bonds[1]	**1,385.0**	4,730.8
Subtotal	**35,070.8**	55,956.9
Total	**106,040.3**	111,988.6

Note:

(1) The corporate bonds of the Company are unsecured medium-term notes and corporate bonds.

Management Discussion and Analysis

As at 31 December 2019, bank and other borrowings mainly denominated in currencies other than the functional currencies of respective entities are set out as below:

	As at 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
USD	**14,147.7**	11,142.2
Japanese Yen	**120.1**	121.9
BRL	**3,947.2**	4,115.4
Total	**18,215.0**	15,379.5

The following table sets forth the guaranteed portion of bank borrowings and other borrowings of the Company:

	As at 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
Guaranteed by:		
Non-controlling interest holders	**–**	700.0
Third parties	**120.1**	128.9
Total	**120.1**	828.9

The following table sets forth the maturity profile of indebtedness of the Company as at the dates indicated:

	As at 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
Repayable within 1 year	**34,043.2**	51,959.9
Repayable after 1 year but within 2 years	**20,243.8**	8,870.8
Repayable after 2 years but within 3 years	**4,747.7**	18,278.0
Repayable after 3 years but within 4 years	**7,185.3**	2,880.5
Repayable after 4 years but within 5 years	**5,770.9**	7,023.0
Repayable after 5 years	**34,049.4**	22,976.4
Total	**106,040.3**	111,988.6

The following table sets forth the effective interest rate ranges of bank borrowings, other borrowings and corporate bonds of the Company as at the dates indicated:

	As at 31 December	
	2019	2018
	%	%
Bank borrowings	**1.05-8.00**	1.05-9.00
Other borrowings	**3.92-4.90**	3.92-4.61
Corporate bonds	**3.14-5.37**	3.14-5.37

The following table sets forth the fixed and floating rate of bank and other borrowings of the Company as of the dates indicated:

	As at 31 December			
	2019		2018	
	(RMB in million)	**%**	(RMB in million)	%
Fixed rate bank and other borrowings	**46,409.8**	**1.05-8.00**	36,988.8	1.05-8.00
Floating rate bank and other borrowings	**39,851.9**	**1.20-7.50**	55,127.2	1.20-9.00
Total	**86,261.7**		92,116.0	

Bank borrowings of the Company were incurred primarily for the purposes of working capital, property development and investment in fixed assets. Other borrowings mainly represented deposits of Energy China Group and its subsidiaries (excluding the Company) with China Energy Engineering Group Finance Co. Ltd..

Indebtedness of the Company decreased by RMB5,948.3 million from 1 January 2019 to 31 December 2019, mainly due to the return of operating cash flow and repayment of some debts.

The Company did not have any material defaults in payment of bank borrowings or breaches of other debt financing obligations or breaches of any restrictive terms. In addition, as at 31 December 2019, the Company had RMB9 billion of authorized but unissued debt securities, namely the unsecured and unguaranteed corporate bonds and perpetual bonds.

As at 31 December 2019, the Company had RMB474.9 billion of unutilized and unrestricted bank facilities. As at the latest practicable date, the Company was not subject to any material restrictive terms in the borrowings.

8 PLEDGE OF ASSETS, CONTINGENCIES AND CONTINGENT LIABILITIES

8.1 Pledge of Assets

As at 31 December 2019, the Company's assets with the following carrying amounts have been pledged to secure general banking facilities (including bank borrowings, bills payable and letter of credit):

	As at 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
Property, plant and equipment [(1)]	**1,248.2**	3,977.2
Prepaid lease payments [(1)]	–	279.6
Intangible assets	**26,464.9**	12,988.9
Trade receivables	**4,536.0**	2,022.8
Properties under development for sale	**18,690.3**	24,105.5
Bank deposits	**5,242.2**	5,749.2
Total	**56,181.6**	49,123.2

Note:

(1) The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. Refer to note 2 to the Consolidated Financial Statement of this annual report.

8.2 Contingencies and Contingent Liabilities

(a) The Company was involved in a number of legal proceedings and claims against it in the ordinary course of business. Provision has been made for the probable losses to the Company on those legal proceedings and claims when the management can reasonably estimate the outcome of the legal proceedings and claims taking into account the legal advice.

(b) Guarantees

The following contingent liabilities arise from guarantees given to banks and other financial institutions in respect of certain loan facilities, as well as mortgage loan guarantees provided to banks of this annual report in favor of the customers of the Company. Details are set out in note 42 to the Consolidated Financial Statement of this annual report.

	As at 31 December	
	2019	2018
	(RMB in million)	(RMB in million)
Guarantees given to banks and other financial institutions in respect of loan facilities granted to(1):		
Associates	**1,532.2**	3,594.4
Joint ventures	**18.0**	736.9
Third party(2)	**243.4**	258.9
Investee recognised as financial assets at FVOCI	**21.4**	24.5
	1,815.0	4,614.7
Mortgage loan guarantees provided by the Company to banks in favor of its customers(3)	**1,578.2**	1,790.4
Total	**3,393.2**	6,405.1

Notes:

(1) In the opinion of the Directors, the fair value of these guarantee contracts is insignificant at initial recognition.

(2) One subsidiary of the Company has provided guarantee in respect of a lease contract with one financial institution to a third party.

(3) The Company had provided guarantees in respect of mortgage facilities granted by certain banks in connection with the mortgage loans entered into by purchasers of the Company's properties. Pursuant to the terms of the guarantees, if there is default of the mortgage payments by these purchasers, the Company is responsible for repaying the outstanding mortgage loans together with accrued interests thereon and any penalty owed by the defaulted purchasers to banks. The Company is then entitled to take over the legal title of the related properties. The guarantee periods commence from the dates of grant of the relevant mortgage loans and end after the buyer obtained the individual property ownership certificate.

In the opinion of the Directors, the fair values of these financial guarantee contracts of the Company are insignificant at initial recognition, and the Directors consider that the possibility of default by the relevant buyers is remote and, in case of default in payments, the net realisable value of the related properties can recover the repayment of the outstanding mortgage principals together with the accrued interest and penalty. Accordingly, no provision has been made in these financial statements for these guarantees.

(c) Contingent liabilities

During the year ended 31 December 2019, Gezhouba Huanjia and some Huanjia Connected Suppliers (see defined in note 23(ii) to the Consolidated Financial Statement of this annual report) were involved as defendants in a number of legal proceedings with certain financial institutions and other lenders. Mr. Wang Jinping was also one of the defendants in certain above-mentioned legal proceedings. These financial institutions sued Gezhouba Huanjia and other defendants for repayment of loans amounted to RMB1,362 million. Certain above-mentioned legal proceedings were rejected by relevant courts, as these courts were of the opinion that these legal proceedings, involved in suspected economic crimes, are subject to the conclusions of the Investigation (see defined in note 23(ii) to the Consolidated Financial Statement of this annual report).

Based on legal advice, the Company believes that Gezhouba Huanjia will be possibly sued by these financial institutions and other lenders and involved in further related investigations after the completion of the Investigation. As at 31 December 2019, as the Investigation is yet to be completed, the Company cannot reliably estimate the amount of liabilities to be undertaken by Gezhouba Huanjia. No provision in this regard has therefore been made.

9 SUBSEQUENT EVENT

The outbreak of novel coronavirus ("**COVID-19 outbreak**") since early 2020 has brought about additional uncertainties in the Group's operating environment. In particular, some entities are located in Hubei Province, which may impact the Group's operations and financial position.

The Group has been closely monitoring the impact from the COVID-19 outbreak on the Group's businesses and has commenced to put in place various contingency measures. These contingency measures include but not limited to continuously monitoring and analysing domestic and overseas epidemic prevention policies, negotiating with project owners and customers on project schedules and delivery timetables, evaluating the sustainability of the existing subcontractors and suppliers and assessing major projects in progress. The Group will keep the contingency measures under review as the COVID-19 outbreak evolves.

As far as the Group's businesses are concerned, the COVID-19 outbreak may result in decrease in revenue and gross profits. The Group has initiated the above contingency measures to respond. Based on the information currently available, the Directors estimated that the COVID-19 outbreak may impact 1) the repayment abilities of certain domestic and oversea project owners and customers and, as a result, may lead to additional provision for trade receivables and contract assets in the future periods; 2) total estimated contract costs arising from the unexpected regulatory requirements of epidemic prevention, which may lead to onerous contracts if the costs cannot be recovered from project owners; 3) timetable of on-going overseas construction contracts due to restriction of travelling abroad, as a result, may cause breach of contract and potential losses from legal proceedings and claims. All the above impacts have not been reflected in the financial statements as at 31 December 2019.

On the other hand, the Directors consider that the government's policy of reducing taxes and fees and the decline in market interest rates will benefit the Company in further reducing costs and increasing efficiency, and such impacts could also be reduced by favourable polices regarding infrastructure construction to be introduced by the government to drive economic growth after the COVID-19 outbreak.

10 RISK

10.1 Business Risk

1. **Macroeconomic risk.** In 2020, the novel coronavirus pneumonia epidemic has had a relatively great influence on the production and operation of various industries in China, and the resumption of work and production of enterprises has been subject to conditions such as local epidemic prevention and control measures and health protection. Meanwhile, the domestic and international macroeconomic situations are also facing the risk of changes, and hence affecting the development of the industry, which may affect the performance of projects in progress, increase the difficulty of market development, slow down the pace of transformation and upgrades, and affect economic benefits. The Company will put more efforts in macroeconomic analysis and research on policies, make full use of favorable policies of all aspects, seize the opportunity when the country will increase investment after the epidemic, and strive to recover from the adverse effects of the epidemic; strengthen business transformation and upgrading, pay close attention to the layout of industrial investment in relevant fields, expand non-power business areas and overseas markets, and exert the role of new business models to achieve sustainable and healthy development of enterprises.

2. **International operation risk.** The international political, economic, and security situations are complex and dynamic, coupled with rising trade protectionism, challenges encountered in the development of the multilateral trading system, increasingly fierce international competition, rapidly changing business models, and rising exchange rate, legal, compliance and security risks. In addition, the novel coronavirus pneumonia epidemic has spread worldwide, which has brought about negative impacts on the development and implementation of the international project market. The Company will refine its international operational management system and improve the international business market layout, while strictly implementing international work procedures for market development, intensifying research on legal, compliance and safety risks, and promptly issuing risk warnings to elevate overseas security and capabilities to respond to risks.

3. **Construction project performance risk.** The inadequate planning breadth and depth in the early stage of projects, the less-satisfactory contracting quality, the deficient construction resource allocation, management and control of the novel coronavirus pneumonia epidemic, impacts on production in the upstream and downstream of industrial chain, and other reasons may result in the unsmooth performance of certain projects, leading to risks of delayed schedules, increased costs, losses and complaints. The Company will improve the supervision process, monitor major projects with higher performance or operating risks, and organize management and inspection of construction in progress; strengthen protection on resources to be used after resumption of work and production, adopt various measures at the same time and actively collect and prepare relevant production materials and anti-epidemic materials, as well as improve the efficiency in material distribution; strengthen communication and coordination with the owners, proactively seek support and assistance, implement policies for different scenarios, and urge subsidiaries to facilitate resumption of work and production in an accurate and orderly manner according to the plan.

4. **Safe production risk.** Construction and contracting is a high-risk sector. Subject to the impact of the nature of industry and environmental condition on the construction site, safe production has always been exposed to higher risks. If the management, scanning and rectification of hidden dangers are less adequately practised and not well arranged, adverse consequences of safe production may occur, leading to loss of life or property, etc. At the same time, the novel coronavirus pneumonia epidemic has caused many impacts to enterprises, such as the postponement of resumption of work and production, and limitation on mobility of personnel. If the plan for resumption of work and production and safety measures are not in place, there will be certain health and safety risks. The Company will clarify the subject of liability for safe production, strictly observe the redline of safe production, augment resource input, enhance educational training and foundation work, strengthen investigation and rectification of hidden hazards and risk management to stay strictly on guard against accidents.

5. **Investment risk.** The Company is undergoing business transformation with its investment business constantly expanding. If risk factor identification and analysis are not sufficient enough, implementation is not in place, financing schemes fail to be launched or the cost is too high, problems such as budgetary overrun of construction cost, insufficient revenue and difficult execution of projects may occur. The Company will establish and improve its investment full-process risk management system, strictly enforce the access criteria for investment projects, and enhance project supervision, inspection and appraisal and urge investing entity to rectify within a defined time period when problems and weak links are discovered.

10.2 Exchange Rate Fluctuation Risk

Most businesses of the Company are operated in China, thus the functional currency applied in the financial statements of the Company is RMB. The Company plans to continue to expand the overseas business, and it is expected that, as a result, the incomes and expenses dominated in foreign currencies will increase significantly. The exchange rate fluctuation may have influence on the service pricing and the expenses of procurement of materials and equipment of the Company by foreign exchange and therefore influence the financial position and operating performance of the Company. Details are set out in note 39 to the Consolidated Financial Statement.

11 NUMBER OF EMPLOYEES, SHARE OPTION SCHEME AND TRAINING PROGRAM

As of the end of 2019, the Company has a total of 119,394 employees, and a legion of high-quality talents, including 35,928 management personnel, 39,013 professional technicians, and 26,769 skilled operators.

The Company has 13,464 talents with various national registered qualifications. Also, the Company has a team of top talents of China, including the 30 experts who enjoy the State Council governmental special subsidies, 6 national engineering survey and design masters, 2 national nuclear industry engineering survey and design masters, 5 national candidates of the "Millions of Talents of the New Century" project, 2 national young and middle-aged experts with outstanding contribution, and 24 national technical experts.

The Company attaches high importance to the education and training of the employees. The Company increased the input of the education and training expenditure and enhanced the employee's quality and professional skills continuously. The Company planned to train 483,200 employees in 2019 and actually trained 534,000 employees, including on-the-job training for 359,600 employees, continuing education training for 30,700 employees, and other training for 143,700 employees.

The Company did not implement any share option scheme during the reporting period except for other share incentive scheme. For details, please refer to the announcements of the Company dated 27 July 2016, 3 October 2016, 21 November 2016, 16 November 2018 and 21 November 2019 and the circular of the Company dated 6 October 2016.

12 PLANS OF THE COMPANY FOR SIGNIFICANT INVESTMENT OR PURCHASE OF CAPITAL ASSET IN THE FUTURE

12.1 Orientation of Future Investment

The Company planned to utilize multiple means such as mergers and acquisitions, and make functional investment in domestic and overseas target enterprises with asset-light strategy, intelligence nature, high technical content, high added value, and sound market prospect, including non-power design and consulting enterprises, high-quality construction enterprises with high-grade qualifications for non-power businesses such as municipal administration, housing construction, highway construction and environmental protection, as well as clean energy enterprises, so as to improve the Company's industrial chain of the core engineering business and enterprise functions, drive engineering business development and push forward transformation and upgrading of enterprises.

12.2 Progress of Mixed-ownership Reform

The overall plan for mixed-ownership reform and employee stock ownership plan of the two third-batch mixed-ownership reform pilot subsidiaries of the Company have been approved by the National Development and Reform Commission. Among which, the specific implementation plan of Hunan Electric Power Design Institute Co., Ltd. (湖南省電力設計院有限公司) and the comprehensive reform plan of "Double-hundred Action" have been considered and approved by Energy China Group, and four strategic investors have been successfully introduced for commencement of employee stock ownership at the same time. Jiangsu No. 1 Electric Power Construction Engineering Co., Ltd. (江蘇省電力建設第一工程有限公司) is actively conducting the introduction of prospective strategic investors.

12.3 Situation of Real Estate Projects

As of 31 December 2019, the Company held 27 operating real estate projects exceeding 5% of the Company's market value, including 24 existing projects and 3 new projects secured in 2019. Details are shown in the table below:

Table of Situation of Operating Real Estate Projects

No.	Name of projects	Location	Land area (square meters)	Construction area (square meters)	The Company's shareholding percentage	Percentage of completion	Note
1	Beijing China Residence	Beijing	104,578	348,704	100.00%	64.73%	
2	Beijing Zijun Orchid Court	Beijing	74,773	241,764	100.00%	79.13%	
3	Shanghai Yulan Garden South	Shanghai	115,759	260,383	100.00%	86.25%	
4	Shanghai Yulan Garden North	Shanghai	119,426	253,403	100.00%	63.16%	
5	Shanghai Zijun Mansion	Shanghai	25,267	62,306	100.00%	93.36%	
6	20 Project in Suzhou	Suzhou	38,557	63,335	100.00%	70.03%	
7	Nanjing China Residence	Nanjing	26,380	114,033	100.00%	74.69%	
8	Nanjing Zijun Orchid Court	Nanjing	143,744	559,642	70.00%	58.91%	
9	Nanjing Zijun Residence	Nanjing	45,636	135,718	51.00%	72.68%	
10	Nanjing G30	Nanjing	42,783	232,925	33.90%	65.82%	Non-consolidated item
11	Nanjing Guyin Orchid Court	Nanjing	24,499	95,741	35.70%	76.11%	Non-consolidated item
12	Nanjing G49	Nanjing	43,708	122,400	100.00%	66.91%	
13	Hangzhou Jing Lin Longfor Mansion	Hangzhou	42,907	141,691	34.00%	84.00%	Non-consolidated item
14	Hangzhou China Residence	Hangzhou	56,755	229,319	70.00%	58.57%	
15	Hefei Zijun Residence	Hefei	42,901	111,027	100.00%	79.26%	
16	Heifei China Residence Projects – Phases I and III	Hefei	68,482	182,997	100.00%	76.04%	
17	Wuhan Zijun Orchid Court	Wuhan	58,304	267,732	100.00%	46.66%	
18	Wuhan Jiangyue Orchid Court	Wuhan	47,315	204,490	30.00%	49.53%	Non-consolidated item
19	Wuhan International Plaza South	Wuhan	42,570	370,228	50.00%	59.42%	Non-consolidated item
20	Wuhan Kunyu Residence	Wuhan	107,544	779,370	40.00%	67.77%	Non-consolidated item
21	Chongqing Expo City	Chongqing	618,622	1,615,764	49.00%	80.36%	Non-consolidated item
22	Chongqing European Garden	Chongqing	813,401	2,073,763	49.00%	61.16%	Non-consolidated item
23	Chongqing Bishan Project	Chongqing	120,838	241,700	100.00%	27.09%	
24	Chengdu Zijun Orchid Court	Chengdu	99,626	334,424	51.00%	82.57%	
25	Guangzhou Zijun Residence	Guangzhou	35,272	207,476	100.00%	76.65%	
26	Guangzhou Nansha Project	Guangzhou	139,229	553,200	61.82%	26.40%	
27	Hainan Blessed Bay	Hainan	374,200	303,079	100.00%	80.51%	

In 2019, the Company did not hold any significant investment projects required to be considered and approved by the Board as required by the Articles of Association.

13 GEARING RATIO

As at 31 December 2019, the gearing ratio of the Company was 93.6%, representing a decrease of 24.1 percentage points as compared to 117.7% for the same period of 2018. Gearing ratio represents interest-bearing debts divided by total equity at the end of the year.

14 SIGNIFICANT INTANGIBLE ASSETS

Details of the significant intangible assets of the Company for the year ended 31 December 2019 are set out in note 15 to the "Consolidated Financial Statements" of this annual report.

15 OTHER SIGNIFICANT EXPENDITURE

The Company saw no other significant expenditure in 2019.

16 ACQUISITION AND DISPOSAL OF SUBSIDIARIES

Details of acquisition and disposal of subsidiaries by the Company for the year ended 31 December 2019 are set out in note 45 to the "Consolidated Financial Statements" of this annual report.

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Directors, supervisors and senior management of the Company have no relationships among each other, including financial affairs, businesses, family and other material relationships. The table below sets forth certain information of the directors, supervisors and senior management of the Company:

	Name	Age	Position
Board of Directors	WANG Jianping	59	Chairman of the Board and Executive Director
	DING Yanzhang	55	Vice chairman of the Board, Executive Director and General Manager
	ZHANG Xianchong[1]	60	Executive Director and Deputy General Manager
	MA Chuanjing	62	Non-executive Director
	LIU Xueshi	54	Non-executive Director
	SI Xinbo	52	Non-executive Director
	DING Yuanchen	70	Independent Non-executive Director
	ZHENG Qiyu[2]	65	Independent Non-executive Director
	CHEUNG Yuk Ming	66	Independent Non-executive Director
Board of Supervisors	WANG Zengyong	58	Chairman of the Supervisory Committee
	LI Fangyi	55	Employee Representative Supervisor and the Head of Auditing Department
	KAN Zhen	56	Employee Representative Supervisor and the Head of the Party-Masses Work Department
	FU Dexiang	69	Supervisor
	WEI Zhongxin	66	Supervisor
Senior Management	DING Yanzhang	55	Vice chairman of the Board, Executive Director and General Manager
	ZHANG Xianchong[1]	60	Executive Director and Deputy General Manager
	WU Chunli	56	Deputy General Manager
	YU Gang	58	Deputy General Manager
	ZHOU Hougui	57	Deputy General Manager
	CHEN Guanzhong	50	Chief Accountant
	WU Yun	55	Deputy General Manager
	DUAN Qiurong	58	Secretary to the Board and the Joint Company Secretary

Notes:

1 The resignation of Mr. Zhang Xianchong as the deputy general manager of the Company was considered and approved at the eighth meeting of the second session of the Board held by the Company on 12 March 2019. Mr. Zhang Xianchong resigned as the executive director of the Company on 14 January 2020.

2 Mr. Zheng Qiyu passed away due to illness in December 2019.

1 BOARD OF DIRECTORS

1.1 Executive Directors

Mr. Wang Jianping aged 59, is a professor-level senior engineer and obtained a bachelor's degree in electric power system and automation. He joined the Group in 1982, and is currently an executive Director, the chairman of the Board, the chairman of the strategy committee and the chairman of the nomination committee of the Board of the Company, while at the same time he is also the chairman of China Energy Engineering Group Co., Ltd.. Mr. Wang started his career in 1982, and served as the president of Northeast Electric Power Design Institute (東北電力設計院), the general manager of China Power Engineering Consulting Corporation (中國電力建設工程諮詢公司), president of Electric Power Planning & Engineering Institute (電力規劃設計總院) and the general manager of China Power Engineering Consulting Group Co., Ltd. (中國電力工程顧問集團公司).

Mr. Ding Yanzhang aged 55, is a professor-level senior engineer and obtained a bachelor's degree in engineering, majoring in hydraulic engineering machinery, a master's degree in management, majoring in administrative management. He joined the Group in 1984, and is currently an executive Director, the vice chairman of the Board, the general manager, member of the Strategy Committee of the Board, while at the same time is also the director and the general manager of China Energy Engineering Group Co., Ltd.. Mr. Ding started his career in 1984, and served as the general manager of China Gezhouba Group No. 2 Engineering Co., Ltd. (中國葛洲壩集團第二工程有限公司), the president of Lancang River Construction Bureau of China Gezhouba Water Conservancy and Hydropower Engineering Group Co., Ltd. (中國葛洲壩水利水電工程集團有限公司瀾滄江施工局), the director of China Gezhouba Water Conservancy and Hydropower Engineering Group Co., Ltd. (中國葛洲壩水利水電工程集團有限公司), the director, the general manager and the chairman of the board of directors of China Gezhouba Group Stock Company Limited and the general manager of China Gezhouba Group Company Limited.

1.2 Non-executive Directors

Mr. Ma Chuanjing aged 62, has obtained a doctor's degree in economics. He joined the Group in 2014, and is currently a non-executive Director, member of the strategy committee and the audit committee of the Board of the Company and is also an external director of Xinxing Cathay International Group Co., Ltd. (新興際華集團有限公司). Mr. Ma served as the vice president and president of the Economic Editorial Department and the head of the International Department of Qiushi Journal (《求是》雜誌社), the vice president of the Comprehensive Research Department under the Research Office of the State Council (國務院研究室綜合研究司) and the inspector, vice president and president of the Industry, Transportation and Trade Research Department under the Research Office of the State Council (國務院研究室工交貿易研究司) and an external director of Sinotrans & CSC Holdings Co., Ltd. (中國外運長航集團有限公司) and Sinochem Group (中國中化集團公司).

Mr. Liu Xueshi

aged 54, has obtained a bachelor's degree in economics, majoring in industrial economy. He joined the Group in 2017. He is currently a non-executive Director, member of the Remuneration and Assessment Committee of the Board of the Company and the chief accountant of the China Reform Holdings Corporation Ltd. (中國國新控股有限責任公司). Mr. Liu served as the director of the No.1 Assessment Division of the Department, the director of the System Division of the Department, the deputy director of cadre office of the Department of Corporation of the Ministry of Finance (財政部企業司), the deputy head of the Service Administration Bureau (the Administration Bureau of the Former and Retired Staff) under the State-owned Assets Supervision and Administration Commission of the State Council.

Mr. Si Xinbo

aged 52, is a senior accountant and obtained master's degree in business administration. He joined the Group in 2017, and is currently an non-executive Director and member of the Strategy Committee of the Board of the Company. He also currently serves as a deputy general manager of Silk Road Fund Co., Ltd. (絲路基金有限責任公司). Mr. Si served as deputy director of Asset Restructuring and Preservation Bureau and director of the Audit Appraisal Bureau of the headquarters of China Development Bank (國家開發銀行), and vice president of Qinghai Branch of China Development Bank.

1.3 Independent Non-executive Directors

Mr. Ding Yuanchen

aged 70, is a senior engineer and obtained an academic diploma of undergraduate education majoring in economics and management. He joined the Group in 2014, and is currently an independent non-executive Director, the member of the Nomination Committee and the chairman of the Audit Committee of the Board of the Company. Mr. Ding worked as the vice president and president of the No.17 Engineering Bureau of Ministry of Railways (鐵道部第十七工程局), the president of the China Railway No.17 Engineering Bureau (中鐵第十七工程局), the deputy general manager of China Railway Construction Corporation Co., Ltd. (中國鐵道建築總公司), the general manager of China Civil Engineering Construction Corporation (中國土木工程集團公司), the vice chairman of the board of directors of China Railway Construction Corporation Limited (中國鐵建股份有限公司) (Stock Code: 601186.SH; 1186.HK), the independent director of China Gezhouba Group Stock Company Limited and the external director of China National Agricultural Development Group Co. Ltd. (中國農業發展集團有限公司).

Mr. Cheung Yuk Ming

aged 66, is a member of the Hong Kong Institute of Certified Public Accountants, Construction Management Association of America, and the Society of Construction Law in Hong Kong. He joined the Group in 2015, and is currently an independent non-executive Director, member of the Nomination Committee, member of the Remuneration and Assessment Committee and member of the Audit Committee of the Board. Mr. Cheung served as an independent non-executive director of TravelSky Technology Limited (中國民航信息網絡股份有限公司) (Stock Code: 0696.HK), Birmingham International Holdings Limited (伯明翰環球控股有限公司) (Stock Code: 2309.HK), an executive director of China Shanshui Cement Group Limited (中國山水水泥股份有限公司) (Stock Code: 0691.HK), and an independent non-executive director of Metallurgical Corporation of China Ltd. (中國冶金科工股份有限公司) (Stock Code: 601618.SH; 1618.HK).

2 BOARD OF SUPERVISORS

Mr. Wang Zengyong aged 58, is a professor-level senior engineer and obtained an engineering bachelor's degree in mechanical engineering. He joined the Group in 1983, and is currently the chairman of the Supervisory Committee of the Company. Mr. Wang started his career in 1983, and has served as the deputy head of the technology department of Central Southern China Electric Power Design Institute (中南電力設計院); the deputy head of technology management department of China Electric Power Planning & Engineering Institute (電力規劃設計總院); the deputy head and the head of the locomotive department of China Power Construction Engineering Consulting Co., Ltd. (中國電力建設工程諮詢公司); the head of the human resources department and the assistant to the general manager, the head of system restructuring office of China Power Engineering Consulting Group Corporation (中國電力工程顧問集團公司) and concurrently, the director of North China Power Engineering Co., Ltd. of China Power Engineering Consulting Group (中電工程華北電力設計院工程有限公司) and the chairman of the board of directors of Beijing Luosida Science and Technology Development Co., Ltd. of China Power Engineering Consulting Group (中電工程北京洛斯達科技發展有限公司), the head of the general office (office of the board of directors) of Energy China Group and the head of the general office (party committee office) of the Company.

Mr. Li Fangyi aged 55, is a professor-level senior engineer. He joined the Group in 1983, and is currently an employee representative supervisor and the director of supervisory committee office under the audit department of the Company, as well as a supervisor of China Electric Power Planning and Engineering Institute Co., Ltd. Mr. Li started his career in 1983, and has served as the deputy head of the environmental protection department, the human resources department and the corporate development department, the head of the human resources department of Central Southern China Electric Power Design Institute (中南電力設計院) of State Electric Power Corporation, the deputy secretary of committee for discipline inspection, the head of the human resources department and the assistant to the head of Midsouthern Electric Power Design Institute of China Power Engineering Consulting Group (中國電力工程顧問集團公司) and the deputy head of the human resources department of China Energy Engineering Group Co., Ltd.

Mr. Kan Zhen aged 56, is a senior economist. He joined the Group in 1983, and is currently the employee representative supervisor, the head of the party-masses work department (formerly known as corporate culture department) of the Company. Mr. Kan started his career in 1983, and served as the assistant to the president and the head of the general office of Bureau of Industry and Tertiary Industry (工業三產業局) of CGGC Group, the head of Beijing office of CGGC Group, the head of the labor union department of China Energy Engineering Group Co., Ltd., and the general manager of the asset management center of Energy China Group.

Mr. Fu Dexiang aged 69, is a senior accountant and obtained an academic diploma of postsecondary education in business management. He joined the Group in 2015, and is currently a supervisor of the Company and is also a senior consultant of China Shipbuilding Industrial Complete Equipment & Logistics Co., Ltd. (中船工業成套物流公司). Mr. Fu served as the deputy manager of the Service Branch, the deputy manager and manager of the Service Operation Department, deputy head and head of the Finance Department of Hudong Shipyard (滬東造船廠), the deputy head and head of the Finance Department of China State Shipbuilding Corporation (中國船舶工業集團公司), the general manager of Zhong Chuan Finance Co., Ltd. (中船財務有限責任公司) and senior specialist of China State Shipbuilding Corporation (中國船舶工業集團公司).

Mr. Wei Zhongxin aged 66, senior economist, obtained a bachelor's degree in Philosophy. He joined the Group in 2015, and is currently a supervisor of the Company. Mr. Wei served as the head of the general office, the deputy chief economist and assistant to the president of China Railway Engineering Corporation (中國鐵路工程總公司), the director of China Railway Resources Co., Ltd. (中鐵資源集團有限公司) and the chairman of the board of directors of China Railway Assignment No. 2 Bureau (中國中鐵外派中鐵二局) and the chairman of the supervisory committee of China Railway Assignment No. 9 Bureau (中國中鐵外派中鐵九局).

3 SENIOR MANAGEMENT

Mr. Ding Yanzhang aged 55, is a professor-level senior engineer and obtained a bachelor's degree in engineering, majoring in hydraulic engineering machinery, a master's degree in management, majoring in administrative management. He joined the Group in 1984, and is currently an executive Director, the vice chairman of the Board, the general manager, member of the Strategy Committee of the Board, while at the same time is also the director and the general manager of China Energy Engineering Group Co., Ltd.. Mr. Ding started his career in 1984, and served as the general manager of China Gezhouba Group No. 2 Engineering Co., Ltd. (中國葛洲壩集團第二工程有限公司), the president of Lancang River Construction Bureau of China Gezhouba Water Conservancy and Hydropower Engineering Group Co., Ltd. (中國葛洲壩水利水電工程集團有限公司瀾滄江施工局), the director of China Gezhouba Water Conservancy and Hydropower Engineering Group Co., Ltd. (中國葛洲壩水利水電工程集團有限公司), the director, the general manager and the chairman of the board of directors of China Gezhouba Group Stock Company Limited and the general manager of China Gezhouba Group Company Limited.

Mr. Wu Chunli aged 56, is a professor-level engineer and obtained a bachelor's degree in hydrogeology. He joined the Group in 1985, and is currently the deputy general manager of the Company. Mr. Wu started his career in 1985, and served as the deputy director, assistant to the chairman and the director of the Human Resources Department, and the vice president of Exchange Service Center of Electric Power Planning & Engineering Institute (電力規劃設計總院人才交流服務中心), the deputy general manager of China Power Engineering Consulting Corporation (中國電力建設工程諮詢公司), the deputy general manager, general manager and the executive director of China Power Engineering Consulting Group Corporation (中國電力工程顧問集團公司).

Mr. Yu Gang

aged 58, is a professor-level senior engineer and obtained a doctor's degree in engineering, majoring in electrical engineering. He joined the Group in 2001, and is currently the deputy general manager of the Company. Mr. Yu started his career in 1982, and served as president of Shandong Weifang Electricity Affairs Bureau (山東濰坊電業局), the president of Shandong Electric Power Engineering Consulting Institute (山東電力工程諮詢院), the general manager of China Power Construction Engineering Consulting Corporation (中國電力建設工程諮詢公司), the deputy general manager of China Power Engineering Consulting Group Co., Ltd. (中國電力工程顧問集團有限公司), the vice president of Electric Power Planning & Engineering Institute (電力規劃設計總院) and the deputy general manager of China Energy Engineering Group Co., Ltd..

Mr. Zhou Hougui

aged 57, is a professor-level senior engineer and obtained a doctor's degree in engineering, majoring in water structural engineering. He joined the Group in 1982, and is currently the deputy general manager of the Company. Mr. Zhou started his career in 1982, and served as the chief engineer of Gezhouba Engineering Bureau Three Gorges Headquarter (葛洲壩工程局三峽指揮部), the deputy general manager of China Gezhouba Water Conservancy and Hydropower Engineering Group Co., Ltd. (中國葛洲壩水利水電工程集團有限公司), the deputy general manager and the chief engineer of CGGC Group, the deputy general manager and chief engineer of CGGC, the deputy general manager and chief engineer of China Energy Engineering Group Co., Ltd., and the president of the Engineering Institute of Energy China Group.

Mr. Chen Guanzhong

aged 50, is a professorate senior accountant and obtained a bachelor's degree in economics, majoring in enterprise management. He joined the Group in 2004, and is currently the chief accountant of the Company. Mr. Chen started his career in 1990, and served as the deputy head and head of the Finance Department, the head of the Audit Department, the deputy chief accountant and the chief accountant of China National Chemical Engineering Six Construction Company (中國化學工程第六建設公司), the chief accountant of China Power Engineering Consulting Group Co., Ltd. (中國電力工程顧問集團有限公司), and the deputy chief accountant and chief accountant of China Energy Engineering Group Co., Ltd..

Mr. Wu Yun

aged 55, is a professor-level senior engineer and obtained a bachelor's degree in engineering, majoring in electric power system and automation. He joined the Group in 1986, and is currently the deputy general manager of the Company. Mr. Wu started his career in 1986 and served as the head and deputy chief engineer of the planning division, director and assistant to general manager of the planning and research department and director of the planning and research center of China Power Engineering Consulting Group Co., Ltd (中國電力工程顧問(集團)有限公司) and the chief engineer of China Power Engineering Consulting Group Corporation (中國電力工程顧問集團公司), the chief engineer and chief information officer of both China Energy Engineering Group Co., Ltd. and China Energy Engineering Corporation Limited.

Mr. Duan Qiurong

aged 58, is a professorate senior economist and obtained a master's degree in engineering, majoring in control engineering. He joined the Group in 1982, and is currently the secretary to the Board and joint company secretary of the Company. He also serves as a director of China Gezhouba Group Stock Company Limited. Mr. Duan joined China Gezhouba Group Company Limited in 1982, and served as deputy head and head of the Party Committee Office, the head of the Reform and Development Department and the head of the Strategic Investment Department of CGGC Group, the head of the Strategic Investment Department of CGGC, the head of the Strategic Development Department and the Strategic Investment Department of China Energy Engineering Group Co., Ltd., and director of China Energy Engineering Group Equipment Co., Ltd. (中國能建集團裝備有限公司).

REPORT OF THE BOARD

1 PRINCIPAL ACTIVITIES

The Company is a comprehensive and ultra-large group company offering holistic solutions and full-chain services in energy power, infrastructure and real estate sectors in China and the world at large. Its businesses cover energy power, water conservancy and water utilities, railways and highways, ports and navigation channels, municipal engineering, urban rail, eco-environment protection and housing construction, with a complete industrial chain integrating planning and consulting, evaluations and review, survey and design, construction and contracting and management, operating maintenance and investment operation, technical services, equipment manufacturing, and building materials. The Company is committed to becoming an internationally top-notch engineering company with global competitive being "technology-based, well-managed, international and diversified".

2 BUSINESS REVIEW

In 2019, the Company held firmly to the general guideline of maintaining stability while seeking progress, promoted high-quality development, focused on accelerating transformation, integrating development momentum and making efforts in improvement of quality and efficiency. We proactively responded to market risks and challenges and worked solidly. Thanks to these efforts, we successfully accomplished the operation targets for the whole year and the key operating indicators maintained a stable growth.

Details of the business development, future development and outlook of the Company in 2019 are set out in the "Business Overview" of this annual report.

Details of the analysis of operation performance, risk analysis, details of employees and the subsequent events after the balance sheet date of the Company for the year of 2019 are set out in the "Management Discussion and Analysis" of this annual report.

Details of the relationship with major customers and suppliers of the Company, and the compliance with the relevant laws and regulations which have a significant impact on the Company for the year of 2019 are set out in the following sections of this report.

3 FINANCIAL PERFORMANCE

Profit of the Company for the year ended 31 December 2019 and financial position of the Company as of the date are set out in the Consolidated Statement of Profit or Loss and Other Comprehensive Income and the Consolidated Statement of Financial Position of this annual report.

4 DIVIDENDS

The Board recommended the payment of a final dividend of RMB0.0306 per share (tax inclusive) for the year to shareholders appearing on the register of members of the Company on 13 July 2020 (Monday). Cash dividend totalling RMB918.6 million is to be paid. Payment will be made on 28 August 2020 subject to the approval by the shareholders at the annual general meeting to be held on 30 June 2020.

5 PROPERTY, PLANT AND EQUIPMENT

Details of the movement in property, plant and equipment of the Company are set out in note 12 to the Consolidated Financial Statements of this annual report.

6 SHARE CAPITAL

As at the end of the Reporting Period, the total number of the shares of the Company was 30,020,396,364, among which: domestic shares were 20,757,960,364 shares, accounting for 69.15% of the total shares; H shares were 9,262,436,000 shares, accounting for 30.85% of the total shares. Details of the share capital of the Company as at 31 December 2019 are set out in note 37 to the Consolidated Financial Statements of this annual report.

7 RESERVES

The changes in the reserve of the Company for the year are set out in the Consolidated Statement of Changes in Equity of this annual report.

8 DISTRIBUTABLE RESERVE

Details of distributable reserve of the Company as at 31 December 2019 are set out in the Consolidated Financial Statements of this annual report.

9 MAJOR CUSTOMERS AND SUPPLIERS

For the year ended 31 December 2019, the sales revenue from the five largest customers of the Company accounted for approximately 1.84%, 1.57%, 0.90%, 0.82% and 0.68% of the total revenue of the Company respectively, totally representing 5.82% of the total revenue of the Company.

For the year ended 31 December 2019, the purchase amount from the five largest suppliers of the Company accounted for approximately 0.86%, 0.70%, 0.61%, 0.57% and 0.29% of the aggregate amount of the procurement of goods, the procurement of subcontracts and other costs of the Company respectively, totally representing 3.02% of the total cost of the Company.

None of the Directors, supervisors and their associates or any shareholders (which, to the best knowledge of the Directors, own more than 5% of the share capital of the Company), has any interest in the above five largest customers or five largest suppliers.

The Company does not constitute a dependence on minority customers and suppliers.

10 SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Details of the principal subsidiaries, joint ventures and associates of the Company for the year ended 31 December 2019 are set out in notes 16, 17 and 18 to the Consolidated Financial Statements of this annual report, respectively.

11 DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

The following table sets forth certain information of the Directors during the Reporting Period:

Name	Position	Date of appointment
WANG Jianping	Chairman of the Board and Executive Director	28 December 2017
DING Yanzhang	Vice chairman of the Board and Executive Director	28 December 2017
ZHANG Xianchong[1]	Executive Director	28 December 2017
MA Chuanjing	Non-executive Director	28 December 2017
LIU Xueshi	Non-executive Director	28 December 2017
SI Xinbo	Non-executive Director	28 December 2017
DING Yuanchen	Independent Non-executive Director	28 December 2017
ZHENG Qiyu[2]	Independent Non-executive Director	28 December 2017
CHEUNG Yuk Ming	Independent Non-executive Director	28 December 2017

Notes:

1 Mr. Zhang Xianchong resigned as the executive Director of the Company on 14 January 2020.

2 Mr. Zheng Qiyu passed away due to illness in December 2019.

The following table sets forth certain information of the supervisors during the Reporting Period:

Name	Position	Date of appointment
WANG Zengyong	Chairman of the Supervisory Committee	28 December 2017
LI Fangyi	Employee Representative Supervisor	14 June 2018
KAN Zhen	Employee Representative Supervisor	28 December 2017
FU Dexiang	Supervisor	28 December 2017
WEI Zhongxin	Supervisor	28 December 2017

The following table sets forth certain information of the senior management of the Company during the Reporting Period:

Name	Position	Date of appointment
DING Yanzhang	Vice chairman of the Board, Executive Director and General Manager	28 December 2017
ZHANG Xianchong[1]	Executive Director and Deputy General Manager	28 December 2017
WU Chunli	Deputy General Manager	28 December 2017
YU Gang	Deputy General Manager	28 December 2017
ZHOU Hougui	Deputy General Manager	28 December 2017
CHEN Guanzhong	Chief Accountant	28 December 2017
WU Yun	Deputy General Manager	28 December 2017
DUAN Qiurong	Secretary to the Board and the Joint Company Secretary	28 December 2017

Note:

1 The resignation of Mr. Zhang Xianchong as the deputy general manager of the Company was considered and approved at the eighth meeting of the second session of the Board held by the Company on 12 March 2019.

The individual information of the existing Directors, supervisors and senior management of the Company is set out in the "Profile of Directors, Supervisors and Senior Management" of this annual report.

The independent non-executive Directors of the Company are appointed for a period of three years. The Company has received annual confirmations of independence from Mr. Ding Yuanchen and Mr. Cheung Yuk Ming. As at the date of this report, the Company still considers each independent non-executive Director above to be independent.

12 INTERESTS OF DIRECTORS AND SUPERVISORS IN CONTRACTS

Save as the service contracts, no Directors or supervisors or entities connected with Directors or supervisors of the Company have material interests, either directly or indirectly, in any transaction, arrangement or contract of significance to the Company to which the Company, any of its subsidiaries or fellow subsidiaries or its holding company is a party during the Reporting Period based on the information available to the Company.

13 MAJOR CONTRACTS

Save as disclosed in this annual report, at any time during the year, there were no major contracts entered into between the Company or any of its subsidiaries and a controlling shareholder (as defined in the Listing Rules) or any of its subsidiaries, or any major contracts for the provision of services to the Company or any of its subsidiaries by a controlling shareholder or any of its subsidiaries.

14 REMUNERATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Personnel	Basic salaries, housing allowance and other allowance (RMB)	Provision of housing funds (RMB)	Contribution to retirement benefit scheme (RMB)	Discretionary bonus (RMB)	Sub-total (RMB)
Directors:					
WANG Jianping	221,200.00	38,292.00	50,055.48	1,166,899.96	1,476,447.44
DING Yanzhang	221,200.00	38,292.00	50,055.48	1,166,899.96	1,476,447.44
ZHANG Xianchong[1]	199,100.00	38,292.00	50,055.48	1,056,400.00	1,343,847.48
MA Chuanjing	–	–	–	–	–
LIU Xueshi	–	–	–	–	–
SI Xinbo	–	–	–	–	–
DING Yuanchen	60,000.00	–	–	–	60,000.00
ZHENG Qiyu[2]	60,000.00	–	–	–	60,000.00
CHEUNG Yuk Ming	120,004.00	–	–	–	120,004.00
Supervisors:					
WANG Zengyong	405,704.19	38,292.00	50,055.48	496,328.85	990,380.52
KAN Zhen	376,187.41	38,292.00	50,055.48	470,394.92	934,929.81
LI Fangyi	344,858.31	38,292.00	50,055.48	417,800.22	851,006.01
FU Dexiang	54,000.00	–	–	–	54,000.00
WEI Zhongxin	54,000.00	–	–	–	54,000.00
Senior Management:					
DING Yanzhang	221,200.00	38,292.00	50,055.48	1,166,899.96	1,476,447.44
ZHANG Xianchong[3]	46,530.00	9,144.00	14,478.57	69,795.00	139,947.57
WU Chunli	199,100.00	38,292.00	50,055.48	1,019,800.00	1,307,247.48
YU Gang	196,900.00	38,292.00	50,055.48	1,042,909.16	1,328,156.64
ZHOU Hougui	196,900.00	38,292.00	50,055.48	1,033,809.16	1,319,056.64
CHEN Guanzhong	196,900.00	38,292.00	50,055.48	1,039,409.16	1,324,656.64
WU Yun	196,900.00	38,292.00	50,055.48	745,640.16	1,030,887.64
DUAN Qiurong	390,549.68	38,292.00	50,055.48	482,215.96	961,113.12

Notes:

1. Mr. Zhang Xianchong resigned as the deputy general manager of the Company on 12 March 2019 and resigned as the executive Director of the Company on 14 January 2020.

2. Mr. Zheng Qiyu passed away due to illness in December 2019.

3. Disclosure information is the pre-tax salary (including the 2016-2018 tenure incentives and the previous annual remuneration issued in 2019) issued to the Directors, supervisors and senior management of the Company during the Reporting Period, and the final remuneration of the senior management approved by the State-owned Assets Supervision Commission of the State Council for 2019 (excluding the previous annual remuneration issued in 2019) has not yet been determined. After confirmation, such information will be disclosed by way of a supplementary announcement.

15 DIRECTORS' AND SUPERVISORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

As at 31 December 2019, none of the Company, controlling shareholders of the Company or the companies under the same controlling shareholders with the Company was a party to any arrangement to entitle the Company's Directors, supervisors or their respective children below the age of 18 rights to acquire benefits by means of the acquisition of shares or debentures of the Company or any other body corporate.

16 DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS

Each of the Directors and supervisors has entered into a service contract with the Company for a term of three years. None of the Directors and supervisors of the Company has entered into a service contract with the Company or any of its subsidiaries which is not determinable within one year without the payment of compensation (other than statutory compensation).

17 DIRECTORS' AND SUPERVISORS' INTEREST AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As at 31 December 2019, based on the information available to the Company and to the best knowledge of the Directors, none of the Directors, supervisors and chief executives of the Company had any interest and short position in the shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which will have to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), or which will be required, pursuant to section 352 of the SFO, to be entered in the register referred to therein or which will be required to be notified to the Company and the Stock Exchange pursuant to the Model Code.

18 APPROVED INDEMNITY PROVISIONS

The Company has purchased the responsibility insurances for Directors, supervisors and senior management for an insurance period from 23 November 2019 to 22 November 2020 in an amount of US$40 million in accordance with code provision A.1.8 of the Corporate Governance Code. Except for such insurance, the Company has no valid indemnity provisions (as defined in Companies (Directors' Report) Regulation of the Chapter 622D of Hong Kong Laws) approved during the Reporting Period and at the time of approval of this report.

19 MANAGEMENT CONTRACTS

No contracts concerning the management and/or administration of the whole or any substantial part of the business of the Company were entered into or existed during the Reporting Period, except for the employment contracts.

20 SUBSTANTIAL SHAREHOLDERS' AND OTHER PERSONS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

As at 31 December 2019, after the reasonable enquiry by the Directors of the Company, the persons below (other than the Directors, supervisors and chief executives of the Company) have interests or short positions in the shares or underlying shares which will have to be notified to the Company pursuant to Divisions 2 and 3 of Part XV of the SFO and which will be required to record in the register maintained by the Company pursuant to section 336 of the SFO:

Name of Shareholders	Class of Shares	Capacity/Nature of Interest	Number of Shares interested*	Approximate percentage of shareholding in the Company's total issued share capital (%)[1]	Approximate percentage of shareholding in the Company's total issued domestic shares (%)[1]	Approximate percentage of shareholding in the Company's total issued H shares (%)*[1]
Energy China Group[2]	Domestic Shares	Beneficial owner	18,107,684,022(L)	60.32	87.23	–
		Interest of controlled corporation	98,542,651(L)	0.33	0.47	–
	H Shares	Beneficial owner	578,884,000(L)	1.93	–	6.25
China Reform Holdings Corporation Ltd. (中國國新控股有限責任公司)[3]	Domestic Shares	Beneficial owner	2,029,378,794(L)	6.76	9.78	–
	H Shares	Interest of controlled corporation	633,704,000(L)	2.11	–	6.84
China Huaxing Group Company (中國華星集團公司)[3]	H Shares	Interest of controlled corporation	633,704,000(L)	2.11	–	6.84
China Huaxing (Hong Kong) International Co., Ltd. (中國華星(香港)國際有限公司)[3]	H Shares	Beneficial owner	633,704,000(L)	2.11	–	6.84
Buttonwood Investment Holding Company Ltd.[4]	H Shares	Interest of controlled corporation	1,462,338,000(L)	4.87	–	15.79
Silk Road Fund Co., Ltd. (絲路基金有限責任公司)[4]	H Shares	Beneficial owner	1,462,338,000(L)	4.87	–	15.79
Central Huijin Investment Ltd.[5]	H Shares	Interest of controlled corporation	961,300,000(L)	3.20	–	10.38
China Construction Bank Corporation[5]	H Shares	Investment manager	961,300,000(L)	3.20	–	10.38
State Grid Corporation of China[6]	H Shares	Interest of controlled corporation	974,892,000(L)	3.25	–	10.53
State Grid International Development Co., Ltd.[6]	H Shares	Interest of controlled corporation	974,892,000(L)	3.25	–	10.53
State Grid International Development Limited[6]	H Shares	Beneficial owner	974,892,000(L)	3.25	–	10.53
E Fund Management Co., Ltd (易方達基金管理有限公司)	H Shares	Investment manager	961,300,000(L)	3.20	–	10.38

Notes:

Letter “L” means long position in the securities and letter “S” means short position in the securities.

(1) The calculation is based on the shareholding in the Company’s 9,262,436,000 issued H shares, 20,757,960,364 issued domestic shares and 30,020,396,364 shares of the total issued share capital as at 31 December 2019.

(2) EPPE Company is a wholly-owned subsidiary of Energy China Group and is interested in the 98,542,651 domestic shares, representing 0.47% of the domestic share capital of the Company. Therefore, Energy China Group is deemed to be interested in the domestic shares held by EPPE Company.

(3) These shares are directly held by China Huaxing (Hong Kong) International Co., Ltd. (中國華星(香港)國際有限公司). China Huaxing (Hong Kong) International Co., Ltd. (中國華星(香港)國際有限公司) is wholly owned by China Huaxing Group Company (中國華星集團公司); and China Huaxing Group Company (中國華星集團公司) is wholly owned by China Reform Holdings Corporation Ltd. (中國國新控股有限責任公司). Therefore, China Huaxing Group Company (中國華星集團公司) and China Reform Holdings Corporation Ltd. (中國國新控股有限責任公司) are deemed to be interested in shares held by China Huaxing (Hong Kong) International Co., Ltd. (中國華星(香港)國際有限公司).

(4) These shares are directly held by Silk Road Fund Co., Ltd.. Buttonwood Investment Holding Company Ltd. holds 65% equity interests in Silk Road Fund Co., Ltd.. Therefore, Buttonwood Investment Holding Company Ltd. is deemed to be interested in shares held by Silk Road Fund Co., Ltd..

(5) Central Huijin Investment Ltd. holds 57.31% equity interests in China Construction Bank Corporation. Therefore, Central Huijin Investment Ltd. is deemed to be interested in shares held by China Construction Bank Corporation.

(6) These shares are directly held by State Grid International Development Limited. State Grid International Development Limited is wholly-owned by State Grid International Development Co., Ltd.; while the latter is wholly-owned by State Grid Corporation of China. Therefore, State Grid International Development Co., Ltd. and State Grid Corporation of China are deemed to be interested in the shares held by State Grid International Development Limited.

21 INTEREST OF DIRECTORS IN COMPETING BUSINESSES

Except as disclosed below, none of the Directors or their associates directly or indirectly has any interest in the businesses which constitute or may constitute competition with the business of the Company.

Names of directors	Company	Energy China Group
WANG Jianping	Executive Director and Chairman of the Board	Chairman of the Board
DING Yanzhang	Executive Director, Vice Chairman of the Board and General Manager	Director and General Manager

22 COMPETING BUSINESSES

22.1 Overall Business Competition

Among the enterprises owned by Energy China Group, the competition between China Energy Engineering Group Beijing Electric Power Construction Company (中國能源建設集團北京電力建設公司) and the Company is limited for the following reasons: Beijing Power Construction is mainly engaged in construction work for power engineering, municipal engineering and new energy engineering, whereas the Company's business consists of five segments, including survey, design and consulting, construction and contracting, industrial manufacturing, clean energy, environmental protection and water utilities, investment and others, which enables the Company to provide one-stop integrated solutions and full life-cycle project management services. In 2019, the revenue and the contract value of Beijing Power Construction were quite minimal which compared with the revenue and the contract value of the construction and contracting segment of the Company as of the same period.

China Energy Engineering Group Shanxi No. 2 Electric Power Construction Engineering Co., Ltd. (中國能源建設集團山西省電力建設二公司), a subsidiary of Energy China Group, has completely ceased its production and operation activities and formally filed a bankruptcy petition according to laws with the local court in December 2019, and therefore does not have any business competition with the Company.

22.2 Avoidance of Horizontal Competition

In order to protect the interests of the Company and the shareholders, the Company renewed the Entrusted Operation Management Agreement with Energy China Group in December 2019 to continue to entrust Beijing Power Construction to the management of CGGC Group, a subsidiary of the Company. Pursuant to the agreement, the Company can exercise various management and operation rights over Beijing Power Construction, and has been granted pre-emptive rights over the entrustment companies under certain circumstances. Therefore, the Company is able to effectively manage and control the competition between Beijing Power Construction and the Company.

22.3 Compliance with Non-Competition Undertakings

To further avoid potential competition from Energy China Group, Energy China Group has issued a non-competition undertaking and undertook that Energy China Group will not engage in any business which directly or indirectly competes with the principal businesses of the Company.

23 CONNECTED TRANSACTIONS

During the Reporting Period, since Energy China Group is the controlling shareholder of the Company, EPPE Company and Asset Management Company are subsidiaries of Energy China Group, and Hubei Provincial Communications Investment Group and its subsidiaries, Chutian Expressway and Hubei Transportation, are connected persons of the Company at a subsidiary level, and thus constitute the connected persons of our Company as defined under Chapter 14A of the Listing Rules; Finance Company, Guangdong Equipment Company and Gezhouba Highway Company are subsidiaries of the Company. Thus, the following transactions in this chapter constitute the connected transactions under the Listing Rules.

23.1 Continuing Connected Transactions

23.1.1 Financial Services Framework Agreement 2018-2020

In order to further improve the profitability of the Group as a whole, expedite the monitoring of the use and application of funds within the Group and provide the Group with higher bargaining power, as considered and approved at the second meeting of the second session of the Board of the Company, Finance Company, a subsidiary of the Company and Energy China Group entered into the Financial Services Framework Agreement 2018-2020 and announced on 29 January 2018. Pursuant to the agreement, Finance Company will provide deposit and credit guarantee financial services to Energy China Group and its subsidiaries from 2018 to 2020. Among which, the maximum daily credit balance limit provided by Finance Company to Energy China Group and its subsidiaries is RMB1.6 billion (inclusive); and the maximum charge for other financial services provided by Finance Company to Energy China Group and its subsidiaries is no more than RMB30 million.

In 2019, the maximum daily credit balance provided by Finance Company to Energy China Group and its subsidiaries was RMB949 million; Finance Company charged RMB8,700 for other financial services provided to Energy China Group and its subsidiaries.

23.1.2 Daily Production and Operation Framework Agreement 2018-2020

In order to improve the operation efficiency and reduce the operation costs and risks of the Company, and enable the Group to conduct its business more extensively and fully master the industry development information, as considered and approved at the second meeting of the second session of the Board of the Company, the Company and Energy China Group entered into the Daily Production and Operation Framework Agreement 2018-2020 and announced on 29 January 2018. Pursuant to the agreement, the Group and Energy China Group and its subsidiaries will provide each other with daily production and operation services, including project survey and design, planning and consulting, labor services, integrated information services, construction, installation and other daily services related to the principal businesses from 2018 to 2020. Among which, the annual cap of fee for services provided to the Group by Energy China Group and its subsidiaries is RMB1.5 billion; the annual cap of fee for services provided to Energy China Group and its subsidiaries by the Group is RMB1.5 billion.

In 2019, the total fee for services provided to the Group by Energy China Group and its subsidiaries was RMB200 million; the total fee for services provided to Energy China Group and its subsidiaries by the Group was RMB49 million.

23.1.3 Property Lease Framework Agreement 2018-2020

In order to ensure the smooth operation and save costs, as considered and approved at the second meeting of the second session of the Board of the Company, the Company and Energy China Group entered into the Property Lease Framework Agreement 2018-2020 and announced on 29 January 2018. Pursuant to the agreement, the Group leased relevant properties from Energy China Group and its subsidiaries from 2018 to 2020 and the annual cap for lease amounts is RMB500 million.

In 2019, the actual rents of the Group's leased properties from Energy China Group and its subsidiaries amounted to RMB155 million.

23.1.4 Daily Production and Operation Service Framework Agreement 2019-2020 with Hubei Provincial Communications Investment Group

In order to enable the Group to conduct its business more broadly and grasp industry development information more comprehensively, as considered and approved at the tenth meeting of the second session of the Board of the Company, the Company and Hubei Provincial Communications Investment Group entered into the Daily Production and Operation Service Framework Agreement 2019-2020 and announced on 22 May 2019. Pursuant to the agreement, during 2019 to 2020, the Group will provide construction and labour services and sell related goods to Hubei Provincial Communications Investment Group and its subsidiaries, with the annual cap for services provided of RMB2 billion and the annual cap for sales of related goods of RMB1 billion.

In 2019, the total fee for services provided to the Hubei Provincial Communications Investment Group and its subsidiaries by the Group was RMB1.06 billion; the total fee for related goods sold to Hubei Provincial Communications Investment Group and its subsidiaries by the Group was RMB691 million.

23.2 One-off Connected Transactions

23.2.1 Capital Increase to and Share Expansion in Finance Company

In order to raise the capital adequacy ratio of Finance Company, as well as enhance the financial service capability and strengthen the ability to resist risks, as considered and approved at the seventh meeting of the second session of the Board of the Company, the agreement in relation to the capital increase to Finance Company was entered into between the Company, CEEPE, a subsidiary of the Company and EPPE Company, a subsidiary of the Energy China Group on 27 December 2018. Pursuant to the agreement, EPPE Company, the connected person of the Company, plans to contribute approximately RMB83 million to Finance Company (the final amount shall be subject to the filings required by the State-owned Assets Supervision and Administration Commission of the State Council). Following the completion of the capital increase, (i) the registered capital of Finance Company will increase from RMB1.9 billion to RMB3.0 billion; and (ii) equity interest in Finance Company will be held as to approximately 0.08% and 6.16% by Energy China Group and EPPE Company, respectively, and approximately 50.43%, 10.02%, 23.31% and 10% by the Company and its subsidiaries, CGGC Group, CGGC and CEEPE, respectively. Accordingly, the equity interest in Finance Company held by the Company and its subsidiaries will increase from 93.03% to 93.76%. Finance Company is a subsidiary of the Company before and after the capital increase.

In May 2019, EPPE Company completed a capital increase of RMB85 million to Finance Company as agreed.

23.2.2 One-off Connected Transaction for Acquisition of Assets

In order to realize the government land acquisition and storage, meet the needs of asset disposal, and obtain clear economic benefits, as considered and approved at the thirteenth meeting of the second session of the Board of the Company, on 21 November 2019, Guangdong Equipment Company, a subsidiary of the Company, agreed to acquire the surviving assets of the allocated land use right and the structures thereon at No. 5, Nanshi Road and No. 8, Nanshi Road, Haizhu District, Guangzhou, Guangdong Province of Asset Management Company at a consideration of RMB101 million, being the estimated value of the assets.

Agreement for the transaction was signed in 2019.

23.2.3 One-off Connected Transaction for Equity Transfer

In order to revitalize its stock assets and improve the efficiency of capital, as considered and approved at the thirteenth meeting of the second session of the Board of the Company, Gezhouba Highway Company, a subsidiary of the Company disposed of its 100% equity interest in Daguangbei Company by the open bidding process in China Beijing Equity Exchange. On 27 December 2019, the day when the bidding ended, transaction price was determined at RMB3.457 billion, and Gezhouba Highway Company entered into a property rights transaction contract with Chutian Smart and Hubei Transportation, and announced on the same date.

The transaction was completed in 2019 as set out in agreement.

The above transactions comply with the relevant requirements in Chapter 14A of the Listing Rules. Save as disclosed in this annual report, there are no connected transactions that are required to be disclosed in this annual report under the relevant requirements of Chapter 14A of the Listing Rules by the Company for the year ended 31 December 2019. Details of the connected transactions in relation to Energy China Group have been included in transactions between the ultimate holding company and the fellow subsidiaries in Notes to the Financial Statements. These connected transactions are disclosed by the Company as required by Chapter 14A of the Listing Rules. For details, please refer to the Company's announcements on the website of the Stock Exchange and the Company.

23.3 Independent Non-executive Directors' Confirmation

The independent non-executive Directors of the Company have reviewed the continuing connected transactions of the Company, and confirmed that:

i. The transactions belonged to or were entered into in the ordinary and usual course of business of the listed issuer;

ii. The terms of the transactions are fair and reasonable and were conducted on normal commercial terms or better terms;

iii. The transactions were carried out pursuant to the agreed terms of the relevant transactions and in the interests of the listed issuer's shareholders as a whole.

23.4 Independent Auditor's Confirmation

Pursuant to Chapter 14A.56 of the Listing Rules, the Board engaged auditors of the Company to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 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 auditors have issued their unqualified letter containing their findings and conclusions in respect of the continuing connected transactions. Copies of the auditors' letter has been provided by the Company to the Stock Exchange.

Based on the work conducted, the auditors of the Company have provided a letter to the Board confirming that, in terms of the continuing connected transactions disclosed above:

(1) The auditors have not noted any of the events enabling the auditors to believe that the disclosed continuing connected transactions have not been approved by the Board of the Company.

(2) In respect of the continuing connected transactions conducted by the Group, the auditors have not noted any events enabling the auditors to believe that the transactions were not, in all material respects, conducted in accordance with the pricing policies of the Group.

(3) The auditors have not noted any of the events enabling the auditors to believe that the transactions were not conducted, in all material respects, in accordance with the agreements relating to the transactions.

(4) In respect of the total amount of each continuing connected transaction disclosed above, the auditors have not noted any of the events enabling the auditors to believe that the amount of the continuing connected transactions has exceeded the annual caps as set out by the Company.

24 REPURCHASE, SALE AND REDEMPTION OF THE LISTED SECURITIES OF THE COMPANY

As of 31 December 2019, there is no repurchase, sale or redemption of the listed securities of the Company by the Company or any of its subsidiaries.

25 EQUITY-LINKED AGREEMENT

During the Reporting Period, the Company and its subsidiaries neither entered into any agreements in relation to equity-linked products nor participated in any arrangements to purchase equity-linked wealth management products.

26 ARRANGEMENT FOR PRE-EMPTIVE RIGHT AND SHARE OPTION

According to the Articles of Association and relevant laws of China, shareholders of the Company have no pre-emptive right. During the Reporting Period, the Company has no arrangement for pre-emptive right or share option.

27 BANK AND OTHER BORROWINGS

Details of the bank and other borrowings of the Company are set out in note 31 to the Consolidated Financial Statements of this annual report.

28 REMUNERATION AND EQUITY-INCENTIVE POLICY

The Company comprehensively established a scientific, reasonable, open and fair, standardized and orderly remuneration management system. With emphasis on incentives and constraints, and adhering to the efficiency-oriented principle, the Company continued to achieve economic growth while achieving staffs' income growth. The Company established a sound system for determining the total amount of wages and mechanism for the regular wage increases for employees, whereby corporate efficiency varies with the salary and wages in the same direction. The Company has implemented the employees' basic salary system based on the performance of positions as the main remuneration policy, in which the salary and wages of employees are closely aligned with the respective position and actual contribution of individual employee according to the "position-based and performance-linked" policy, highlighting performance and contribution, which promotes more reasonable distribution of income.

Pursuant to the requirements of the relevant policy of the SASAC under the State Council, the Company determined the remuneration of the Directors based on the remuneration standard of the listed state-owned peers in the industry. Among which, the remuneration of the chairman of the Board of the Company is based on the remuneration standard stipulated by the SASAC under the State Council, the remuneration of the executive Directors who are also senior management is based on the results of their performance appraisal and the relevant regulatory requirements on remuneration.

In order to maximize the proactiveness of the senior management and key employees and to support the realization of the Company's strategy and sustainable development, upon consideration and approval at the first extraordinary general meeting of 2016 of the Company, the Company adopted the Restricted Share Incentive Scheme of China Energy Engineering Corporation Limited on 21 November 2016. On 16 November 2018, as resolved by the Board of Directors of the Company, the conditions for unlocking of the first unlocking period under the initial grant of restricted shares for the restricted share incentive scheme approved on 21 November 2016 have been fulfilled. Upon the approval of the above resolution, the first unlocking period is between the first trading day after 24 months since the date of initial grant to the last trading day within 36 months since the date of grant. The actual number of grantees under the initial grant of the Company was 516 and the total number of restricted shares of the Company granted thereunder was 273.674 million (for details, please refer to the 2018 annual report of the Company), of which 481 has fulfilled the conditions for this unlocking, 83.994 million restricted shares granted to them were unlocked on 22 November 2018.

As resolved by the Board on 21 November 2019, since the Company had not fulfilled the assessment conditions for the second period of unlocking, the Company transferred the incentive scheme participants' restricted shares of the Company to be unlocked in the second period of unlocking back to the entrusted management agency according to the grant price. Pursuant to which, the Company transferred 504 incentive scheme participants' restricted shares of the Company, representing 92.78 million shares, to the entrusted management agency according to the grant price. The aggregate amount paid by the Company was RMB54.7402 million. Save as disclosed above, as of 31 December 2019, according to the restricted share incentive scheme, no restricted shares have been granted, lapsed or cancelled.

Save for the above-mentioned Restricted Share Incentive Scheme, the Company did not implement any share option scheme during 2019.

29 STAFF RETIREMENT BENEFITS

Details of the staff retirement benefits of the Company are set out in note 34 to the Consolidated Financial Statements of this annual report.

30 DONATIONS

The Company made donations of a total amount of RMB13.72 million in 2019. The donations were made mainly through People's Government at the county level or above and other social welfare organizations to designated poverty areas, education, medical and healthcare, public relief and public welfare.

31 COMPLIANCE WITH CORPORATE GOVERNANCE CODE

The Company has complied with all the code provisions set out in the Corporate Governance Code during the Reporting Period. Details are set out in the "Corporate Governance Report" of this annual report.

32 INDEPENDENT AUDITORS

The Company has appointed KPMG, BDO China Shu Lun Pan Certified Public Accountants LLP and Zhongxinghua Certified Public Accountants LLP as its international and domestic auditors of the Company, respectively, for the financial statements for the year ended 31 December 2019.

Deloitte Touche Tohmatsu was engaged as the international auditor of the Company for the years of 2015 and 2016. As resolved at the general meeting of the Company held on 8 June 2017, it was resolved to appoint KPMG as its international auditor.

33 COMPLIANCE WITH RELEVANT LAWS

After listing on the Main Board of the Stock Exchange, the Company is subject to the Company Law, the Listing Rules, the SFO and other related laws and regulations domestically and internationally. The Company complies with the following key regulatory requirements:

The SASAC and other Chinese government departments (including but not limited to Ministry of Finance, State Taxation Administration, National Audit Office, State Administration for Market Regulation, People's Bank of China, Ministry of Human Resources and Social Security) have made inquiries and on-site inspection or off-site survey to the Company's compliance with Chinese laws and regulations in terms of state-owned assets management, financial condition and business operation, solvency status, tax payment, foreign exchange management, labour and social welfare, etc.

Compliance with the Listing Rules and the SFO, including but not limited to fulfilling the followings: safe-keeping the register of interests in shares and short positions and the register of interests and short positions of Directors, supervisors and chief executives, disclosure of inside information, etc. The Company has implemented internal control to ensure its compliance with such laws and regulations. To the best of our knowledge, there are no legal issues that may, in the opinion of the Directors, have material adverse effects on the corporate business, financial condition, business performance or prospects as of the end of the Reporting Period.

34 ENVIRONMENTAL POLICY AND PERFORMANCE OF THE COMPANY

In 2019, the Company revised the Management Regulations on Environmental Protection of China Energy Engineering Corporation Limited, the Measures for Environmental Protection Assessment and Reward and Punishment of China Energy Engineering Corporation Limited and the Measures for Environmental Incident Report, Investigation and Treatment of China Energy Engineering Corporation Limited to implement classification and grading management model and further clarify the environmental responsibility of enterprises at all levels. The Company put forward the differentiated management and control points according to the types of projects, strengthening the environmental protection supervision in key areas such as investment and construction projects and factories (industrial enterprises). The Company implemented innovative assessment and evaluation methods in 2019, where it formulated comprehensive assessment rules emphasizing on both "goal" and "process", and introduced new index scoring rules to clarify the assessment requirements for affiliated enterprises.

The Company implemented the development philosophies of being "green", adhered to the development red line of environmental protection, and promoted the improvement of the Company's environmental protection level through innovative management and continuous improvement under the premise of ensuring that all indicators met the standards stably. The Company adhered to green production and optimized the construction plan, which enabled the Company to achieve remarkable results in dust, noise, waste residue and waste water treatment. The Company got involved in green engineering projects, actively promoted energy conservation and ecological protection technologies, undertook green engineering projects and promoted protects including comprehensive treatment for the water environment to improve the quality of local water environment. The Company developed the environmental protection industry and built a demonstration line for the cement kiln co-processing of household wastes, realizing the reduction, recycling and harmlessness of domestic waste. CGGC Group was awarded China Environmental Excellence Award, the highest social award in the field of environmental protection in China, showing its development concept of going green to the society.

In 2019, the Company did not have any environment-related incidents.

35 COMPLIANCE WITH OFAC UNDERTAKINGS

The Overseas Risk Management Committee of the Company will be specifically assigned to supervise the projects that will be conducted in sanctioned countries or those persons or entities who will be sanctioned by OFAC, the United Nations and other agencies. The Company has requested its subsidiaries to conduct international business in accordance with the Detailed Rules on the Work of the Overseas Risk Management Committee of China Energy Engineering Corporation Limited. During the Reporting Period, the Company convened four meetings of the Overseas Risk Management Committee, complying with the working requirements for the overseas risk management.

According to the legal advice provided by professional lawyers, the Company has not received any inquiries from any relevant agencies in the US, as overseas items of the Company did not involve the target behaviors indicated in the OFAC guidelines.

36 PUBLIC FLOAT

As of the date of this report, the shares of the Company held by the public accounted for 30.85% of the total shares of the Company. The capital structure of the Company maintained sufficient public float and complied with the requirements of the Listing Rules.

37 REVIEW OF ANNUAL REPORT

The Audit Committee has reviewed the Company's annual results of 2019, and the financial statements for the year ended 31 December 2019 prepared in accordance with International Financial Reporting Standards.

38 INFORMATION ON TAX REDUCTION AND EXEMPTION FOR HOLDERS OF H SHARES

38.1 Individual Investors

According to the Notice on the Management of Personal Income Tax Imposed after the Abolition of Guo Shui Fa [1993] No. 045 Document issued by the State Administration of Taxation (Guo Shui Han [2011] No. 348) (《國家稅務總局關於國稅發[1993] 045號文件廢止後有關個人所得稅征管問題的通知》(國稅函[2011] 348號)), the dividends and bonuses received by foreign resident individual shareholders from the issuance of shares in Hong Kong by domestic non-foreign invested enterprises is subject to the payment of individual income tax according to the items of "interests, dividend and bonus income", which shall be withheld and paid on behalf of the shareholders by the withholding and payment agents. The foreign resident individual shareholders who hold the shares issued by domestic non-foreign invested enterprises in Hong Kong are entitled to the relevant preferential tax treatment pursuant to the provisions in the tax agreements signed between the countries where they reside and China and the tax arrangements between mainland and Hong Kong (Macau). The tax rate for dividends under the relevant tax agreements and tax arrangements is generally 10%, and for the purpose of simplifying tax administration management, domestic non-foreign invested enterprises issuing shares in Hong Kong may, when distributing dividends and bonuses, generally withhold and pay individual income tax at the rate of 10%, and are not obligated to file an application. If the tax rate for dividends is not equal to 10%, the following provisions shall apply: (1) for citizens from countries which have entered into tax agreements stipulating a tax rate of lower than 10%, the withholding and payment agents will file applications on their behalf to seek entitlement of the relevant agreed preferential treatments, and upon review and approval by the tax authorities, the excess tax amounts withheld and paid will be refunded; (2) for citizens from countries which have entered into tax agreements stipulating a tax rate of higher than 10% but lower than 20%, the withholding and payment agents will withhold and pay the individual income tax at the agreed-upon effective tax rate when distributing dividends, and are not obligated to file an application; (3) for citizens from countries without tax agreements or are under other situations, the withholding and payment agents will withhold and pay the individual income tax at a tax rate of 20% when distributing dividends and bonuses.

According to the Arrangement between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (Guo Shui Han [2006] No. 884) (《內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排》(國稅函[2006] 884號)) signed on 21 August 2006, the Chinese government may impose tax on dividends payable by the Chinese companies to Hong Kong residents, but the tax should not exceed 10% of the total dividend payable, if Hong Kong residents directly hold at least 25% equity interest in the Chinese company, the relevant tax shall not exceed 5% of the total dividend payable by the Chinese company.

38.2 Enterprises

According to the Enterprise Income Tax law of the People's Republic of China (《中華人民共和國企業所得稅法》) and the Regulations on the Implementation of the Enterprise Income Tax Law of the People's Republic of China (《中華人民共和國企業所得稅法實施條例》) effective on 1 January 2008, if non-resident enterprises establish no organizations and sites within the territory of China, or though they have established certain organizations and sites but the dividends and bonuses received have actually not correlated to the organizations and sites established, such enterprises shall pay the enterprise income tax at the rate of 10% of its income from the Chinese territory. Such withholding tax may be reduced pursuant to applicable treaties for the avoidance of double taxation.

According to the Notice on the Withholding and Payment of Enterprise Income Tax on the Dividends Distributed by the Chinese Resident Enterprise to Foreign H Share Non-resident Enterprise Shareholders (Guo Shui Han [2008] No. 897) (《關於中國居民企業向境外H股非居民企業股東派發股利代扣代繳企業所得稅有關問題的通知》 (國稅函[2008] 897號)) issued by the State Administration of Taxation and effective on 6 November 2008, when the Chinese resident enterprises distribute dividends of 2008 and subsequent years to foreign H share non-resident enterprise shareholders, they shall withhold and pay on behalf of the shareholders the enterprise income tax at the unified rate of 10%. Such withholding tax may be reduced pursuant to applicable treaties for the avoidance of double taxation.

Pursuant to the provisions in the Notice on Tax Policies Regarding Shanghai-Hong Kong Stock Connect Pilot Programs (Cai Shui [2014] No. 81) (《關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》 (財稅[2014] 81號)) issued by the Ministry of Finance, the State Administration of Taxation and CSRC, for the dividends and bonuses obtained by mainland individual investors from investing in H shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, such H share companies shall withhold individual income tax at the tax rate of 20%. For the dividends and bonuses obtained by mainland securities investment funds from investing in shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, the individual income tax will be levied pursuant to the provisions mentioned above. For the dividends and bonuses obtained by mainland enterprise investors from investing in shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, such H share companies shall not withhold any income taxes on the dividends and bonuses, as the income taxes shall be reported and paid by the investing enterprises on their own. Meanwhile, for the dividends and bonuses obtained by mainland resident enterprises from holding relevant H shares for consecutive 12 months, the corporate income taxes shall be exempted according to laws.

Pursuant to the current practices of Inland Revenue Department of Hong Kong, no taxes shall be paid for the dividends distributed by the Company.

The shareholders of the Company shall pay the relevant taxes and/or be entitled to tax reduction and exemption pursuant to the above provisions.

CORPORATE GOVERNANCE REPORT

The Company is firmly committed to maintaining the overall standards of corporate governance. It has adopted all the code provisions of the Corporate Governance Code as set out in Appendix 14 to the Listing Rules as its own code on corporate governance practices.

1 CORPORATE GOVERNANCE STRUCTURE

The Company conducts its business in strict accordance with the relevant laws and regulations and regulatory documents such as Company Law, Securities Law, Listing Rules as well as requirements of the Articles of Association. The Company has set up an internal governance structure composed of the general meeting, the Board of Directors and its special committees, the Board of Supervisors and the Senior Management, clarifying the work mechanism of the Company's party committee conducting prepositive researches and debates on major issues and the special committees under the Board of Directors listening to work reports on a regular basis. The system framework and managing mechanism is optimized with clear procedures and sufficient information communications. During the Reporting Period, each internal governance department was operated independently and effectively with their respective duties and obligations being fully fulfilled.

2 COMPLIANCE WITH THE CODE PROVISIONS OF CORPORATE GOVERNANCE CODE

As a listed company on the Main Board of the Stock Exchange, the Company has adopted the Corporate Governance Code as the relevant corporate governance code of the Company, and has always complied with all the code provisions of the Corporate Governance Code during the Reporting Period.

3 COMPLIANCE WITH MODEL CODE BY THE DIRECTORS AND SUPERVISORS

The Company has formulated and implemented internal conduct code which is no less than the Model Code as the code of conduct regarding securities transaction by the Directors and supervisors.

Having made specific enquiry of all Directors and supervisors, the Company confirms that all Directors or supervisors of the Company have complied with the required standard set out in the Model Code during the Reporting Period.

4 SHAREHOLDERS

4.1 Rights of Shareholders

According to the Articles of Association, the procedures for convening an extraordinary general meeting, making inquiries to the Board and putting forward proposals at the general meetings by the shareholders are as follows:

a) Convening an Extraordinary General Meeting

Shareholders individually or collectively holding 10% (including 10%) or more of the shares with voting rights at the proposed meeting may sign one or more written requests in the same format and content and deliver to the Board for calling an extraordinary general meeting or a class meeting, stating the subjects of the meeting. The Board shall call an extraordinary general meeting or a class meeting as soon as possible after receiving the aforementioned written requests.

b) *Making Inquiries to the Board*

To inquire about matters related to the Company with the Board of Directors, shareholders can email us at: dongban3996@ceec.net.cn.

c) *Putting Forward Proposals at the General Meeting*

(1) The Company convenes a general meeting, at which shareholders individually or collectively holding 3% or more of the shares of the Company are entitled for proposing resolutions to the Company. Shareholders individually or collectively holding 3% or more of the shares of the Company are entitled for proposing extraordinary resolutions and submitting the same in writing to the convener 10 days before the convening of the general meeting. The convener shall issue a supplemental notice of the general meeting to announce the content of the extraordinary resolutions within 2 days after receiving the proposal.

(2) When convening a general meeting, the Company shall give a written meeting notice to all shareholders 45 days before the date of the meeting. Shareholders who intend to attend the general meeting shall reply the Company in writing that they will attend the meeting within 20 days prior to the convening of the meeting.

As a channel to promote effective communication, the Company publishes its announcements, financial data and other relevant data on the website. For enquiry, shareholders may directly send a letter to the Company's principal place of business in Hong Kong. The Company will handle all enquiries with an appropriate method in a prompt manner.

The Board welcomes views of shareholders and encourages them to attend general meetings to raise any concerns they might have with the Board or the management directly. The chairman of the Board as well as the chairmen of all committees are normally present at the annual general meetings and other general meetings of the Company to answer questions raised.

The detailed voting procedures and the voting by poll have been contained in the shareholder circular sent earlier.

4.2 General Meeting

During the Reporting Period, the Company convened one general meeting, details of which are as follows:

Name of the meeting	Time	Meeting manner	Number of shareholders or authorized representative attended	Number of shares represented	The percentage of total share capital
Annual general meeting of 2018	28 June 2019	Onsite	6	23,779,294,330	79.21%

The above general meeting was convened in compliance with relevant legal procedures which safeguarded shareholders' rights of participation and exercise of their rights.

5 BOARD OF DIRECTORS

5.1 Composition of the Board

During the Reporting Period, the composition of the Board is as follows (the term of office of all non-executive Directors was effective from 28 December 2017 and will end upon the expiry of the second session of the Board of the Company, and the term of office is three years):

No.	Name	Position
1	WANG Jianping	Chairman of the Board and Executive Director
2	DING Yanzhang	Vice chairman of the Board, Executive Director and General Manager
3	ZHANG Xianchong[1]	Executive Director and Deputy General Manager
4	MA Chuanjing	Non-executive Director
5	LIU Xueshi	Non-executive Director
6	SI Xinbo	Non-executive Director
7	DING Yuanchen	Independent Non-executive Director
8	ZHENG Qiyu	Independent Non-executive Director (passed away due to illness in December 2019)
9	CHEUNG Yuk Ming	Independent Non-executive Director

Note:

1 The resignation of Mr. ZHANG Xianchong as the deputy general manager of the Company was considered and approved at the eighth meeting of the second session of the Board held by the Company on 12 March 2019. He resigned as the executive Director of the Company on 14 January 2020.

All the Directors of the Company do not have any financial, business, family or other material relationship with each other.

Mr. Zheng Qiyu passed away due to illness in December 2019. The Board of the Company comprises only two independent non-executive Directors, one of whom is an independent non-executive Director with appropriate professional qualifications or related accounting and financial management expertise as required under Rule 3.10(2) of the Listing Rules; Remuneration and Assessment Committee of the Board comprises only two members, with one non-executive Director and one independent non-executive Director. The Company did not comply with (i) Rule 3.10(1) of the Listing Rules, where the Board shall include at least three independent non-executive Directors; (ii) Rule 3.10A of the Listing Rules, where the number of the independent non-executive Directors shall represent one-third of the total number of members of the Board; and (iii) Rule 3.25 of the Listing Rules, where the remuneration committee shall be chaired by an independent non-executive Director, and the majority of whom shall be independent non-executive Directors. As at the date of this report, the Company has adopted measures and used its best endeavours to seek suitable candidates so as to fill the vacancies as soon as practicable by which to comply with relevant regulations of Listing Rules. The Company will make further announcements in due course.

Pursuant to the Articles of Association, the term of office of a Director is three years, and may hold consecutive terms upon re-election. The term of office of each independent non-executive Director is limited to a maximum term of six years to ensure his/her independence. As of the date of this report, the Company has received the confirmation of independence from each of the independent non-executive Directors made in accordance with Rule 3.13 of the Listing Rules. The Company confirms that each of the independent non-executive Directors is independent.

5.2 Board Meetings

In 2019, the Company held six Board meetings in total. A total of 41 resolutions were considered and passed at the meetings, including the 2019 Production and Operation Plan and the Work Report of the Board of Directors.

The table below sets out the details of Board meeting attendance of each director during the Reporting Period:

	Attendance of Board Meeting				Attendance of General Meeting		
Director(s)	Number of meetings required to attend	Number of meetings attended in person	Number of attendance by proxy	Attendance rate	Number of meetings required to attend	Number of meetings attended in person	Attendance rate
WANG Jianping	6	6	0	100%	1	1	100%
DING Yanzhang[1]	6	4	2	100%	1	1	100%
ZHANG Xianchong[2]	6	3	3	100%	1	0	0
MA Chuanjing	6	6	0	100%	1	1	100%
DING Yuanchen	6	6	0	100%	1	1	100%
ZHENG Qiyu[3]	6	5	1	100%	1	1	100%
LIU Xueshi[4]	6	2	4	100%	1	0	0
SI Xinbo[5]	6	3	3	100%	1	0	0
CHEUNG Yuk Ming	6	6	0	100%	1	1	100%

Notes:

1 Mr. DING Yanzhang was unable to attend the eighth meeting of the second session of the Board of the Company held on 12 March 2019 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting; he was unable to attend the ninth meeting of the second session of the Board of the Company held on 29 March 2019 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting.

2 Mr. ZHANG Xianchong was unable to attend the eleventh meeting of the second session of the Board of the Company held on 28 June 2019 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting; he was unable to attend the annual general meeting of 2018 of the Company held on 28 June 2019 due to other work engagements; he was unable to attend the twelfth meeting of the second session of the Board of the Company held on 30 August 2019 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting; he was unable to attend the thirteenth meeting of the second session of the Board of the Company held on 21 November 2019 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting.

3 Mr. ZHENG Qiyu was unable to attend the thirteenth meeting of the second session of the Board of the Company held on 21 November 2019 due to personal health issue, and designated Mr. CHEUNG Yuk Ming as proxy to attend the meeting; Mr. ZHENG Qiyu passed away due to illness in December 2019.

4 Mr. LIU Xueshi was unable to attend the ninth meeting of the second session of the Board of the Company held on 29 March 2019 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting; he was unable to attend the eleventh meeting of the second session of the Board of the Company held on 28 June 2019 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting; he was unable to attend the annual general meeting of 2018 of the Company held on 28 June 2019 due to other work engagements; he was unable to attend the twelfth meeting of the second session of the Board of the Company held on 30 August 2019 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting; he was unable to attend the thirteenth meeting of the second session of the Board of the Company held on 21 November 2019 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting.

5 Mr. SI Xinbo was unable to attend the ninth meeting of the second session of the Board of the Company held on 29 March 2019 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting; he was unable to attend the eleventh meeting of the second session of the Board of the Company held on 28 June 2019 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting; he was unable to attend the annual general meeting of 2018 of the Company held on 28 June 2019 due to other work engagements; he was unable to attend the twelfth meeting of the second session of the Board of the Company held on 30 August 2019 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting.

The Company adopts the practice of holding regular Board meetings and extraordinary Board meetings, at least four regular meetings annually and at approximately quarterly intervals. Notices are given not less than fourteen days in advance for all regular Board meetings to provide all Directors with an opportunity to attend and include related matters in the agenda for a regular meeting.

For extraordinary meetings of the Board and meetings of the special committees of the Board, reasonable notice is generally given. The agenda and accompanying meeting papers of extraordinary meetings of the Board and meetings of the special committees of the Board are dispatched to the Directors or members of the relevant special committees of the Board at least five days and three days, respectively, before the meetings to ensure that they have sufficient time to review the papers and be adequately prepared for the meetings.

5.3 The Board and the Management

The chairman of the Board and the general manager of the Company are held by different persons. The Board and the management respectively perform their own duties and take their own responsibilities. The division of duty is in strict compliance with the requirements under the Articles of Association, Rules of Procedure of the Board of China Energy Engineering Corporation Limited (《中國能源建設股份有限公司董事會議事規則》), By-laws for General Manager of China Energy Engineering Corporation Limited (《中國能源建設股份有限公司總經理工作細則》) and relevant laws and regulations.

1) Board of Directors

Major duties of the Board are as follows:

- Convening the general meetings and reporting its work to the general meetings;
- Implementing resolutions of the general meeting;
- Deciding the business plans and investment plans of the Company;
- Formulating the plans for annual financial budgets and final accounts of the Company;
- Formulating the plans for profit distribution and making up losses of the Company;
- Formulating proposals for the increase or reduction of registered capital and the issue of shares, debentures or other securities and the listing plan of the Company;
- Formulating plans for major acquisition, repurchase of the shares of the Company or the merger, division, dissolution or change of the nature of incorporation of the Company;

- Deciding matters such as external investment, acquisition and disposal of assets, pledge of assets, external guarantee, debt financing, entrusted wealth management and connected transactions, except those which shall be approved by the general meeting of the Company as prescribed by laws, regulations, departmental regulations or the Articles of Association;

- Deciding the establishment of the internal management organization of the Company;

- Appointing or removing the general manager and secretary to the Board of the Company; Appointing or removing deputy general managers and other senior management of the Company pursuant to the nominations of the general manager and deciding on their remuneration as well as reward and punishment;

- Formulating the basic management system of the Company;

- Preparing plans for amendments to the Articles of Association;

- Managing information disclosure matters of the Company;

- Proposing to the general meetings as to the appointment or change of the accounting firm for the auditing of the Company;

- Receiving the work reports of the general manager of the Company and reviewing the work of the general manager;

- Deciding the establishment of special committees of the Board and their compositions; and

- Exercising other functions and powers conferred by the laws, regulations and the listing rules of the stock exchange on which the shares of the Company are listed, at general meetings and the Articles of Association.

There are currently four special committees established under the Board, namely the Strategy Committee, the Nomination Committee, the Remuneration and Assessment Committee and the Audit Committee. Each of the special committees has its rules of procedure and is accountable to the Board. Under the centralized leadership of the Board, the special committees shall provide recommendations, opinions and advice for the decision to be made by the Board. The special committees may engage intermediary organizations to provide independent professional advice, and the relevant expenses shall be borne by the Company.

During the Reporting Period, the Board of Directors actively expanded information communication channels by launching 4 special investigations and 1 communication session between the chairman of the Board and independent non-executive Directors and listening to the work report of the general manager and the implementation of resolutions of the Board of Directors on a regular basis to enhance scientific decision-making of the Board of Directors and ensure that the Board performed effectively in accordance with the regulations. Meanwhile, the Board of Directors also set up a mechanism for the special committees of the Board to listen to work reports on a regular basis. The special committees under the Board of Directors listened to work report for seven times as an effort to stay updated with major issues.

2) *Management*

The Company has one general manager, who is responsible for and reports to the Board, and has several deputy general managers and a chief accountant to assist with the work of the general manager.

The general manager primarily performs the following duties:

- Being in charge of the production, operation and management of the Company, organizing and implementing resolutions of the Board and reporting to the Board;
- Organizing and implementing the annual business plans and investment plans of the Company;
- Drafting the plan for establishment of the internal management structure of the Company;
- Drafting the general management system of the Company;
- Formulating the detailed rules and regulations of the Company;
- Proposing to the Board the appointment or removal of the deputy general managers and chief accountant of the Company;
- Appointing or removing management personnel other than those required to be appointed or removed by the Board of Directors; and
- Exercising other functions and powers conferred by the Articles of Association or the Board.

At the request of the Board, the general manager timely provides important information relating to the Company's production and operation, entering into and performance of material contracts, capital and asset operation, profit or loss, etc. to the Board, regularly reports to the Board on his work, and ensures the truthfulness, objectiveness and completeness of such reports.

5.4 Continuous Professional Training of the Directors

The Company arranges regular seminars and training for Directors, providing them the latest development and updated information, if any changes, of the Listing Rules and other relevant laws and regulatory provisions from time to time.

During the Reporting Period, Directors of the Company received training on director responsibilities and related regulations, business ethics of listed companies other than regulation-specified, Corporate Governance Code and related amendments to the Listing Rules.

Director(s)	Director Responsibilities and related regulations	Training on business ethics of listed companies other than regulation-specified	Corporate Governance Code and amendments related to the Listing Rules
WANG Jianping	1	1	1
DING Yanzhang	1	1	1
ZHANG Xianchong	1	1	1
MA Chuanjing	1	1	1
DING Yuanchen	1	1	1
ZHENG Qiyu[1]	1	1	1
CHEUNG Yuk Ming	1	1	1
LIU Xueshi	1	1	1
SI Xinbo	1	1	1

1 Mr. ZHENG Qiyu passed away due to illness in December 2019.

5.5 Special Committees of the Board

5.5.1 Strategy Committee

Major duties of the Strategy Committee are: studying on the Company's medium and long-term development strategies, industrial restructuring, major organizational restructuring, major business restructuring plans, major investment and financing plans, major capital operation, asset management projects, and proposing recommendations on aforementioned matters to the Board of Directors.

At the end of the Reporting Period, the members of the Strategy Committee include WANG Jianping (executive Director), DING Yanzhang (executive Director), MA Chuanjing (non-executive Director) and SI Xinbo (non-executive Director). WANG Jianping is the chairman of the Strategy Committee. During the Reporting Period, the Strategy Committee convened 2 meetings to consider and approve 3 resolutions.. The following table shows the attendance of each committee member at the Strategic Committee meetings:

Committee member	Number of attendance	Number of attendance in person	Number of attendance by proxy
WANG Jianping	2	2	0
DING Yanzhang	2	1	1
MA Chuanjing	2	2	0
SI Xinbo	2	1	1

5.5.2 Nomination Committee

Major duties of the Nomination Committee are: formulating criteria, procedures and methods for selection of Directors and senior management of the Company and submitting them to the Board of Directors for consideration; reviewing the structure, size, composition and related qualifications of the Board of Directors, reviewing the composition of Board of Directors at diversified levels and overseeing the execution of the Board diversity policy; reviewing the independence of independent non-executive Directors; proposing human resources retention scheme and suggestions to the Company; proposing suggestions to the Board of Directors regarding appointment or re-appointment or Directors and succession planning of Directors.

At the end of the Reporting Period, the members of the Nomination Committee include WANG Jianping (executive Director), DING Yuanchen (independent non-executive Director) and CHEUNG Yuk Ming (independent non-executive Director). WANG Jianping is the chairman of the Nomination Committee. During the Reporting Period, the Nomination Committee convened 1 meeting, and considered 3 resolutions. The following table shows the attendance of each committee member at the Nomination Committee meeting:

Committee member	Number of attendance	Number of attendance in person	Number of attendance by proxy
WANG Jianping	1	1	0
CHEUNG Yuk Ming	1	1	0
DING Yuanchen	1	1	0

5.5.3 Remuneration and Assessment Committee

Major duties of the Remuneration and Assessment Committee are: proposing recommendations to the Board of Directors regarding the overall remuneration policies and structures of Directors and senior management of the Company; formulating the specific compensation packages for all executive Directors and senior management, and proposing recommendations to the Board of Directors regarding the remuneration of non-executive Directors; reviewing the job fulfillment of and carrying out annual performance assessment for related Directors and senior management; studying the Company's wages, benefits, reward and punishment policies and schemes, and proposing recommendations to the Board of Directors and overseeing its execution.

The performance appraisal and the remuneration allocation for executive Directors, who were supervised by the SASAC and served as the chairman of the Board, vice chairman of the Board or general manager of the Company, was implemented in accordance with the relevant requirements of the SASAC. The remuneration of Directors of the Company who served as the executive Directors is managed by the SASAC and is closely related to their positions and business performance assessment and should be reasonably differentiated and determined according to a certain proportion of the remuneration standards for principal persons in charge.

At the end of the Reporting Period, the members of Remuneration and Assessment Committee include ZHENG Qiyu (independent non-executive Director), CHEUNG Yuk Ming (independent non-executive Director) and LIU Xueshi (non-executive Director). ZHENG Qiyu is the chairman of the Remuneration and Assessment Committee. During the Reporting Period, the Remuneration and Assessment Committee convened 2 meetings, considered 5 resolutions and listened to 2 reports. The following table shows the attendance of each committee member at the Remuneration and Assessment Committee meetings:

Committee member	Number of attendance	Number of attendance in person	Number of attendance by proxy
ZHENG Qiyu	2	1	1
CHEUNG Yuk Ming	2	2	0
LIU Xueshi	2	2	0

Note: Mr. ZHENG Qiyu passed away due to illness in December 2019.

5.5.4 Audit Committee

Major duties of the Audit Committee are: conducting independent assessment and supervision on the compliance, legality and efficiency of the Company's operation activities on behalf of the Board, particularly including:

1. Making proposals to the Board regarding appointment, re-appointment and removal of the external auditor, approving the remuneration and terms of engagement of the external auditor, and handling any queries of its resignation or dismissal;

2. Reviewing and monitoring the external auditor's independence and objectivity and the effectiveness of the audit process in accordance with applicable accounting standards;

3. Developing and implementing policy on engaging an external auditor to provide non-audit services;

4. Monitoring the truthfulness, completeness and accuracy of the financial statements, reports and accounts of the Company, and reviewing significant financial reporting opinions contained therein;

5. Examining the Company's financial controls, internal control and risk management systems;

6. Being responsible for the communication between internal audit departments and external auditors in order to ensure coordination between the internal and external auditors;

7. Reviewing the financial and accounting policies and practices of the Company;

8. Considering the risk management strategies and solutions for key risk management issues of the Company;

9. Other duties conferred by the Board.

At the end of the Reporting Period, the members of the Audit Committee include Mr. DING Yuanchen (independent non-executive Director), Mr. MA Chuanjing (non-executive Director), and Mr. CHEUNG Yuk Ming (independent non-executive Director). Mr. DING Yuanchen is the chairman of the Audit Committee.

During the Reporting Period, the Audit Committee convened 4 meetings, and considered 10 resolutions and listened to 7 reports. The following table shows the attendance of each committee member at the Audit Committee meetings:

Committee member	Number of attendance	Number of attendance in person	Number of attendance by proxy
DING Yuanchen	4	4	0
MA Chuanjing	4	4	0
CHEUNG Yuk Ming	4	4	0

5.6 Board Diversity Policy

5.6.1 Purpose

With a view to achieving a sustainable and balanced development, the Company views the increasing diversity of the Board level as an essential element in supporting the attainment of its strategic objectives, enhancing the level of corporate governance, improving the efficiency of the Board, reducing management and control risk and maintaining its sustainable development. In designing the Board's composition, the Board diversity has been considered from a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. All appointments of the Board will be based on meritocracy, and candidates will be considered against objective criteria, having due regard for the benefits of diversity on the Board.

5.6.2 Measurable Objectives

Candidates of the Board of the Company will be selected based on a range of perspectives, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. The ultimate decision will be based on merit and contribution that the selected candidates will contribute to the Board. The Board's composition (including gender and age) will be disclosed in the annual report of the Company annually.

5.6.3 Monitoring and Reporting

The Nomination Committee of the Company will review annually the Board's composition under diversity perspectives, and monitor the implementation of the Board diversity policy.

5.7 Director Nomination Policy

The Director Nomination Policy is formulated in accordance with the Corporate Governance Code and relevant provisions of the Listing Rules, in which set out the selection criteria and nomination procedure of newly appointed and re-appointed Director.

Selection Criteria

– Impact on the Board's composition and the Board diversity, including but not limited to gender, age, cultural and educational background, area, professional experience, skills, knowledge and length of service of the candidate

– The commitment of the candidate putting in sufficient time involvement and effective discharge of duties

– The independence of the candidate

– The potential or actual conflict of interest with the candidate as a result of the selection

– The length of the service of the independent non-executive Directors proposed to be re-appointed

– The candidate submits the required personal information and letter of consent in prescribed format, agrees to be appointed as a non-executive Director, and agrees to publicly disclose the personal information on any documents or relevant websites in relation to the matters about the election of non-executive Director or anything related.

– If the Nomination Committee thinks as necessary, it can request the candidate to provide additional information and documents

– Making recommendation to the Board in relation to the succession planning of Director(s)

Nomination Procedure

– The Nomination Committee searches and selects the candidate in accordance with the selection criteria of the Nomination Policy

– If necessary, the Nomination Committee assesses the candidate, including but not limited to the personal interview and background check, etc.

– The Nomination Committee convenes the meeting of the Nomination Committee to consider the matters regarding nomination of the candidate, and forms a resolution

– The Nomination Committee proposes to convene the general meeting and the Board meeting to consider the matters regarding nomination of the candidate, and forms a resolution

– Appointing the Director(s) in accordance with the resolutions of the general meeting and the Board

Supervision and Review

The Nomination Committee of the Company is responsible for the monitoring of the execution of the Nomination Policy and re-examining the Nomination Policy when appropriate. The Nomination Committee shall discuss the amendments which have to be made and make recommendation to the Board and the revised Nomination Policy shall be implemented upon the approval of the Board.

5.8 Corporate Governance Functions

The Board recognizes that corporate governance shall be the collective responsibility of Directors, and the corporate governance functions include the followings:

(1) Developing and reviewing the Company's policies and practices on corporate governance and making recommendations to the Board;

(2) Reviewing and monitoring the training and continuous professional development of the Directors and senior management;

(3) Reviewing and monitoring the Company's policies and practices on compliance with legal and regulatory requirements;

(4) Developing, reviewing and monitoring the code of conduct and compliance manual (if any) applicable to employees and the Directors; and

(5) Reviewing the Company's compliance with the Listing Rules and disclosures in the Corporate Governance Report.

6 BOARD OF SUPERVISORS

The Board of Supervisors is responsible for supervising the legality of the performance of duties by the Directors and senior management of the Company, so as to protect the overall benefits of the Company and shareholders.

The Board of Supervisors of the Company is composed of 5 members. As of 31 December 2019, the Company's Board of Supervisors members included Mr. WANG Zengyong, Mr. LI Fangyi, Mr. KAN Zhen, Mr. FU Dexiang, and Mr. WEI Zhongxin. Mr. WANG Zengyong acts as the Chairman of the Supervisory Committee, and Mr. LI Fangyi and Mr. KAN Zhen act as employee representative supervisors.

During the Reporting Period, the Board of Supervisors convened 4 meetings to consider and approve 12 resolutions, including resolutions on the annual report and connected transactions of the Company, and listened to 6 reports. The table below sets out the details of attendance of each supervisor at the Board of Supervisors meetings during the Reporting Period:

Supervisors	Number of attendance	Number of attendance in person	Number of attendance by proxy
WANG Zengyong	4	4	0
LI Fangyi	4	4	0
KAN Zhen	4	3	1
FU Dexiang	4	3	1
WEI Zhongxin	4	4	0

7 DIVIDEND POLICY

The profit distribution policy of the Company should value the reasonable investment return expectation of the shareholders, and fully consider the need of continuing and stable development of the Company, under the prerequisites of in compliance with the relevant laws and regulations as well as the Articles of Association.

When the Company distributes the post-tax profit of the relevant accounting year, it should be made in accordance with the post-tax profit prepared under the financial statements with reference to the China accounting standard and laws and regulations, and the financial statements prepared under the international or overseas accounting standard on which the shares of the Company are listed (whichever is lower).

According to the resolution of the general meeting, the Company may distribute the interim cash dividend.

The distribution form of the dividend of the Company is cash or shares.

8 JOINT COMPANY SECRETARIES

According to the provision of the Listing Rules, the Company employed Mr. DUAN Qiurong and Ms. LEUNG Suet Wing, the manager of listing services division of TMF Hong Kong Limited, as the joint company secretaries of the Company.

Mr. DUAN Qiurong, the joint company secretary and the authorized representative of the Company, is the primary internal contact person between Ms. LEUNG Suet Wing and the Company.

Mr. DUAN Qiurong and Ms. LEUNG Suet Wing fully complied with the requirements under Rule 3.29 of the Listing Rules, and received not less than 15 hours of continuous professional training during the Reporting Period.

9 INTERNAL CONTROL AND RISK MANAGEMENT

In strict compliance with the related requirements under the Basic Principles for Internal Control of Enterprises (《企業內部控制基本規範》) and its ancillary guidelines and the Corporate Governance Code, and combined with its actual situation, the Company amends the internal control management policy and improves the internal control and risk management system. The Board is responsible for the internal control and risk management system and the review on its effectiveness. The Board is responsible for setting up and maintaining the well-developed system of internal control and risk management. The Audit Committee is set up under the Board to oversee the formulation and implementation of the internal control and risk management system and evaluate the effectiveness of the risk management system of the Company annually. The management of the Company has established the Internal Control and Risk Management Committee and set the mutually independent system construction management and appraisal departments. In accordance with the Measures for Risk Assessment and Management, the Company organizes various departments in the headquarters and subordinate enterprises to carry out risk identification and analysis for various business activities on a yearly basis to evaluate major business risks in respect of occurrence probability and impact and formulate management and control measures against major risks and implements risk management and control measures in daily work to strictly prevent the occurrence of risk events. In 2019, the Company did not have any material risk event. The Company carries out internal control and risk management assessment every year on a regular basis involving all the business segments, key enterprises and business aspects to identify and urge the rectification of internal control defects, constantly improve the internal control system and keep risks within acceptable levels.

In view of the above, the Board of Directors has assessed the internal control and risk management system of 2019, reviewed the Company's financial reporting, the internal control and risk management system and the adequacy and effectiveness of related procedures, including the adequacy of the Company in respect of the resources, employee qualifications and experience in accounting and financial reporting functions as well as the adequacy of training programmes and budgets. According to the review, the Board of Directors and the Audit Committee concluded that such systems are effective and adequate.

The Board of Directors also acknowledged that such systems aim at managing, instead of eliminating, the risks of failure to achieve the business objectives, and can only provide reasonable but not absolute assurance against material misstatement or loss.

10 AUDITOR'S REMUNERATION

The Company has appointed KPMG, BDO China Shu Lun Pan Certified Public Accountants and Zhongxinghua Certified Public Accountants as the international and domestic auditors of the Company, respectively, for the financial statements for the year ended 31 December 2019.

RMB0'000

	KPMG (tax included)	BDO China Shu Lun Pan Certified Public Accountants (tax included)	Zhongxinghua Certified Public Accountants (tax included)
Interim review	420		
Annual report	820	892	
Annual report of CGGC Group			315
Internal control audit of CGGC Group			80
Others	249	42	
Total	1,489	934	

The Board proposed to appoint KPMG LLP, Da Hua Certified Public Accountants (Special General Partnership) and Zhongxinghua Certified Public Accountants LLP as its international and domestic auditors of the Company, respectively for the year of 2020, subject to the approval by the shareholders at the forthcoming annual general meeting.

11 INFORMATION DISCLOSURE

The chairman of the Board of the Company is the first responsible person for the disclosure and management of the Company's information, and the secretary to the Board is responsible for the detailed coordination. During the Reporting Period, the Company has fulfilled the information disclosure obligations in a continuous and standard way and made timely, effective, complete and legally appropriate disclosure to the discloseable information and voluntary disclosures in strict compliance with the requirements of the Listing Rules, and further intensified the Company's promotion in the capital market to constantly enhance the image as a listed company. The Company places great emphasis on the management of inside information, strictly controls the scope of insiders and the confidentiality management of inside information vehicles. The Company earnestly commences the registration of insiders with strengthened registration and filing of material matters. With prudent judgment of information which might constitute to the inside information of the Company, the Company will disclose the discloseable inside information pursuant to the requirements as soon as reasonably practicable to further protect the legitimate rights of shareholders, creditors and other interest-related parties.

12 ACCOUNTABILITY OF THE DIRECTORS IN RELATION TO FINANCIAL STATEMENTS

The Directors of the Company confirm their related responsibilities for the preparation of the financial statements of the Company and make sure the preparation of the financial statements of the Company conforms to relevant laws and regulations and applicable accounting standards, and ensure the timely publication of the financial statements of the Company. The Company is not exposed to material uncertainties or circumstances which may result in substantial doubts over the Company's ability to continue as a going concern.

13 INVESTOR RELATIONS

The Company attaches great attention to providing accurate and timely information to investors, and procures to maintain mutual-communication through effective channels, thus reinforcing knowledge of each other and improving the transparency of its information disclosure. The Company proactively coordinates for the internal departments to conduct investor relations management work in accordance with the Management Code and Measures on Investor Relations of China Energy Engineering Corporation Limited and Notice of the Measures on the Further Clarification of Voluntary Information Disclosure, with an aim to allow investors to further understand the information of the Company. In addition, the Company has set up a centralized department for investor relations, which is responsible for investors' calls, visits and on-site inspections, and coordinating for the investors to attend investors' annual meetings, investment strategy meetings and domestic and overseas road shows of major financial institutions.

The Company will publish the Company's information in due course. The latest development, announcements and press in relation to the Company are available on the website designated by the Stock Exchange and the Company's website (www.ceec.net.cn) for investors. Investors could also contact the Company via its hotline (+86 (10) 59098818) or email (zgnj3996@ceec.net.cn).

In the future, the Company will provide better services to investors by further expanding activities in relation to investor relations.

14 ARTICLES OF ASSOCIATION AND ITS AMENDMENTS

During the Reporting Period, the Company did not have any amendments to the Articles of Association.

Independent Auditor's Report

To the shareholders of China Energy Engineering Corporation Limited
(Established in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of China Energy Engineering Corporation Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 103 to 261, which comprise the consolidated statement of financial position as at 31 December 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board (the "IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

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

KEY AUDIT MATTERS (CONTINUED)

Construction contract accounting estimates

Refer to note 4 to the consolidated financial statements and the accounting policies in note 2(x).

The Key Audit Matter	How the matter was addressed in our audit
The Group's business involves entering into infrastructure construction contracts with customers mainly in the power industry to provide construction services. Revenue from construction contracts accounted for 72% of the Group's revenue for the year ended 31 December 2019. The recognition of revenue and costs from construction contracts is based on the stage of completion method, which is assessed with reference to the percentage of the estimated total contract costs for the contracts that the Group has incurred to date under IFRS 15. Recognising revenue and costs from construction contracts requires management and the Group's internal engineers to make a number of judgemental assumptions in relation to estimating the total costs for individual construction contracts. These assumptions include estimating future labour costs and costs of materials required to complete the construction based on the customised specifications of individual construction contracts. When it is assessed that the budgeted costs exceed the total contract revenue for an individual construction contract or there are other circumstances indicating an expected loss on an individual construction contract and such loss is not recoverable from its customers, management makes a provision for the foreseeable loss.	Our audit procedures to assess accuracy of construction contract accounting estimates included the following: • assessing the design, implementation and operating effectiveness of key internal controls which govern the budgeting process and contract revenue recognition; • selecting a sample of contracts, using a variety of quantitative and qualitative criteria, and performing the following procedures for each contract selected: – inspecting the contract and discussing with management to obtain an understanding of the specific terms and risks associated with the individual construction contracts; and – assessing and challenging the underlying judgements of management's assessment of total estimated contact costs and estimated costs to complete the contact where it was still in progress at the reporting date, which included making enquiries of the Group's internal engineers and management about the basis and key assumptions adopted in arriving at the budgeted costs and benchmarking the key inputs in the budgets against similar projects undertaken by the Group and market information; • testing the mathematical accuracy of the calculation of percentage of completion, and comparing the percentage of completion with third party engineers' certification of work completed, or latest billing statements agreed with project owners, where applicable on a sample basis; • comparing items recorded as contract costs during the year with suppliers' contracts, goods receipt notes and other relevant underlying documentations on a sample basis;

KEY AUDIT MATTERS (CONTINUED)

Construction contract accounting estimates

Refer to note 4 to the consolidated financial statements and the accounting policies in note 2(x).

The Key Audit Matter	How the matter was addressed in our audit
We identified accuracy of construction contract accounting estimates as a key audit matter because of the significant management judgement required in preparing and revising budgets and forecasting the outcome for individual construction contracts at the end of the reporting period, which may affect the calculations of percentage of completion for individual construction contracts and the corresponding revenue and profit or loss recognised for the year.	• identifying and assessing possible onerous contracts by comparing the total budgeted costs, taking into consideration the actual costs incurred up to 31 December 2019, with the total contract revenue for individual construction contracts as agreed with customers; • assessing the impact of possible management bias in budgeting costs by: – assessing the historical accuracy of estimates made by management when preparing budgets for construction contracts by comparing the budgeted costs estimated by management at 31 December 2018 with the actual costs incurred in respect of these individual construction contracts during the current year; and – enquiring of management about the reasons for any changes in budgeted costs for individual construction contracts which existed at 31 December 2019 and under or over-spending for contracts completed during the current year and considering the impact of such reasons on the budgeted costs for other ongoing contracts; • performing site visits to a sample of contracts in progress at 31 December 2019 and discussing with site project managers and the Group's internal engineers the state of completion, service provided and goods delivered; and • assessing the presentation and related disclosures in the consolidated financial statements with reference to the requirements of IFRS 15.

KEY AUDIT MATTERS (CONTINUED)

Loss allowance for trade receivables and contract assets for construction contracts

Refer to notes 22 and 27 to the consolidated financial statements and the accounting policies in notes 2(m), 2(o) and 2(p).

The Key Audit Matter	How the matter was addressed in our audit
The carrying value of the Group's trade receivables and contract assets for construction contracts as at 31 December 2019 totalled RMB101,830 million after deduction of an allowance for expected credit losses of RMB5,104 million. Management estimates the loss allowance at an amount equal to lifetime expected credit loss for trade receivables and contract assets for construction contracts with assessments of expected credit losses and estimated loss rates based on the ageing of overdue balances, repayment histories of individual debtors, existing customer-specific and market conditions and forward-looking information. Such assessment involves a significant degree of judgement. We identified the loss allowance for trade receivables and contract assets for construction contracts as a key audit matter because of the inherent uncertainty in assessing if trade receivables and contract assets for construction contracts will be recovered in full and because the assessment of expected credit losses requires the exercise of significant management judgement.	Our audit procedures to assess the loss allowance for trade receivables and contract assets for construction contracts included the following: • obtaining an understanding of and assessing the design and implementation of key internal controls relating to credit control, debt collection, estimate of expected credit losses and making related allowances; • obtaining an understanding on the key data and assumptions of the expected credit loss model adopted by the Group, including the basis of the segmentation of the trade receivables and contract assets for construction contracts based on credit risk characteristics, the historical default data, and the assumptions involved in management's estimated loss rate; • assessing the reasonableness of management's estimate of expected credit losses by examining the information used by management to form such judgements, including testing the accuracy of the historical default data and evaluating whether the historical loss rates are appropriately adjusted based on current economic conditions and forward-looking information; and • comparing cash receipts from debtors and actual billing to customers subsequent to the financial year end relating to trade receivables and contract assets for construction contracts balances at 31 December 2019 with bank statements and relevant underlying documentation, on a sample basis.

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

The Directors are responsible for the other information. The other information comprises all the information included in the annual report, other than the consolidated financial statements and our auditor's report thereon.

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

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The engagement partner on the audit resulting in the independent auditor's report is Chu Man Wai.

KPMG
Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
31 March 2020

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
Revenue	4	**247,290,988**	224,034,347
Cost of sales		**(214,953,740)**	(194,270,958)
Gross profit		**32,337,248**	29,763,389
Other income	5	**2,110,055**	2,406,061
Net impairment losses on financial assets and contract assets	6(a)	**(1,118,360)**	(851,503)
Other net gains and losses	6(b)	**2,420,944**	795,350
Selling expenses		**(2,383,853)**	(2,371,991)
Administrative expenses		**(12,126,157)**	(12,014,225)
Research and development expenses		**(5,511,588)**	(4,003,592)
Finance income	7	**1,055,089**	795,528
Finance costs	7	**(4,355,663)**	(3,827,043)
Share of profits of joint ventures	17	**168,960**	304,385
Share of profits of associates	18	**711,246**	680,450
Profit before taxation		**13,307,921**	11,676,809
Income tax	10	**(3,707,542)**	(3,125,298)
Profit for the year	8	**9,600,379**	8,551,511
Other comprehensive income for the year:			
Items that will not be reclassified subsequently to profit or loss:			
– Remeasurement of defined benefit obligations	34	**270,578**	(618,640)
– Income tax relating to remeasurement of defined benefit obligations		**3,499**	8,037
– Equity investments at fair value through other comprehensive income-net movement in fair value reserve (non-recycling)		**191,198**	(435,501)
– Income tax relating to equity investments at fair value through other comprehensive income-net movement in fair value reserve (non-recycling)		**(22,097)**	64,919
		443,178	(981,185)
Items that may be reclassified subsequently to profit or loss:			
– Exchange differences on translating foreign operations		**(109,173)**	(312,108)
		(109,173)	(312,108)
Other comprehensive income for the year		**334,005**	(1,293,293)
Total comprehensive income for the year		**9,934,384**	7,258,218

The notes on pages 110 to 261 form part of these financial statements.

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
Profit for the year attributable to:			
Equity holders of the Company			
– Shareholders		**5,072,433**	4,570,685
– Perpetual capital instruments holders		**6,091**	–
		5,078,524	4,570,685
Non-controlling interests			
– Shareholders		**3,683,171**	3,263,206
– Perpetual capital instruments holders		**838,684**	717,620
		4,521,855	3,980,826
		9,600,379	8,551,511
Total comprehensive income for the year attributable to:			
Equity holders of the Company			
– Shareholders		**5,243,806**	3,606,913
– Perpetual capital instruments holders		**6,091**	–
		5,249,897	3,606,913
Non-controlling interests			
– Shareholders		**3,845,803**	2,933,685
– Perpetual capital instruments holders		**838,684**	717,620
		4,684,487	3,651,305
		9,934,384	7,258,218
Earnings per share			
– Basic (RMB cents)	11	**16.99**	15.34
– Diluted (RMB cents)	11	**16.99**	15.33

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

The notes on pages 110 to 261 form part of these financial statements. Details of dividends payable to equity shareholders of the Company attributable to the profit for the year are set out in note 37(b).

Consolidated Statement of Financial Position

At 31 December 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
Non-current assets			
Property, plant and equipment	12	**47,803,927**	34,819,904
Prepaid lease payments	13	**–**	9,048,720
Investment properties	14	**719,094**	579,341
Intangible assets	15	**42,443,895**	35,105,733
Investments in joint ventures	17	**5,416,691**	4,200,462
Investments in associates	18	**16,460,287**	10,703,688
Goodwill	19	**1,575,800**	1,576,496
Deferred tax assets	21(b)	**2,068,529**	1,961,576
Trade receivables	22	**29,128,276**	23,869,816
Prepayments, deposits and other receivables	23	**1,894,945**	1,915,998
Finance lease receivables	24(b)	**1,863,472**	706,584
Financial assets at fair value through other comprehensive income	20(a)	**2,194,812**	2,051,154
Financial assets at fair value through profit or loss	20(b)	**5,423,593**	5,253,100
		156,993,321	131,792,572
Current assets			
Inventories	25	**12,617,279**	12,456,931
Properties under development for sale	26	**47,103,429**	45,858,785
Completed properties for sale	26	**2,231,891**	2,239,218
Contract assets	27(a)	**41,151,749**	36,071,661
Trade and bills receivables	22	**54,228,499**	56,075,508
Prepayments, deposits and other receivables	23	**49,027,166**	43,297,055
Prepaid lease payments	13	**–**	261,128
Other loans	24(a)	**5,998,443**	4,999,011
Financial assets at fair value through profit or loss	20(b)	**2,758,182**	1,150,618
Finance lease receivables	24(b)	**425,616**	387,245
Pledged deposits	28(a)	**5,242,218**	5,749,150
Bank and cash balances	28(a)	**43,892,508**	49,046,642
		264,676,980	257,592,952
Current liabilities			
Trade and bills payables	29	**104,390,647**	94,294,218
Contract liabilities	27(b)	**52,490,798**	42,845,942
Other payables and accruals	30	**28,889,755**	30,310,576
Income tax payable	21(a)	**2,111,310**	1,505,720
Bank and other borrowings	31	**33,685,867**	51,226,123
Defined benefit obligations	34	**1,104,067**	1,048,956
Corporate bonds	32	**1,384,961**	4,730,776
Lease liabilities	33	**293,465**	–
Provisions	35	**631,168**	350,512
		224,982,038	226,312,823

The notes on pages 110 to 261 form part of these financial statements.

Consolidated Statement of Financial Position

At 31 December 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
NET CURRENT ASSETS		**39,694,942**	31,280,129
TOTAL ASSETS LESS CURRENT LIABILITIES		**196,688,263**	163,072,701
Non-current liabilities			
Other payables and accruals	30	**419,150**	328,625
Bank and other borrowings	31	**52,575,827**	40,889,908
Corporate bonds	32	**18,393,576**	15,141,776
Lease liabilities	33	**852,992**	–
Defined benefit obligations	34	**9,269,577**	9,580,792
Deferred tax liabilities	21(b)	**1,119,297**	1,142,352
Deferred revenue	36	**767,492**	825,392
		83,397,911	67,908,845
NET ASSETS		**113,290,352**	95,163,856
Capital and Reserves			
Issued share capital	37(c)	**30,020,396**	30,020,396
Perpetual capital instruments	38	**3,000,000**	–
Reserves		**25,124,366**	20,612,288
Equity attributable to equity holders of the Company		**58,144,762**	50,632,684
Perpetual capital instruments	38	**23,900,000**	19,400,000
Non-controlling interests		**31,245,590**	25,131,172
TOTAL EQUITY		**113,290,352**	95,163,856

Approved and authorised for issue by the Board of Directors on 31 March 2020.

Wang Jianping
Director

Ding Yanzhang
Director

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

The notes on pages 110 to 261 form part of these financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2019 (Expressed in Renminbi)

	Attributable to equity holders of the Company															
	Issued share capital	Perpetual capital instruments	Shares held under restricted share incentive scheme	Capital reserve	Statutory reserve	Share based compensation reserve	Special reserve	Defined benefit obligation remeasurement reserve	Investments revaluation reserve (non-recycling)	Foreign currency translation reserve	Retained earnings (Note)	Total equity attributable to equity holders of the Company	Perpetual capital instruments	Non-controlling interests	Total equity
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Balance at 1 January 2018	30,020,396	–	(282,524)	8,190,872	1,499,958	44,559	488,959	1,220,494	(147,576)	(226,345)	7,261,647	48,070,440	8,220,000	22,741,955	79,032,395
Total comprehensive income	–	–	–	–	–	–	–	(458,985)	(189,442)	(315,345)	4,570,685	3,606,913	717,620	2,933,685	7,258,218
Purchase of own shares under restricted share incentive scheme (note 37)	–	–	(22,555)	–	–	–	–	–	–	–	–	(22,555)	–	–	(22,555)
Effect of shares under restricted share incentive scheme vested (note 37)	–	–	101,997	(22,871)	–	(31,789)	–	–	–	–	–	47,337	–	–	47,337
Issue of perpetual capital instruments (note 38)	–	–	–	–	–	–	–	–	–	–	–	–	1,180,000	–	1,180,000
Transfer from debt instrument (note 32)	–	–	–	–	–	–	–	–	–	–	–	–	10,000,000	–	10,000,000
Capital contributed by non-controlling interests	–	–	–	–	–	–	–	–	–	–	–	–	–	474,567	474,567
Disposal of subsidiaries	–	–	–	1,545	–	–	–	–	–	–	–	1,545	–	(42,851)	(41,306)
Acquisition of additional interests in subsidiaries	–	–	–	31,534	–	–	–	–	–	–	–	31,534	–	(41,742)	(10,208)
Acquisition of subsidiaries	–	–	–	–	–	–	–	–	–	–	–	–	–	252,165	252,165
Transfer to reserves	–	–	–	–	843,797	–	86,561	–	–	–	(930,358)	–	–	–	–
Dividends declared to perpetual capital instruments holders	–	–	–	–	–	–	–	–	–	–	–	–	(717,620)	–	(717,620)
Dividends declared (note 37)	–	–	–	–	–	–	–	–	–	–	(918,624)	(918,624)	–	–	(918,624)
Dividends declared to non-controlling interests	–	–	–	–	–	–	–	–	–	–	–	–	–	(1,186,607)	(1,186,607)
Effect of share based compensation (note 37)	–	–	–	–	–	6,103	–	–	–	–	–	6,103	–	–	6,103
Others	–	–	–	(33,414)	–	–	–	–	–	–	(156,595)	(190,009)	–	–	(190,009)
Balance at 31 December 2018	30,020,396	–	(203,082)	8,167,666	2,343,755	18,873	575,520	761,509	(337,018)	(541,690)	9,826,755	50,632,684	19,400,000	25,131,172	95,163,856

	Attributable to equity holders of the Company															
	Issued share capital	Perpetual capital instruments	Shares held under restricted share incentive scheme	Capital reserve	Statutory reserve	Share based compensation reserve	Special reserve	Defined benefit obligation remeasurement reserve	Investments revaluation reserve (non-recycling)	Foreign currency translation reserve	Retained earnings	Total equity attributable to equity holders of the Company	Perpetual capital instruments	Non-controlling interests	Total equity
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Balance at 1 January 2019	**30,020,396**	**-**	**(203,082)**	**8,167,666**	**2,343,755**	**18,873**	**575,520**	**761,509**	**(337,018)**	**(541,690)**	**9,826,755**	**50,632,684**	**19,400,000**	**25,131,172**	**95,163,856**
Total comprehensive income	-	6,091	-	-	-	-	-	252,155	36,089	(116,871)	5,072,433	5,249,897	838,684	3,845,803	9,934,384
Issue of perpetual capital instruments (note 38)	-	3,000,000	-	-	-	-	-	-	-	-	-	3,000,000	10,000,000	-	13,000,000
Redemption of perpetual capital instruments (note 38)	-	-	-	-	-	-	-	-	-	-	-	-	(5,500,000)	-	(5,500,000)
Capital contributed by non-controlling interests	-	-	-	61,426	-	-	-	-	-	-	-	61,426	-	3,458,195	3,519,621
Disposal of subsidiaries (note 45)	-	-	-	329	-	-	-	-	-	-	-	329	-	6,544	6,873
Acquisition of additional interests in subsidiaries	-	-	-	6,266	-	-	-	-	-	-	-	6,266	-	(28,066)	(21,800)
Transfer to reserves	-	-	-	-	733,948	-	(27,472)	-	-	-	(706,476)	-	-	-	-
Dividends declared to perpetual capital instruments holders	-	(6,091)	-	-	-	-	-	-	-	-	-	(6,091)	(838,684)	-	(844,775)
Dividends declared (note 37)	-	-	-	-	-	-	-	-	-	-	(918,624)	(918,624)	-	-	(918,624)
Dividends declared to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,168,058)	(1,168,058)
Effect of share based compensation (note 37)	-	-	-	-	-	(18,873)	-	-	-	-	-	(18,873)	-	-	(18,873)
Disposal of financial assets at fair value through other comprehensive income	-	-	-	-	-	-	-	-	-	-	67,345	67,345	-	-	67,345
Others	-	-	-	70,403	-	-	-	-	-	-	-	70,403	-	-	70,403
Balance at 31 December 2019	**30,020,396**	**3,000,000**	**(203,082)**	**8,306,090**	**3,077,703**	**-**	**548,048**	**1,013,664**	**(300,929)**	**(658,561)**	**13,341,433**	**58,144,762**	**23,900,000**	**31,245,590**	**113,290,352**

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

The notes on pages 110 to 261 form part of these financial statements.

Consolidated Statement of Cash Flows

At 31 December 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
Operating activities			
Cash generated from operations	28(b)	**14,240,637**	8,165,715
Income tax paid		**(3,277,060)**	(3,106,737)
Net cash generated from operating activities		**10,963,577**	5,058,978
Investing activities			
Interest received		**1,050,616**	881,484
Payments for addition to property, plant and equipment		**(4,327,443)**	(4,009,491)
Payments for addition to prepaid lease payments		**–**	(362,437)
Payments for addition to investment properties	14	**–**	(2,191)
Payments for addition to intangible assets		**(10,034,763)**	(11,781,315)
Payments for addition to finance lease		**–**	(574,680)
Capital contributions to joint ventures		**(1,051,498)**	(508,371)
Capital contributions to associates		**(2,229,419)**	(3,379,424)
Net cash (purchase of)/proceeds from other investment		**(132,650)**	2,743,670
Purchase of financial assets at fair value through other comprehensive income		**(114,928)**	(62,808)
Purchase of financial assets at fair value through profit or loss		**(3,520,750)**	(7,656,204)
Proceeds from disposal of property, plant and equipment		**523,478**	235,212
Proceeds from disposal of prepaid lease payments		**–**	369,939
Proceeds from disposal of intangible assets		**3,698**	8,930
Proceeds from disposal of associates		**111,128**	83
Proceeds from disposal of joint ventures		**4,229**	–
Proceeds from disposal of financial assets at fair value through other comprehensive income		**280,491**	41,280
Proceeds from disposal of financial assets at fair value through profit or loss		**1,781,474**	8,032,346
Proceeds from finance lease receivables		**–**	227,015
Net decrease/(increase) in pledged deposits	28(a)	**506,932**	(2,295,444)
Dividends received from associates	18	**17,243**	16,331
Dividends received from financial assets at fair value through other comprehensive income	5	**98,317**	101,173
Dividends received from financial assets at fair value through profit or loss	5	**109,695**	73,054
Net withdrawal/(placement) of deposits with original maturity of over three months	28(a)	**135,560**	(692,685)
Acquisition of subsidiaries, net of cash acquired		**(217,170)**	(1,093,648)
Disposal of subsidiaries, net of cash disposed	45	**3,466,572**	39,940
Net (increase)/decrease in other loan and receivables		**(223,284)**	90,760
Net increase in loan to related parties		**(804,987)**	(815,787)
Government grants received related to assets		**54,110**	14,880
Net cash used in investing activities		**(14,513,349)**	(20,358,388)

The notes on pages 110 to 261 form part of these financial statements.

Consolidated Statement of Cash Flows

At 31 December 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
Financing activities			
Capital injections from non-controlling interests		**3,519,621**	438,183
Issue of perpetual capital instruments	37	**13,000,000**	1,180,000
Interests paid on perpetual capital instruments	28(c)	**(838,684)**	(717,620)
Acquisition of additional interests in subsidiaries		**(21,800)**	(10,208)
Interests paid on bank and other borrowings	28(c)	**(4,961,308)**	(3,634,996)
Interests paid on corporate bonds	28(c)	**(786,850)**	(816,498)
New bank and other borrowings	28(c)	**42,656,743**	61,345,100
Repayments of bank and other borrowings	28(c)	**(50,818,725)**	(48,175,080)
New corporate bonds	28(c)	**4,000,000**	4,200,000
Repayments of corporate bonds	28(c)	**(4,179,400)**	(650,000)
Repayment of perpetual capital instruments	28(c)	**(5,500,000)**	–
Repayment of finance lease payables	28(c)	**–**	(902)
Repayment of finance lease interests	28(c)	**–**	(3)
Capital elements of lease rentals paid	28(c)	**(606,313)**	–
Interest elements of lease rentals paid	28(c)	**(40,626)**	–
Net increase in borrowings from related parties	28(c)	**4,382,815**	2,994,872
Dividends paid to equity shareholders of the Company		**(918,624)**	(918,624)
Dividends paid to non-controlling interests		**(861,109)**	(950,535)
Net cash (used in)/generated from financing activities		**(1,974,260)**	14,283,689
Net decrease in cash and cash equivalents		**(5,524,032)**	(1,015,721)
Cash and cash equivalents at the beginning of the year		**47,643,153**	47,699,837
Effects of exchange rate changes		**505,458**	959,037
Cash and cash equivalents at the end of the year	28(a)	**42,624,579**	47,643,153

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

The notes on pages 110 to 261 form part of these financial statements.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

1 GENERAL INFORMATION

The Company was established in the People's Republic of China (the "PRC") on 19 December 2014 as a joint stock company with limited liability as part of the reorganisation of China Energy Engineering Group Co., Ltd. ("ENERGY CHINA GROUP") in preparation for the listing of the Company's H shares on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The address of the Company's registered office is Building No.106 Lize Zhongyuan, Chaoyang District, Beijing, the PRC. In the opinion of the directors of the Company (the "Directors"), ENERGY CHINA GROUP is the immediate and ultimate holding company of the Company.

The Company was listed on the Main Board of the Stock Exchange on 10 December 2015.

The consolidated financial statements are presented in Renminbi ("RMB"), which is the functional currency of the Company and its PRC subsidiaries.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IAS") and interpretations promulgated by the International Accounting Standards Board (the "IASB") and the disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange. Significant accounting policies adopted by the Group are disclosed below.

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

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2019 comprise the Group and its interest in associates and joint ventures.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the financial assets at fair value through other comprehensive income ("FVOCI") and financial assets at fair value through profit or loss ("FVPL") (see note 2(h)) are stated at their fair value.

Non-current assets and disposal groups held for sale are stated at the lower of carrying amount and fair value less costs to sell (see note 2(j)(ii)).

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

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

Judgements made by management in the application of IFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in note 3.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies

The IASB has issued a new IFRS, IFRS 16, *Leases*, and a number of amendments to IFRSs that are first effective for the current accounting period of the Group.

Except for IFRS 16, *Leases*, none of the developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

IFRS 16, Leases

IFRS 16 replaces IAS 17, *Leases*, and the related interpretations, IFRIC 4, *Determining whether an arrangement contains a lease*, SIC 15, *Operating leases – incentives*, and SIC 27, *Evaluating the substance of transactions involving the legal form of a lease*. It introduces a single accounting model for lessees, which requires a lessee to recognise a right-of-use asset and a lease liability for all leases, except for leases that have a lease term of 12 months or less ("short-term leases") and leases of low value assets. The lessor accounting requirements are brought forward from IAS 17 substantially unchanged.

IFRS 16 also introduces additional qualitative and quantitative disclosure requirements which aim to enable users of the financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of an entity.

The Group has initially applied IFRS 16 as from 1 January 2019. The Group has elected to use the modified retrospective approach and has therefore recognised the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019. Comparative information has not been restated and continues to be reported under IAS 17.

Further details of the nature and effect of the changes to previous accounting policies and the transition options applied are set out below:

a. *New definition of a lease*

The change in the definition of a lease mainly relates to the concept of control. IFRS 16 defines a lease on the basis of whether a customer controls the use of an identified asset for a period of time, which may be determined by a defined amount of use. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

The Group applies the new definition of a lease in IFRS 16 only to contracts that were entered into or changed on or after 1 January 2019. For contracts entered into before 1 January 2019, the Group has used the transitional practical expedient to grandfather the previous assessment of which existing arrangements are or contain leases. Accordingly, contracts that were previously assessed as leases under IAS 17 continue to be accounted for as leases under IFRS 16 and contracts previously assessed as non-lease service arrangements continue to be accounted for as executory contracts.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

IFRS 16, Leases (continued)

b. Lessee accounting and transitional impact

IFRS 16 eliminates the requirement for a lessee to classify leases as either operating leases or finance leases, as was previously required by IAS 17. Instead, the Group is required to capitalise all leases when it is the lessee, including leases previously classified as operating leases under IAS 17, other than those short-term leases and leases of low-value assets which are exempt. As far as the Group is concerned, these newly capitalised leases are mainly primarily in relation to property, plant and equipment as disclosed in note 12. For an explanation of how the Group applies lessee accounting, see note 2(l)(i).

At the date of transition to IFRS 16 (i.e. 1 January 2019), the Group determined the length of the remaining lease terms and measured the lease liabilities for the leases previously classified as operating leases at the present value of the remaining lease payments, discounted using the relevant incremental borrowing rates at 1 January 2019. The weighted average of the incremental borrowing rates used for determination of the present value of the remaining lease payments was 4.61%.

To ease the transition to IFRS 16, the Group applied the following recognition exemption and practical expedients at the date of initial application of IFRS 16:

(i) the Group elected not to apply the requirements of IFRS 16 in respect of the recognition of lease liabilities and right-of-use assets to leases for which the remaining lease term ends within 12 months from the date of initial application of IFRS 16, i.e. where the lease term ends on or before 31 December 2019;

(ii) when measuring the lease liabilities at the date of initial application of IFRS 16, the Group applied a single discount rate to a portfolio of leases with reasonably similar characteristics (such as leases with a similar remaining lease term for a similar class of underlying asset in a similar economic environment); and

(iii) when measuring the right-of-use assets at the date of initial application of IFRS 16, the Group relied on the previous assessment for onerous contract provisions as at 31 December 2018 as an alternative to performing an impairment review.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

IFRS 16, Leases (continued)

b. Lessee accounting and transitional impact (continued)

The following table reconciles the operating lease commitments as disclosed in note 41 as at 31 December 2018 to the opening balance for lease liabilities recognised as at 1 January 2019:

	1 January 2019 RMB'000
Operating lease commitments at 31 December 2018	**802,520**
Less: commitments relating to leases exempt from capitalisation:	
– short-term leases and other leases with remaining lease term ending on or before 31 December 2019	**(18,124)**
Add: lease payments for the additional periods where the Group considers it reasonably certain that it will exercise the extension options	**614,433**
	1,398,829
Less: total future interest expenses	**(163,630)**
Present value of remaining lease payments, discounted using the incremental borrowing rate at 1 January 2019	**1,235,199**

The right-of-use assets in relation to leases previously classified as operating leases have been recognised at an amount equal to the amount recognised for the remaining lease liabilities, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the statement of financial position at 31 December 2018. There is no impact on the opening balance of equity.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

IFRS 16, Leases (continued)

b. Lessee accounting and transitional impact (continued)

The following table summarises the impacts of the adoption of IFRS 16 on the Group's consolidated statement of financial position:

	Carrying amount at 31 December 2018	Capitalisation of operating lease contracts	Carrying amount at 1 January 2019
	RMB'000	RMB'000	RMB'000
Line items in the consolidated statement of financial position impacted by the adoption of IFRS 16:			
Prepaid lease payments	9,048,720	(9,048,720)	–
Property, plant and equipment	34,819,904	10,558,593	45,378,497
Prepayments, deposits and other receivables	1,915,998	(82,890)	1,833,108
Total non-current assets	**131,792,572**	**1,426,983**	**133,219,555**
Prepaid lease payments	261,128	(261,128)	–
Prepayments, deposits and other receivables	43,297,055	(12,751)	43,284,304
Total current assets	**257,592,952**	**(273,879)**	**257,319,073**
Other payables and accruals	30,310,576	(82,095)	30,228,481
Lease liabilities	–	421,618	421,618
Current liabilities	**226,312,823**	**339,523**	**226,652,346**
Net current assets	**31,280,129**	**(613,402)**	**30,666,727**
Total assets less current liabilities	**163,072,701**	**813,581**	**163,886,282**
Lease liabilities	–	813,581	813,581
Total non-current liabilities	**67,908,845**	**813,581**	**68,722,426**
Net assets	**95,163,856**	**–**	**95,163,856**

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

IFRS 16, Leases (continued)

c. Impact on the financial result, segment results and cash flows of the Group

After the initial recognition of right-of-use assets and lease liabilities as at 1 January 2019, the Group as a lessee is required to recognise interest expense accrued on the outstanding balance of the lease liability, and the depreciation of the right-of-use asset, instead of the previous policy of recognising rental expenses incurred under operating leases on a straight-line basis over the lease term. This results in a positive impact on the reported profit from operations in the Group's consolidated statement of profit or loss, as compared to the results if IAS 17 had been applied during the year.

In the cash flow statement, the Group as a lessee is required to split rentals paid under capitalised leases into their capital element and interest element (see note 28(c)). These elements are classified as financing cash outflows, similar to how leases previously classified as finance leases under IAS 17 were treated, rather than as operating cash outflows, as was the case for operating leases under IAS 17. Although total cash flows are unaffected, the adoption of IFRS 16 therefore results in a significant change in presentation of cash flows within the cash flow statement (see note 28(d)).

The following tables may give an indication of the estimated impact of adoption of IFRS 16 on the Group's financial result, segment results and cash flows for the year ended 31 December 2019, by adjusting the amounts reported under IFRS 16 in these consolidated financial statements to compute estimates of the hypothetical amounts that would have been recognised under IAS 17 if this superseded standard had continued to apply in 2019 instead of IFRS 16, and by comparing these hypothetical amounts for 2019 with the actual 2018 corresponding amounts which were prepared under IAS 17.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

IFRS 16, Leases (continued)

c. *Impact on the financial result, segment results and cash flows of the Group (continued)*

	2019				2018
	Amounts reported under IFRS 16	Add back: IFRS 16 depreciation and interest expense	Deduct: Estimated amounts related to operating leases as if under IAS 17 (note (i))	Hypothetical amounts for 2019 as if under IAS 17	Compared to amounts reported for 2018 under IAS 17
	(A)	(B)	(C)	(D=A+B-C)	
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Financial result for the year ended 31 December 2019 impacted by the adoption of IFRS 16:					
Gross profit	32,337,248	102,654	(82,882)	32,357,020	29,763,389
Selling expenses	(2,383,853)	13,458	(12,949)	(2,383,344)	(2,371,991)
Administrative expenses	(12,126,157)	311,569	(278,183)	(12,092,771)	(12,014,225)
Finance costs	(4,355,663)	40,626	–	(4,315,037)	(3,827,043)
Profit before taxation	13,307,921	468,307	(374,014)	13,402,214	11,676,809
Profit for the year	9,600,379	367,453	(296,937)	9,670,895	8,551,511
Reportable segment results for the year ended 31 December 2019 (note 4) impacted by the adoption of IFRS 16:					
– Survey, design and consulting services	1,194,899	39,739	(41,506)	1,193,132	1,394,573
– Construction and contracting	6,758,815	184,765	(147,634)	6,795,946	6,974,332
– Industrial manufacturing	3,538,854	20,024	(1,417)	3,557,461	2,567,328
– Clean energy, environmental protection and water utilities	303,259	101,064	(61,566)	342,757	1,420,709
– Investment and other businesses	2,409,575	122,715	(121,891)	2,410,399	1,140,511
– Total	14,128,196	468,307	(374,014)	14,222,489	13,494,719

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

IFRS 16, Leases (continued)

c. *Impact on the financial result, segment results and cash flows of the Group (continued)*

	2019			2018
	Amounts reported under IFRS 16	Estimated amounts related to operating leases as if under IAS 17 (notes (i)&(ii))	Hypothetical amounts for 2019 as if under IAS 17	Compared to amounts reported for 2018 under IAS 17
	(A)	(B)	(C=A+B)	
	RMB'000	RMB'000	RMB'000	RMB'000
Line items in the consolidated statement of cash flows for the year ended 31 December 2019 impacted by the adoption of IFRS 16:				
Net cash generated from operating activities	**10,963,577**	**(626,939)**	**10,336,638**	5,058,978
Payments for addition to prepaid lease payments	**–**	**(106,861)**	**(106,861)**	(362,437)
Payments for addition to property, plant and equipment	**(4,327,443)**	**106,861**	**(4,220,582)**	(4,009,491)
Net cash used in investing activities	**(14,513,349)**	**–**	**(14,513,349)**	(20,358,388)
Capital element of lease rentals paid	**(606,313)**	**586,313**	**(20,000)**	(902)
Interest element of lease rentals paid	**(40,626)**	**40,626**	**–**	(3)
Net cash used in financing activities	**(1,974,260)**	**626,939**	**(1,347,321)**	14,283,689

Notes:

(i) The "estimated amounts related to operating leases" is an estimate of the amounts of the cash flows in 2019 that relate to leases which would have been classified as operating leases, if IAS 17 had still applied in 2019. This estimate assumes that there were no differences between rentals and cash flows and that all of the new leases entered into in 2019 would have been classified as operating leases under IAS 17, if IAS 17 had still applied in 2019. Any potential net tax effect is ignored.

(ii) In this impact table these cash outflows are reclassified from financing to operating in order to compute hypothetical amounts of net cash generated from operating activities and net cash used in financing activities as if IAS 17 still applied.

d. *Lessor accounting*

The Group leases out a number of items of buildings, plant, and machinery as the lessor of operating leases. The accounting policies applicable to the Group as a lessor remain substantially unchanged from those under IAS 17.

Under IFRS 16, when the Group acts as an intermediate lessor in a sublease arrangement, the Group is required to classify the sublease as a finance lease or an operating lease by reference to the right-of-use asset arising from the head lease, instead of by reference to the underlying asset. The adoption of IFRS 16 does not have a significant impact on the Group's financial statements in this regard.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(d) Functional and presentation currency

The financial statements are presented in RMB, rounded to the nearest thousand, which is the Group's presentation currency and the functional currency of the Company and its PRC subsidiaries.

(e) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances and transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at the non-controlling interests' proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity holders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity holders of the Company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated statement of financial position in accordance with notes 2(r) and 2(s) depending on the nature of the liability.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 2(h)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (see note 2(f)).

In the Company's statement of financial position, an investment in a subsidiary is stated at cost less impairment losses (see note 2(m)(iii)), unless the investment is classified as held for sale (or included in a disposal group that is classified as held for sale) (see note 2(j)(ii)).

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(f) Associates and joint ventures

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement, and have rights to net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale) (see note 2(j)(ii)). Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate or joint venture that forms part of the Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see notes 2(g) and 2(m)(iii)). Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with any other long-term interests that in substance form part of the Group's net investment in the associate or the joint venture (after applying the ECL model to such other long-term interests where applicable (see note 2(m)(i)).

Unrealised profits and losses resulting from transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(f) Associates and joint ventures (continued)

In all other cases, 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 that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 2(h)).

In the Company's statement of financial position, its investments in associates and joint venture are stated at cost less impairment losses (see note 2(m)(iii)), unless classified as held for sale (or included in a disposal group that is classified as held for sale) (see note 2(j)(ii)).

(g) Goodwill

Goodwill represents the excess of

(i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over

(ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

When (ii) is greater than (i), then this excess is recognised immediately in profit or loss as a gain on a bargain purchase.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see note 2(m)(iii)).

On disposal of a cash generating unit during the year, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(h) Other investments in debt and equity securities

The Group's policies for investments in debt and equity securities, other than investments in subsidiaries, associates and joint ventures, are set out below.

Investments in debt and equity securities are recognised/derecognised on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at FVPL for which transaction costs are recognised directly in profit or loss. For an explanation of how the Group determines fair value of financial instruments, see note 39. These investments are subsequently accounted for as follows, depending on their classification.

(i) Investments other than equity investments

Non-equity investments held by the Group are classified into one of the following measurement categories:

– amortised cost, if the investment is held for the collection of contractual cash flows which represent solely payments of principal and interest. Interest income from the investment is calculated using the effective interest method (see note 2(x)(vi)).

– FVOCI – recycling, if the contractual cash flows of the investment comprise solely payments of principal and interest and the investment is held within a business model whose objective is achieved by both the collection of contractual cash flows and sale. Changes in fair value are recognised in other comprehensive income, except for the recognition in profit or loss of expected credit losses, interest income (calculated using the effective interest method) and foreign exchange gains and losses. When the investment is derecognised, the amount accumulated in other comprehensive income is recycled from equity to profit or loss.

– FVPL, if the investment does not meet the criteria for being measured at amortised cost or FVOCI (recycling). Changes in the fair value of the investment (including interest) are recognised in profit or loss.

(ii) Equity investments

An investment in equity securities is classified as FVPL unless the equity investment is not held for trading purposes and on initial recognition of the investment the Group makes an irrevocable election to designate the investment at FVOCI (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained earnings. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVPL or FVOCI, are recognised in profit or loss as other income in accordance with the policy set out in note 2(x)(v).

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(i) Investment properties

Investment properties are land and/or buildings which are owned or held under a leasehold interest (see note 2(l)) to earn rental income and/or for capital appreciation. These include land held for a currently undetermined future use and property that is being constructed or developed for future use as investment property.

Investment properties are stated in the statement of financial position at cost less accumulated depreciation and impairment losses (see note 2(m)(iii)). Depreciation is calculated to write off the cost less residual value if applicable, using the straight-line method over the estimated useful lives ranging from 15 to 40 years. Rental income from investment properties is accounted for as described in note 2(x)(iv).

In the comparative period, when the Group held a property interest under an operating lease and used the property to earn rental income and/or for capital appreciation, the Group could elect on a property-by-property basis to classify and account for such interest as an investment property. Any such property interest which had been classified as an investment property was accounted for as if it were held under a finance lease (see note 2(l)), and the same accounting policies were applied to that interest as were applied to other investment properties leased under finance leases. Lease payments were accounted for as described in note 2(l).

(j) Other property, plant and equipment

(i) Property, plant and equipment

The following items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 2(m)(iii)):

– right-of-use assets arising from leases over buildings and interests in leasehold land where the Group is the registered owner of the property interest; and

– items of plant and equipment, including right-of-use assets arising from leases of underlying plant and equipment (see note 2(l)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs (see note 2(z)).

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Other property, plant and equipment (continued)

(i) Property, plant and equipment (continued)

Depreciation is calculated to write off the cost or valuation of items of property, plant and equipment, less their estimated residual value, if any, using the straight-line method over their estimated useful lives as follows:

Buildings	8 – 40 years
Machinery	4 – 22 years
Transportation vehicles/vessels	4 – 30 years
Electronic equipment	3 – 10 years
Office equipment	5 – 10 years
Others	4 – 15 years
Right-of-use assets	1 – 50 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

(ii) Non-current assets held for sale

A non-current asset (or disposal group) is classified as held for sale if it is highly probable that its carrying amount will be recovered through a sale transaction rather than through continuing use and the asset (or disposal group) is available for sale in its present condition. A disposal group is a group of assets to be disposed of together as a group in a single transaction, and liabilities directly associated with those assets that will be transferred in the transaction.

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

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Other property, plant and equipment (continued)

(ii) Non-current assets held for sale (continued)

Immediately before classification as held for sale, the measurement of the non-current assets (and all individual assets and liabilities in a disposal group) is brought up-to-date in accordance with the accounting policies before the classification. Then, on initial classification as held for sale and until disposal, the non-current assets (except for certain assets as explained below), or disposal groups, are recognised at the lower of their carrying amount and fair value less costs to sell. The principal exceptions to this measurement policy so far as the financial statements of the Group and the Company are concerned are deferred tax assets, assets arising from employee benefits, financial assets (other than investments in subsidiaries, associates and joint ventures) and investment properties. These assets, even if held for sale, would continue to be measured in accordance with the policies set out elsewhere in note 2.

Impairment losses on initial classification as held for sale, and on subsequent remeasurement while held for sale, are recognised in profit or loss. As long as a non-current asset is classified as held for sale, or is included in a disposal group that is classified as held for sale, the non-current asset is not depreciated or amortised.

(k) Intangible assets (other than goodwill)

When the Group has a right to charge for usage of concession infrastructure (as a consideration for providing construction service in a service concession arrangement), it recognises an intangible asset at an amount equals to the fair value of the consideration for provision of construction service upon initial recognition. The intangible asset with finite useful lives is carried at cost less accumulated amortisation and any accumulated impairment losses.

Amortisation of the toll roads infrastructures is calculated to write off their cost, over their expected useful lives or the remaining concession period, whichever is the shorter, commencing from the date of commencement of commercial operation of the toll roads, based on a units-of-usage basis, which is the ratio of actual traffic volume compared to the total expected traffic volume of the toll roads as estimated by the management or by reference to traffic projection reports prepared by independent traffic consultants. The management of the Group is of the view that amortisation method based on units-of-usage is a more appropriate and systematic way to reflect the pattern in which the future economic benefits of toll roads are expected to be consumed by the Group.

Amortisation of the wastewater treatment infrastructures is provided using the straight-line method over the service concession period.

Amortisation for mining rights with finite useful lives is provided using the unit of production method based on the actual production volume over the estimated total proved and probable reserves of the ores mines.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(k) Intangible assets (other than goodwill) (continued)

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labour, and an appropriate proportion of overheads and borrowing costs, where applicable (see note 2(z)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see note 2(m)(iii)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Other intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 2(m)(iii)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

Except for mining rights and concession rights related to toll roads, intangible assets are amortised using the straight-line method over the expected useful lives as follows:

Patent & unpatented technology	10 years
Software	5 years
Concession right related to wastewater treatment plants	20 – 30 years
Concession right related to coal power plant	25 years
Concession right related to hydraulic power plant	30 years
Others	5 – 10 years

Amortisation of other intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. The intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives. Both the period and method of amortisation are reviewed annually.

Intangible assets are not amortised while their useful lives are assessed to be indefinite. Any conclusion that the useful life of an intangible asset is indefinite is reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite is accounted for prospectively from the date of change and in accordance with the policy for amortisation of intangible assets with finite lives as set out above.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(k) Intangible assets (other than goodwill) (continued)

Intangible assets acquired in a business combination and recognised separately from goodwill 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 are reported at cost less accumulated amortisation and 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 or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

(l) Leased assets

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

(i) As a lessee

(A) Policy applicable from 1 January 2019

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases

At the lease commencement date, the Group recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets which, for the Group are primarily electronic equipment or office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets (continued)

(i) As a lessee (continued)

(A) Policy applicable from 1 January 2019 (continued)

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see notes 2(j) and 2(m)(iii)), except for the following types of right-of-use asset:

– right-of-use assets related to interests in leasehold land where the interest in the land is held as inventory are carried at the lower of cost and net realisable value in accordance with note 2(n).

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group presents right-of-use assets that do not meet the definition of investment property in "property, plant and equipment" and presents lease liabilities separately in the statement of financial position.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets (continued)

(i) As a lessee (continued)

(B) Policy applicable prior to 1 January 2019

In the comparative period, as a lessee the Group classified leases as finance leases if the leases transferred substantially all the risks and rewards of ownership to the Group. Leases which did not transfer substantially all the risks and rewards of ownership to the Group were classified as operating leases, with the following exceptions:

– property held under operating leases that would otherwise meet the definition of an investment property was classified as investment property on a property-by-property basis and, if classified as investment property, was accounted for as if held under a finance lease (see note 2(i)); and

– land held for own use under an operating lease, the fair value of which could not be measured separately from the fair value of a building situated thereon at the inception of the lease, was accounted for as being held under a finance lease, unless the building was also clearly held under an operating lease. For these purposes, the inception of the lease was the time that the lease was first entered into by the Group, or taken over from the previous lessee.

Where the Group acquired the use of assets under finance leases, the amounts representing the fair value of the leased asset, or, if lower, the present value of the minimum lease payments, of such assets were recognised as property, plant and equipment and the corresponding liabilities, net of finance charges, were recorded as obligations under finance leases. Depreciation was provided at rates which wrote off the cost or valuation of the assets over the term of the relevant lease or, where it was likely the Group would obtain ownership of the asset, the life of the asset, as set out in note 2(j). Impairment losses were accounted for in accordance with the accounting policy as set out in note 2(m)(iii). Finance charges implicit in the lease payments were charged to profit or loss over the period of the leases so as to produce an approximately constant periodic rate of charge on the remaining balance of the obligations for each accounting period. Contingent rentals were charged to profit or loss in the accounting period in which they were incurred.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets (continued)

(i) As a lessee (continued)

(B) Policy applicable prior to 1 January 2019 (continued)

Where the Group had the use of assets held under operating leases, payments made under the leases were charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis was more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received were recognised in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals were charged to profit or loss in the accounting period in which they were incurred.

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. The rental income from operating leases is recognised in accordance with note 2(x)(iv).

When the Group is an intermediate lessor, the sub-leases are classified as a finance lease or as an operating lease with reference to the right-of-use asset arising from the head lease. If the head lease is a short-term lease to which the Group applies the exemption described in note 2(l)(i), then the Group classifies the sub-lease as an operating lease.

(m) Credit losses and impairment of assets

(i) Credit losses from financial instruments, contract assets and lease receivables

The Group recognises a loss allowance for expected credit losses ("ECLs") on the following items:

– financial assets measured at amortised cost;

– contract assets as defined in IFRS 15 (see note 2(o));

– debt securities measured at FVOCI (recycling); and

– lease receivables.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments, contract assets and lease receivables (continued)

Other financial assets measured at fair value, including units in funds and other non-equity instruments, equity and debt securities measured at FVPL, and equity securities designated at FVOCI (non-recycling), are not subject to the ECL assessment.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

The expected cash shortfalls are discounted using the following discount rates where the effect of discounting is material:

– fixed-rate financial assets, trade and other receivables and contract assets: effective interest rate determined at initial recognition or an approximation thereof;

– variable-rate financial assets: current effective interest rate;

– lease receivables: discount rate used in the measurement of the lease receivable.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

In measuring ECLs, the Group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments, contract assets and lease receivables (continued)

Measurement of ECLs (continued)

ECLs are measured on either of the following bases:

– 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and

– lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

Loss allowances for trade receivables, lease receivables and contract assets are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

For all other financial instruments, the Group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

Significant increases in credit risk

In assessing whether the credit risk of a financial instrument has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial instrument assessed at the reporting date with that assessed at the date of initial recognition. In making this reassessment, the Group considers that a default event occurs when (i) the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or (ii) the financial asset is 90 days past due. 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.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments, contract assets and lease receivables (continued)

Significant increases in credit risk (continued)

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

– failure to make payments of principal or interest on their contractually due dates;

– an actual or expected significant deterioration in a financial instrument's external or internal credit rating (if available);

– an actual or expected significant deterioration in the operating results of the debtor; and

– existing or forecast changes in the market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt securities that are measured at FVOCI (recycling), for which the loss allowance is recognised in other comprehensive income and accumulated in the fair value reserve (recycling).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments, contract assets and lease receivables (continued)

Basis of calculation of interest income

Interest income recognised in accordance with note 2(x)(vi) is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset.

At each reporting date, the Group assesses whether a financial asset is credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable events:

- significant financial difficulties of the debtor;
- a breach of contract, such as a default or past due event;
- it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;
- significant changes in the market, economic or legal environment that have an adverse effect on the debtor; or
- the disappearance of an active market for a security because of financial difficulties of the issuer.

Write-off policy

The gross carrying amount of a financial asset, lease receivable or contract asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(ii) Credit losses from financial guarantees issued

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantees issued are initially recognised within "trade and other payables" at fair value. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss.

Subsequent to initial recognition, the amount initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued.

The Group monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the amount carried in "trade and other payables" in respect of the guarantees (i.e. the amount initially recognised, less accumulated amortisation).

To determine ECLs, the Group considers changes in the risk of default of the specified debtor since the issuance of the guarantee. A 12-month ECL is measured unless the risk that the specified debtor will default has increased significantly since the guarantee is issued, in which case a lifetime ECL is measured. The same definition of default and the same assessment of significant increase in credit risk as described in note 2(m)(i) apply.

As the Group is required to make payments only in the event of a default by the specified debtor in accordance with the terms of the instrument that is guaranteed, an ECL is estimated based on the expected payments to reimburse the holder for a credit loss that it incurs less any amount that the Group expects to receive from the holder of the guarantee, the specified debtor or any other party. The amount is then discounted using the current risk-free rate adjusted for risks specific to the cash flows.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(iii) Impairment of other non-current assets

Internal and external sources of information are reviewed at the end of each reporting date to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

– property, plant and equipment, including right-of-use assets;

– investment property;

– intangible assets;

– goodwill; and

– investments in subsidiaries, associates and joint ventures in the Company's statement of financial position.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill, intangible assets that are not yet available for use and intangible assets that have indefinite useful lives, the recoverable amount is estimated annually whether or not there is any indication of impairment.

– Calculation of recoverable amount

The recoverable amount of an asset is the greater of its 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 time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

– Recognition of impairment losses

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated first to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable), or value in use (if determinable).

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(iii) Impairment of other non-current assets (continued)

– Reversals of impairment losses

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

(iv) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange, the Group is required to prepare an interim financial report in compliance with IAS 34, Interim financial reporting, in respect of the first six months of the financial year. At the end of the interim period, the Group applies the same impairment testing, recognition, and reversal criteria as it would at the end of the financial year (see notes 2(m)(i) and (ii)).

Impairment losses recognised in an interim period in respect of goodwill, are not reversed in a subsequent period. This is the case even if no loss, or a smaller loss, would have been recognised had the impairment been assessed only at the end of the financial year to which the interim period relates.

(n) Inventories and other contract costs

(i) Inventories

Inventories are assets which are held for sale in the ordinary course of business, in the process of production for such sale or in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Inventories are carried at the lower of cost and net realisable value as follows:

– Inventories other than property development

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(n) Inventories and other contract costs (continued)

(i) Inventories (continued)

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

– Property development

Cost and net realisable values are determined as follows:

– Property under development for sale

The cost of properties under development for sale comprises specifically identified cost, including the acquisition cost of interests in leasehold land, aggregate cost of development, materials and supplies, wages and other direct expenses, an appropriate proportion of overheads and borrowing costs capitalised (see note 2(z)). Net realisable value represents the estimated selling price less estimated costs of completion and costs to be incurred in selling the property.

– Completed property held for resale

The cost of completed properties held for sale comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

In the case of completed properties developed by the Group which comprise of multiple units which are sold individually, the cost of each unit is determined by apportionment of the total development costs for that development project to each unit on a per square foot basis, unless another basis is more representative of the cost of the specific unit. Net realisable value represents the estimated selling price less costs to be incurred in selling the property.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(n) Inventories and other contract costs (continued)

(ii) Other contract costs

Other contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer which are not capitalised as inventory (see note 2(n)(i)), property, plant and equipment (see note 2(j)) or intangible assets (see note 2(k)).

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (e.g. an incremental sales commission). Incremental costs of obtaining a contract are capitalised when incurred if the costs relate to revenue which will be recognised in a future reporting period and the costs are expected to be recovered. Other costs of obtaining a contract are expensed when incurred.

Costs to fulfil a contract are capitalised if the costs relate directly to an existing contract or to a specifically identifiable anticipated contract; generate or enhance resources that will be used to provide goods or services in the future; and are expected to be recovered. Costs that relate directly to an existing contract or to a specifically identifiable anticipated contract may include direct labour, direct materials, allocations of costs, costs that are explicitly chargeable to the customer and other costs that are incurred only because the Group entered into the contract (for example, payments to sub-contractors). Other costs of fulfilling a contract, which are not capitalised as inventory, property, plant and equipment or intangible assets, are expensed as incurred.

Capitalised contract costs are stated at cost less accumulated amortisation and impairment losses. Impairment losses are recognised to the extent that the carrying amount of the contract cost asset exceeds the net of (i) remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates, less (ii) any costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

Amortisation of capitalised contract costs is charged to profit or loss when the revenue to which the asset relates is recognised. The accounting policy for revenue recognition is set out in note 2(x).

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(o) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue (see note 2(x)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for ECLs in accordance with the policy set out in note 2(m)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see note 2(p)).

A contract liability is recognised when the customer pays non-refundable consideration before the Group recognises the related revenue (see note 2(x)). A contract liability would also be recognised if the Group has an unconditional right to receive non-refundable consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see note 2(p)).

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see note 2(x)).

(p) Trade and other receivables

A receivable is recognised when the Group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due. If revenue has been recognised before the Group has an unconditional right to receive consideration, the amount is presented as a contract asset (see note 2(o)).

Receivables are stated at amortised cost using the effective interest method less allowance for credit losses (see note 2(m)(i)).

(q) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated cash flow statement. Cash and cash equivalents are assessed for ECLs in accordance with the policy set out in note 2(m)(i).

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Trade and other payables

Trade and other payables are initially recognised at fair value. Except for financial guarantee liabilities measured in accordance with note 2(m)(ii), trade and other payables are subsequently stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

(s) Interest-bearing borrowings

Interest-bearing borrowings are measured initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the Group's accounting policy for borrowing costs (see note 2(z)).

(t) Perpetual securities

Perpetual capital instruments issued by the Group, which includes no contractual obligation for the Group to deliver cash or another financial asset to the holders or to exchange financial assets or financial liabilities with the holders under conditions that are potentially unfavorable to the Group, are classified as equity instruments and are initially recorded at the proceeds received.

(u) Employee benefits

(i) Short-term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Defined benefit retirement plan obligations

The Group's net obligation in respect of defined benefit retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine the present value and the fair value of any plan assets is deducted. The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(u) Employee benefits (continued)

(ii) Defined benefit retirement plan obligations (continued)

Service cost and net interest expense (income) on the net defined benefit liability (asset) are recognised in profit or loss and allocated by function as part of "cost of sales", "distribution costs" or "administrative expenses". Current service cost is measured as the increase in the present value of the defined benefit obligation resulting from employee service in the current period. Net interest expense (income) for the period is determined by applying the discount rate used to measure the defined benefit obligation at the beginning of the reporting period to the net defined benefit liability (asset). The discount rate is the yield at the end of the reporting period on high quality corporate bonds that have maturity dates approximating the terms of the Group's obligations.

When the benefits of a plan are changed, or when a plan is curtailed, current service cost for the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised as an expense in profit or loss at the earlier of when the plan amendment or curtailment occurs and when related restructuring costs or termination benefits are recognised.

Remeasurements arising from defined benefit retirement plans are recognised in other comprehensive income and reflected immediately in retained earnings. Remeasurements comprise actuarial gains and losses, the return on plan assets (excluding amounts included in net interest on the net defined benefit liability (asset)) and any change in the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability (asset)).

(iii) Share-based payments

The fair value of share options granted to employees is recognised as an employee cost with a corresponding increase in a capital reserve within equity. The fair value is measured at grant date using the binomial lattice model, taking into account the terms and conditions upon which the options were granted. Where the employees have to meet vesting conditions before becoming unconditionally entitled to the options, the total estimated fair value of the options is spread over the vesting period, taking into account the probability that the options will vest.

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to the profit or loss for the year of the review, unless the original employee expenses qualify for recognition as an asset, with a corresponding adjustment to the capital reserve. On vesting date, the amount recognised as an expense is adjusted to reflect the actual number of options that vest (with a corresponding adjustment to the capital reserve) except where forfeiture is only due to not achieving vesting conditions that relate to the market price of the Company's shares. The equity amount is recognised in the capital reserve until either the option is exercised (when it is included in the amount recognised in share capital for the shares issued) or the option expires (when it is released directly to retained profits).

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(u) Employee benefits (continued)

(iv) Termination benefits

Termination benefits are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when it recognises restructuring costs involving the payment of termination benefits.

(v) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(v) Income tax (continued)

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Additional income taxes that arise from the distribution of dividends are recognised when the liability to pay the related dividends is recognised.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Company or the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

– in the case of current tax assets and liabilities, the Company or the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or

– in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:

  – the same taxable entity; or

  – different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(w) Provisions, contingent liabilities and onerous contracts

(i) Provisions and contingent liabilities

Provisions are recognised when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

(ii) Onerous contracts

An onerous contract exists when the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Provisions for onerous contracts are measured at the present value of the lower of the expected cost of terminating the contract and the net cost of continuing with the contract.

(iii) Contingent liabilities assumed in business combinations

Contingent liabilities assumed in a business combination which are present obligations at the date of acquisition are initially recognised at fair value, provided the fair value can be reliably measured. After their initial recognition at fair value, such contingent liabilities are recognised at the higher of the amount initially recognised, less accumulated amortisation where appropriate, and the amount that would be determined in accordance with note 2(w)(i). Contingent liabilities acquired assumed in a business combination that cannot be reliably fair valued or were not present obligations at the date of acquisition are disclosed in accordance with note 2(w)(i).

(x) Revenue and other income

Income is classified by the Group as revenue when it arises from the sale of goods, the provision of services or the use by others of the Group's assets under leases in the ordinary course of the Group's business.

Revenue is recognised when control over a product or service is transferred to the customer, or the lessee has the right to use the asset, at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Revenue and other income (continued)

Where the contract contains a financing component which provides a significant financing benefit to the customer for more than 12 months, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction with the customer, and interest income is accrued separately under the effective interest method. Where the contract contains a financing component which provides a significant financing benefit to the Group, revenue recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method. The Group takes advantage of the practical expedient in paragraph 63 of IFRS 15 and does not adjust the consideration for any effects of a significant financing component if the period of financing is 12 months or less.

Further details of the Group's revenue and other income recognition policies are as follows:

(i) Sale of products

Sales of the Group's products are recognised as follows:

– Made-to-order manufacturing arrangements

The Group classifies contracts as made-to-order manufacturing arrangements when the Group manufactures the products in accordance with the customer's specification and under the contract the Group has the right to be paid for work done to date if the customer were to cancel the contract before the order was fully completed.

Revenue arising from made-to-order manufacturing arrangements, and a corresponding contract asset (see note 2(o)), are recognised progressively over time using the cost-to-cost method, i.e. based on the proportion of the actual costs incurred relative to the estimated total costs. The contract asset (either partially or in full) is reclassified to receivables when the entitlement to payment for that amount has become unconditional (see note 2(p)).

– Sales of other products

Revenue is recognised when the customer takes possession of and accepts the products. If the products are a partial fulfilment of a contract covering other goods and/or services, then the amount of revenue recognised is an appropriate proportion of the total transaction price under the contract, allocated between all the goods and services promised under the contract on a relative stand-alone selling price basis.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Revenue and other income (continued)

(ii) Sale of properties

Revenue arising from the sale of properties developed for sale in the ordinary course of business is recognised when legal assignment is completed, which is the point in time when the customer has the ability to direct the use of the property and obtain substantially all of the remaining benefits of the property. Deposits and instalments received on properties sold prior to the date of revenue recognition are included in the statement of financial position under contract liabilities (see note 2(o)).

When residential properties are marketed by the Group while the property is still under construction, the Group may offer a discount compared to the listed sales price, provided the customer agrees to pay the balance of the consideration early. In such cases, if the advance payments are regarded as providing a significant financing benefit to the Group, interest expense arising from the adjustment of time value of money will be accrued by the Group during the period between the payment date and the completion date of legal assignment. This accrual increases the balance of the contract liability during the period of construction, and therefore increases the amount of revenue recognised when control of the completed property is transferred to the customer. The interest is expensed as accrued unless it is eligible to be capitalised under IAS 23, Borrowing costs, in accordance with the policies set out in note 2(z).

(iii) Construction contracts

A contract with a customer is classified by the Group as a construction contract when the contract relates to an asset under the control of the customer and therefore the Group's construction activities create or enhance an asset under the customer's control.

When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognised progressively over time using the cost-to-cost method, i.e. based on the proportion of the actual costs incurred relative to the estimated total costs.

The likelihood of the Group earning contractual bonuses for early completion or suffering contractual penalties for late completion are taken into account in making these estimates, such that revenue is only recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.

When the outcome of a construction contract cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Revenue and other income (continued)

(iii) Construction contracts (continued)

If at any time the costs to complete the contract are estimated to exceed the remaining amount of the consideration under the contract, then a provision is recognised in accordance with the policy set out in note 2(w)(ii).

(iv) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are earned.

(v) Dividends

– Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

– Dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

(vi) Interest income

Interest income is recognised as it accrues under the effective interest method using the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of the financial asset. For financial assets measured at amortised cost or FVOCI (recycling) that are not credit-impaired, the effective interest rate is applied to the gross carrying amount of the asset. For credit-impaired financial assets, the effective interest rate is applied to the amortised cost (i.e. gross carrying amount net of loss allowance) of the asset (see note 2(m)(i)).

(vii) Government grants

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are deducted from the carrying amount of the asset and consequently are effectively recognised in profit or loss over the useful life of the asset by way of reduced depreciation expense.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(y) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of reporting period. Exchange gains and losses are recognised in profit or loss, except those arising from foreign currency borrowings used to hedge a net investment in a foreign operation which are recognised in other comprehensive income.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. The transaction date is the date on which the Company initially recognises such non-monetary assets or liabilities. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

The results of foreign operations are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Statement of financial position items, including goodwill arising on consolidation of foreign operations acquired on or after 1 January 2005, are translated into RMB at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve. Goodwill arising on consolidation of a foreign operation acquired before 1 January 2005 is translated at the foreign exchange rate that applied at the date of acquisition of the foreign operation.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to profit or loss when the profit or loss on disposal is recognised.

(z) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(aa) Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

(i) has control or joint control over the Group;

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or the Group's parent.

(b) An entity is related to the Group if any of the following conditions applies:

(i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third party.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

(viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(bb) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated financial statements, are identified from the financial statements provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

3 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES

(a) Significant judgements in applying accounting policy

(i) De facto control over subsidiary

China Gezhouba Group Company Limited (中國葛洲壩集團有限公司) ("CGGC Group"), a limited liability company established in the PRC and a wholly-owned subsidiary of the Company. There is a subsidiary of CGGC Group, China Gezhouba Group Stock Company Limited (中國葛洲壩集團股份有限公司) ("CGGC"), in which the Company indirectly has less than 50% ownership interest and voting rights. The Group's management exercises its critical judgement when determining whether the Group has de facto control over an entity by evaluating its influence over the entity which includes, but is not limited to:

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

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

- rights arising from other contractual arrangements; and

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

3 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES (CONTINUED)

(b) Key assumptions and uncertainties about accounting estimates

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.

(i) Revenue recognition

As explained in policy note 2(x), revenue from construction contracts is recognised over time. Such revenue and profit recognition on uncompleted projects is dependent on estimating the total outcome of the contract, as well as the work done to date.

Based on the Group's recent experience and the nature of the construction activities undertaken by the Group, the Group has made estimates of the point at which it considered the work was sufficiently advanced such that the outcome of the contract can be reasonably measured. Until this point is reached the related contract assets disclosed in note 27 do not include profit which the Group might eventually realise from the work done to date. In addition, actual outcomes in terms of total cost or revenue may be higher or lower than estimated at the end of the reporting period, which would affect the revenue and profit recognised in future years as an adjustment to the amounts recorded to date.

(ii) Expected credit losses of trade receivables and contract assets

Expected credit losses are a probability-weighted estimate of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the trade receivables and contract assets. Trade receivables and contract assets are categorised by individual characteristics of each customer rather than the industry or country in which the customers operate. The Group estimates the loss allowance at an amount equal to lifetime expected credit losses for trade receivables and contract assets based on the ageing of overdue balances, repayment histories of individual debtors, existing customer-specific and market conditions and forward-looking information.

The Group considers the following indicators when assessing the credit risks, such as the changes in macroeconomic conditions, probabilities of default and internal or external credit ratings, or expected operating performance of the customer, etc. At every reporting date the historical observed default rates are updated and changes in the forward-looking information are analysed. Such assessment involves a significant degree of judgement by the management. Details of movements of allowance for trade receivables and contract assets are disclosed in note 39.

3 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES (CONTINUED)

(b) Key assumptions and uncertainties about accounting estimates (continued)

(iii) Useful lives and residual value of property, plant and equipment

The Group's management estimates the residual value and useful lives of property, plant and equipment. These estimates are based on the historical experience of the actual residual value and useful lives of property, plant and equipment of similar nature and functions. It could change significantly as a result of technical innovations and keen competitions from competitors. Management will increase the depreciation charge where residual value or useful lives are less than previously estimated, or will write-off or write-down technically obsolete assets. Details of property, plant and equipment are disclosed in note 12.

(iv) Amortisation and impairment assessment of service concession arrangements

The Group recognised the concession rights on the construction and operation of toll roads as intangible assets. Amortisation is calculated based on a units-of-usage basis, which is the ratio of actual traffic volume compared to the total expected traffic volume of the toll roads over the service concession period as estimated by the management. These intangible assets are amortised commencing from the date of commencement of commercial operation.

The management of the Group makes judgement on the estimation of the total expected traffic volume over the service concession period. The total expected traffic volume over the respective service concession periods could change significantly. The Group reviews regularly the total expected traffic volume throughout the operating periods of the respective service concession arrangements. If it is considered appropriate, independent professional traffic studies will be obtained. When the difference between the actual traffic volume and the previous estimated expected traffic volume of the same period is material or/and there are circumstances came to the attention of the management that the future traffic volume may be significantly different to previous estimate, the Group will review and revise, if considered appropriate, the total expected traffic volume of the remaining period of the service concession, and adjust the future amortisation in accordance with the revised total expected traffic volume.

In addition, at the end of the reporting period, the management of the Group reviewed the carrying amounts of the concession rights to determine whether there was any indication that those assets have suffered an impairment loss. The management of the Group was of the view that there was no indication that concession rights have suffered any significant impairment loss on their carrying values at 31 December 2019. Details are set out in note 15.

3 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES (CONTINUED)

(b) Key assumptions and uncertainties about accounting estimates (continued)

(v) Recognition of deferred tax assets

The realisation of the deferred tax assets mainly depends on whether sufficient future profits or taxable temporary differences will be available in the future. In cases where the actual future profits generated are less than expected, a material reversal of deferred tax assets may arise, which will be recognised in profit or loss in the period in which such a reversal takes place. Besides, no deferred tax asset has been recognised in respect of certain deductible tax losses and other deductible temporary differences due to the unpredictability of future profit streams, details of which are set out in note 21(b). In cases where the actual future profits generated are higher than expected, the deferred tax assets will be adjusted and recognised in the consolidated statement of profit or loss and other comprehensive income in the period in which such a situation takes place.

(vi) Retirement and other supplemental benefit obligations

The retirement and other supplemental benefit obligations are estimated based on a number of factors that are determined on an actuarial basis using a number of assumptions as disclosed in note 34. The accuracy of the estimate mainly depends on the extent of deviation between the actuarial assumptions and the actual conditions. The Group's actuarial assumptions mainly comprised of but not limited to the following:

- Demographic assumptions:
  - Mortality;
  - rates of employee turnover, disability and early retirement; and
  - the take-up of any benefit payment options available under the plan.
- Financial assumptions:
  - Future salary;
  - benefit levels (excluding any cost of the benefits to be met by employees or third parties); and
  - the discount rate.

Any changes in these assumptions will have an impact on the carrying amount of retirement and other supplemental benefit obligations. To determine the present value of retirement and other supplemental benefit obligations, the Group obtains an actuarial valuation at 31 December 2019.

3 CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES (CONTINUED)

(b) Key assumptions and uncertainties about accounting estimates (continued)

(vii) Determining the lease term

As explained in policy note 2(l), the lease liability is initially recognised at the present value of the lease payments payable over the lease term. In determining the lease term at the commencement date for leases that include renewal options exercisable by the Group, the Group evaluates the likelihood of exercising the renewal options taking into account all relevant facts and circumstances that create an economic incentive for the Group to exercise the option, including favourable terms, leasehold improvements undertaken and the importance of that underlying asset to the Group's operation. The lease term is reassessed when there is a significant event or significant change in circumstance that is within the Group's control. Any increase or decrease in the lease term would affect the amount of lease liabilities and right-of-use assets recognised in future years.

4 SEGMENT INFORMATION

Segment reporting

The executive directors of the Company are identified as the chief operating decision maker (the "CODM") of the Group for the purposes of resources allocation and performance assessment. The information reported to the CODM for the purposes of resources allocation and performance assessment focuses specifically on respective businesses of the Group.

As at 31 December 2018, the Group has reorganised the reportable segments to the CODM, by integrating equipment manufacturing, civil explosives and cement production into one segment: industrial manufacturing, and splitting clean energy, environmental protection and water utilities from investment and other business as a separate reportable segment.

As at 31 December 2019, the Group reorganised the reportable segment to the CODM by moving power engineering debugging and project operation and maintenance businesses from investment and other business to construction and contracting.

4 SEGMENT INFORMATION (CONTINUED)

Segment reporting (continued)

The Group's operating and reportable segments are as follows:

- Provision of survey and design services for large scale power generation, transformation and transmission projects of fossil-fuel power, hydropower, nuclear power, wind farms and solar power in China and overseas, and the provision of a broad range of consulting services, such as the policy and planning of power industry as well as testing, evaluation and supervision of power projects ("Survey, design and consulting services");

- Provision of infrastructure construction contracts and power engineering debugging and project operation and maintenance services for large scale power generation, transformation and transmission projects of fossil-fuel power, hydropower, nuclear power, wind farms and solar power in China and overseas, as well as undertaking other types of construction projects, such as water conservancy facilities, transportation, municipal engineering, industrial, civil construction projects ("Construction and contracting");

- Design, manufacturing and sales of various types of equipment for various sectors of the power industry, including mainly auxiliary machinery equipment for power plants, power grid equipment, steel structure, energy-saving and environmental-friendly equipment and complete sets of equipment; manufacturing and sales of civil explosives and cement, and the provision of blasting services for construction projects ("Industrial manufacturing");

- Investing in and operating power plants, water plant construction and operation, and environmental water project operation, as well as participating in renewable resource business ("Clean energy, environmental protection and water utilities"); and

- Investing in and operating infrastructure projects (such as expressways) and providing financial service, as well as engaging in the real estate developing business ("Investment and other businesses").

The accounting policies applied in determining segment revenue and segment results of the operating segments are the same as the Group's accounting policies described in note 2 above.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

4 SEGMENT INFORMATION (CONTINUED)

Segment revenue and results

For the year ended 31 December 2019

	Survey, design and consulting services RMB'000	Construction and contracting RMB'000	Industrial manufacturing RMB'000	Clean energy, environmental protection and water utilities RMB'000	Investment and other businesses RMB'000	Eliminations RMB'000	Total RMB'000
Disaggregated by timing of revenue recognition							
Point in time	–	–	22,988,038	16,171,576	17,673,213	–	56,832,827
Over time	13,089,157	177,369,004	–	–	–	–	190,458,161
External segment revenue	13,089,157	177,369,004	22,988,038	16,171,576	17,673,213	–	247,290,988
Inter-segment revenue	64,841	8,056,105	722,589	1,649	1,861,548	(10,706,732)	–
Segment revenue	13,153,998	185,425,109	23,710,627	16,173,225	19,534,761	(10,706,732)	247,290,988
Segment results	1,194,899	6,758,815	3,538,854	303,259	2,409,575	(77,206)	14,128,196
Unallocated items:							
Cost of sales							(1,041)
Other income							712,250
Net impairment losses on financial assets and contract assets							(1,118,360)
Other net gains and losses							2,420,944
Selling expenses							(10,124)
Administrative expenses							(391,638)
Research and development expenses							(11,938)
Finance income							1,055,089
Finance costs							(4,355,663)
Share of profits of joint ventures							168,960
Share of profits of associates							711,246
Profit before taxation							13,307,921

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

4 SEGMENT INFORMATION (CONTINUED)

Segment revenue and results (continued)

For the year ended 31 December 2018

	Survey, design and consulting services	Construction and contracting	Industrial manufacturing	Clean energy, environmental protection and water utilities	Investment and other businesses	Eliminations	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Disaggregated by timing of revenue recognition							
Point in time	–	–	20,682,202	20,826,091	15,744,930	–	57,253,223
Over time	12,178,036	154,603,088	–	–	–	–	166,781,124
External segment revenue	12,178,036	154,603,088	20,682,202	20,826,091	15,744,930	–	224,034,347
Inter-segment revenue	38,253	8,692,269	1,137,373	–	1,827,209	(11,695,104)	–
Segment revenue	12,216,289	163,295,357	21,819,575	20,826,091	17,572,139	(11,695,104)	224,034,347
Segment results	1,394,573	6,974,332	2,567,328	1,420,709	1,140,511	(2,734)	13,494,719
Unallocated items:							
Cost of sales							(997)
Other income							637,934
Net impairment losses on financial assets and contract assets							(851,503)
Other net gains and losses							795,350
Selling expenses							(10,548)
Administrative expenses							(333,436)
Research and development expenses							(8,030)
Finance income							795,528
Finance costs							(3,827,043)
Share of profits of joint ventures							304,385
Share of profits of associates							680,450
Profit before taxation							11,676,809

Note: The Group has initially applied IFRS 16 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

4 SEGMENT INFORMATION (CONTINUED)

Segment revenue and results (continued)

Segment profit represents the profit earned by each segment without allocation of certain cost of sales, other income, net impairment losses on financial assets and contract assets, other net gains and losses, selling expenses, administrative expenses, research and development expenses, finance income, finance costs, share of profits of joint ventures and associates. This is the measure reported to the CODM for the purposes of resource allocation and performance assessment.

Revenue expected to be recognised in the future arising from contracts with customers in existence at the end of the reporting period:

As at 31 December 2019, the aggregated amount of the transaction price allocated to the remaining performance obligations under the Group's existing contracts is RMB654,601 million. This amount represents revenue expected to be recognised in the future from survey, design and consulting contracts, construction contracts and pre-completion sales contracts of properties under development entered into by the customers with the Group. The Group will recognise the expected revenue in future when or as the work is completed.

The Group has applied the practical expedient in paragraph 121 of IFRS 15 to its sales contracts for equipment manufacturing, civil explosives, cement production, clean energy, environmental protection and water utilities, such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the sales contracts that had an original expected duration of one year or less.

The above amount also does not include any amounts of completion bonuses that the Group may earn in the future by meeting the conditions set out in the Group's construction contracts with customers, unless at the end of the reporting period it is highly probable that the Group will satisfy the conditions for earning those bonuses.

Segment assets and liabilities

Information reported to the CODM for the purposes of resources allocation and performance assessment does not include any assets and liabilities. Accordingly, no segment assets and liabilities are presented.

4 SEGMENT INFORMATION (CONTINUED)

Geographical information

The Group's operations and non-current assets are mainly located in Mainland China. The geographical information about its revenue and non-current assets prepared by location of customers is as follows:

	2019 RMB'000	2018 RMB'000
Segment revenue		
Mainland China	**206,711,730**	185,048,912
Overseas:		
Pakistan	**6,335,835**	9,313,681
Vietnam	**4,021,275**	3,430,570
Jordan	**3,950,187**	2,449,575
Bangladesh	**3,097,357**	2,691,657
Indonesia	**2,763,818**	2,988,719
Angola	**2,720,640**	3,094,393
Others	**17,690,146**	15,016,840
Total	**247,290,988**	224,034,347

	2019 RMB'000	2018 (Note (ii)) RMB'000
Non-current assets		
Mainland China	**99,409,438**	87,966,184
Overseas:		
Vietnam	**8,992,128**	4,086,860
Pakistan	**5,717,045**	3,755,302
Kazakhstan	**870,091**	680,821
Kuwait	**222,614**	226,503
Argentina	**162,157**	169,152
Brazil	**126,188**	39,265
Liberia	**110,269**	124,483
Others	**704,710**	901,770
Total	**116,314,640**	97,950,340

Notes:

(i) Non-current assets exclude financial instruments and deferred tax assets.

(ii) The Group has initially applied IFRS 16 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

4 SEGMENT INFORMATION (CONTINUED)

Revenue from major customers

There is no major individual customers contributing over 10% of the total revenue of the Group for the year ended 31 December 2019 (2018: nil).

5 OTHER INCOME

	2019 RMB'000	2018 RMB'000
Government grants		
– grants related to income (note)	**1,656,056**	2,041,337
– grants related to assets (note 36)	**31,827**	50,277
Dividend income from financial assets at FVOCI	**98,317**	101,173
Dividend income from financial assets at FVPL	**109,695**	73,054
Compensation income from project owners and other parties	**38,453**	40,308
Others	**175,707**	99,912
Total	**2,110,055**	2,406,061

Note: Government grants include various government subsidies received by the Group from relevant government bodies primarily in connection with enterprise expansion, technology advancement and value-added tax refund. There were no unfulfilled conditions or contingencies relating to these subsidies as at 31 December 2019.

6 NET IMPAIRMENT LOSSES ON FINANCIAL ASSETS AND CONTRACT ASSETS AND OTHER NET GAINS AND LOSSES

(a) Net impairment losses on financial assets and contract assets

	2019 RMB'000	2018 RMB'000
Trade receivables (note 39(b))	**460,232**	382,407
Contract assets (note 39(b))	**88,148**	(67,397)
Other receivables (note 23)	**121,045**	84,870
Other receivables from Huanjia Connected Suppliers (note 23)	**448,935**	451,623
Total	**1,118,360**	851,503

6 NET IMPAIRMENT LOSSES ON FINANCIAL ASSETS AND CONTRACT ASSETS AND OTHER NET GAINS AND LOSSES (CONTINUED)

(b) Other net gains and losses

	2019 RMB'000	2018 RMB'000
Net foreign exchange gain	**60,410**	463,589
(Loss)/gain on disposals of:		
– Financial assets at FVPL	**(2,059)**	75,429
– Property, plant and equipment	**106,132**	52,328
– Prepaid lease payments	**–**	170,933
– Intangible assets	**(755)**	–
– Subsidiaries (note 45)	**2,300,070**	37,331
Impairment loss recognised in respect of:		
– Property, plant and equipment (note 12)	**(19,692)**	(21,393)
– Investments in an associate	**(55,695)**	–
Fair value changes of financial assets at FVPL	**40,953**	403,103
Loss arising from "the Transfer" (note 23(iv))	**–**	(349,183)
Loss on compensation, penalties and fines	**(105,192)**	(84,337)
Others	**96,772**	47,550
Total	**2,420,944**	795,350

7 FINANCE INCOME AND FINANCE COSTS

	2019	2018
		(Note (i))
	RMB'000	RMB'000
Interest income on:		
Bank and cash balances and pledged deposits	1,000,730	746,424
Other loans	40,378	32,316
Defined benefit plan assets	13,981	16,788
Total finance income	1,055,089	795,528
Interest expenses on:		
Bank and other borrowings	4,935,467	4,352,355
Corporate bonds	872,235	767,321
Asset based security ("ABS")	95,426	43,548
Finance leases	–	3
Lease liabilities	40,626	–
Discounted bills	70,606	132,497
Defined benefit obligations	299,693	420,040
	6,314,053	5,715,764
Less: Interest capitalised in		
– Construction in progress	(573,623)	(333,762)
– Properties under development for sale	(916,280)	(1,280,146)
– Intangible assets	(468,487)	(274,813)
Total finance costs	4,355,663	3,827,043

Notes:

(i) The Group has initially applied IFRS 16 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

(ii) Borrowing costs were capitalised to the qualifying assets based on the effective interest rates of bank and other borrowings and corporate bonds.

(iii) The borrowing costs have been capitalised at rates of 2.92% to 9.00% for the year ended 31 December 2019 (2018: 3.86% to 9.00%).

8 PROFIT FOR THE YEAR

Profit for the year has been arrived at after charging/(crediting):

	2019 RMB'000	2018 (Note) RMB'000
Directors' and supervisors' emoluments (note 9)	**7,418**	5,971
Other staff costs:		
Salaries and other labor costs	**17,819,620**	16,702,070
Retirement benefits and pensions	**2,758,024**	2,828,596
Other social benefits	**4,626,408**	4,411,542
Effect of share-based compensation	**(18,873)**	6,043
Total staff and labor costs	**25,192,597**	23,954,222
Less: Capitalised in construction in progress	**(123,026)**	(90,153)
Less: Capitalised in properties under development for sale	**(162,173)**	(74,110)
	24,907,398	23,789,959
Depreciation:		
– Owned property, plant and equipment (note 12)	**2,783,108**	2,737,148
– Right-of-use assets (note 12)	**668,687**	–
– Investment properties (note 14)	**35,683**	30,752
Less: Released from deferred revenue under sales and leaseback transactions (note 36)	**(6,026)**	(6,048)
	3,481,452	2,761,852
Less: Capitalised in construction in progress	**(12,714)**	(1,618)
Less: Capitalised in properties under development for sale	**(3,174)**	(3,163)
	3,465,564	2,757,071
Amortisation:		
– Intangible assets (included in cost of sales)	**490,483**	436,566
– Intangible assets (included in administrative expenses)	**104,588**	110,862
– Intangible assets (included in selling expenses)	**646**	459
Subtotal (note 15)	**595,717**	547,887
– Prepaid lease payments (note 13)	**–**	206,369
Less: Capitalised in construction in progress	**–**	(6,040)
	595,717	748,216

8 PROFIT FOR THE YEAR (CONTINUED)

	2019 RMB'000	2018 (Note) RMB'000
Auditor's remuneration	**28,649**	22,280
Recognition/(reversal) of allowance on:		
– Inventories	**153,095**	31,044
– Trade receivables (note 39(b))	**460,232**	382,407
– Contract assets (note 39(b))	**88,148**	(67,397)
– Other receivables (note 23)	**121,045**	84,870
– Other receivables from Huanjia Connected Suppliers (note 23)	**448,935**	451,623
Cost of inventories recognised as expense	**67,069,186**	68,151,447
Leases expenses	**473,722**	502,806
Gross rental income from investment properties	**(56,866)**	(53,663)
Less: Direct operating expenses (including depreciation of investment properties) incurred for investment properties that generated rental income	**42,404**	36,787
	(14,462)	(16,876)

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise right-of-use assets relating to leases which were previously classified as operating leases under IAS 17. The depreciated carrying amount of the land use rights which were previously included in prepaid lease payments is also identified as right-of-assets. After initial recognition of right-of-use assets at 1 January 2019, the Group as a lessee is required to recognise the depreciation of right-of-use assets, instead of the previous policy of recognising rental expenses incurred under operating leases on a straight-line basis over the lease term. Under this approach, the comparative information is not restated. See note 2(c).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

9 DIRECTORS', CHIEF EXECUTIVE'S, SUPERVISORS' AND EMPLOYEES' EMOLUMENTS

Directors' and supervisors' emoluments disclosed pursuant to section 383(1) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

	Directors' fee	Salaries and other allowances	Discretionary bonus	Retirement benefit scheme contributions	Share based compensation under restricted share incentive scheme	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
For the year ended 31 December 2019						
Executive directors and chief executive:						
Mr. WANG Jianping	–	259	1,167	50	–	1,476
Mr. DING Yanzhang (chief executive)	–	259	1,167	50	–	1,476
Mr. ZHANG Xianchong	–	237	1,056	50	–	1,343
	–	755	3,390	150	–	4,295
Non-executive directors:						
Mr. MA Chuanjing	–	–	–	–	–	–
Mr. LIU Xueshi	–	–	–	–	–	–
Mr. SI Xinbo	–	–	–	–	–	–
Independent non-executive directors:						
Mr. DING Yuanchen	60	–	–	–	–	60
Mr. ZHENG Qiyu(Passed away in December 2019)	60	–	–	–	–	60
Mr. ZHANG Yuming	120	–	–	–	–	120
	240	–	–	–	–	240
Supervisors:						
Mr. WANG Zengyong	–	444	496	50	–	990
Mr. KAN Zhen	–	414	470	50	–	934
Mr. LI Fangyi	–	383	418	50	–	851
Mr. WEI Zhongxin	–	54	–	–	–	54
Mr. FU Dexiang	–	54	–	–	–	54
	–	1,349	1,384	150	–	2,883
Total	240	2,104	4,774	300	–	7,418

9 DIRECTORS', CHIEF EXECUTIVE'S, SUPERVISORS' AND EMPLOYEES' EMOLUMENTS (CONTINUED)

	Directors' fee	Salaries and other allowances	Discretionary bonus	Retirement benefit scheme contributions	Share based compensation under restricted share incentive scheme	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
For the year ended 31 December 2018						
Executive directors and chief executive:						
Mr. WANG Jianping	–	242	684	58	–	984
Mr. DING Yanzhang (chief executive)	–	242	684	58	–	984
Mr. ZHANG Xianchong	–	221	660	58	–	939
	–	705	2,028	174	–	2,907
Non-executive directors:						
Mr. MA Chuanjing	–	–	–	–	–	–
Mr. LIU Xueshi	–	–	–	–	–	–
Mr. SI Xinbo	–	–	–	–	–	–
Independent non-executive directors:						
Mr. DING Yuanchen	60	–	–	–	–	60
Mr. WANG Bin (Passed away in August 2018)	40	–	–	–	60	100
Mr. ZHENG Qiyu	60	–	–	–	–	60
Mr. ZHANG Yuming	122	–	–	–	–	122
	282	–	–	–	60	342
Supervisors:						
Mr. WANG Zengyong	–	409	444	58	–	911
Mr. LIAN Yongjiu (Resigned in June 2018)	–	228	284	33	–	545
Mr. KAN Zhen	–	380	420	58	–	858
Mr. LI Fangyi (Appointed in June 2018)	–	153	122	25	–	300
Mr. WEI Zhongxin	–	54	–	–	–	54
Mr. FU Dexiang	–	54	–	–	–	54
	–	1,278	1,270	174	–	2,722
Total	282	1,983	3,298	348	60	5,971

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

The non-executive director's emoluments shown above was mainly for his services as Director. The independent non-executive directors' emoluments shown above were mainly for their services as Directors.

9 DIRECTORS', CHIEF EXECUTIVE'S, SUPERVISORS' AND EMPLOYEES' EMOLUMENTS (CONTINUED)

The discretionary bonus is determined by the remuneration committee in accordance with the relevant human resources policies.

Five highest paid individuals

For the year ended 31 December 2019, the five highest paid employees were neither directors, supervisors nor chief executive of the Group (2018: Nil).

Details of the remuneration of the five highest paid individuals during the year are as follows:

	2019 RMB'000	2018 RMB'000
Basic salaries and other allowances	**1,759**	2,676
Discretionary bonus	**6,020**	3,978
Retirement benefit scheme contributions	**228**	232
Share based compensation under restricted share incentive scheme	**–**	170
	8,007	7,056

Discretionary bonuses are calculated based on the Group's or respective member's performance for relevant financial year.

The number of the five highest paid individuals whose remuneration fell within the following bands is as follows:

	2019	2018
Hong Kong Dollar ("HKD") 1,000,001 to HKD1,500,000	**–**	2
HKD1,500,001 to HKD2,000,000	**5**	3
	5	5

During the year, no emoluments were paid by the Group to any of the directors, supervisors, chief executive, or the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office. None of the directors, supervisors and chief executive has waived any emoluments during the year.

10 INCOME TAX

	2019 RMB'000	2018 RMB'000
Current enterprise income tax	**3,129,984**	2,790,889
Deferred taxation (note 21(b))	**42,806**	(23,861)
Land appreciation tax ("LAT")	**534,752**	358,270
	3,707,542	3,125,298

Most of the subsidiaries of the Company are located in Mainland China. The provision for income tax is calculated based on a statutory rate of 25% under the relevant Corporate Income Tax Law of the PRC and the respective regulations, except for certain preferential treatments available to the Company's subsidiaries, which were exempted or taxed at a preferential rate of 15% during the reporting period primarily due to their status as entities engaging in technology development or development projects in the western part of Mainland China.

The provision of LAT is estimated according to the requirements set forth in the relevant PRC tax laws and regulations. LAT has been provided at ranges of progressive rates of the appreciation value, with certain allowable exemptions and deductions.

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

	2019 RMB'000	2018 RMB'000
Profit before taxation	**13,307,921**	11,676,809
National tax on profit before taxation, calculated at the rates applicable to profits in the countries concerned	**3,326,980**	2,919,202
Effect of expenses that are not deductible for tax purposes	**136,329**	212,414
Tax effect of share of profit of joint ventures	**(42,240)**	(76,096)
Tax effect of share of profit of associates	**(177,812)**	(170,113)
Effect of tax-exempted income	**(39,492)**	(48,417)
Effect of unrecognised deductible losses and unrecognised deductible temporary differences	**956,191**	915,084
Effect of using previously unrecognised deductible losses and previously unrecognised deductible temporary differences	**(147,250)**	(170,053)
Tax concession	**(710,684)**	(716,523)
LAT	**534,752**	358,270
Tax effect of LAT	**(133,688)**	(89,567)
Others	**4,456**	(8,903)
Actual tax expense	**3,707,542**	3,125,298

11 EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to the equity shareholders of the Company of RMB5,072 million (2018: RMB4,568 million, excluding cash dividend attributable to the shares under restricted share incentive scheme expected to be vested in the future) and the weighted average of 29,855,864,000 ordinary shares in issue during the year ended 31 December 2019 (2018: 29,783,730,000 shares).

The weighted average number of ordinary shares is calculated as follows:

	2019 **'000**	2018 '000
Issued ordinary shares at 1 January	**29,855,864**	29,790,770
Effect of shares under restricted share incentive scheme vest (note 37(d))	–	10,586
Effect of shares under restricted share incentive scheme purchase (note 37(d))	–	(17,626)
Weighted average number of ordinary shares at 31 December	**29,855,864**	29,783,730

Given the Group failed to fulfil the vesting conditions of restricted shares which are subject to achievement of financial performance, the Directors are of the opinion that nil share will be vested in the future. Therefore, there was no dilutive effect arising from restricted share incentive scheme for the year ended 31 December 2019.

12 PROPERTY, PLANT AND EQUIPMENT

(a) Reconciliation of carrying amount

	Buildings	Ownership interests in leasehold land held for own use	Machinery	Transportation vehicles/ vessels	Electronic equipment	Office equipment	Others	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost:									
At 1 January 2018	21,523,760	–	20,766,440	3,534,655	1,492,751	498,755	728,541	2,523,977	51,068,879
Additions	201,992	–	809,706	306,156	233,258	55,537	97,791	5,212,146	6,916,586
Transfer within property, plant and equipment	2,482,350	–	1,919,077	1,657	101,816	724	173,268	(4,678,892)	–
Acquisition of subsidiaries	86,980	–	96,916	3,477	1,565	133	21	61,206	250,298
Transfer from investment properties (note 14)	34,198	–	–	–	–	–	–	–	34,198
Write off/disposals	(217,571)	–	(801,850)	(532,683)	(72,875)	(25,380)	(61,571)	(5,867)	(1,717,797)
Disposal of subsidiaries	–	–	(1,158)	(2,288)	(1,039)	(1,016)	–	–	(5,501)
Transfer to investment properties (note 14)	(47,054)	–	–	–	–	–	–	–	(47,054)
Exchange adjustment	(13,561)	–	(18,729)	(26,911)	(1,440)	(756)	209	–	(61,188)
At 31 December 2018	24,051,094	–	22,770,402	3,284,063	1,754,036	527,997	938,259	3,112,570	56,438,421
Impact on initial application of IFRS 16 (note (d))	1,197,913	9,309,848	9,460	40,814	–	189	369	–	10,558,593
At 1 January 2019	**25,249,007**	**9,309,848**	**22,779,862**	**3,324,877**	**1,754,036**	**528,186**	**938,628**	**3,112,570**	**66,997,014**
Additions	**1,104,479**	**128,545**	**752,124**	**206,557**	**114,862**	**80,521**	**79,473**	**3,617,415**	**6,083,976**
Transfer within property, plant and equipment	**454,840**	**–**	**483,029**	**1,244**	**25,968**	**2,677**	**212,836**	**(1,180,594)**	**–**
Acquisition of subsidiaries	**61,384**	**–**	**155,409**	**171**	**14**	**–**	**159**	**–**	**217,137**
Transfer from investment properties (note 14)	**5,414**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**5,414**
Write off/disposals	**(234,976)**	**(19,020)**	**(1,060,960)**	**(293,783)**	**(91,185)**	**(26,314)**	**(37,369)**	**(1,411)**	**(1,765,018)**
Disposal of subsidiaries (note 45)	**(20,153)**	**(3,244)**	**(12,707)**	**(1,088)**	**(1,461)**	**(94)**	**(1,381)**	**–**	**(40,128)**
Transfer to investment properties (note 14)	**(57,388)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(57,388)**
Exchange adjustment	**(8,149)**	**267**	**(14,926)**	**1,722**	**(2,496)**	**(354)**	**(1,273)**	**(13,334)**	**(38,543)**
At 31 December 2019	**26,554,458**	**9,416,396**	**23,081,831**	**3,239,700**	**1,799,738**	**584,622**	**1,191,073**	**5,534,646**	**71,402,464**

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

12 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(a) Reconciliation of carrying amount (continued)

	Buildings	Ownership interests in leasehold land held for own use	Machinery	Transportati on vehicles/ vessels	Electronic equipment	Office equipment	Others	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Accumulated depreciation and impairment:									
At 1 January 2018	(5,355,668)	–	(10,691,138)	(2,432,346)	(987,162)	(304,382)	(488,360)	(28,459)	(20,287,515)
Provided for the year (note 8)	(842,890)	–	(1,396,558)	(242,391)	(134,650)	(51,676)	(68,983)	–	(2,737,148)
Transfer from investment properties (note 14)	(7,747)	–	–	–	–	–	–	–	(7,747)
Write off/disposals	60,024	–	682,270	488,012	64,937	21,950	51,039	5,867	1,374,099
Disposal of subsidiaries	–	–	1,060	2,014	955	875	–	–	4,904
Transfer to investment properties (note 14)	25,840	–	–	–	–	–	–	–	25,840
Impairment for the year (note 6)	(15,779)	–	(5,578)	(36)	–	–	–	–	(21,393)
Exchange adjustment	69	–	15,151	13,483	921	186	633	–	30,443
At 31 December 2018	(6,136,151)	–	(11,394,793)	(2,171,264)	(1,054,999)	(333,047)	(505,671)	(22,592)	(21,618,517)
Provided for the year (note 8)	(1,247,994)	(242,801)	(1,394,847)	(238,887)	(148,598)	(64,334)	(114,334)	–	(3,451,795)
Transfer from investment properties (note 14)	(1,295)	–	–	–	–	–	–	–	(1,295)
Write off/disposals	170,029	1,873	898,610	253,430	80,463	20,683	32,690	3	1,457,781
Disposal of subsidiaries (note 45)	5,025	265	3,799	930	736	75	221	–	11,051
Transfer to investment properties (note 14)	22,834	–	–	–	–	–	–	–	22,834
Impairment for the year (note 6)	–	–	(19,685)	–	–	–	(7)	–	(19,692)
Exchange adjustment	29	–	2,263	(727)	241	68	(778)	–	1,096
At 31 December 2019	(7,187,523)	(240,663)	(11,904,653)	(2,156,518)	(1,122,157)	(376,555)	(587,879)	(22,589)	(23,598,537)
Net book value:									
At 31 December 2019	**19,366,935**	**9,175,733**	**11,177,178**	**1,083,182**	**677,581**	**208,067**	**603,194**	**5,512,057**	**47,803,927**
At 31 December 2018	17,914,943	–	11,375,609	1,112,799	699,037	194,950	432,588	3,089,978	34,819,904

12 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(a) Reconciliation of carrying amount (continued)

Notes:

(a) As at the end of each reporting period, there was indication that certain specific property, plant and equipment have suffered an impairment loss due to the change of the market condition. The recoverable amount of these assets were estimated by management of the Group in order to determine the extent of the impairment loss. Impairment on property, plant and equipment of RMB20 million was made for the year ended 31 December 2019 (2018: RMB21 million) to reduce the carrying value of certain property, plant and equipment to the recoverable amount. These impairment losses were primarily due to the expected future losses of the cash generating units to which the assets belong. The recoverable amount was calculated based on the higher of assets' value in use or fair value less cost of disposal.

(b) The Group pledged certain buildings with carrying amount of approximately RMB954 million as at 31 December 2019 (2018: RMB967 million), and pledged leasehold land with carrying amount of RMB294 million (2018: RMB280 million) to secure loan facilities granted to the Group. Details of pledge of assets are set out in note 43.

(c) As at 31 December 2019, the Group was in the process of applying the title certificates of certain of its buildings with aggregate carrying amounts of approximately RMB425 million (2018: RMB426 million). After consulting with the legal advisor of the Company, the Directors are of the view that the Group is entitled to lawfully and validly occupy and use the abovementioned buildings without incurring significant costs. The Directors are also of the opinion that the aforesaid matter will not have any significant impact on the Group's financial position as at the end of reporting period.

(d) The Group has initially applied IFRS 16 using the modified retrospective method and adjusted the opening balances at 1 January 2019 to recognise right-of-use assets relating to leases which were previously classified as operating leases under IAS 17. In addition, the depreciated carrying amount of the land use rights which were previously included in prepaid lease payments was also identified as right-of-assets. See note 2(c).

12 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(b) Right-of-use assets

The analysis of the net book value of right-of-use assets by class of underlying asset at the end of the reporting period and at the date of transition to IFRS 16 is as follows:

	At 31 December 2019 RMB'000	At 1 January 2019 RMB'000
Included in "Property, plant and equipment":		
Ownership interests in leasehold land held for own use, carried at depreciated cost (i)	**9,175,733**	9,309,848
Buildings leased for own use, carried at depreciated cost (ii)	**1,170,823**	1,197,913
Other property, plant and equipment, carried at depreciated cost (ii)	**136,319**	50,832
	10,482,875	10,558,593

The analysis of expense items in relation to leases recognised in profit or loss is as follows:

	2019 RMB'000	2018 (Note) RMB'000
Depreciation charge of right-of-use assets by class of underlying asset:		
Ownership interests in leasehold land held for own use	**242,801**	206,369
Buildings leased for own use	**401,619**	–
Other property, plant and equipment	**24,267**	–
	668,687	206,369
Interest on lease liabilities (note 7)	**40,626**	3
Expense relating to short-term leases and other leases with remaining lease term ending on or before 31 December 2019	**65,742**	–
Expense relating to leases of low-value assets, excluding short-term leases of low-value assets	**1,103**	–
Total minimum lease payments for leases previously classified as operating leases under IAS 17	**–**	802,520

12 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(b) Right-of-use assets (continued)

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise right-of-use assets relating to leases which were previously classified as operating leases under IAS 17. The depreciated carrying amount of the land use rights which were previously included in prepaid lease payments is also identified as right-of-assets. After initial recognition of right-of-use assets at 1 January 2019, the Group as a lessee is required to recognise the depreciation of right-of-use assets, instead of the previous policy of recognising rental expenses incurred under operating leases on a straight-line basis over the lease term. Under this approach, the comparative information is not restated. See note 2(c).

During the year, additions to right-of-use assets were RMB814 million. This amount included the acquisition of land use rights of RMB129 million, and the remainder primarily related to the capitalised lease payments payable under new tenancy agreements.

Details of total cash outflow for leases, the maturity analysis of lease liabilities and the future cash outflows arising from leases that are not yet commenced are set out in notes 28(d), 33 and 40, respectively.

(i) Ownership interests in leasehold land held for own use

The Group holds several land use rights for its business and operating purpose. The Group is the registered owner of these leasehold land use rights. Lump sum payments were made upfront to acquire these land use rights from the local government authorities or their previous registered owners, and there are no ongoing payments to be made under the terms of the related land use right contract.

As at 31 December 2019, the Group was in the process of applying the title certificates of certain of its leasehold land use rights in the PRC with aggregate carrying amount of approximately RMB10 million (2018: RMB10 million). After consulting with the legal advisor of the Company, the Directors are of the view that the Group is entitled to lawfully and validly occupy and use the above-mentioned land use rights without incurring significant costs. The Directors are also of the opinion that the aforesaid matter will not have any significant impact on the Group's financial position as at the end of the reporting period.

(ii) Other leases

The Group leases buildings, machinery, transportation on vehicles, office equipment, and others under leases expiring from 1 to 25 years. Some leases include an option to renew the lease when all terms are renegotiated, while some include an option to purchase the leased equipment at the end of the lease term at a price deemed to be a bargain purchase option. None of the leases includes variable lease payments.

12 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(c) Machinery leased out under operating leases

	2019 RMB'000	2018 RMB'000
Cost:		
At beginning of the year	**476,557**	294,448
Additions	**193,927**	182,109
At end of the year	**670,484**	476,557
Accumulated depreciation and impairment:		
At beginning of the year	**(358,672)**	(210,727)
Charge for the year	**(180,880)**	(147,945)
At end of the year	**(539,552)**	(358,672)
Net book value:		
At end of the year	**130,932**	117,885
At beginning of the year	**117,885**	83,721

Note: The Group leases out a number of items of machinery under operating leases. The leases typically run for an initial period of 1 to 24 years, with an option to renew the lease after that date at which time all terms are renegotiated. None of the leases includes variable lease payments. Undiscounted lease payments under non-cancellable operating leases in place at the reporting date will be receivable by the Group in future periods are RMB940 million (2018: RMB1,279 million). Where practicable, the Group obtains residual value guarantees from the lessee to reduce the residual asset risk.

13 PREPAID LEASE PAYMENTS

	2019	2018 (Note)
	RMB'000	RMB'000
Cost:		
At beginning of the year	–	9,249,476
Additions	–	1,324,945
Acquisition of subsidiaries	–	31,025
Disposals	–	(212,842)
At end of the year	–	10,392,604
Accumulated amortisation and impairment:		
At beginning of the year	–	(890,223)
Charge for the year (note 8)	–	(206,369)
Disposals	–	13,836
At end of the year	–	(1,082,756)
Net book value:		
At end of the year	–	9,309,848
At beginning of the year	–	8,359,253
Analysed for reporting purposes as:		
Non-current	–	9,048,720
Current	–	261,128
	–	9,309,848

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise right-of-use assets relating to leases which were previously classified as operating leases under IAS 17. The depreciated carrying amount of the land use rights which were previously included in prepaid lease payments is also identified as right-of-assets and measured at depreciated cost. Under this approach, the comparative information is not restated. See note 2(c).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

14 INVESTMENT PROPERTIES

	2019 RMB'000	2018 RMB'000
Cost:		
At the beginning of the year	**822,482**	805,361
Transfer from property, plant and equipment (note 12)	**57,388**	47,054
Transfer from completed properties for sale	**145,001**	–
Acquisition of subsidiaries	**–**	2,074
Transfer to property, plant and equipment (note 12)	**(5,414)**	(34,198)
Additions	**–**	2,191
At the end of the year	**1,019,457**	822,482
Accumulated depreciation:		
At the beginning of the year	**(243,141)**	(194,296)
Transfer from property, plant and equipment (note 12)	**(22,834)**	(25,840)
Provided for the year (note 8)	**(35,683)**	(30,752)
Transfer to property, plant and equipment (note 12)	**1,295**	7,747
At the end of the year	**(300,363)**	(243,141)
Net book value:	**719,094**	579,341

The above investment properties are depreciated on a straight-line basis taking into account their estimated residual value, over the estimated useful lives of 15 to 40 years, which is the shorter of the lease term of land and estimated useful lives of buildings.

14 INVESTMENT PROPERTIES (CONTINUED)

As at 31 December 2019, the Group is in the process of applying for the title certificates for certain of its investment properties with an aggregate carrying amount of RMB63 million (2018: RMB67 million). The Directors are of the opinion that the Group is entitled to lawfully and validly occupy and use these investment properties without incurring significant costs. The Directors are of the opinion that the aforesaid matter will not have any significant impact on the Group's financial position as at the end of reporting period.

The carrying amount of investment properties included the Group's leasehold interest in land as the payments cannot be allocated reliably between the land and building elements, as such the entire asset is accounted for as investment properties.

The carrying amount of the Group's investment properties and information about the fair value hierarchy were as follows:

	Net book value as at		(Level 3) Fair value as at	
	2019	2018	**2019**	2018
	RMB'000	RMB'000	**RMB'000**	RMB'000
Investment properties	**719,094**	579,341	**1,519,789**	1,337,419

The fair value of the investment properties as at 31 December 2018 and 2019 has been arrived at based on a valuation carried out by DTZ Cushman & Wakefield Limited (the "DTZ"), independent valuer not connected with the Group, based on either income approach or direct comparison approach. The Directors are of the view that it is the best estimate of the fair value of these investment properties.

There has been no change from the valuation technique used for the reporting period. In estimating the fair value of the properties, the highest and best use of the properties is their current use.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

15 INTANGIBLE ASSETS

	Patent & unpatented technology	Software	Mining rights	Concession rights	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost:						
At 1 January 2018	304,944	735,853	213,757	24,797,734	393,969	26,446,257
Additions	6,475	65,737	27,329	12,118,532	135,263	12,353,336
Transfer within intangible assets	92,631	2,103	4,673	–	(99,407)	–
Exchange of adjustment	–	24	(6,290)	(297,235)	–	(303,501)
Write off/disposal	(1,178)	(2,913)	–	–	(3,181)	(7,272)
At 31 December 2018	402,872	800,804	239,469	36,619,031	426,644	38,488,820
Additions	**5,282**	**85,931**	**112,697**	**12,109,998**	**145,855**	**12,459,763**
Transfer within intangible assets	**87,386**	**3,783**	**–**	**–**	**(91,169)**	**–**
Disposal of subsidiaries(note 45)	**–**	**–**	**–**	**(5,400,504)**	**–**	**(5,400,504)**
Exchange of adjustment	**–**	**13**	**379**	**(185,101)**	**–**	**(184,709)**
Write off/disposal	**(15)**	**(1,081)**	**–**	**(3,838)**	**(2,297)**	**(7,231)**
At 31 December 2019	**495,525**	**889,450**	**352,545**	**43,139,586**	**479,033**	**45,356,139**
Accumulated amortisation and impairment:						
At 1 January 2018	(129,603)	(554,893)	(41,286)	(2,069,387)	(44,657)	(2,839,826)
Charge for the year (note 8)	(36,785)	(70,875)	(22,723)	(401,097)	(16,407)	(547,887)
Transfer within intangible assets	–	(103)	(244)	–	347	–
Exchange of adjustment	–	(9)	–	–	–	(9)
Write off/disposal	193	4,051	–	–	391	4,635
At 31 December 2018	(166,195)	(621,829)	(64,253)	(2,470,484)	(60,326)	(3,383,087)
Charge for the year (note 8)	**(29,758)**	**(86,168)**	**(26,075)**	**(435,104)**	**(18,612)**	**(595,717)**
Disposal of subsidiaries(note 45)	**–**	**–**	**–**	**1,063,810**	**–**	**1,063,810**
Exchange of adjustment	**–**	**(6)**	**(22)**	**–**	**–**	**(28)**
Write off/disposal	**15**	**866**	**–**	**1,206**	**691**	**2,778**
At 31 December 2019	**(195,938)**	**(707,137)**	**(90,350)**	**(1,840,572)**	**(78,247)**	**(2,912,244)**
Net book value:						
At 31 December 2019	**299,587**	**182,313**	**262,195**	**41,299,014**	**400,786**	**42,443,895**
At 31 December 2018	236,677	178,975	175,216	34,148,547	366,318	35,105,733

15 INTANGIBLE ASSETS (CONTINUED)

The Group has entered into a number of service concession arrangements with certain government authorities in the PRC, Vietnam and Pakistan on a Build-operate-transfer ("BOT") basis in respect of its toll road operations, wastewater treatment plants, coal power plants and hydraulic power plants (the "underlying assets"). Pursuant to the service concession arrangement contracts, the Group (i) is responsible for the construction of the underlying assets, and the acquisition of the related facilities and equipment; (ii) has the contractual obligations to maintain the infrastructure at a specified level of serviceability and also maintain the infrastructure to an acceptable level of working conditions before handing over the infrastructure to the grantors; and (iii) is entitled to operate the underlying assets upon completion for a specified concession period from 20 to 30 years by charging users of the public service. The Group will not hold any residual interest in the underlying assets upon expiration of the concession period. As such, the service concession arrangement contracts are accounted for as service concession arrangements and an intangible asset was recognised at an amount equal to the fair value of the consideration for provision of construction service upon initial recognition.

The rights in respect of toll roads and water utilities income under five (2018: three) concession agreements with an aggregate carrying amount of RMB26,465 million as at 31 December 2019 (2018: RMB15,999 million) were pledged to obtain bank borrowings (note 43).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

16 SUBSIDIARIES

Details of the Company's principal directly-held subsidiaries at the end of the reporting period are as follows:

Name of subsidiary	Date and place of establishment/ operation	Paid up registered capital	Equity interests attributable to the Group at 31 December		Principal activities
		RMB	2019	2018	
中國葛洲壩集團有限公司 CGGC Group	10 June 2003 PRC	3,315,308,700	100%	100%	Survey, design, consulting, construction, civilian blasting, cement sales and real estate development
中國能建集團裝備有限公司 China Energy Engineering Group Equipment Co., Ltd.	16 August 2012 PRC	3,760,198,740	100%	100%	Manufacturing of equipment
中國能源建設集團南方建設投資有限公司 China Energy Engineering Group Southern Construction and Investment Co., Ltd. ("CEESC")	12 April 2017 PRC	3,407,713,285	100%	100%	Investment holding
中國能源建設集團規劃設計有限公司 China Energy Engineering Group Planning and Engineering Co., Ltd. ("CEEPE")	16 April 2018 PRC	10,000,000,000	100%	100%	Investment holding
中國能源建設集團西北建設投資有限公司 China Energy Engineering Group Northwest Construction and Investment Co., Ltd.	16 April 2018 PRC	1,490,021,401	100%	100%	Investment holding
中國能源建設集團華東建設投資有限公司 China Energy Engineering Group Eastern Construction and Investment Co., Ltd.	18 April 2018 PRC	4,206,462,915	100%	100%	Investment holding
中國能源建設集團北方建設投資有限公司 China Energy Engineering Group North Construction and Investment Co., Ltd.	26 April 2018 PRC	3,684,602,717	100%	100%	Investment holding

Note:

English names of all these subsidiaries are for reference only and have not been registered.

All the above subsidiaries were established as limited liability companies in the PRC.

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

16 SUBSIDIARIES (CONTINUED)

Details of non-wholly owned subsidiaries that have material non-controlling interests

The table below shows details of non-wholly owned subsidiaries of the Group that have material non-controlling interests:

Name of subsidiary	Place of establishment and principal place of business	Proportion of equity interests and voting rights held by non-controlling interests at 31 December		Profit/(loss) allocated to non-controlling interests year ended 31 December		Accumulated non-controlling interests at 31 December	
		2019	2018	**2019**	2018	**2019**	2018
				RMB'000	RMB'000	**RMB'000**	RMB'000
CGGC (note 3(a)(i))	PRC	**57.66%**	57.66%	**3,673,703**	3,502,981	**29,191,654**	24,336,979
Others				**171,646**	180,528	**7,481,691**	4,121,105
Eliminations (note)				**(162,178)**	(420,303)	**(5,427,755)**	(3,326,912)
Total				**3,683,171**	3,263,206	**31,245,590**	25,131,172

Note: Eliminations represent certain cross holding of subsidiaries by other subsidiaries of the Group.

Summarised financial information in respect of CGGC that has material non-controlling interests is set out below. The summarised financial information below represents amounts before intra-group elimination. The summarised financial information below represents amounts shown in the subsidiary's financial statements prepared in accordance with IFRSs.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

16 SUBSIDIARIES (CONTINUED)

CGGC and subsidiaries

	2019 RMB'000	2018 (Note) RMB'000
Non-controlling interests percentage	**57.66%**	57.66%
Current assets	**134,039,207**	129,777,332
Non-current assets	**100,424,166**	88,431,934
Current liabilities	**112,469,413**	117,963,839
Non-current liabilities	**55,762,458**	45,160,799
Net assets	**66,231,502**	55,084,628
Carry amounts:		
Perpetual capital instruments holders	**23,900,000**	19,400,000
Non-controlling interests	**29,191,654**	24,336,979
Revenue	**109,945,697**	100,625,670
Profit for the year	**6,563,609**	5,959,894
Total comprehensive income for the year	**6,742,544**	5,073,322
Profit attributable to perpetual capital instruments holders	**838,684**	717,620
Profit attributable to non-controlling interests	**3,673,703**	3,502,981
Dividends paid to non-controlling interests	**1,378,856**	1,152,966
Net cash inflows from operating activities	**6,070,433**	1,277,804
Net cash outflows from investing activities	**(5,280,889)**	(13,894,128)
Net cash inflows from financing activities	**2,036,218**	12,948,526

Note: The subsidiary has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise additional right-of-use assets of RMB801 million and lease liabilities of RMB733 million relating to leases which were previously classified as operating leases under IAS 17. Under this approach, the comparative information is not restated.

17 INTERESTS IN JOINT VENTURES

	2019 RMB'000	2018 RMB'000
Cost of unlisted interests in joint ventures	**4,616,499**	3,569,901
Share of post-acquisition profits, net of dividends received and receivables	**800,192**	630,561
	5,416,691	4,200,462

Particulars of the principal joint ventures of the Group are as follows:

Name of the joint ventures	Principal activities	Place of establishment and operation	Ownership interest at 31 December		Voting rights held at 31 December	
			2019	2018	**2019**	2018
廣州市正林房地產開發有限公司 Guangzhou Zhenglin Real Estate Development Co., Ltd ("Zhenglin")* (note (a))	Real estate	PRC	**49%**	49%	**49%**	49%
廣州市如茂房地產開發有限公司 Guangzhou Rumao Real Estate Development CO., Ltd ("Rumao")* (note (a))	Real estate	PRC	**49%**	49%	**49%**	49%
中電廣西防城港電力有限公司 CLP Guangxi Fangchenggang Power Co., Ltd ("Fangchenggang")* (note (b))	Generation and sale of electricity	PRC	**30%**	30%	**30%**	30%

* English names of these companies are for reference only and have not been registered.

Notes:

(a) Under the joint venture agreements, the boards of directors of these two entities comprise 5 directors respectively, 2 of which are appointed by the Group. Unanimous approvals by all directors are required for decisions on directing the relevant activities of these two entities. Hence, in the opinion of the Directors, the Group's interests in these two entities are accounted for as joint ventures.

(b) Under the joint venture agreement, the board of directors of Fangchenggang comprises 7 directors, 2 of which are appointed by the Group. Unanimous approvals by at least three-fourths of directors are required for decisions on directing the relevant activities of Fangchenggang. Hence, in the opinion of the Directors, the Group's interest in Fangchenggang is accounted for as a joint venture.

17 INTERESTS IN JOINT VENTURES (CONTINUED)

The summarised financial information in respect of the Group's material joint ventures which are accounted for using the equity accounting method and prepared using IFRSs is set out below.

Zhenglin

	2019 **RMB'000**	2018 RMB'000
Gross amount of Zhenglin		
Current assets	**3,701,318**	4,626,331
Non-current assets	**443**	2,032
Current liabilities	**708,998**	1,784,809
Equity	**2,992,763**	2,843,554
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	**231,529**	441,940
Revenue	**515,167**	2,705,626
Profit and other comprehensive income for the year	**148,604**	592,560
The above profit for the year includes the following:		
Finance cost	**(12,513)**	–
Income tax expense	**(49,535)**	(197,520)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in Zhenglin recognised in these consolidated financial statements:

	2019 **RMB'000**	2018 RMB'000
Net assets of the joint venture	**2,992,763**	2,843,554
Proportion of the Group's interest in Zhenglin	**49%**	49%
Carrying amount of the Group's interest in Zhenglin	**1,466,454**	1,393,341

17 INTERESTS IN JOINT VENTURES (CONTINUED)

Rumao

	2019 RMB'000	2018 RMB'000
Gross amount of Rumao		
Current assets	**2,521,227**	3,343,389
Non-current assets	**1,113**	438
Current liabilities	**384,765**	1,204,055
Equity	**2,137,575**	2,139,772
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	**98,139**	267,362
Revenue	**196,527**	339,749
(Loss)/profit and other comprehensive income for the year	**(2,197)**	37,645
The above (loss)/profit for the year includes the following:		
Income tax expense	**732**	(8,516)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in Rumao recognised in these consolidated financial statements:

	2019 RMB'000	2018 RMB'000
Net assets of the joint venture	**2,137,575**	2,139,772
Proportion of the Group's interest in Rumao	**49%**	49%
Carrying amount of the Group's interest in Rumao	**1,047,412**	1,048,488

Notes to the Consolidated Financial Statements
For the year ended 31 December 2019

17 INTERESTS IN JOINT VENTURES (CONTINUED)

Fangchenggang

	2019 RMB'000	2018 RMB'000
Gross amount of Fangchenggang		
Current assets	**1,410,343**	1,498,540
Non-current assets	**6,946,669**	7,135,747
Current liabilities	**1,096,532**	1,180,084
Non-current liabilities	**4,405,246**	4,923,973
Equity	**2,855,234**	2,530,230
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	**610,861**	546,509
Current financial liabilities (excluding trade and other payables and provisions)	**323,477**	432,780
Non-current financial liabilities (excluding trade and other payables and provisions)	**4,360,246**	4,877,597
Revenue	**3,559,763**	2,793,804
Profit and other comprehensive income for the year	**325,005**	7,044
The above profit for the year includes the following:		
Depreciation and amortisation	**(203,097)**	(164,385)
Finance income	**9,490**	9,435
Finance costs	**(243,451)**	(248,134)
Income tax expense	**(126,178)**	(579)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in Fangchenggang recognised in these consolidated financial statements:

	2019 RMB'000	2018 RMB'000
Net assets of the joint venture	**2,855,234**	2,530,230
Proportion of the Group's interest in Fangchenggang	**30%**	30%
Carrying amount of the Group's interest in Fangchenggang	**856,570**	759,069

17 INTERESTS IN JOINT VENTURES (CONTINUED)

Aggregate information of joint ventures that are not individually material:

	2019	2018
	RMB'000	RMB'000
The Group's share of loss and other comprehensive income for the year	**(576)**	(3,257)
Aggregate carrying amount of the Group's interests in these joint ventures	**2,046,255**	999,564

18 INTERESTS IN ASSOCIATES

	2019	2018
	RMB'000	RMB'000
Cost of unlisted interests in associates	**15,228,641**	10,110,289
Share of post-acquisition profits, net of dividends received and receivable	**1,327,823**	633,881
Provision for impairment	**(96,177)**	(40,482)
	16,460,287	10,703,688

The following list contains only the particulars of material associates, all of which are unlisted corporate entities whose quoted market price is not available:

Name of associate	**Place of establishment and operations**	**Proportion of Ownership interest held by the Group at 31 December**		**Principal activities**
		2019	2018	
武漢華潤置地葛洲壩置業有限公司Wuhan China Resources Land Gezhouba Real Estate Co., Ltd. ("WCRLGRE")* (note (a))	PRC	**40.00%**	40.00%	Real estate
武漢葛洲壩龍湖房地產開發有限公司Wuhan Gezhouba Longhu Property Development Co., Ltd(WGLPD")*(note (b))	PRC	**50.00%**	50.00%	Real estate
陝西葛洲壩延黃甯石高速公路有限公司 Shanxi Gezhouba Yanhuang Ningshi Expressway Co., Ltd("SGYNE")*(note (c))	PRC	**40.00%**	40.00%	Expressway operation

* English names of all these companies are for reference only and have not been registered.

18 INTERESTS IN ASSOCIATES (CONTINUED)

Notes:

(a) Under the associate agreement, two directors out of five were appointed by the Group. At least 50% approvals by the directors of WCRLGRE are required for decisions on directing the relevant activities of WCRLGRE. In the opinion of the Directors, the Group has significant influence over WCRLGRE and the interest in the entity is accounted for as interests in an associate.

(b) Under the associate agreement, two directors out of five were appointed by the Group. At least 50% approvals by the directors of WGLPD are required for decisions on directing the relevant activities of WGLPD. In the opinion of the Directors, the Group has significant influence over WGLPD and the interest in the entity is accounted for as interests in an associate. As at 31 December 2019, the other equity holder had not injected the capital.

(c) Under the associate agreement, one director out of three was appointed by the Group. 100% approvals by the directors of SGYNE are required for decisions on directing the relevant activities of SGYNE. In the opinion of the Directors, the Group has significant influence over SGYNE and the interest in the entity is accounted for as interests in an associate. As at 31 December 2019, all other equity holders had not injected the capital.

WCRLGRE

	2019 **RMB'000**	2018 RMB'000
Gross amount of WCRLGRE		
Current assets	**6,831,389**	6,075,842
Non-current assets	**2,590**	9,517
Current liabilities	**3,285,479**	3,292,869
Non-current liabilities	**599,950**	427,000
Equity	**2,948,550**	2,365,490
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	**501,123**	316,058
Non-current financial liabilities (excluding trade and other payables and provisions)	**599,950**	427,000
Revenue	**2,801,736**	1,224
Profit/(loss) and other comprehensive income for the year	**583,059**	(10,029)
The above profit/(loss) for the year includes the following:		
Finance income	**–**	5,681
Finance costs	**(5,458)**	–
Income tax expense	**(194,524)**	(3,286)

18 INTERESTS IN ASSOCIATES (CONTINUED)

WCRLGRE (continued)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in WCRLGRE recognised in these consolidated financial statements:

	2019 **RMB'000**	2018 RMB'000
Net assets of the associate	**2,948,550**	2,365,490
Proportion of the Group's interest in WCRLGRE	**40%**	40%
Carrying amount of the Group's interest in WCRLGRE	**1,179,420**	946,196

WGLPD

	2019 **RMB'000**	2018 RMB'000
Gross amount of WGLPD		
Current assets	**5,325,402**	4,960,966
Non-current assets	**142**	–
Current liabilities	**393,907**	–
Equity	**4,931,637**	4,960,966

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in WGLPD recognised in these consolidated financial statements:

	2019 **RMB'000**	2018 RMB'000
Net assets of the associate	**4,931,637**	4,960,966
Proportion of the Group's interest in WGLPD	**50%**	50%
Carrying amount of the Group's interest in WGLPD	**2,466,109**	2,480,773

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

18 INTERESTS IN ASSOCIATES (CONTINUED)

SGYNE

	2019	2018
	RMB'000	RMB'000
Gross amount of SGYNE		
Current assets	**3,763,833**	655,956
Non-current assets	**6,341,496**	1,947,278
Current liabilities	**7,854,843**	652,748
Non-current liabilities	**300,486**	486
Equity	**1,950,000**	1,950,000
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	**2,269,074**	419,294

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in SGYNE recognised in these consolidated financial statements:

	2019	2018
	RMB'000	RMB'000
Net assets of the associate	**1,950,000**	1,950,000
Proportion of the Group's interest in SGYNE	**40%**	40%
Carrying amount of the Group's interest in SGYNE	**1,950,000**	1,950,000

Aggregate information of associates that are not individually material:

	2019	2018
	RMB'000	RMB'000
The Group's share of profit and other comprehensive income	**491,491**	684,454
Cash dividends received	**17,243**	16,331
Aggregate carrying amount of the Group's interests in these associates	**10,864,758**	5,326,719

19 GOODWILL

	2019 RMB'000	2018 RMB'000
Cost:		
At the beginning of the year	**1,576,496**	1,375,110
Arising on acquisition of subsidiaries	**33**	201,853
Disposal of subsidiaries	**–**	(467)
At the end of the year	**1,576,529**	1,576,496
Impairment losses:		
At the beginning of the year	**–**	–
Impairment losses	**(729)**	–
At the end of the year	**(729)**	–
Net book value:		
At the end of the year	**1,575,800**	1,576,496
At the beginning of the year	**1,576,496**	1,375,110

19 GOODWILL (CONTINUED)

Impairment testing on goodwill

The carrying amount of goodwill at the end of year is attributable to the acquisition of subsidiaries of the following directly-held subsidiaries of the Company:

	2019 RMB'000	2018 RMB'000
CGGC Group	**1,539,598**	1,539,598
CEEPE	**22,150**	22,150
CEESC	**9,743**	9,743
Others	**4,309**	5,005
	1,575,800	1,576,496

The basis of determining the recoverable amounts of the above subsidiaries and their major underlying assumptions are summarised below:

Goodwill with an amount of RMB688 million, arised on acquisition of 葛洲壩鍾祥水泥有限公司 (Gezhouba Zhongxiang Cement Company Limited) (the "Zhongxiang Cement") by CGGC in 2014 which is included in civil explosives and cement production business of the Group and Zhongxiang Cement, is principally engaged in the production and sales of cement businesses. The recoverable amount of this cash generating unit as at 31 December 2019 has been determined based on a value in use calculation. The recoverable amount is based on the financial budget approved by management of CGGC for the next five-year period and the cash flows beyond the five-year period is estimated based on the market trend and by reference to the relevant market trend report. The rate used to discount the forecast cash flows is 10.50% (2018: 9.50%). Another key assumption for the value in use calculations is the stable budgeted gross margin, which is determined based on the subsidiary's past performance.

19 GOODWILL (CONTINUED)

Goodwill with an amount of RMB508 million, arised on acquisitions of 北京中凱興業投資管理有限公司 (Beijing Zhongkai Xingye Investment Management Company Limited) (the "Beijing Zhongkai Xingye") and 湖南海川達投資管理有限公司 (Hunan Haichuanda Investment Management Company Limited) (the "Hunan Haichuanda") by CGGC during 2016 which are included in investment business of the Group and principally engaged in investment management business of water plants. The recoverable amounts of the cash generating units as at 31 December 2019 have been determined based on the value in use calculation. The recoverable amounts are based on the financial budgets approved by management of CGGC for the next five-year period and the cash flows beyond the five-year period are estimated based on the production and water supply plans. The rates used to discount the forecast cash flows are 10.00% and 10.00% (2018: 10.00% and 12.50%), respectively. Another key assumption for the value in use calculation is the stable budgeted gross margin, which is determined based on the subsidiary's past performance.

Goodwill with an amount of RMB98 million arised on acquisition of the business of the 四川通達化工有限責任公司彭州分公司 (Pengzhou Branch of Sichuan Tongda Chemical Co., Ltd.) (the "Sichuan Tongda Chemical") by CGGC in 2018 included in civil explosives and cement production business of the Group, which is principally engaged in the production and sales of civil explosives businesses. The recoverable amount of this cash generating unit as at 31 December 2019 has been determined based on a value in use calculation. The recoverable amount is based on the financial budget approved by management of CGGC for the next five-year period and the cash flows beyond the five-year period is estimated based on the market trend and by reference to the relevant market trend report. The rate used to discount the forecast cash flows is 14.00% (2018:10.47%). Another key assumption for the value in use calculations is the stable budgeted gross margin, which is determined based on the business's past performance.

The recoverable amounts in respect of subsidiaries, which are principally engaged in civil explosive product manufacturing, cements production, waste water treatment and electronic power, other than Zhongxiang Cement, Beijing Zhongkai Xingye, Hunan Haichuanda and Sichuan Tongda Chemical, have been determined based on a value in use calculation. This calculation uses cash flow projections based on the most recent financial budgets of five years approved by management and an extrapolated financial budget for the following five years, and a discount rate of 5.40% to 18.00% (2018: 5.40% to 17.00%). One major assumption is annual growth rates in revenue which vary among different subsidiaries for the most recent financial budgets period, covering 3 to 5 years, and a growth rate which is estimated based on the market trend and by reference to the relevant market trend report for the extrapolation period. Another key assumption for the value in use calculations is the stable budgeted gross margin, which is determined based on the subsidiaries' past performance.

Management believes that any reasonably possible change in any of these assumptions would not cause the aggregate carrying amount of the remaining subsidiaries to exceed its recoverable amount.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

20 FINANCIAL ASSETS

(a) Financial assets at FVOCI

	31 December 2019 RMB'000	31 December 2018 (Note (a)) RMB'000
Listed equity investments:		
Equity securities listed in Mainland China	**1,108,528**	830,426
Equity securities listed in Hong Kong	**–**	70,480
Unlisted equity investments:		
Private companies (note (i))	**833,835**	800,533
Listed company (note (ii))	**252,449**	349,715
Total	**2,194,812**	2,051,154
Analysed for reporting purposes as:		
Non-current	**2,194,812**	2,051,154

(b) Financial assets at FVPL

	31 December 2019 RMB'000	31 December 2018 RMB'000
Listed investments:		
Equity securities listed in Mainland China	**43,278**	33,504
Unlisted investments:		
Private companies	**4,858,594**	4,754,135
Units in funds and other non-equity investments	**3,279,903**	1,616,079
Total	**8,181,775**	6,403,718
Analysed for reporting purposes as:		
Non-current	**5,423,593**	5,253,100
Current	**2,758,182**	1,150,618

20 FINANCIAL ASSETS (CONTINUED)

Notes:

(i) The unlisted investments in private companies represent equity securities of private entities established in the PRC. These investments are designated at FVOCI, as they are held for strategic purposes. The Group does not intend to dispose them in the near future.

(ii) These investments mainly represent non-tradable shares of Huadian Fuxin Energy Corporation Limited ("Huadian Fuxin", a PRC established company which is under control by SASAC), the H shares of which were listed on the Stock Exchange in 2012.

21 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(a) Tax payable/(recoverable) in the consolidated statement of financial position represents:

	2019	2018
	RMB'000	RMB'000
Net tax payable at 1 January	**1,142,909**	1,086,161
Provision for the year (note 10)	**3,664,736**	3,149,159
Effect of (disposal)/acquisition of subsidiaries	**3,116**	14,326
Income tax paid	**(3,277,060)**	(3,106,737)
Net tax payable at 31 December	**1,533,701**	1,142,909
Representing:		
Tax payable	**2,111,310**	1,505,720
Tax recoverable	**(577,609)**	(362,811)
	1,533,701	1,142,909

21 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(b) Deferred taxation

The following are the major deferred tax assets/(liabilities) recognised and movements thereon during the year:

	Defined benefit obligations	Impairment of assets	Credit loss allowance	Unrealised profit in intra-group transactions	Employee benefits payables	Deductible losses	Depreciation and amortisation difference between taxation and accounting basis	Depreciation charge of right-of-use asset	Fair value changes of financial assets	Differences between book value and tax basis of assets acquired not under common control	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2018	292,910	96,086	610,085	469,694	69,239	19,848	(661,290)	–	(124,306)	(15,356)	77,713	834,623
(Charge)/credit to profit or loss (note 10)	(49,165)	13,273	145,525	44,766	(21)	859	(100,475)	–	(57,224)	791	25,532	23,861
Credit to other comprehensive income	8,037	–	–	–	–	–	–	–	64,919	–	–	72,956
Increase from acquisition of subsidiaries	–	–	4,753	–	–	–	(116,969)	–	–	–	–	(112,216)
At 31 December 2018	251,782	109,359	760,363	514,460	69,218	20,707	(878,734)	–	(116,611)	(14,565)	103,245	819,224
(Charge)/credit to profit or loss (note 10)	**(29,650)**	**11,951**	**(62,345)**	**164,650**	**(293)**	**6,483**	**(140,842)**	**11,942**	**(5,834)**	**789**	**343**	**(42,806)**
Credit to other comprehensive income	**3,499**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(22,097)**	**–**	**–**	**(18,598)**
Decrease in disposal of subsidiaries (note 45)	**–**	**–**	**–**	**–**	**–**	**–**	**191,412**	**–**	**–**	**–**	**–**	**191,412**
At 31 December 2019	**225,631**	**121,310**	**698,018**	**679,110**	**68,925**	**27,190**	**(828,164)**	**11,942**	**(144,542)**	**(13,776)**	**103,588**	**949,232**

21 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

The following is the analysis of the deferred tax balances for financial reporting purposes:

	2019	2018
		(Note)
	RMB'000	RMB'000
Net deferred tax asset recognised in the consolidated statement of financial position	**2,068,529**	1,961,576
Net deferred tax liability recognised in the consolidated statement of financial position	**(1,119,297)**	(1,142,352)
	949,232	819,224

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

Details of tax losses not recognised are set out below:

	2019	2018
	RMB'000	RMB'000
Tax losses	**9,869,994**	9,196,728

No deferred tax asset has been recognised in respect of the above tax loss due to the unpredictability of future profit stream for relevant subsidiaries. Included in unrecognised tax losses are losses that will expire in the following years:

	2019	2018
	RMB'000	RMB'000
2019	**–**	928,544
2020	**1,167,660**	1,413,277
2021	**1,485,872**	1,692,592
2022	**1,938,055**	2,126,301
2023	**2,823,706**	3,036,014
2024	**2,454,701**	–
	9,869,994	9,196,728

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

22 TRADE AND BILLS RECEIVABLES

	2019 RMB'000	2018 RMB'000
Trade receivables	**50,321,200**	51,785,125
Retention receivables	**14,381,833**	13,273,089
Less: loss allowance	**(4,024,432)**	(3,635,803)
	60,678,601	61,422,411
Bills receivable	**5,611,852**	5,707,995
Build-transfer ("BT")/BOT project receivables	**17,066,322**	12,814,918
Total trade and bills receivables	**83,356,775**	79,945,324
Analysed for financial reporting purpose:		
Non-current	**29,128,276**	23,869,816
Current	**54,228,499**	56,075,508
	83,356,775	79,945,324

Trade and bills receivables of the Group primarily represent receivables from grid and power generation companies. The credit terms granted to its trade customers mainly ranged from 30 days to 180 days, except for the retention receivables and certain receivables from BT and BOT projects.

Retention receivables are withheld by customers up to a maximum amount calculated based on a prescribed percentage of the construction contract amount. Retention terms of 12 to 24 months after the completion of construction contracts may be granted to customers and debtors for retentions receivable, depending on the market practice of construction industries in countries where construction contracts are carried out and credit assessment carried out by management on an individual customer or debtor basis. The trade receivables arising from BT and BOT projects are unsecured and are repayable by instalments over a 4 to 30 years period during or after the completion of the construction of the underlying projects.

As at 31 December 2019, the Group pledged its trade receivables amounting to approximately RMB4,536 million (2018: RMB2,023 million) to secure loan facilities granted to the Group. Details of pledge of assets are set out in note 43.

As at 31 December 2019, trade receivables of RMB1,505 million (2018: RMB2,493 million) had been transferred in accordance with relevant ABS issuances. Relevant trade receivables were derecognised as the Directors are of the opinion that the substantial risks and rewards associated with the trade receivables have been transferred and therefore qualified for derecognition.

22 TRADE AND BILLS RECEIVABLES (CONTINUED)

(a) Ageing analysis

The following is ageing analysis of trade and bills receivables, net of loss allowance and based on the invoice date at the end of the reporting period:

	2019 **RMB'000**	2018 RMB'000
0 to 6 months	**58,973,905**	56,620,651
6 months to 1 year	**7,665,837**	8,384,627
1 year to 2 years	**7,592,431**	6,458,729
2 years to 3 years	**3,838,897**	4,744,210
3 years to 4 years	**3,055,326**	1,793,825
4 years to 5 years	**1,270,199**	1,115,599
Over 5 years	**960,180**	827,683
	83,356,775	79,945,324

(b) Related parties of trade and bills receivables

The amounts due from ultimate holding company, fellow subsidiaries, joint ventures and associates included in the trade and bills receivables are analysed as follows:

	2019 **RMB'000**	2018 RMB'000
Ultimate holding company	**425**	103
Fellow subsidiaries	**25,383**	23,185
Joint ventures	**891,427**	801,721
Associates	**1,754,729**	3,728,313
Total	**2,671,964**	4,553,322

The above amounts are unsecured and interest-free. The Group has not granted any credit periods to related parties. All balances are past due but not impaired and aged within one year.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

22 TRADE AND BILLS RECEIVABLES (CONTINUED)

(c) Foreign currency of trade and bills receivables

Trade receivables denominated in currencies other than the functional currencies of respective entities are set out below:

	2019 RMB'000	2018 RMB'000
Brazilian Real ("BRL")	**5,990,380**	6,122,392
United States Dollar ("USD")	**838,751**	266,709
Euro ("EUR")	**13,287**	256,758
Others	**187,088**	193,709
	7,029,506	6,839,568

23 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2019 RMB'000	2018 (Note (i)) RMB'000
Advance to suppliers (note (i))	**24,760,370**	21,412,760
Other receivables from Huanjia Connected Suppliers (note (ii))	**574,218**	1,053,785
Other receivables (note (iii))	**15,260,726**	14,026,526
Receivables for the "Transfer" (note (iv))	**2,121,789**	2,156,044
Prepayments for purchase of property, plant and equipment	**1,156,751**	1,668,713
Prepaid taxes	**7,000,886**	4,837,085
Dividends receivable	**5,265**	16,106
Interests receivable	**3,028**	12,536
Deposits for land use rights	**39,078**	29,498
	50,922,111	45,213,053
Analysed for financial reporting purpose:		
Non-current	**1,894,945**	1,915,998
Current	**49,027,166**	43,297,055
	50,922,111	45,213,053

23 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES (CONTINUED)

Notes:

(i) The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. Upon the initial adoption of IFRS 16, prepaid lease payments of RMB96 million previously included in "Advance to suppliers" were adjusted to right-of-use assets recognised at 1 January 2019. See note 2(c).

(ii) During the year ended 31 December 2018, Gezhouba Huanjia (Dalian) Renewable Resources Company Limited (葛洲壩環嘉（大連）再生資源有限公司, "Gezhouba Huanjia"), in which a wholly owned subsidiary of CGGC and Mr. Wang Jinping hold 55% and 45% equity interests, respectively, made prepayments of RMB1,741 million to certain suppliers. From the year of 2015 to 2019, Mr. Wang Jinping was the director and general manager of Gezhouba Huanjia, and the chairman and shareholder of Dalian Huanjia Group Co., Ltd. (大連環嘉集團有限公司) (now renamed as Huanjia Group Co., Ltd. (環嘉集團有限公司), "Huanjia Group", see note25). As these suppliers subsequently failed to deliver relevant goods to Gezhouba Huanjia, the balances were reclassified to other receivables and impairment loss of RMB452 million was made during the year ended 31 December 2018.

During the year ended 31 December 2019, Mr. Wang Jinping, certain directors and management personnel of Gezhouba Huanjia were kept in detention and investigated by the Committee of Supervisory of Wuhan City (武漢市監察委員會) for duty related crimes and/or crimes (the "Investigation", see note 42(c)). These suppliers were found to be connected to Huanjia Group ("Huanjia Connected Suppliers", see note42(c)). The Group had taken certain contingency measures to recover the receivables. As at 31 December 2019, the gross amount of outstanding other receivables from Huanjia Connected Suppliers was RMB1,475 million. Based on information available to the Group, additional impairment loss of RMB449 million was made during the year ended 31 December 2019 (2018: RMB452 million).

(iii) Other receivables mainly represent bidding bonds, performance bonds and various deposits required for the Group's business operations.

(iv) In accordance with relevant policies issued by SASAC and Ministry of Finance of the PRC, the state-owned enterprises shall carve out, upgrade (if necessary) and transfer their assets related to water supply, power supply, and heat/gas supply and property management of employees' communities, together with their maintenance obligation and management function, to the parties, which are designated by local governments before the year end of 2018 (the "Transfer", 三供一業移交).

The Group and ENERGY CHINA GROUP, the ultimate holding company of the Group, have entered into a mutual agreement regarding to the Transfer, which stipulated that ENERGY CHINA GROUP is the primary obligor and will bear the standard upgrading costs, which are regulated by MOF. Any other expenses, upgrading costs exceeding the standard upgrading costs and loss arising from the transfer of the assets, will be borne by the Group. Receivables for the Transfer represented the relative costs borne by ENERGY CHINA GROUP, the ultimate holding company of the Group, in accordance with the mutual agreement signed therefore.

23 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES (CONTINUED)

Movements in the loss allowance are set out as follows:

	2019 RMB'000	2018 RMB'000
At the beginning of the year	**1,826,162**	1,335,790
Impairment losses recognised (note 8)	**569,980**	536,493
Written off	**(139,258)**	(44,421)
Effect on disposal of subsidiaries	**(5,353)**	(1,699)
Exchange adjustment	**–**	(1)
At the end of the year	**2,251,531**	1,826,162

The amounts due from ultimate holding company, fellow subsidiaries, joint ventures and associates included in the prepayments, deposits and other receivables are analysed as follows:

	2019 RMB'000	2018 RMB'000
Ultimate holding company		
– Non-trade nature	**2,338,343**	2,375,569
Fellow subsidiaries		
– Trade nature	**236,701**	142,924
– Non-trade nature	**725,102**	680,683
Joint ventures		
– Non-trade nature	**2,677**	156,006
Associates		
– Non-trade nature	**993,761**	1,263,194
Total	**4,296,584**	4,618,376

24 OTHER LOANS AND FINANCE LEASE RECEIVABLES

(a) Other loans

At 31 December 2019, the amounts due from fellow subsidiaries, associates and third parties included in other loans were repayable within one year. These loans are all unsecured and non-trade, further details of which are analysed as follows:

	2019	2018
	RMB'000	RMB'000
Amounts due from:		
Fellow subsidiaries	**1,193,960**	245,000
Associates	**4,056,765**	4,219,493
Third parties	**747,718**	534,518
	5,998,443	4,999,011
Analysed for financial reporting purpose:		
Current	**5,998,443**	4,999,011
Loans:		
With ultimate holding company guarantee	**277,500**	245,000
Without guarantees	**5,720,943**	4,754,011
	5,998,443	4,999,011
Interest-bearing loans (fixed rate)	**4,105,168**	3,018,404
Interest-free loans repayable on demand	**1,893,275**	1,980,607
	5,998,443	4,999,011
Range of interest rate (per annum)	**4.35% to 10.00%**	4.35% to 10.00%

24 OTHER LOANS AND FINANCE LEASE RECEIVABLES (CONTINUED)

(b) Finance lease receivables

As at 31 December 2019, the Group entered into finance lease arrangements for certain of its transportation vehicles and manufacturing facilities. The period of finance leases entered into is ranged from 6 months to 15 years.

Finance lease receivables were mainly with floating interest rates reference to the benchmark interest rate of the People's Bank of China (the "PBOC"). The interest rates of finance lease receivables were adjusted periodically with reference to the benchmark interest rates. As at 31 December 2019, the carrying amount of these finance lease receivables was RMB2,289 million (2018: RMB1,094 million), of which approximately RMB426 million (2018: RMB387 million) was classified as current assets.

25 INVENTORIES

	2019 **RMB'000**	2018 RMB'000
Materials in transit	**171,393**	82,096
Raw materials	**4,309,048**	4,206,766
Work in progress	**1,584,878**	1,531,734
Finished goods	**6,443,474**	6,388,040
Low value consumables and spare parts	**325,371**	348,634
	12,834,164	12,557,270
Less: write-down of inventories	**(216,885)**	(100,339)
	12,617,279	12,456,931

Note: Certain inventories of Gezhouba Huanjia were stored in sites, which were leased from Huanjia Group (defined in note 23(ii)). As at 31 December 2019, inventories of Gezhouba Huanjia with carrying amount of RMB708 million, which were stored in these sites, were seized by court orders for enforcement as a result of a number of legal proceedings against Huanjia Group. The Company is of the opinion that these inventories are lawfully owned by Gezhouba Huanjia and no impairment shall be made for these inventories as at 31 December 2019.

26 PROPERTIES UNDER DEVELOPMENT FOR SALE/COMPLETED PROPERTIES FOR SALE

	2019	2018
	RMB'000	RMB'000
Properties under development for sale	**47,103,429**	45,858,785
Completed properties for sale	**2,231,891**	2,239,218
	49,335,320	48,098,003

The amount of properties under development for sale not expected to be completed within the next twelve months is as follows:

	2019	2018
	RMB'000	RMB'000
Properties under development	**17,764,695**	27,149,142

Certain properties under development for sale of the Group were pledged against the loans and borrowings, details of which are set out in note 43.

27 CONTRACT ASSETS AND CONTRACT LIABILITIES

(a) Contract assets

	31 December 2019 RMB'000	31 December 2018 RMB'000
Contract assets		
Arising from performance under construction contracts	**41,151,749**	36,071,661
Receivables from contracts with customers within the scope of IFRS15, which are included in "Trade and bills receivables" (note 22)	**66,290,453**	67,130,406

Typical payment terms which impact on the amount of contract assets recognised are as follows:

The Group's construction contracts include payment schedules which require stage payments over the construction period once milestones are reached. These payment schedules prevent the build-up of significant contract assets.

The amount of revenue recognised during the year from performance obligations satisfied (or partially satisfied) in previous periods is RMB7,094 million (2018: RMB7,569 million), mainly due to the changes in estimate of the stage of completion of certain construction contracts.

The amount of contract assets that is expected to be recovered after more than one year is RMB20,080 million (2018: RMB17,938 million), which relates to retentions and long-term billing cycles of certain projects.

Contract assets above include amounts attributable to joint venture and associates as follows:

	2019 RMB'000	2018 RMB'000
Joint ventures	**981,368**	498,915
Associates	**4,089,382**	1,498,013
	5,070,750	1,996,928

The transactions between these related parties were based on prices mutually agreed between the parties after taking reference of the market prices.

27 CONTRACT ASSETS AND CONTRACT LIABILITIES (CONTINUED)

(b) Contract liabilities

	31 December 2019 RMB'000	31 December 2018 RMB'000
Contract liabilities		
Billings in advance of performance under construction contracts	**15,094,422**	12,169,113
Advances for the sale of properties	**13,029,718**	8,723,621
Other advances received from customers	**24,366,658**	21,953,208
	52,490,798	42,845,942

Typical payment terms which impact on the amount of contract liabilities recognised are as follows:

When the Group receives a deposit before the production activity commences this will give rise to contract liabilities at the start of a contract, until the revenue recognised on the project exceeds the amount of the deposit. The amount of the deposit, if any, is negotiated on a case by case basis with customers.

Movements in contract liabilities

	2019 RMB'000	2018 RMB'000
Balance at 1 January	**42,845,942**	35,700,745
Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities at the beginning of the period	**(36,316,494)**	(30,939,788)
Increase in contract liabilities as a result of billing in advance of construction activities	**45,961,350**	38,084,985
Balance at 31 December	**52,490,798**	42,845,942

The amount of billings in advance of performance and forward sales deposits and instalments received expected to be recognised as income after more than one year is RMB6,424 million (2018: RMB4,959 million).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

27 CONTRACT ASSETS AND CONTRACT LIABILITIES (CONTINUED)

(b) Contract liabilities (continued)

Contract liabilities above include amounts attributable to fellow subsidiaries joint ventures and associates as follows:

	2019 RMB'000	2018 RMB'000
Fellow subsidiaries	**308**	–
Joint venture	**68,052**	173,487
Associates	**1,885,118**	43,077
	1,953,478	216,564

The transactions between these related parties were based on prices mutually agreed between the parties after taking reference of the market prices.

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS

(a) Cash and cash equivalents comprise:

	2019 RMB'000	2018 RMB'000
Bank and cash balances	**43,665,214**	48,827,839
Time deposits	**5,469,512**	5,967,953
	49,134,726	54,795,792
Less: Pledged deposits for		
Bills payable	**1,060,916**	1,289,921
Letter of credit	**1,259,726**	1,223,205
Others	**2,921,576**	3,236,024
	5,242,218	5,749,150
Bank and cash balances at end of year	**43,892,508**	49,046,642
Less: Non-pledged time deposits with original maturity of three months or more when acquired	**1,267,929**	1,403,489
Cash and cash equivalents in the consolidated statement of cash flows	**42,624,579**	47,643,153

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(a) Cash and cash equivalents comprise: (continued)

The Group's bank and cash balances comprise cash and bank deposits, including pledged deposits, carrying interest at prevailing variable market rates ranging from 0.01% to 6.50% per annum as at 31 December 2019 (2018: 0.01% to 3.41% per annum).

As at 31 December 2019, the bank deposits of RMB1,268 million (2018: RMB1,403 million) carried fixed rate interests ranging from 0.30% to 6.50% per annum (2018: 1.00% to 3.41% per annum) with original maturity of more than three months.

The Group's business operations in the PRC are conducted in RMB. RMB is not a freely convertible currency and the remittance of funds out of Mainland China is subject to the exchange restrictions imposed by the PRC government.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(b) Reconciliation of profit before taxation to cash generated from operations:

	Note	2019 RMB'000	2018 (Note) RMB'000
Operating activities			
Profit before taxation		**13,307,921**	11,676,809
Adjustment for:			
Depreciation of property, plant and equipment	12	**3,451,795**	2,737,148
Depreciation of investment properties	14	**35,683**	30,752
Amortisation of prepaid lease payments	13	**–**	206,369
Amortisation of intangible assets	15	**595,717**	547,896
Amortisation of unrealised profit on sale and leaseback transactions	36	**(6,026)**	(6,048)
Amortisation of government grant related to income	36	**(346,174)**	(280,532)
Interest on finance lease		**2,468**	(17,639)
Finance costs	7	**4,355,663**	3,827,043
Finance income	7	**(1,055,089)**	(795,528)
Net foreign exchange gain	6	**(60,410)**	(463,589)
Loss/(gain) on disposal of financial assets at FVPL	6	**2,059**	(75,429)
Gain on disposal of property, plant and equipment	6	**(106,132)**	(52,328)
Gain on disposal of prepaid lease payments	6	**–**	(170,933)
Gain on disposal of subsidiaries	6	**(2,300,070)**	(37,331)
Loss on disposal of intangible assets	6	**755**	–
Recognition of allowance for trade receivables	6	**460,232**	382,407
Recognition of allowance for other receivables	6	**569,980**	84,870
Recognition/(reversal) of allowance for contract assets	6	**88,148**	(67,397)
Recognition of allowance on inventories	8	**153,095**	31,044
Impairment on property, plant and equipment	6	**19,692**	21,393
Impairment on interest in associates	6	**55,695**	–
Impairment on goodwill	19	**729**	–

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(b) Reconciliation of profit before taxation to cash generated from operations: (continued)

	Note	2019 RMB'000	2018 (Note) RMB'000
Operating activities (continued)			
Dividends received from financial assets at FVPL	5	**(109,695)**	(73,054)
Dividends received from financial assets at FVOCI	5	**(98,317)**	(101,173)
Fair value changes of financial assets at FVPL	6	**(40,953)**	(403,103)
Share based compensation expense	8	**(18,873)**	6,103
Others	5	**(175,707)**	(99,912)
Government grants related to assets	5	**(31,827)**	(50,277)
Share of profits of joint ventures	17	**(168,960)**	(304,385)
Share of profits of associates	18	**(711,246)**	(680,450)
Operating cash flows before movements in working capital		**17,870,153**	15,872,726
Increase in trade and bill receivables		**(5,346,503)**	(2,345,549)
Increase in prepayments, deposits and other receivables		**(9,833,799)**	(4,248,343)
Increase in inventories		**(366,882)**	(748,975)
Decrease in completed properties for sale		**7,089,635**	271,144
Increase in properties under development for sale		**(7,816,901)**	(9,826,010)
Increase in contract assets		**(5,168,236)**	(2,328,211)
Increase in contract liabilities		**9,695,153**	7,013,737
Increase in trade and bills payables		**8,209,211**	3,828,039
(Decrease)/increase in other payables and accruals		**(372,629)**	453,719
Decrease in defined benefit obligations		**(271,238)**	(199,548)
Increase in government grants related to income		**272,017**	361,935
Increase in provisions		**280,656**	61,051
Cash generated from operations		**14,240,637**	8,165,715

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise right-of-use assets and lease liabilities relating to leases which were previously classified as operating leases under IAS 17. Previously, cash payments under operating leases made by the Group as a lessee of RMB503 million were classified as operating activities in the consolidated cash flow statement. Under IFRS 16, except for short-term lease payments, payments for leases of low value assets and variable lease payments not included in the measurement of lease liabilities, all other rentals paid on leases are now split into capital element and interest element (see note 28(c)) and classified as financing cash outflows. Under the modified retrospective approach, the comparative information is not restated. Further details on the impact of the transition to IFRS 16 are set out in note 2(c).

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(c) Reconciliation of liabilities arising from financing activities:

	Bank loans and other borrowings	Corporate bonds	Lease liabilities	Accrued interests	Perpetual capital instruments	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
	(Note 31)	(Note 32)		(Note 30)	(Note 37)	
At 31 December 2018	92,116,031	19,872,552	–	1,107,243	19,400,000	132,495,826
Impact on initial application of IFRS 16 (note)	–	–	1,235,199	–	–	1,235,199
At 1 January 2019	**92,116,031**	**19,872,552**	**1,235,199**	**1,107,243**	**19,400,000**	**133,731,025**
Changes from financing cash flows:						
New bank and other borrowings	42,656,743	–	–	–	–	42,656,743
Net increase in borrowings from related parties	4,382,815	–	–	–	–	4,382,815
Repayment of bank and other borrowings	(50,818,725)	–	–	–	–	(50,818,725)
New corporate bonds	–	4,000,000	–	–	–	4,000,000
Repayment of corporate bonds	–	(4,179,400)	–	–	–	(4,179,400)
Capital elements of lease rentals paid	–	–	(606,313)	–	–	(606,313)
Interest element of lease rentals paid	–	–	(40,626)	–	–	(40,626)
Issue of perpetual capital instruments	–	–	–	–	13,000,000	13,000,000
Repayment of perpetual capital instruments	–	–	–	–	(5,500,000)	(5,500,000)
Interest paid	–	(786,850)	–	(4,961,308)	(838,684)	(6,586,842)
Total changes from financing cash flows	(3,779,167)	(966,250)	(646,939)	(4,961,308)	6,661,316	(3,692,348)
Exchange adjustments	168,030	–	–	–	–	168,030
Other changes:						
Increase in lease liabilities from entering into new leases during the period	–	–	517,571	–	–	517,571
Interest expenses	–	872,235	40,626	3,047,683	838,684	4,799,228
Capitalised borrowing costs	–	–	–	1,958,390	–	1,958,390
Disposal of subsidiaries(note 45)	(2,243,200)	–	–	–	–	(2,243,200)
Total other changes	(2,243,200)	872,235	558,197	5,006,073	838,684	5,031,989
At 31 December 2019	**86,261,694**	**19,778,537**	**1,146,457**	**1,152,008**	**26,900,000**	**135,238,696**

Note: The Group has initially applied IFRS 16 using the modified retrospective method and adjusted the opening balances at 1 January 2019 to recognise lease liabilities relating to leases which were previously classified as operating leases under IAS 17. See notes 2(c) and 28(b).

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(c) Reconciliation of liabilities arising from financing activities: (continued)

	Bank loans and other borrowings	Corporate bonds	Lease liabilities	Accrued interests	Perpetual capital instruments	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
	(Note 31)	(Note 32)		(Note 30)	(Note 37)	
At 1 January 2018	70,519,768	26,371,729	902	257,387	8,220,000	105,369,786
Changes from financing cash flows:						
New bank and other borrowings	61,345,100	–	–	–	–	61,345,100
Net increase in borrowings from related parties	2,994,872	–	–	–	–	2,994,872
Repayment of bank and other borrowings	(48,175,080)	–	–	–	–	(48,175,080)
New corporate bonds	–	4,200,000	–	–	–	4,200,000
Repayment of corporate bonds	–	(650,000)	–	–	–	(650,000)
Repayment of finance lease payables	–	–	(902)	–	–	(902)
Issue of perpetual capital instruments	–	–	–	–	1,180,000	1,180,000
Interest paid	–	(816,498)	(3)	(3,634,996)	(717,620)	(5,169,117)
Total changes from financing cash flows	16,164,892	2,733,502	(905)	(3,634,996)	462,380	15,724,873
Exchange adjustments	737,070	–	–	–	–	737,070
Other changes:						
Interest expenses	–	767,321	3	2,596,131	717,620	4,081,075
Capitalised borrowing costs	–	–	–	1,888,721	–	1,888,721
Transfer to Perpetual capital instruments	–	(10,000,000)	–	–	10,000,000	–
Acquisition of business	4,694,301	–	–	–	–	4,694,301
Total other changes	4,694,301	(9,232,679)	3	4,484,852	10,717,620	10,664,097
At 31 December 2018	92,116,031	19,872,552	–	1,107,243	19,400,000	132,495,826

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(d) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

	2019 RMB'000	2018 (Note) RMB'000
Within operating cash flows	**473,722**	502,806
Within investing cash flows	**106,861**	362,437
Within financing cash flows	**646,939**	905
	1,227,522	866,148

Note: As explained in the note to note 28(b), the adoption of IFRS 16 introduces a change in classification of cash flows of certain rentals paid on leases. The comparative amounts have not been restated.

These amounts relate to the following:

	2019 RMB'000	2018 RMB'000
Lease rentals paid	**1,120,661**	502,806
Purchase of leasehold property	**106,861**	362,437
	1,227,522	865,243

29 TRADE AND BILLS PAYABLES

	2019 RMB'000	2018 RMB'000
Trade payables	**91,063,087**	85,637,507
Bills payable	**13,327,560**	8,656,711
	104,390,647	94,294,218

The credit period on purchases of goods or services ranges from 30 days to 180 days.

As at 31 December 2019, retention payables of RMB6,164 million (31 December 2018: RMB5,252 million) was included in trade and bills payables. Retention payables are interest-free and payable at the end of the retention periods of the respective construction contracts. The Group's normal operating cycle with respect to the construction contracts is usually more than one year.

Details of the bank deposits pledged for the Group's bills payable are set out in note 28.

The following is an ageing analysis of trade and bills payables presented based on the invoice date at the end of the reporting period:

	2019 RMB'000	2018 RMB'000
Within 1 year	**90,851,870**	80,322,846
1 to 2 years	**6,490,507**	6,216,968
2 to 3 years	**2,721,690**	2,857,369
More than 3 years	**4,326,580**	4,897,035
	104,390,647	94,294,218

The amounts due to fellow subsidiaries, joint ventures and associates included in trade and bills payables are analysed as follows:

	2019 RMB'000	2018 RMB'000
Fellow subsidiaries	**124,365**	99,913
Joint ventures	**8,300**	1,058
Associates	**26,321**	6,331
	158,986	107,302

The above amounts due to related parties are unsecured, non-interest bearing and repayable on similar credit terms offered by other suppliers of the Group.

30 OTHER PAYABLES AND ACCRUALS

	2019 RMB'000	2018 (Note (i)) RMB'000
Other payables (notes (i)&(iii))	**23,468,339**	24,382,525
Accrued payroll and welfare	**2,197,884**	2,404,305
Non-income tax related tax payables	**1,903,298**	2,288,994
Dividend payables	**587,376**	456,134
Accrued interests	**1,152,008**	1,107,243
	29,308,905	30,639,201
Analysed for financial reporting purpose:		
Current	**28,889,755**	30,310,576
Non-current	**419,150**	328,625
	29,308,905	30,639,201

Notes:

(i) The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

(ii) The balances of other payables mainly include payments made by third parties on behalf of the Group, deposits payable and others.

(iii) On the date of transition to IFRS 16, accrued lease payments of RMB82 million previously included in "Other payables" were adjusted to right-of-use assets recognised at 1 January 2019. See note 2(c).

The amounts due to ultimate holding company, fellow subsidiaries, joint ventures and associates included in other payables are analysed as follows:

	2019 RMB'000	2018 RMB'000
Ultimate holding company	**1,281,862**	1,245,296
Fellow subsidiaries	**243,689**	336,965
Joint ventures	**83,497**	467,326
Associates	**542,144**	1,775,041
	2,151,192	3,824,628
Analysed by nature:		
Non-trade nature (note)	**2,151,192**	3,824,628
	2,151,192	3,824,628

Note: The above amounts due to related parties are unsecured, non-interest bearing and have no fixed terms of repayment.

31 BANK AND OTHER BORROWINGS

	2019 RMB'000	2018 RMB'000
Current		
Short-term bank borrowings:		
– unsecured	**12,950,482**	29,191,719
– secured	**92,000**	798,000
Short-term other borrowings:		
– unsecured	**15,188,260**	11,846,837
Current portion of long-term bank borrowings:		
– unsecured	**2,298,775**	3,621,515
– secured	**3,103,380**	5,623,559
Current portion of long-term other borrowings:		
– secured	**52,970**	144,493
	33,685,867	51,226,123
Non-current		
Long-term bank borrowings:		
– unsecured	**26,551,962**	24,280,463
– secured	**26,011,984**	16,107,708
Long-term other borrowings:		
– secured	**11,881**	501,737
	52,575,827	40,889,908

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

31 BANK AND OTHER BORROWINGS (CONTINUED)

	2019 RMB'000	2018 RMB'000
Carrying amount is repayable as follows (note):		
Within one year	**32,678,867**	50,229,123
More than one year but within two years	**11,823,199**	8,120,787
More than two years but within three years	**4,747,667**	6,878,038
More than three years but within four years	**1,191,698**	2,880,537
More than four years but within five years	**1,770,865**	1,031,273
More than five years	**34,049,398**	22,976,273
	86,261,694	92,116,031
Less:		
Carrying amounts of bank loans that contain a repayment on demand clause (shown under current liabilities) but repayable:		
– More than five years	**1,007,000**	997,000
– Amounts due within one year	**32,678,867**	50,229,123
Amounts shown under current liabilities	**33,685,867**	51,226,123
Amounts shown under non-current liabilities	**52,575,827**	40,889,908

Note: The amounts due are based on scheduled repayment dates set out in the loan agreements.

The amounts due to ultimate holding company, fellow subsidiaries, joint ventures and associate included in bank and other borrowings above are analysed as follows:

	2019 RMB'000	2018 RMB'000
Ultimate holding company	**3,167,514**	2,796,763
Fellow subsidiaries	**1,746,721**	1,561,919
Joint ventures	**3,525,514**	3,077,510
Associates	**5,481,955**	2,102,697
	13,921,704	9,538,889

Bank borrowings and other borrowings were secured by certain assets of the Group, details of which are set out in note 43.

31 BANK AND OTHER BORROWINGS (CONTINUED)

The amounts of bank and other borrowings guaranteed by third parties are analysed as follows:

	2019 RMB'000	2018 RMB'000
Guaranteed by third parties	**120,065**	128,907
Guaranteed by non-controlling interest holders	**–**	700,000
	120,065	828,907

Bank and other borrowings denominated in currencies other than the functional currencies of respective entities are set out below:

	2019 RMB'000	2018 RMB'000
USD	**14,147,651**	11,142,156
BRL	**3,947,222**	4,115,398
Japanese Yen ("JPY")	**120,065**	121,907
	18,214,938	15,379,461

The carrying amount of the bank and other borrowings and the range of interest rates are as below:

	2019		2018	
	RMB'000	%	RMB'000	%
Fixed rate bank and other borrowings	**46,409,830**	**1.05 – 8.00**	36,988,821	1.05-8.00
Floating rate bank and other borrowings	**39,851,864**	**1.20 – 7.50**	55,127,210	1.20-9.00
	86,261,694		92,116,031	

The floating rate bank and other borrowings are arranged at the interest rate based on benchmark interest rates of the PBOC or London Interbank Offered Rate.

32 CORPORATE BONDS

	2019 RMB'000	2018 RMB'000
Carrying amount repayable based on repayment term (note):		
Within one year	**1,364,361**	1,730,776
More than one year but within two years	**8,420,600**	750,000
More than two years but within three years	**–**	11,400,000
More than three years but within four years	**5,993,576**	–
More than four years but within five years	**4,000,000**	5,991,776
	19,778,537	19,872,552
Less:		
Carrying amounts of corporate bonds that contain a repayment on demand clause (shown under current liabilities) but repayable:		
More than two years but within three years	**–**	3,000,000
More than one years but within two years	**20,600**	–
Amounts due within one year	**1,364,361**	1,730,776
Amounts shown under current liabilities	**1,384,961**	4,730,776
Amounts shown under non-current liabilities	**18,393,576**	15,141,776
Effective interest rate – floating rate (per annum)	**n/a**	n/a
Effective interest rate – fixed rate (per annum)	**3.14% – 5.37%**	3.14% – 5.37%

Note: The amounts due are based on scheduled repayment dates set out in the bond agreements.

33 LEASE LIABILITIES

The following table shows the remaining contractual maturities of the Group's lease liabilities at the end of the current and previous reporting periods and at the date of transition to IFRS 16:

	31 December 2019		1 January 2019 (Note)	
	Present value of the minimum lease payments	Total minimum lease payments	Present value of the minimum lease payments	Total minimum lease payments
	RMB'000	RMB'000	RMB'000	RMB'000
Within 1 year	**293,465**	**321,572**	575,694	623,189
After 1 year but within 2 years	**211,715**	**225,632**	299,112	334,723
After 2 years but within 5 years	**348,983**	**385,259**	335,445	400,793
After 5 years	**292,294**	**426,178**	24,948	40,124
	852,992	**1,037,069**	659,505	775,640
	1,146,457	**1,358,641**	1,235,199	1,398,829
Less: total future interest expenses		**(212,184)**		(163,630)
Present value of lease liabilities		**1,146,457**		1,235,199

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise lease liabilities relating to leases which were previously classified as operating leases under IAS 17. Comparative information as at 31 December 2018 has not been restated and the Group did not have leases previously classified as finance leases. Further details on the impact of the transition to IFRS 16 are set out in note 2(c).

34 DEFINED BENEFIT OBLIGATIONS

The Group paid post-employment obligations to its retired employees in the PRC. In addition, the Group was committed to make periodic benefits payments to certain former employees, who were terminated or early retired, standby staff with injury and the dependents of deceased employees in accordance with various employee benefit schemes adopted by the Group. These benefits were only applicable to the qualifying employees.

ENERGY CHINA GROUP has operated a fund, which was injected into ENERGY CHINA GROUP by the MOF in 2012. According to the circular issued by the MOF, this fund can be used to pay for certain pension or allowance of the above qualifying employees. ENERGY CHINA GROUP has deposited this fund entirely with specific accounts in certain commercial banks in the PRC and China Energy Engineering Group Finance Co., Ltd., a financial institution and a subsidiary of the Company, as time deposits. This designated fund in relation to the Group is accounted for as a defined benefit plan asset consisting of time deposits operated under the name of ENERGY CHINA GROUP (the "Defined Benefit Plan Asset"). The interest income generated from the Defined Benefit Plan Asset is also allocated to the Group. During the year, ENERGY CHINA GROUP made cash payments to the Group amounting to RMB309 million (2018: RMB267 million) to settle part of the Defined Benefit Plan Asset with the Group, details of the movements of the Defined Benefit Plan Asset during the year are set out in the latter part of this note below. The Defined Benefit Plan Asset as at 31 December 2019 was offset against defined benefit obligations of the Group for presentation purpose in these consolidated financial statements.

The plan exposes the Group to actuarial risks such as interest rate risk, benefit risk and average medical expense risk.

Interest rate risk	The present value of the defined benefit plan obligations is calculated using a discount rate determined by reference to government bond yields. As such, a decrease in the bond interest rate will increase the plan liability.
Benefit risk	The present value of the defined benefit plan obligations is calculated by reference to the future benefits of plan participants. As such, an increase in the benefits of the plan participants will increase the plan liability.
Average medical expense risk	The present value of the defined benefit plan obligations is calculated by reference to the future average medical expense of plan participants. As such, an increase in the average medical expense of the plan participants will increase the plan liability.

The actuarial valuations of the present value of the defined benefit obligations as at 31 December 2019 and 31 December 2018 were carried out by an independent firm of actuaries, Willis Towers Watson, a member of China Association of Actuaries. The present value of the defined benefit obligations, and the related current service cost and past cost were measured using the Projected Unit Credit Method.

34 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

The principal assumptions used for the purposes of the actuarial valuations are as follows:

	2019	2018
Discount rate	**2.75%-3.25%**	3.00%-3.25%
Early-retiree's and standby staff with injury salary and supplemental benefit inflation rate	**4.50%**	4.50%
Retired employees, dependents of deceased employees and standby staff's benefit inflation rate	**2.00%**	2.00%
Medical cost trend rate	**5.50%**	5.50%

Amounts recognised in the consolidated statement of profit or loss and other comprehensive income in respect of these defined benefit plans are as follows:

	2019 RMB'000	2018 RMB'000
Past service costs	**418,935**	539,187
Interest costs	**299,693**	420,040
Less:interest income	**13,981**	16,788
Components of defined benefit costs recognised in profit or loss	**704,647**	942,439
Component of defined benefit income recognised in other comprehensive income	**(270,578)**	618,640
Total	**434,069**	1,561,079

Past service cost is included in the administrative expenses in profit or loss. The interest cost is included in the finance costs in profit or loss. The interest income is included in the finance income in profit or loss. The remeasurement of the net defined benefit obligations arising from changes in financial assumptions is included in other comprehensive income.

The amount of retirement and supplemental benefit obligations recognised in the consolidated statement of financial position are determined as follows:

	2019 RMB'000	2018 RMB'000
Liability arising from defined benefit obligations	**10,925,232**	11,476,277
Fair value of Defined Benefit Plan Asset	**(551,588)**	(846,529)
Less: net amount due within one year	**1,104,067**	1,048,956
Net amount due after one year	**9,269,577**	9,580,792

34 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

Movements in the present value of the retirement and supplemental benefit obligations during the year are as follows:

	2019	2018
	RMB'000	RMB'000
At beginning of the year	**11,476,277**	10,903,919
Past service costs	**418,935**	539,187
Interest costs	**299,693**	420,040
Benefits paid	**(999,095)**	(1,005,509)
Actuarial (gain)/loss arising from changes in financial assumptions	**(270,578)**	618,640
At end of the year	**10,925,232**	11,476,277

Movements in the present value of Defined Benefit Plan Asset during the year are as follows:

	2019	2018
	RMB'000	RMB'000
At beginning of the year	**846,529**	1,096,515
Interest income	**13,981**	16,788
Cash received by the Group from ENERGY CHINA GROUP	**(308,922)**	(266,774)
At end of the year	**551,588**	846,529

Mortality is assumed to be the average life of expectancy of residents in Mainland China and the medical costs paid to early retirees are assumed to continue until the death of the retirees.

34 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

Significant actuarial assumptions made in determining defined benefit obligations are discount rate, supplemental benefit rate and average medical cost trend rate. The sensitivity analyses below have been determined based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period, while holding all other factors constant.

	2019	2018
	RMB'000	RMB'000
Actuarial assumptions		
Discount rate		
– increase by 0.25%	**(235,650)**	(250,280)
– decrease by 0.25%	**245,690**	278,320
Supplemental benefit rate		
– increase by 1.00%	**755,320**	842,790
– decrease by 1.00%	**(656,060)**	(713,020)
Medical cost trend rate		
– increase by 1.00%	**237,740**	269,550
– decrease by 1.00%	**(201,140)**	(211,630)

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligations as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligations has been calculated using the Projected Unit Credit Method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligations liability recognised in the consolidated statement of financial position.

There was no change in the methods and assumptions used in preparing the sensitivity analysis during the reporting period.

The average duration of the benefit obligations can be analysed as follows:

	2019	2018
	No. of years	No. of years
Retired members	**16**	17
Civil retirees	**5**	5
Early retired staff	**4**	5
Standby staff with injury	**8**	9
Dependents of deceased employees	**13**	14
Terminated staff	**6**	7

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

35 PROVISIONS

The movements of provisions are as follows:

	Provision for onerous performance obligations	Others	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2018	187,958	101,503	289,461
Additions	61,760	23,521	85,281
Paid	–	(24,230)	(24,230)
At 31 December 2018	**249,718**	**100,794**	**350,512**
Additions	**243,126**	**54,651**	**297,777**
Paid	**–**	**(17,121)**	**(17,121)**
At 31 December 2019	**492,844**	**138,324**	**631,168**

36 DEFERRED REVENUE

	Government grants related to assets	Government grants related to income	Unrealised profit of sales and leaseback transaction	Total
	RMB'000	RMB'000	RMB'000	RMB'000
	(note (a))	(note (b))	(note (c))	
At 1 January 2018	496,132	240,529	48,773	785,434
Additions	14,880	361,935	–	376,815
Released to profit or loss	(50,277)	(280,532)	(6,048)	(336,857)
At 31 December 2018	460,735	321,932	42,725	825,392
Additions	54,110	272,017	–	326,127
Released to profit or loss	(31,827)	(346,174)	(6,026)	(384,027)
At 31 December 2019	483,018	247,775	36,699	767,492

Notes:

(a) The government grants received are treated as deferred revenue and will be released to profit or loss over the estimated useful lives of the underlying property, plant and equipment.

(b) Government grants are recognised in profit or loss on a systematic basis over the periods in which the group entities recognise expenses for which the grants are intended to compensate.

(c) When a sale and leaseback transaction results in a finance lease, any excess of sales proceeds over the carrying amount of the asset upon sale is deferred and amortised over the lease term.

37 CAPITAL AND RESERVE

(a) Movements in components of equity

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statement of changes in equity. Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

	Issued share capital	Perpetual capital instruments	Capital reserve	Shares held under restricted share incentive scheme	Share based compensation reserve	Retained earnings/ (accumulated losses)	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Balance at 1 January 2018	30,020,396	–	17,010,521	(282,524)	44,559	(269,551)	46,523,401
Profit and total comprehensive income for the year	–	–	–	–	–	3,132,184	3,132,184
Purchase of own shares under restricted share incentive scheme	–	–	–	(22,555)	–	–	(22,555)
Effect of shares under restricted share incentive scheme vested	–	–	(22,871)	101,997	(31,789)	–	47,337
Dividends declared	–	–	–	–	–	(918,624)	(918,624)
Effect of share based compensation	–	–	–	–	6,103	–	6,103
Balance at 31 December 2018	30,020,396	–	16,987,650	(203,082)	18,873	1,944,009	48,767,846
Profit and total comprehensive income for the year	–	6,091	–	–	–	1,021,758	1,027,849
Issue of perpetual capital instruments	–	3,000,000	–	–	–	–	3,000,000
Dividends declared to perpetual capital instruments holders	–	(6,091)	–	–	–	–	(6,091)
Dividends declared	–	–	–	–	–	(918,624)	(918,624)
Effect of share based compensation	–	–	–	–	(18,873)	–	(18,873)
Balance at 31 December 2019	30,020,396	3,000,000	16,987,650	(203,082)	–	2,047,143	51,852,107

Note: The Group, including the Company, has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated and there is no net effect on the opening balance of the Company's equity as at 1 January 2019. See notes 2(c) and 46.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

37 CAPITAL AND RESERVE (CONTINUED)

(b) Dividends

(i) Dividends payable to equity shareholders of the Company attributable to the year

	2019	2018
	RMB'000	RMB'000
Final dividend proposed after the end of the reporting period of RMB0.0306 per share (2018: RMB0.0306 per share)	**918,624**	918,624

A final dividend of RMB0.0306 per share in respect of the year ended 31 December 2019, comprising 30,020,396,000 shares existing as at 31 December 2019, has been proposed by the Directors and is subject to the approval by the shareholders in the forthcoming annual general meeting. The final dividend proposed after the end of the reporting period has not been recognised as a liability at the end of the reporting period.

(ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year

	2019	2018
	RMB'000	RMB'000
Final dividend in respect of the previous financial year, approved and paid during the year, of RMB0.0306 per share (2018: RMB0.0306 per share)	**918,624**	918,624

37 CAPITAL AND RESERVE (CONTINUED)

(c) Issued share capital

The details of the Company's issued share capital are as follows:

	At 31 December 2019		At 31 December 2018	
	Number of shares	Nominal value	Number of shares	Nominal value
	'000	RMB'000	'000	RMB'000
Registered, issued and fully paid				
State legal person shares of RMB1.00 each	**20,757,960**	**20,757,960**	20,757,960	20,757,960
H Shares of RMB1.00 each	**9,262,436**	**9,262,436**	9,262,436	9,262,436
	30,020,396	**30,020,396**	30,020,396	30,020,396

(d) Purchase of shares under restricted share incentive scheme

During the year ended 31 December 2019, the Company did not purchase any shares under restricted share incentive scheme.

As at 31 December 2019 and 2018, the details of shares under restricted share incentive scheme purchased by a trustee on the Stock Exchange are as follows:

At 31 December 2019 and 2018			
Number of shares purchased	Highest price paid per share	Lowest price paid per share	Aggregate price paid
	HKD	HKD	RMB'000
164,532,000	1.5785	1.2200	203,082

37 CAPITAL AND RESERVE (CONTINUED)

(e) Restricted share incentive scheme

On 21 November 2016, the Company adopted a restricted share scheme (the "Scheme") with a duration of ten years and the Board of Directors approved an initial grant of restricted shares under the Scheme, pursuant to which approximately 287,500,000 restricted shares, representing approximately 0.96% of the issued share capital of the Company as at 31 December 2016, were granted to 542 selected Scheme participants at the grant price of HK$0.66 per share. These restricted shares would vest gradually after the Scheme participants complete a period of 2-4 years from the date of grant. The vesting conditions of restricted shares are subject to achievement of financial performance of the Group and individual performance assessment of participants over the unlocking period. The shares which will be acquired from the market will be held as restricted shares by a trustee before they are vested. As at 31 December 2019, 248,526,000 shares were acquired from the market (31 December 2018: 248,526,000 shares), 83,994,000 shares were vested to 481 grantees upon the fulfillment of vesting conditions in 2018. Given the Group failed to fulfil the vesting conditions of restricted shares which are subject to achievement of financial performance, the Directors are of the opinion that nil share will be vested in the future.

Movements in number of restricted shares granted and related fair value are as follows:

	2019		2018	
	Average fair value (per share)	**Number of restricted shares granted**	Average fair value (per share)	Number of restricted shares granted
	HKD	**'000**	HKD	'000
At the beginning of the year	**0.66**	**180,284**	0.66	275,272
Forfeited	**0.66**	**(92,780)**	0.66	(10,994)
Vested	**–**	**–**	0.66	(83,994)
At the end of the year	**0.66**	**87,504**	0.66	180,284

37 CAPITAL AND RESERVE (CONTINUED)

(f) Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, by pricing products and services commensurately with the level of risk and by securing access to finance at a reasonable cost.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholder returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions.

The capital structure of the Group consists of net debt (which includes bank and other borrowings, corporate bonds, lease liabilities, net of pledged deposits and bank and cash balances, as disclosed in notes 31, 32, 33 and 28 respectively), perpetual capital instruments and equity attributable to equity shareholders of the Company.

The Group has initially applied IFRS 16 using the modified retrospective approach. Under this approach, the Group recognises right-of-use assets and corresponding lease liabilities for almost all leases previously accounted for as operating leases as from 1 January 2019. This caused an increase in the Group's net debt and hence the Group's net debt rose from RMB57,193 million to RMB58,428 million on 1 January 2019 when compared to its position as at 31 December 2018.

The net debt of the Group as at 31 December 2019 is RMB58,052 million. There were no changes in the Group's approach to capital management compared with previous years.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

38 PERPETUAL CAPITAL INSTRUMENTS

Perpetual capital instruments as at 31 December 2019:

Issuance Date	Distribution Rate p.a	Amount
	%	RMB'000
31 May 2016	4.28	3,000,000
21 September 2016	3.76	3,000,000
21 July 2016	3.48	2,500,000
3 August 2016	3.43	3,000,000
31 July 2017	5.90	600,000
8 December 2017	6.00	620,000
12 January 2018	6.60	520,000
22 January 2018	6.60	660,000
20 May 2019	4.35	5,000,000
13 December 2019	3.90	3,000,000
18 December 2019	4.17	5,000,000
Total		26,900,000

There is no maturity of these instruments and the repayments of instruments can be deferred at the discretion of the Group. As long as the compulsory distribution payment events have not occurred, the Group has the right to defer the distribution payment at each interest payment date to the next distribution payment date unlimitedly, which does not cause the Group for breach of contract.

The Group could not defer current distribution and all deferred distribution when any of the following compulsory interest payment events occur:

- to declare and pay dividend to shareholders; and
- to reduce registered capital.

When any of the compulsory distribution payment events occur, the Group, as the case may be, shall make distribution to the holders of these instruments at the distribution rate as defined in the subscription agreements.

The distribution rate of these instruments will be reset according to the terms agreed in each contract of instruments respectively in every two to five years.

The Group does not have the contractual obligation to deliver cash or other financial assets to other parties, therefore the perpetual capital instruments are recognised as equity in these consolidated financial statements.

39 FINANCIAL INSTRUMENTS

(a) Categories of financial instruments

	31 December2019 RMB'000	31 December2018 (Note) RMB'000
Financial assets		
Loans and receivables:		
Trade and bills receivables	**83,356,775**	79,945,324
Deposits and other receivables	**15,269,019**	14,055,168
Finance lease receivables	**2,289,088**	1,093,829
Other loans	**5,998,443**	4,999,011
Pledged deposits	**5,242,218**	5,749,150
Bank and cash balances	**43,892,508**	49,046,642
	156,048,051	154,889,124
Financial assets at FVOCI	**2,194,812**	2,051,154
Financial assets at FVPL	**8,181,775**	6,403,718
Financial liabilities		
Amortised cost:		
Trade and bills payables	**104,390,647**	94,294,218
Other payables	**25,207,723**	25,945,902
Bank and other borrowings	**86,261,694**	92,116,031
Lease liabilities	**1,146,457**	–
Corporate bonds	**19,778,537**	19,872,552
	236,785,058	232,228,703

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise lease liabilities relating to leases which were previously classified as operating leases under IAS 17. Lease liabilities include amounts recognised at the date of transition to IFRS 16 in respect of leases previously classified as operating leases under IAS 17 and amounts relating to new leases entered into during the year. Under this approach, the comparative information is not restated. See note 2(c).

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies

The Group's major financial instruments include trade and bills receivables, financial assets at fair value through other comprehensive income, financial assets at fair value through profit or loss, other loans, pledged deposits, bank and cash balances, deposits and other receivables, trade and bills payables, other payables, bank and other borrowings, corporate bonds and lease liabilities. Details of the financial instruments are disclosed in the respective notes. The risks associated with these financial instruments include market risks (interest rate risk, foreign currency risk and other price risk), credit risk and liquidity risk. The policies on how to mitigate these risks are set out below. The management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Market risk

(i) Interest rate risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group is exposed to fair value interest rate risk which arises from fixed rate bank and other borrowings, other loans, corporate bonds and lease liabilities.

In addition, the Group is exposed to cash flow interest rate risk which arises from corporate bonds, floating rate bank and other borrowings, pledged deposits and bank and cash balances. The Group's exposures to interest rates on financial liabilities are detailed in the liquidity risk management section of this note.

Sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to interest rates for bank and cash balances, pledged deposits, floating rate corporate bonds and bank and other borrowings at the end of the reporting period. The analysis is prepared assuming the financial instruments outstanding at the end of reporting period were outstanding for the whole year. A 10 basis points increase or decrease in interest rate on bank and cash balances and pledged deposits and a 50 basis points increase or decrease in interest rate on floating rate corporate bonds and bank and other borrowings are used which represent management's assessment of the reasonably possible changes in interest rates.

If interest rates had been 10 basis points (2018: 10 basis points) higher/lower for bank and cash balances and pledged deposits with all other variables held constant, the Group's post-tax profit for the year ended 31 December 2019 would increase/decrease by approximately RMB32 million (2018: RMB36 million).

If interest rates had been 50 basis points (2018: 50 basis points) higher/lower for floating rate corporate bonds and bank and other borrowings with all other variables held constant, the Group's post-tax profit (net of interest capitalised) for the year ended 31 December 2019 would decrease/increase by approximately RMB47 million (2018: RMB53 million).

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Market risk (continued)

(ii) Currency risk

The Group's exposure to currency risk is attributable to bank and cash balances, trade and bills receivables, trade and bills payables and bank borrowings which are denominated in the currencies other than the functional currency of the relevant group entities. The management manages and monitors this exposure to ensure appropriate measures are implemented in a timely and effective manner.

The carrying amounts of the Group's major foreign currency denominated monetary assets and monetary liabilities other than the functional currency of the relevant group entities at the end of the reporting period are as follows:

	Assets		Liabilities	
	2019	2018	**2019**	2018
	RMB'000	RMB'000	**RMB'000**	RMB'000
USD	**12,924,171**	8,537,418	**10,532,681**	8,242,979
BRL	**68,107**	163,062	**2,518**	104,450
Pakistani Rupee("PKR")	**805,244**	178,865	**915,267**	75,337
Kuwaiti Dinar("Dinar")	**458,226**	642,186	**1,830,849**	783,137
EUR	**212,174**	417,532	**765,277**	720,007
HKD	**30,885**	15,325	**–**	–
Others	**5,259,387**	3,882,135	**6,607,231**	5,049,972

Sensitivity analysis

The sensitivity analysis below has been determined based on a 6% (2018: 6%) increase/decrease in functional currency of respective group entities against the relevant foreign currencies. 6% (2018: 6%) is the sensitivity rate used and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the end of the reporting period for a 6% (2018: 6%) change in foreign currency rates. A positive (negative) number below indicates an increase (decrease) in the Group's post-tax profit and the Group's other comprehensive income, where functional currency of respective group entities had strengthened 6% (2018: 6%) against the relevant foreign currency. For a 6% (2018: 6%) weakening of functional currency of respective group entities against the relevant foreign currency, there would be an equal and opposite impact on the post-tax profit and other comprehensive income for the year.

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Market risk (continued)

(ii) Currency risk (continued)

Sensitivity analysis (continued)

	2019 RMB'000	2018 RMB'000
Increase/(decrease) in the Group's post-tax profit		
– if RMB strengthens against USD	**(107,617)**	(13,250)
– if RMB strengthens against EUR	**24,890**	13,611
– if RMB strengthens against HKD	**(1,390)**	(690)
– if RMB strengthens against others	**124,421**	51,599
Decrease in the Group's other comprehensive income		
– if RMB strengthens against HKD	**–**	(3,172)

(iii) Other price risk

The Group is exposed to other price risk because the fair value of certain financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss are measured by reference to quoted prices. Details of the financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss are set out in note 20.

The Group currently does not have a policy to hedge the other price risk. However, the management closely monitors such risk by maintaining a portfolio of investments with different risks.

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Market risk (continued)

(iii) Other price risk (continued)

Sensitivity analysis

The sensitivity analysis below has been determined based on a 12% (2018: 12%) increase/decrease in equity price of the equity securities mentioned above. 12% (2018: 12%) is the sensitivity rate used and represents management's assessment of the reasonably possible change in equity price. A positive/(negative) number below indicates an increase/(decrease) in the Group's post-tax profit or increase/(decrease) in the Group's other comprehensive income.

	2019 RMB'000	2018 RMB'000
Increase/(decrease) in post-tax profit		
– as a result of increase in equity price	**3,895**	3,015
– as a result of decrease in equity price	**(3,895)**	(3,015)
Increase/(decrease) in other comprehensive income		
– as a result of increase in equity price	**99,768**	81,082
– as a result of decrease in equity price	**(99,768)**	(81,082)

Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's credit risk is primarily attributable to trade receivables and contract assets. The Group's exposure to credit risk arising from cash and cash equivalents and bills receivable is limited because the counterparties are banks and financial institutions, for which the Group considers to have low credit risk.

Except for the financial guarantees given by the Group as set out in note 42(b), the Group does not provide any other guarantees which would expose the Group to credit risk. The maximum exposure to credit risk in respect of these financial guarantees at the end of the reporting period is disclosed in note 42(b).

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Trade receivables and contract assets

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry or country in which the customers operate and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the end of the reporting period, 3% (2018: 5%) of the total trade receivables and contract assets was due from the Group's largest five customers within the construction and contracting business segment.

Individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. Trade receivables are due within 30-180 days from the date of billing. Normally, the Group does not obtain collaterals from customers.

The Group measures loss allowances for trade receivables and contract assets at an amount equal to lifetime ECLs, which is calculated using a provision matrix. According to the Group's historical credit loss experience, loss patterns were different for different types of customers. Therefore the loss allowance based on past due status is further distinguished based on types of customers sharing credit risk characteristics as state-owned enterprises directly supervised by SASAC, other state-owned enterprises and local governments, and private enterprises and others. Each type of customers shares different expected loss rate.

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Trade receivables and contract assets (continued)

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables and contract assets:

	2019		
	Expected loss rate	Gross carrying amount	Loss allowance
	%	RMB'000	RMB'000
– SASAC owned enterprises	1.0%	34,964,962	(349,650)
– Other state-owned enterprises and local governments	3.0%	18,998,126	(569,944)
– Private enterprises and others			
Current (not past due)	0.9%	40,715,430	(366,439)
Less than 6 months past due	10.4%	3,371,835	(350,671)
6 months to 18 months past due	16.9%	3,458,998	(584,571)
18 months to 30 months past due	31.4%	2,329,835	(731,568)
30 months to 42 months past due	53.5%	1,107,716	(592,628)
42 months to 54 months past due	73.2%	460,807	(337,310)
Over 54 months past due	80.0%	1,527,106	(1,221,684)
Total		106,934,815	(5,104,465)
Trade receivables (note)		64,703,033	(4,024,432)
Contract assets		42,231,782	(1,080,033)
Total		106,934,815	(5,104,465)

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Trade receivables and contract assets (continued)

	2018		
	Expected loss rate	Gross carrying amount	Loss allowance
	%	RMB'000	RMB'000
– SASAC owned enterprises	1.0%	23,406,126	(234,061)
– Other state-owned enterprises and local governments	3.0%	16,690,050	(500,702)
– Private enterprises and others			
Current (not past due)	1.0%	44,877,027	(448,770)
Less than 6 months past due	10.0%	9,518,780	(951,878)
6 months to 18 months past due	16.0%	4,103,108	(656,497)
18 months to 30 months past due	30.0%	1,387,978	(416,393)
30 months to 42 months past due	51.0%	760,158	(387,681)
42 months to 54 months past due	70.0%	673,617	(471,532)
Over 54 months past due	80.0%	723,711	(578,969)
Total		102,140,555	(4,646,483)
Trade receivables (note)		65,058,214	(3,635,803)
Contract assets		37,082,341	(1,010,680)
Total		102,140,555	(4,646,483)

Note: Trade receivables exclude BT/BOT project receivables.

Expected loss rates are based on actual loss experience over the past 2 years. These rates are adjusted to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Trade receivables and contract assets (continued)

Movement in the loss allowance account in respect of trade receivables and contract assets during the year is as follows:

	2019 RMB'000	2018 RMB'000
Balance at 1 January	**4,646,483**	4,363,055
Provided for the year (note 8)	**548,380**	315,010
Written off	**(81,865)**	(26,861)
Others	**(8,533)**	(4,721)
Balance at 31 December	**5,104,465**	4,646,483

For the BT/BOT project receivables, the Group considers that the credit risk arising from these receivables is significantly mitigated by related development projects, with reference to the estimated market value of those projects.

Credit risk arising from other loans and other receivables

The Group measures loss allowance for other loans provided to associates and other advances paid for other parties on an individual basis. The Group considers that its exposure to credit risk arising from default of the counterparties is limited, with reference to the estimated market value of the related property development projects and toll roads projects. For the remaining balance of other receivables and advances, the Group measures loss allowance at an amount equal to 12-months ECLs. ECLs on these financial assets are estimated based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of bank and cash balances as well as undrawn banking facilities deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. The management monitors the utilisation of bank borrowings and bills payable to ensure compliance with loan covenants.

The following tables detail the Group's remaining contractual maturities for its non-derivative financial liabilities. The tables have 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. Specifically, bank and other borrowings with a repayable on demand clause were included in the earliest time band regardless of the probability of the lenders choosing to exercise their right. The maturity dates for other non-derivative financial liabilities are based on the agreed repayment dates. The table includes both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate at the end of the reporting period.

	Contractual undiscount cash outflow								
	Weighted average interest rate	Repayable on demand or within one year	In the second year	In the third year	In the fourth year	In the fifth year	After five years	Total undiscounted cash flows	Carrying amount
	%	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2019									
Trade and bills payables	N/A	104,390,647	–	–	–	–	–	104,390,647	104,390,647
Other payables	N/A	25,207,723	–	–	–	–	–	25,207,723	25,207,723
Corporate bonds	4.04%	1,889,419	1,541,269	9,175,807	459,850	6,459,850	4,159,250	23,685,445	19,778,537
Lease Liabilities	4.55%	321,572	225,632	123,413	157,667	104,179	426,178	1,358,641	1,146,457
Interest-bearing bank and other borrowings									
– Floating rate	5.89%	5,907,018	9,573,366	4,612,518	2,200,072	2,942,855	30,968,418	56,204,247	39,851,864
– Fixed rate	2.46%	18,050,387	5,582,892	2,155,070	2,014,175	2,866,725	29,522,670	60,191,919	46,409,830
		155,766,766	16,923,159	16,066,808	4,831,764	12,373,609	65,076,516	271,038,622	236,785,058
Financial guarantee contracts	N/A	3,393,186	–	–	–	–	–	3,393,186	

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Liquidity risk (continued)

	Weighted average interest rate	Contractual undiscount cash outflow							
		Repayable on demand or within one year	In the second year	In the third year	In the fourth year	In the fifth year	After five years	Total undiscounted cash flows	Carrying amount
	%	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2018									
Trade and bills payables	N/A	94,294,218	–	–	–	–	–	94,294,218	94,294,218
Other payables	N/A	25,945,902	–	–	–	–	–	25,945,902	25,945,902
Corporate bonds	3.80%	11,603,670	1,986,850	1,479,450	12,093,540	300,600	6,300,600	33,764,710	19,872,552
Interest-bearing bank and other borrowings									
– Floating rate	5.64%	26,447,872	7,281,261	7,930,768	1,845,696	1,705,880	25,055,262	70,266,739	55,127,210
– Fixed rate	4.61%	25,389,216	3,999,603	2,435,902	1,997,728	467,409	7,422,112	41,711,970	36,988,821
		183,680,878	13,267,714	11,846,120	15,936,964	2,473,889	38,777,974	265,983,539	232,228,703
Financial guarantee contracts	N/A	6,405,117	–	–	–	–	–	6,405,117	–

Note: The Group has initially applied IFRS 16 using the modified retrospective approach and adjusted the opening balances at 1 January 2019 to recognise lease liabilities relating to leases which were previously classified as operating leases under IAS 17. Under this approach, the comparative information is not restated. See note 2(c).

Bank borrowings with a repayment on demand clause are included in the "Repayable on demand or within one year" time band in the above maturity analysis. As at 31 December 2019, the aggregate carrying amount of these bank borrowings amounted to RMB1,007 Million (2018: RMB997 million). Taking into account the Group's financial position, the management of the Group does not believe that it is probable that the banks will exercise their discretionary rights to demand for immediate repayment.

Corporate bonds with a repayment on demand clause are included in the "Repayable on demand or within one year" time band in the above maturity analysis. As at 31 December 2019, the aggregate carrying amount of these corporate bonds amounted to RMB21 million (2018: RMB3,000 million). Taking into account the Group's financial position, the management of the Group does not believe that it is probable that the investors will exercise their discretionary rights to demand for immediate repayment.

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Liquidity risk (continued)

Other borrowings have no fixed repayment term and are included in the "Repayable on demand or within one year" time band in the above maturity analysis.

The amounts included above for financial guarantee contracts are the maximum amount 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 guarantee. Based on expectations at the end of the reporting period, the Group considers that it is more likely than not that such amount will not be payable under the arrangement. However, this estimate is subject to change depending on the probability of the counterparty claiming under the guarantee which is a function of the likelihood that the financial receivables held by the counterparty which are guaranteed suffer credit losses.

Fair value measurement

Fair value hierarchy

The following table presents the fair value of the Group's financial instruments measured at the end of the reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined in IFRS 13, *Fair value measurement*. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

- Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date

- Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available

- Level 3 valuations: Fair value measured using significant unobservable inputs

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Fair value measurement (continued)

Fair value hierarchy (continued)

The Group has a team headed by the finance manager performing valuations for the financial instruments, including tradable unlisted equity securities classified as financial asset at FVOCI and tradable unlisted equity securities classified as financial asset at FVPL, which are categorised into Level 3 of the fair value hierarchy. The team reports directly to the chief financial officer and the audit committee. A valuation report with analysis of changes in fair value measurement is prepared by the external valuers at each interim and annual reporting date, and is reviewed and approved by the chief financial officer. Discussion of the valuation process and results with the chief financial officer and the audit committee is held twice a year, to coincide with the reporting dates.

During the year ended 31 December 2019, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3 (31 December 2018: nil). The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

Fair value measurement for financial instruments not measured at fair value on a recurring basis

Except as detailed in the following table, the Directors consider that the carrying amounts of financial assets and financial liabilities recognised in these consolidated financial statements approximate their fair values.

	Carrying amounts		Fair values	
	2019	2018	**2019**	2018
	RMB'000	RMB'000	**RMB'000**	RMB'000
Financial liabilities				
Bank and other borrowings (fixed rate)	46,409,830	36,988,821	49,023,838	38,542,795
Corporate bonds (fixed rate)	19,778,537	19,872,552	19,904,724	20,087,565
	66,188,367	56,861,373	68,928,562	58,630,360

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Fair value measurement (continued)

Fair value measurement as at 31 December 2019

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial liabilities				
Bank and other borrowings (fixed rate)	**–**	**49,023,838**	**–**	**49,023,838**
Corporate bonds (fixed rate)	**–**	**19,904,724**	**–**	**19,904,724**
	–	**68,928,562**	**–**	**68,928,562**

Fair value measurement as at 31 December 2018

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial liabilities				
Bank and other borrowings (fixed rate)	–	38,542,795	–	38,542,795
Corporate bonds (fixed rate)	–	20,087,565	–	20,087,565
	–	58,630,360	–	58,630,360

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Fair value measurement (continued)

Fair value measurements for financial instruments measured at fair value on a recurring basis

Some of the Group's financial assets are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets are determined (in particular, the valuation techniques and key inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorised (levels 1 to 3) based on the degree to which the inputs to the fair value measurements are observable.

Financial assets	**Fair value at**		Fair value hierarchy
	31 December 2019	31 December 2018	
Tradable listed equity securities classified as Financial asset at FVOCI	**1,108,528**	900,906	Level 1
Tradable unlisted equity securities classified as Financial asset at FVOCI	**1,086,284**	1,150,248	Level 3
Total	**2,194,812**	2,051,154	
Tradable listed equity securities classified as financial assets at FVPL	**43,278**	33,504	Level 1
Tradable unlisted equity securities classified as financial asset at FVPL	**8,138,497**	6,370,214	Level 3
Total	**8,181,775**	6,403,718	

39 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Fair value measurement (continued)

Information about Level 3 fair value measurements

Industry	Amount	Valuation techniques	Significant unobservable inputs	Relationship of unobservable inputs to fair value
Finance	3,896,269	Market comparable companies	Discount for lack of marketability	The higher the discount for lack of marketability, the lower the fair value.
Others	521,029			
Toll road and railway	3,937,500	Discounted cash flow	Expected future cashflow Discount rate that correspond to the expected risk level	The higher the future cashflow, the higher the fair value. The lower the discount rate, the higher the fair value
Power Plant	588,301			
Others	29,233			
Power plant and others	252,449	Adjusted quoted price on active market	Discount for lack of liquidity	The higher the discount for lack of liquidity, the lower the fair value.

The movements during the period in the balance of these Level 3 fair value measurements are as follows:

	2019 RMB'000	2018 RMB'000
Balance at 1 January	**7,520,462**	7,354,961
Payment for purchases	**3,835,680**	7,719,010
Disposal for the year	**(2,064,181)**	(8,007,895)
Changes in fair value recognised in profit or loss during the year	**31,178**	431,465
Changes in fair value recognised in other comprehensive income during the year	**(98,358)**	22,921
Balance at 31 December	**9,224,781**	7,520,462

Any gain or loss arising from the remeasurement of the Group's unlisted equity securities held for strategic purposes are recognised in the profit or loss or in other comprehensive income. Upon disposal of the equity securities, the investment income or loss of the financial assets at FVPL is presented in the "other income" line item in the consolidated statement of profit or loss. For the financial assets at FVOCI, the amount accumulated in other comprehensive income is transferred directly to retained earnings.

40 CAPITAL COMMITMENTS

Capital expenditure:

	2019 RMB'000	2018 RMB'000
Contracted for but not provided in these consolidated financial statements:		
Property, plant and equipment	**2,708,494**	2,995,665

Investment commitments:

According to relevant agreements, the Group has the following investment commitments:

	2019 RMB'000	2018 RMB'000
Investment commitments in:		
– Joint ventures	**366,700**	366,700
– Associates	**4,450**	4,450
	371,150	371,150

41 OPERATING LEASE COMMITMENTS

As at 31 December 2018, the total future minimum lease payments under non-cancellable operating leases were payable as follows:

	2018 RMB'000
Within one year	359,049
1 to 3 years	283,631
Over 3 years	159,840
	802,520

The Group is the lessee in respect of a number of properties and items of plant and machinery and office equipment held under leases which were previously classified as operating leases under IAS 17. The Group has initially applied IFRS 16 using the modified retrospective approach. Under this approach, the Group adjusted the opening balances at 1 January 2019 to recognise lease liabilities relating to these leases (see note 2(c)). From 1 January 2019 onwards, future lease payments are recognised as lease liabilities in the statement of financial position in accordance with the policies set out in note 2(l), and the details regarding the Group's future lease payments are disclosed in note 33.

42 CONTINGENCIES AND CONTINGENT LIABILITIES

(a) The Group was involved in a number of legal proceedings and claims against it in the ordinary course of business. Provision has been made for the probable losses to the Group on these legal proceedings and claims when the management can reasonably estimate the outcome of the legal proceedings and claims taking into account the legal advice. No provision has been made for pending legal proceedings and claims when the outcome of the legal proceedings and claims cannot be reasonably estimated, or the management believes that the probability of loss is remote.

(b) Guarantees

	2019 RMB'000	2018 RMB'000
Guarantees given to banks and other financial institutions in respect of loan facilities granted to (note (i)):		
Joint ventures (note 44 (a))	**18,000**	736,911
Associates (note 44 (a))	**1,532,242**	3,594,419
Third party (note ii)	**243,369**	258,888
Investee recognised as financial assets at FVOCI	**21,400**	24,500
	1,815,011	4,614,718
Mortgage loan guarantees provided by the Group to banks in favour of its customers (note (iii))	**1,578,175**	1,790,399
	3,393,186	6,405,117

42 CONTINGENCIES AND CONTINGENT LIABILITIES (CONTINUED)

(b) Guarantees (continued)

Notes:

(i) In the opinion of the Directors, the fair value of these guarantee contracts is insignificant at initial recognition.

(ii) One subsidiary of the Group has provided guarantee in respect of a leasing contract with one financial institution to a third party.

(iii) The Group had provided guarantees in respect of mortgage facilities granted by certain banks in connection with the mortgage loans entered into by purchasers of the Group's properties. Pursuant to the terms of the guarantees, if there is default of the mortgage payments by these purchasers, the Group is responsible for repaying the outstanding mortgage loans together with accrued interests thereon and any penalty owed by the defaulted purchasers to banks. The Group is then entitled to take over the legal title of the related properties. The guarantee periods commence from the dates of grant of the relevant mortgage loans and end after the buyer obtained the individual property ownership certificate.

In the opinion of the Directors, the fair values of these financial guarantee contracts of the Group are insignificant at initial recognition, and the Directors consider that the possibility of default by the relevant buyers is remote and, in case of default in payments, the net realisable value of the related properties can recover the repayment of the outstanding mortgage principals together with the accrued interest and penalty. Accordingly, no provision has been made in these consolidated financial statements for these guarantees.

(c) Contingent liabilities

During the year ended 31 December 2019, Gezhouba Huanjia and Huanjia Connected Suppliers (defined in note 23(ii)) were involved as defendants in a number of legal proceedings with certain financial institutions and other lenders. Mr. Wang Jinping was also one of the defendants in certain above-mentioned legal proceedings. These financial institutions sued Gezhouba Huanjia and other defendants for repayment of loans amounted to RMB1,362 million. Certain above-mentioned legal proceedings were rejected by relevant courts, as these courts were of the opinion that these legal proceedings, involved in duty related crimes and/or crimes, are subject to the conclusions of the Investigation (defined in note 23(ii)).

Based on legal advice, the Company believes that Gezhouba Huanjia will be possibly sued by these financial institutions and other lenders and involved in further related investigations after the completion of the Investigation. As at 31 December 2019, as the Investigation is yet to be completed, the Company cannot reliably estimate the amount of liabilities to be undertaken by Gezhouba Huanjia. No provision in this regard has therefore been made.

43 PLEDGE OF ASSETS

Assets with the following carrying amounts have been pledged to secure general banking facilities (including bank borrowings, bills payable and letter of credit) granted to the Group:

	Notes	**2019** **RMB'000**	2018 (Note) RMB'000
Property, plant and equipment	12	**1,248,205**	966,779
Prepaid lease payments	13	**–**	279,586
Intangible assets	15	**26,464,899**	15,999,293
Trade receivables	22	**4,535,984**	2,022,816
Properties under development for sale	26	**18,690,337**	24,105,537
Bank deposits	28	**5,242,218**	5,749,150
		56,181,643	49,123,161

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

44 MATERIAL RELATED PARTY TRANSACTIONS

(a) Significant related party transactions

Save as disclosed elsewhere in these consolidated financial statements, the Group entered into the following transactions with related parties during the year:

	2019 RMB'000	2018 RMB'000
Sales of goods		
Ultimate holding company	–	96
Fellow subsidiaries	5,440	647
Joint ventures	–	28
Associates	264	1,196
	5,704	1,967
Provision of construction services		
Fellow subsidiaries	43,269	29,297
Joint ventures	4,789,278	2,943,643
Associates	13,779,357	8,528,037
	18,611,904	11,500,977
Purchase of goods		
Fellow subsidiaries	3,304	5,561
Joint ventures	1	1,058
Associates	15,423	15,705
	18,728	22,324
Purchase of services		
Ultimate holding company	6,230	–
Fellow subsidiaries	190,669	210,681
Joint ventures	2,663	–
Associates	55	–
	199,617	210,681
Lease expense		
Fellow subsidiaries	154,908	167,440
Finance income		
Fellow subsidiaries	23,562	8,388
Associates	160,803	258,573
	184,365	266,961
Finance costs		
Ultimate holding company	64,130	36,334
Fellow subsidiaries	23,781	21,205
Associates	16,861	–
	104,772	57,539

44 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (continued)

The Group had issued guarantees to banks or other financial institutions in respect of the banking facilities granted to the following parties:

	2019 RMB'000	2018 RMB'000
Joint ventures (note 42 (b))	**18,000**	736,911
Associates (note 42 (b))	**1,532,242**	3,594,419
	1,550,242	4,331,330

In the opinion of the Directors, the transactions between the Group and the related parties were based on prices mutually agreed between the parties after taking reference of the market prices.

The Group operates in an economic environment predominated by enterprises directly or indirectly owned or controlled by the PRC government through its numerous authorities, affiliates or organisations (collectively "State-owned Enterprises"). During the year, the Group had transactions with State-owned Enterprises including, but not limited to, the provision of infrastructure construction services and purchases of services. The Directors consider that the transactions with these State-owned Enterprises are activities in the ordinary course of the Group's business and that the dealings of the Group have not been significantly or unduly affected by the fact that the Group and these State-owned Enterprises are ultimately controlled or owned by the PRC government. The Group has also established pricing policies for services and products, and such pricing policies do not depend on whether or not the customers are State-owned Enterprises. Having due regard to the substance of the relationship, the Directors are of the opinion that none of these transactions are material related party transactions that require separate disclosure.

(b) Outstanding balances with related parties

Details of the outstanding balances with related parties are set out in notes 22, 23, 24, 27, 29, 30 and 31.

44 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Compensation of key management personnel

The remuneration of key management during the year was as follows:

	2019 RMB'000	2018 RMB'000
Directors' fee	**240**	282
Salaries and other allowances	**3,713**	3,746
Discretionary bonus	**10,139**	7,696
Retirement benefit schemes contributions	**600**	762
Share based compensation under restricting share incentive scheme	**–**	160
	14,692	12,646

The remuneration of key management is determined having regard to the Group's or respective member's performance for such financial period.

During 2019, no key management personnel was granted restricted share. Details of the Scheme are set out in note 37(e).

(d) Applicability of the Listing Rules relating to connected transactions

Certain of the related party transactions included in note 44(a) above constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules. These transactions are disclosed in the Report of the Board as required by Chapter 14A of the Listing Rules.

45 DISPOSAL OF SUBSIDIARIES

During the year ended 31 December 2019, equity interests of certain companies held by the Group were disposed of by the Group.

On 27 December 2019, a wholly-owned subsidiary of CGGC has entered into a contract with Hubei Chutian Smart Communication Co., Ltd. (湖北楚天智能通信有限公司) ("Chutian Smart") and Hubei Transportation Investment Construction Group Co., Ltd. (湖北交通投資建設集團有限公司) ("Hubei Transportation"), to transfer its 100% equity interests in Hubei Daguangbei Expressway Co., Ltd. (湖北大廣北高速公路有限責任公司) ("Daguangbei") at a consideration of RMB3,457 million.

The aggregate financial information of the subsidiaries disposed of by the Group, at the date of disposal in 2019, is as follows:

	Daguangbei	**Others**	**Total**
	RMB'000	RMB'000	RMB'000
NON-CURRENT ASSETS			
Property, plant and equipment	1,058	28,019	29,077
Intangible assets	4,336,694	–	4,336,694
	4,337,752	28,019	4,365,771
CURRENT ASSETS			
Inventories	–	53,439	53,439
Trade and bill receivables	37,508	27,052	64,560
Prepayments, deposits and other receivables	30,823	5,985	36,808
Cash and cash equivalents	36,790	552	37,342
	105,121	87,028	192,149
CURRENT LIABILITIES			
Trade and bills payables	43,487	57,973	101,460
Contract liabilities	48,334	3,276	51,610
Other payables and accruals	246,383	108,930	355,313
Income tax payable	3,114	2	3,116
	341,318	170,181	511,499
NET CURRENT ASSETS	(236,197)	(83,153)	(319,350)
TOTAL ASSETS LESS CURRENT LIABILITIES	4,101,555	(55,134)	4,046,421

45 DISPOSAL OF SUBSIDIARIES (CONTINUED)

	Daguangbei	Others	Total
	RMB'000	RMB'000	RMB'000
NON-CURRENT LIABILITIES			
Deferred tax liabilities	191,412	–	191,412
Other payables and accruals	459,749	990	460,739
Bank and other borrowings	2,243,200	–	2,243,200
	2,894,361	990	2,895,351
NET ASSETS	1,207,194	(56,124)	1,151,070
Consideration disposed of			
Cash Consideration received/receivable	3,457,000	684	3,457,684
Plus: non-controlling interests	–	(6,544)	(6,544)
Less: net assets	1,207,194	(56,124)	1,151,070
Gain on disposal of subsidiaries	2,249,806	50,264	2,300,070
Net cash inflow arising on disposal			
Total cash consideration received	3,457,000	684	3,457,684
Less: cash and cash equivalents disposed of	36,790	552	37,342
Net inflow of cash and cash equivalents in respect of the acquisition	3,420,210	132	3,420,342

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

46 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	2019 RMB'000	2018 (Note) RMB'000
NON-CURRENT ASSETS		
Property, plant and equipment	**52,548**	8,713
Intangible assets	**10,783**	13,173
Investments in subsidiaries	**56,235,533**	52,996,869
Financial asset at fair value through other comprehensive income	**13,000**	13,000
Prepayments, deposits and other receivables	**1,105**	29,174
Other loans to subsidiaries	**1,752,000**	2,808,000
	58,064,969	55,868,929
CURRENT ASSETS		
Other receivables	**5,397,585**	4,990,567
Other loans to subsidiaries	**325,505**	738,980
Bank and cash balances	**793,286**	1,621,393
	6,516,376	7,350,940
CURRENT LIABILITIES		
Other payables and accruals	**4,860,205**	5,023,747
Corporate bonds	**256,154**	254,100
Lease liabilities	**49,124**	–
Bank and other borrowings	**394,981**	2,071,501
	5,560,464	7,349,348
NET CURRENT ASSETS	**955,912**	1,592
TOTAL ASSETS LESS CURRENT LIABILITIES	**59,020,881**	55,870,521
NON-CURRENT LIABILITIES		
Other payables and accruals	**155,198**	110,718
Bank and other borrowings	**1,020,000**	1,000,000
Corporate bonds	**5,993,576**	5,991,957
	7,168,774	7,102,675
NET ASSETS	**51,852,107**	48,767,846

46 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION (CONTINUED)

	2019 RMB'000	2018 (Note) RMB'000
CAPITAL AND RESERVES		
Issued share capital	**30,020,396**	30,020,396
Perpetual capital instruments	**3,000,000**	–
Reserves	**18,831,711**	18,747,450
TOTAL EQUITY	**51,852,107**	48,767,846

Approved and authorised for issue by the Board of Directors on.

Wang Jianping
Director

Ding Yanzhang
Director

Note: The Company has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 2(c).

47 COMPARATIVE FIGURES

The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. Further details of the changes in accounting policies are disclosed in note 2(c). Certain comparative figures have been adjusted to conform to current year's presentation for the first time in 2019.

48 SUBSEQUENT EVENT

The outbreak of novel coronavirus ("COVID-19 outbreak") since early 2020 has brought about additional uncertainties in the Group's operating environment. In particular, some entities are located in Hubei Province, which may impact the Group's operations and financial position.

48 SUBSEQUENT EVENT (CONTINUED)

The Group has been closely monitoring the impact from the COVID-19 outbreak on the Group's businesses and has commenced to put in place various contingency measures. These contingency measures include but not limited to continuously monitoring and analysing domestic and overseas epidemic prevention policies, negotiating with project owners and customers on project schedules and delivery timetables, evaluating the sustainability of the existing subcontractors and suppliers and assessing major projects in progress. The Group will keep the contingency measures under review as the COVID-19 outbreak evolves.

As far as the Group's businesses are concerned, the COVID-19 outbreak may result in decrease in revenue and gross profits. The Group has initiated the above contingency measures to respond. Based on the information currently available, the Directors estimated that the COVID-19 outbreak may impact: 1) the repayment abilities of certain domestic and oversea project owners and customers and, as a result, may lead to additional provision for trade receivables and contract assets in the future periods; 2) total estimated contract costs arising from the unexpected regulatory requirements of epidemic prevention, which may lead to onerous contracts if the costs cannot be recovered from project owners; 3) timetable of on-going overseas construction contracts due to restriction of travelling abroad, as a result, may cause breach of contract and potential losses from legal proceedings and claims. All the above impacts have not been reflected in the financial statements as at 31 December 2019.

On the other hand, the Directors consider that the government's policy of reducing taxes and fees and the decline in market interest rates will benefit the Company in further reducing costs and increasing efficiency, and such impacts could also be reduced by favourable polices regarding infrastructure construction to be introduced by the government to drive economic growth after the COVID-19 outbreak.

49 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2019

Up to the date of issue of these financial statements, the IASB has issued a number of amendments and a new standard, IFRS 17, Insurance contracts, which are not yet effective for the year ended 31 December 2019 and which have not been adopted in these financial statements. These developments include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Amendments to IFRS 3, Definition of a business	1 January 2020
Amendments to IAS 1 and IAS 8, Definition of material	1 January 2020

The Group is in the process of making an assessment of what the impact of these developments is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.

Glossary of Vocabulary and Technical Terms

"Company" or "our Company"	refers to China Energy Engineering Corporation Limited (中國能源建設股份有限公司), a joint stock company with limited liability incorporated in the PRC on 19 December 2014
"Group" or "our Group"	refers to the Company and its subsidiaries
"subsidiary(ies)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"Energy China Group"	refers to China Energy Engineering Group Co., Ltd. (中國能源建設集團有限公司), a wholly state-owned company with limited liability established in the PRC on 28 September 2011, the controlling shareholder and one of the promoters of our Company, and thus a connected person of the Company
"EPPE Company"	refers to Electric Power Planning Engineering Institute Co., Ltd. (電力規劃總院有限公司), a limited liability company established in the PRC on 17 July 2014 and a wholly-owned subsidiary of Energy China Group and one of the promoters of our Company, and thus a connected person of the Company
"Finance Company"	refers to China Energy Engineering Group Finance Co., Ltd. (中國能源建設集團財務有限公司), formerly known as China Energy Engineering Group Gezhouba Finance Co.,Ltd. (中國能源建設集團葛洲壩財務有限公司), a limited liability company established in the PRC on 18 January 1996 and a subsidiary of the Company
"CGGC Group"	refers to China Gezhouba Group Company Limited (中國葛洲壩集團有限公司), a subsidiary of the Company
"CGGC"	refers to China Gezhouba Group Stock Company Limited (中國葛洲壩集團股份有限公司), a subsidiary of the Company
"CEEPE"	refers to China Energy Engineering Group Planning and Engineering Co., Ltd. (中國能源建設集團規劃設計有限公司), a subsidiary of the Company
"Jiangsu Power Construction 1 Company"	refers to China Energy Engineering Group Jiangsu No. 1 Electric Power Construction Engineering Co., Ltd. (中國能源建設集團江蘇省電力建設第一工程有限公司), a subsidiary of the Company
"Hunan Institute"	refers to China Energy Engineering Group Hunan Electric Power Design Institute Co., Ltd. (中國能源建設集團湖南省電力設計院有限公司), a subsidiary of the Company
"Asset Management Company"	refers to China Energy Engineering Group Asset Management Co., Ltd. (中國能源建設集團資產管理有限公司), a subsidiary of China Energy Engineering Group Co., Ltd., and thus a connected person of the Company
"Beijing Power Construction"	refers to China Energy Engineering Group Beijing Electric Power Construction Company (中國能源建設集團北京電力建設公司), a subsidiary of China Energy Engineering Group Co., Ltd., and thus a connected person of the Company
"Guangdong Equipment Company"	refers to Guangdong Energy Engineering Power Equipment Factory Co., Ltd. (廣東能建電力設備廠有限公司), a subsidiary of the Company
"Gezhouba Highway Company"	refers to China Gezhouba Group Highway Operation Co., Ltd. (中國葛洲壩集團公路運營有限公司), a subsidiary of the Company
"Daguangbei Company"	refers to Hubei Daguangbei Expressway Co., Ltd. (湖北大廣北高速公路有限責任公司), a former subsidiary of the Company

Glossary of Vocabulary and Technical Terms

"Hubei Provincial Communications Investment Group"	refers to Hubei Provincial Communications Investment Group Co., Ltd. (湖北省交通投資集團有限公司), a connected person of the Company at subsidiary level
"Chutian Smart"	refers to Hubei Chutian Smart Communication Co., Ltd. (湖北楚天智能交通股份有限公司), a connected person of the Company at subsidiary level
"Hubei Transportation"	refers to Hebei Transportation Investment Construction Group Co., Ltd. (湖北交投建設集團有限公司), a connected person of the Company at subsidiary level
"Board" or "Board of Directors"	refers to the board of directors of the Company
"Director(s)"	refers to the director(s) of the Company
"Board of Supervisors" or "Supervisory Committee"	refers to the board of supervisors of the Company
"Reporting Period"	refers to the period of 12 months ended 31 December 2019
"year-on-year"	refers to comparison with the same period of the previous year
"Corporate Governance Code"	refers to the Corporate Governance Code as contained in Appendix 14 to the Listing Rules
"Listing Rules"	refers to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (as amended from time to time)
"Model Code"	refers to Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules
"SFO"	refers to Hong Kong Securities and Future Ordinance
"PRC" or "China"	refers to the People's Republic of China
"Ministry of Finance"	refers to Ministry of Finance of the People's Republic of China (中華人民共和國財政部)
"MOC"	refers to the Ministry of Commerce of the People's Republic of China (中華人民共和國商務部)
"Ministry of Industry and Information Technology"	refers to Ministry of Industry and Information Technology of the People's Republic of China (中華人民共和國工業和信息化部)
"National Development and Reform Commission"	refers to National Development and Reform Commission of the People's Republic of China (中華人民共和國發展和改革委員會)
"SASAC" or "State-owned Assets Supervision Commission of the State Council"	refers to State-owned Assets Supervision and Administration Commission of the State Council (國務院國有資產監督管理委員會)
"National Bureau of Statistics"	refers to the National Bureau of Statistics of the People's Republic of China (中華人民共和國統計局)
"State Administration for Market Regulation"	refers to the State Administration for Market Regulation of the People's Republic of China (中華人民共和國國家市場監督管理總局)
"Stock Exchange"	refers to The Stock Exchange of Hong Kong Limited, a wholly owned subsidiary of Hong Kong Exchanges and Clearing Limited

Glossary of Vocabulary and Technical Terms

"One Belt and One Road"	refers to the development strategy and framework, proposed by the People's Republic of China that focuses on connection and cooperation among countries primarily in Eurasia, which consists of two main components, the land-based "Silk Road Economic Belt" and ocean-going "Maritime Silk Road"
"16+1 Cooperation"	refers to the meeting mechanism of the leaders of China-Central and Eastern Europe
"Shanghai Cooperation Organization"	refers to permanent intergovernmental organization whose establishment was announced by the People's Republic of China, the Republic of Kazakhstan, the Kyrgyz Republic, the Russian Federation, the Republic of Tajikistan and the Republic of Uzbekistan in Shanghai, China on 15 June 2001
"OFAC"	refers to the abbreviation of the Office of Foreign Assets Control, referring to Office of Foreign Assets Control of the US Department of the Treasury
"three supply in one industry"	refers to the water, power and gas supply and property management took place in the residence to employees of state-owned enterprises
"MW"	refers to the measurement of electric power which equals to 1,000,000 watts. Alternatively, 1 MW equals to 1,000 kW
"PPP"	refers to public private partnership, a business model in which public infrastructure projects are financed, built and operated by way of partnership between the public sector and the private sector
"PV"	refers to the abbreviation of solar photovoltaic system, a technology that directly converts solar energy into electrical energy by making use of the photovoltaic effect of semiconductor materials
"EPC"	refers to a common form of contracting arrangement whereby the contractor is commissioned by the project owner to carry out project work such as design, procurement, construction and trial operations, or any combination of the above, either through the contractor's own labor or by subcontracting part or all of the project work, and is responsible for the quality, safety, timely delivery and cost of the project
"BOT"	refers to the build-operate-transfer mode. It is a model in which the government grants the concession rights of an infrastructure project to a contractor, where the contractor is responsible for the design, financing, construction and operation of the project during the concession period to recover its costs, repay debts and earn profits. Upon expiration of the concession period, the ownership of the project will be transferred back to the government
"smart grid"	refers to the new modern grid highly integrating the advanced sensor measurement technology, information and communication technology, analysis and decision technology, automatic control technology, energy electric technology and power grid infrastructure in order to achieve the reliable, economical, efficient, environmental friendly and safety use objectives
"sponge city"	refers to the city having a good "flexibility" to adapt to environmental changes and respond to natural disasters caused by rain, etc., capable of water absorption, water storage, water seepage, and water purification when it rains, and "release" and make use of the stored water when needed
"urban comprehensive underground pipe gallery"	refers to the public tunnels laid underground in urban areas for paving municipal pipelines including electricity, telecommunications, television broadcast, water supply, water drainage, heat and gas, etc.

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