

 China

 Asia

 Africa

 Europe

 South
America

 Oceania

ANNUAL REPORT 2018

The BELT AND ROAD BRINGING ENERGY TO THE WORLD

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

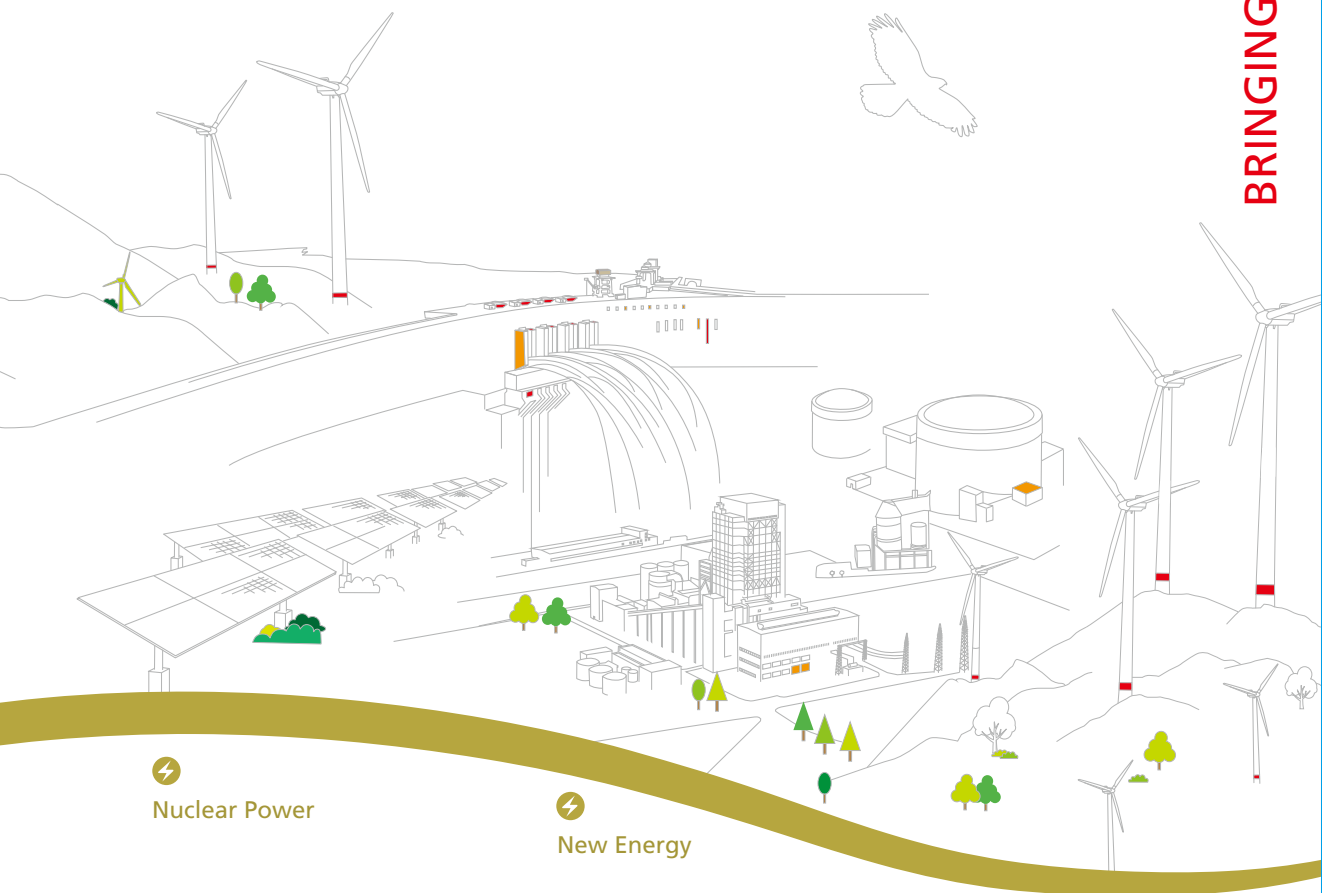
*(A joint stock company incorporated in the People's
Republic of China with limited liability)*

(Stock Code: 3996)




Fossil Fuel Power


Hydropower



⚡
Nuclear Power

⚡
New Energy

⚡
Power Transmission
& Transformation

**EVER-IMPROVING PROFESSIONAL
COMPETENCE AND
OPERATIONAL CAPACITY**

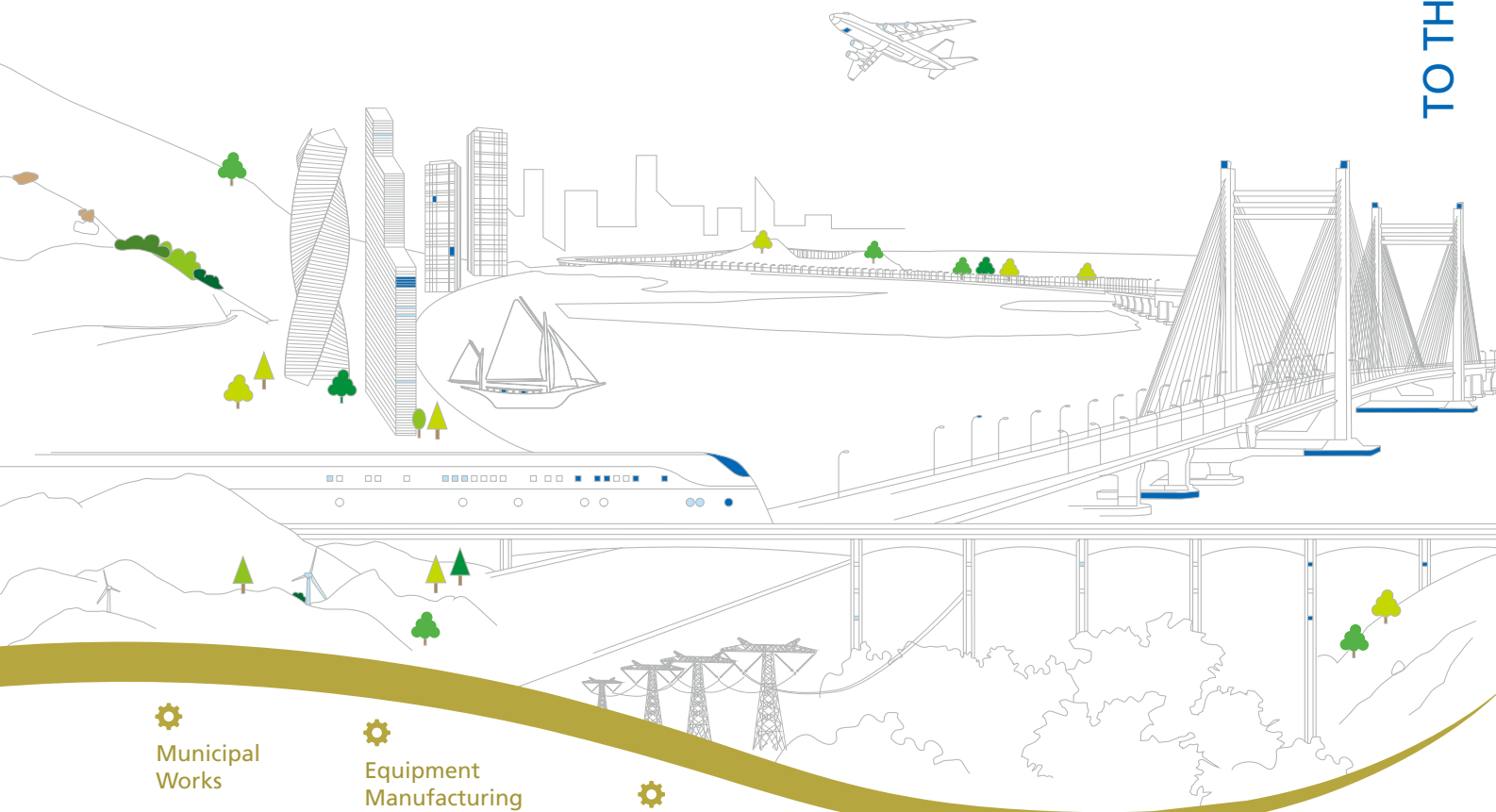


⚙️
Road & Bridge

⚙️
Railway

⚙️
Shipping

⚙️
Architecture



Municipal Works



Equipment Manufacturing & Maintenance

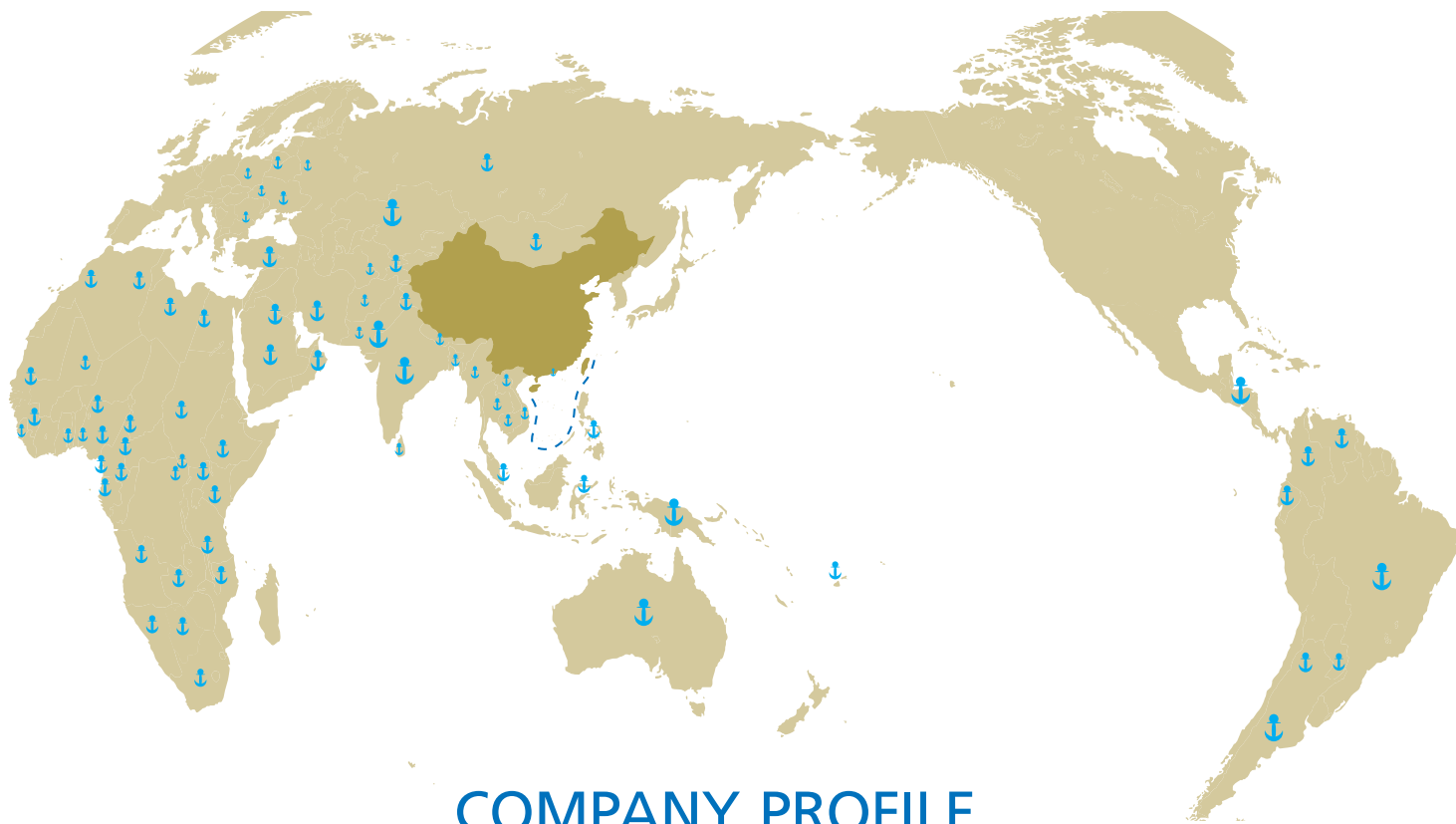


Cement & Industrial Explosive Production



Real Estate & Diversified Investment

TO ACHIEVE HARMONIOUS
COLLABORATION
AND SOLID DEVELOPMENT



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 a Fortune Global Top 500 company) 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).

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, operating maintenance and investment operation, technical services, equipment manufacturing, and building materials. The Company is committed to building an internationally competitive engineering company featuring “technology-based, well-managed, international and diversified”.

The Company serves its clients around the global and leads industry development by virtue of its leading the technology levels and superb innovation capabilities. Since establishment, the Company won more than 600 science and technology awards at state and provincial levels, 6 China Construction Engineering Luban Prizes and 25 National Quality Engineering Gold Awards. As of the end of 2018, the Company had 2 state-level enterprise technology centers, 4 academician expert workstations, 10 post-doctoral research and development workstations, 46 provincial research institutions and 84 high and new technology enterprises. It had a total of 8,787 patents in force. It formulated and revised 1,000-plus national or industry standards, making important contribution to more than 90% of China’s thermal power station, conventional island of 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 distribution project, the ultra-high voltage power distribution project of the world’s highest technical level, the world’s first multi-terminal flexible direct current transmission project and other high-level projects.

The Company is stepping up effort in pushing forward business transformation, with stress laid on implementing international and diversified operating strategies to cultivate new development momenta and sharpen new development edges. The Company has set up over 200 branch offices in more than 80 countries and regions across the world with its businesses extending to over 140 countries and regions outside China. It enjoyed all-round growth in gross international business contracting, revenue and profit, as well as a constant rise in the Company’s international competitiveness, as evidenced by the Company’s front-row rankings in ENR Top 150 Global Engineering Design Firms, Top 225 International Engineering Design Firms, Top 250 Global Contractors and Top 250 International Contractors. The Company keeps speeding up business model innovation, with the situation of its power and non-power businesses advancing side by side forming. The environmental protection and water utilities business, cement, civil explosives, wind power, PV and other investment businesses exhibited favorable momenta, supporting the Company’s sustained healthy development.

Shouldering an institution mission of “Bringing Energy to the World” and adhering to a strategic vision of “Industry-leading and World-class”, 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 while adapting to the new era, understanding new requirements and seeking new development. The Company adheres to high-quality development throughout its workflow, and strives to strengthen its development vitality, control, impact, international competitiveness and risk resistance to serve the purpose of creating the most value for customers, shareholders, employees and the society by delivering first-class quality projects to China and the world.



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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
Email: zgnj3996@ceec.net.cn

STOCK INFORMATION OF THE COMPANY

Stock Category: H share
Stock Exchange: The Stock Exchange of Hong Kong Limited
Stock Name: CHINA ENERGY ENG
Stock Code: 3996

EXECUTIVE DIRECTORS

Mr. WANG Jianping (*Chairman*)
Mr. DING Yanzhang (*Vice Chairman*)
Mr. ZHANG Xianchong

NON-EXECUTIVE DIRECTORS

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

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. DING Yuanchen
Mr. WANG Bin
(passed away in August 2018)
Mr. ZHENG Qiyu
Mr. CHEUNG Yuk Ming

SUPERVISORS

Mr. WANG Zengyong (*Chairman*)
Mr. LIAN Yongjiu
(resigned on 14 June 2018)
Mr. LI Fangyi
(appointed on 14 June 2018)
Mr. KAN Zhen
Mr. FU Dexiang
Mr. WEI Zhongxin

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. WANG Bin
(passed away in August 2018)
Mr. DING Yuanchen
(appointed on 16 November 2018)
Mr. CHEUNG Yuk Ming

COMPANY INFORMATION

REMUNERATION AND ASSESSMENT COMMITTEE

Mr. ZHENG Qiyu (*Chairman*)
Mr. WANG Bin
(passed away in August 2018)
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. MOK Ming Wai
(resigned on 16 November 2018)
Ms. LEUNG Suet Wing
(appointed on 16 November 2018)

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
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 BANKERS

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

FINANCIAL SUMMARY

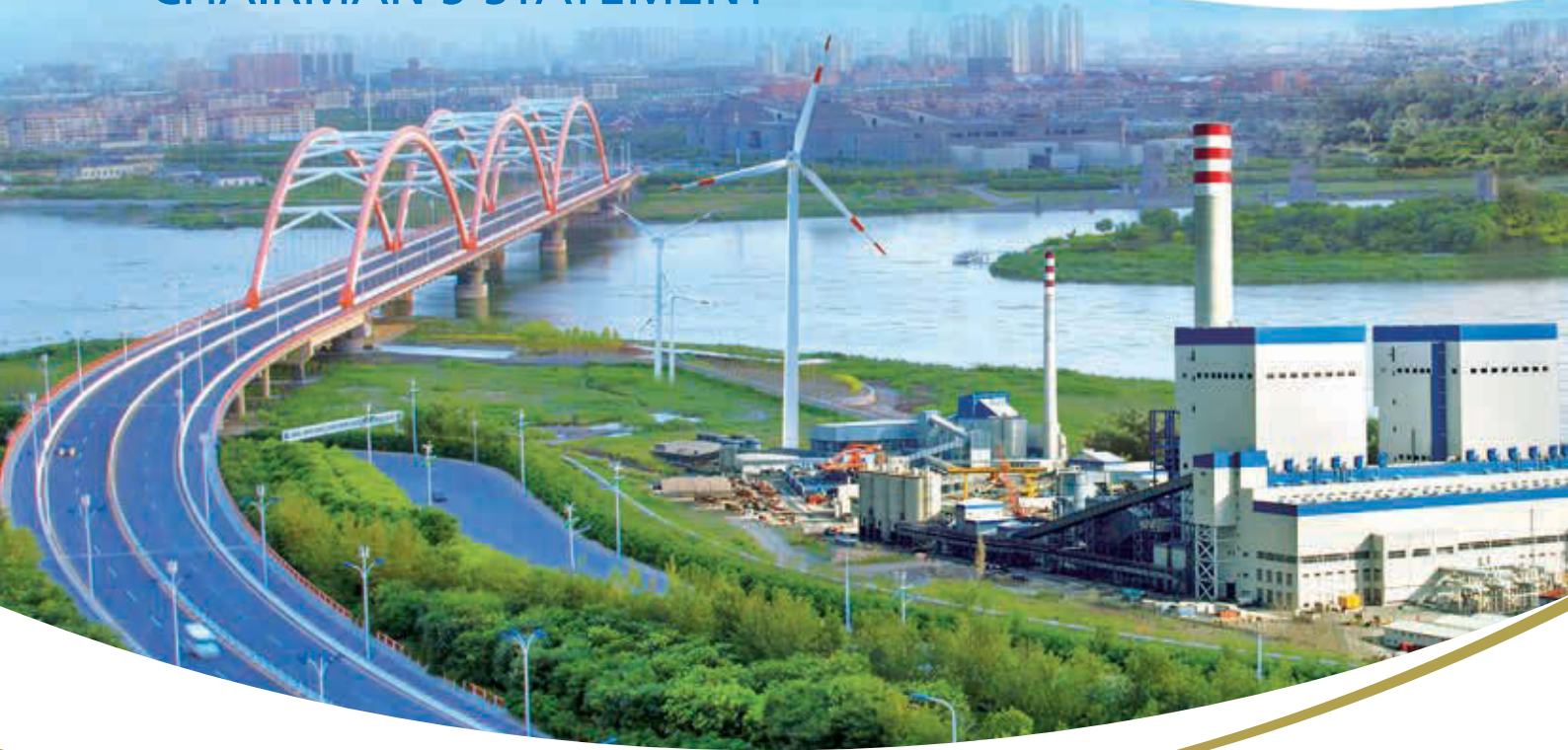
1 SUMMARY OF CONSOLIDATED STATEMENT OF PROFIT OR LOSS

	For the year ended 31 December					Changes of 2018 over 2017 (%)
	2018 (RMB in million)	2017 (RMB in million)	2016 (RMB in million)	2015 (RMB in million)	2014 (RMB in million)	
Revenue:						
Survey, design and consulting services	12,216.3	13,282.6	12,972.6	12,454.7	12,432.2	(8.03)
Construction and contracting	159,192.0	168,751.7	161,058.2	153,172.8	142,436.6	(5.66)
Industrial manufacturing	21,819.6	19,958.9	18,799.6	17,578.3	17,015.1	9.32
Clean energy, environmental protection and water utilities	20,826.1	23,982.5	15,323.0	7,911.5	1,165.2	(13.16)
Investment and other businesses	21,675.5	19,830.8	22,175.1	21,163.2	15,281.2	9.30
Inter-segment elimination and adjustment	(11,695.1)	(11,436.4)	(8,157.5)	(6,587.6)	(4,506.3)	2.26
Total	224,034.3	234,370.1	222,171.0	205,692.9	183,824.0	(4.41)
Gross profit	29,763.4	27,628.7	25,312.8	23,058.1	20,216.5	7.73
Profit before taxation	11,676.8	11,955.3	9,647.0	8,585.8	6,017.8	(2.33)
Profit for the year	8,551.5	9,064.2	7,438.6	6,470.4	4,095.6	(5.66)
Profit for the year attributable to equity shareholders of the Company	4,570.7	5,261.1	4,281.3	4,235.7	2,152.8	(13.12)
Basic and diluted earnings per share (RMB)	0.15	0.18	0.14	0.19	0.10	(16.67)

2 SUMMARY OF CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at 31 December					Changes of 2018 over 2017 (%)
	2018 (RMB in million)	2017 (RMB in million)	2016 (RMB in million)	2015 (RMB in million)	2014 (RMB in million)	
Current assets	257,593.0	242,329.4	212,729.1	184,877.1	148,160.3	6.30
Non-current assets	131,792.6	101,557.7	79,928.4	75,720.8	70,724.8	29.77
Total assets	389,385.5	343,887.1	292,657.5	260,597.9	218,885.1	13.23
Current liabilities	226,312.8	204,337.1	163,742.2	151,934.7	131,207.3	10.75
Non-current liabilities	67,908.8	59,694.3	54,926.3	47,870.9	43,676.3	13.76
Total liabilities	294,221.6	264,031.4	218,668.5	199,805.6	174,883.6	11.43
Total equity	95,163.9	79,855.7	73,989.0	60,792.3	44,001.5	19.17
Total equity and liabilities	389,385.5	343,887.1	292,657.5	260,597.9	218,885.1	13.23

CHAIRMAN'S STATEMENT



Dear all shareholders,

Light travels like an arrow, and time like a stream. The Company has weathered through the extremely challenging 2018 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.

The year 2018 marks an extraordinary year in the Company's history, and a year of crucial significance for the Company to accelerate business transformation, deepen reforms at all fronts and cultivate new development momenta. Over the year, the Company gauged the profound changes in world economic situations, and responded to the challenges from fierce market competition, urgent transformation pressure, and strenuous pro-growth tasks in an effective manner. The Company vigorously launched international operation to seek development and sped up business transformation to seek breakthroughs while keeping deepening internal reforms to stimulate vitality and enhancing standardized governance to lay a solid foundation. Thanks to these endeavors, the Company maintained an overall steady development.

Production and operation maintained stable overall. The Company overcame adverse impacts from both internal and external factors and vigorously pushed forward high-quality development. The newly contracted value throughout the year amounted to RMB461.946 billion, with a total profit of RMB11.677 billion and a total revenue of RMB224.034 billion. This protected the interest of its shareholders and enabled preservation or increase of the value of assets, coupled with the Company's growing comprehensive strength.

CHAIRMAN'S STATEMENT



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

International businesses achieved remarkable results. Fused in depth into the “One Belt and One Road” construction and with scientifically-planned overseas markets, the Company’s international businesses reached their newly contracted value, revenue totaling RMB142.119 billion, RMB38.985 billion, accounting for 31%, 17%, respectively, with their growth rates rising year-on-year by 0.85, 0.42 percentage point, respectively. The Company signed contracts valuing RMB106.673 billion with countries along the “One Belt and One Road”, up by 37.97% year-on-year. The Company signed international power contracts valuing RMB118.434 billion, up by 26.18% year-on-year, consolidating the Company’s leading status in the international power construction market. The Company signed international EPC projects valuing RMB131.8 billion, up by 17.79% year-on-year. The Company successfully won major projects including the Kaliwa Dam in the Philippines, the Nam Dinh Phase I Coal-fired Power Plant in Vietnam and the wind power plant in Ukraine, further showcasing its international competitiveness.

Business transformation gained speed. The Company has been actively engaged in implementing major national strategies such as the Xiong’an New Area, the military-civilian integration, the protection of Yangtze River, the Guangdong-Hong Kong-Macao Greater Bay Area and Hainan Free Trade Zone and spares no effort in seizing the market opportunities of infrastructure construction. The newly signed contracts of non-power engineering business amounted to RMB183.613 billion, up by 3.55% year-on-year and accounting for 39.75% of the Company’s annual total new contract amount. Among which, the newly signed contracts of domestic non-power engineering business amounted to RMB159.928 billion, up by 15.52% year-on-year and accounting for approximately 50% of all domestic contracts for the first time. The Company keeps improving the capabilities of enterprises at various levels for running projects of new business models and the contracted value of PPP projects exceeded RMB100 billion for two consecutive years. The Company’s investment business has been developing steadily, with the annual investment projected to be RMB63.162 billion, up by 26.14% year-on-year. Both

CHAIRMAN'S STATEMENT

domestic and overseas investment projects such as hydropower, thermal power, and new energy are proceeding smoothly, with the installed capacities of in-production and in-construction power projects held by the Company at the year end reaching 1.42 million kilowatt and 2.4 million kilowatt, respectively. The investment not only drives the engineering business, but also laid the foundation of subsequent efficiency improvement for the Company.

Internal reform kept deepening. Following the overall idea of segment-based, professional and regional development, the Company established (restructured) a planning and engineering company, a construction investment company in Northern China, Eastern China, Southern China and Northwest China, and other companies such as investment, international and engineering consulting business platforms. This investment-driven, integration of industry is leading and supporting subsidiaries' collaborative and logical development to emerge. There is positive progress in the piloting of mixed-ownership reform and the state-owned enterprise reform, that is, the "Double-hundred Action", with the mixed-ownership reform plans of 4 enterprises approved, and 3 enterprises shortlisted for the comprehensive reform as "Doubled-hundred Enterprise".

Level of standardized management kept rising. The Company's cost reduction, leverage and liability reduction and improvement in internal potential tapping welcomed positive effectiveness, bringing down the gearing ratio by 1.22 percentage points from that at the beginning of the year. Its capital concentration reached 85.75%, up by 12.79 percentage points year-on-year. Its operating profit margin reached 5.21%, up by 0.10 percentage point year-on-year. The rate of procurement cost reduction reached 4.19 percentage points. The Company's general meeting, the Board of Directors, the Board of Supervisors, and the management level operated normatively in accordance with the laws, while directors, supervisors and management performed their obligations diligently, and further enhanced information disclosure, connected transactions, inside information management, investor relations and market value management.

The benefits of science and technology innovation were increasingly highlighted. The Company's science and technology innovation platform keeps strengthening, as evidenced by 2 provincial enterprise research centers approved, 2 new post-doctoral workstations established and 2 academician experts introduced to the academician expert workstation. Besides, the Company witnessed mushrooming science and technology innovation results, including 1 second prize of National Award for Technological Invention, 1 second prize of National Science and Technology Progress Award, 18 prizes of China's Electric Power Science and Technology Award and 111 prizes

CHAIRMAN'S STATEMENT

of Science and Technology Progress Award for Power Construction. The Company formulated and revised 86 national and industry standards, obtained 1,280 patent licenses including 229 invention patents. Multiple science and technology projects of the Company including the research on active power distribution grid planning technology, and the Phased Array Ultrasonic Testing (PAUT) technology filled the gap of the industry and the area.

Safety quality and environmental protection management was on a steady rise. The Company improved its safety production and management systems and maintained stable safety production in ongoing engineering projects overall with no major or above production safety accidents. The Company keeps elevating its quality management level and has yielded substantial high quality results, including 32 National Quality Engineering Gold Awards (of which, it included 7 Gold Awards), 1 FIDIC Outstanding Project of the Year Award, and 1 FIDIC Award of Merit, 5 China Quality Installation Engineering Awards (China Installing Star), 41 China Power Quality Engineering Awards, 141 Survey Design Awards of Merit for Power Industry (Thermal Power and Power Transmission and Distribution), 11 Excellent Design Result Awards of Engineering Construction Projects, 195 Excellent Consulting Result Awards of Power Industry, and 17 Excellent Engineering Project Management and Excellent EPC Project Awards of Power Survey and Design Industry. The Company pushed forward green construction and clean production in a solid manner and witnessed neither a single environment event nor energy conservation and emission reduction non-compliance events.

The year 2019 marks the time where there will still be a favourable prospect of 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 closely center around the strategic goal of building the Company into an internationally competitive engineering company and pursue high-quality development throughout enterprise reform and development while investing effort in "maintaining stable growth, expediting transformation, promoting reform, preventing risks and strengthening Party building" for the aim of achieving higher-quality, more efficient, and more sustainable development. The Company will lay stress on four aspects.

First, the Company will spare no effort in maintaining stable growth and improving development quality. The Company will step up prioritized development of international businesses and optimize overseas market arrangement as part of effort of active engagement in the "One Belt and One Road" development. It will drive the launch and effective operation of contracted projects, improve project profit margins and cultivate new edges for international competition. The Company will vigorously open up domestic market, consolidate its advantages in traditional businesses and markets, and extend traditional businesses in depth. The Company will take active part in the implementation of major strategies including the Xiong'an New Area, the coordinated development of Beijing-Tianjin-Hebei, the Yangtze River Economic Zone, the Guangdong-Hong Kong-Macao Greater Bay Area and Hainan Free Trade Zone. The Company will speed up business transformation, innovate business models, deepen integration of industry and finance and play the driving role of investment to push forward domestic and overseas investments in the power, cement, civil explosives, environmental protection, water utilities and urban infrastructure sectors among others. The Company will keep deepening collaborative operation and bring the group's overall advantages into play. The Company will pay more attention to quality improvement and efficiency enhancement, vigorously perform lean management, tap into internal potential and expand revenue and profit margins to increase economic benefits.

CHAIRMAN'S STATEMENT

Second, the Company will push ahead various reforms and stimulate endogenous power. The Company will actively advance the professional, regional and scaled integration among well-qualified internal companies to improve competitiveness. By making use of equity diversification and other methods, we introduce external capital, optimize the structure of property rights, transform operating mechanisms and strengthen the effectiveness of capital. The Company will carry forward reforms including the mixed ownership reform to ensure positive progress in the reformation. We will steadily implement the professional manager system and reasonably increase the proportion of market-based selection of managers.

Third, the Company will comprehensively improve its management and control level to lay a solid foundation for development. The Company will promote the corporate governance by law, raise awareness of business compliance, foster a culture of compliance, and accelerate the establishment of a compliance management system with clear responsibilities, comprehensive coverage, procedures norms and effectiveness. The Company will strengthen management and control over various types of risks to keep debt, legal, investment and international operation risks under strict control. The Company will strengthen safety production management to promote favorable performance of safety production. The Company will improve its quality risk prevention and control to eliminate significant and the aforementioned quality accidents. The Company will continue to well carry out the inside information, connected transactions, compliance audit and others to ensure compliance with regulatory requirements for listed companies.

CHAIRMAN'S STATEMENT

Fourth, the Company will focus on intensifying science and technology innovation to elevate core competitiveness. The Company will implement in depth the innovation-driven strategies and continuously increasing input in innovation to highlight the supporting and leading role of science and technology innovation and information construction. The Company will grasp the pulse of industry and technology development trend, and utilize new technologies to nurture emerging industries while improving traditional ones. The Company will propel its major science and technology projects to tackle key problems to overcome key and core technologies and create high-level scientific and technological results. The Company will strive to bring up leading talents in science and technology innovation, improve its innovation organization and incentive mechanisms and fully mobilize the enthusiasm and creativity of all kinds of talents.

In 2019, the Company will dash ahead to seize opportunities and speed up development, in an aim to fulfill various goals successfully and reward our society, shareholders and employees with sound business performance and services. We hope that shareholders and all parties and friends who make long-term attention to the Company will continue to give us help and support!

Wang Jianping

Chairman of the Board

29 March 2019

BUSINESS OVERVIEW

1 OVERVIEW OF INDUSTRY DEVELOPMENT

Fixed asset investment. In 2018, China's fixed asset investment (excluding rural households) totaled RMB63.56 trillion, up by 5.9% year-on-year, the investment growth slowing down by 1.3 percentage points year-on-year. The infrastructure investment (excluding power, heat, gas and water production and supply industries) grew by 3.8% over last year, the growth rate falling by 15.2 percentage points year-on-year. Specifically, the water conservancy management investment dropped by 4.9%, with its growth rate turning from positive to negative. The public facilities management investment grew by 2.5%, the growth rate falling by 19.3 percentage points. The road transport investment grew by 8.2%, the growth rate falling by 14.9 percentage points. The railway transport investment declined by 5.1%, the rate reducing by 5 percentage points. Region-specifically, the investment in the eastern area grew by 5.7% year-on-year, that in the central area grew by 10%, that in the western area grew by 4.7%, and that in the northeast area grew by 1%.

Construction industry. In 2018, China's construction industry realized a total value of output of RMB23.5 trillion, rising by 9.9% year-on-year and the growth rate being 0.6 percentage point lower than that of the last year. The annual added value of the construction industry amounted to RMB6.18 trillion, rising by 4.5% year-on-year.

Power industry. In 2018, China's total electricity consumption reached 6.8 trillion kilowatt hours, rising by 8.5% year-on-year, with the growth rate increasing by 1.9 percentage points over last year. In 2018, China's power grid and power generation projects completed investment of RMB809.4 billion, including RMB537.3 billion for power grid projects, up by 0.6% year-on-year. The power generation projects of nationwide major power enterprises completed investment of RMB272.1 billion, down by 6.2% year-on-year. Among the power generation projects completed, the hydropower investment was RMB67.4 billion, up by 8.4% year-on-year; the thermal power investment was RMB77.7 billion, down by 9.4% year-on-year; the nuclear power investment was RMB43.7 billion, down by 3.8% year-on-year.

Overseas contracting. In 2018, China's overseas contracting business completed a turnover of RMB1.12 trillion, down by 1.7% year-on-year (equivalent to 169.04 billion US dollars, or up by 0.3% year-on-year). The value of newly signed contracts totaled RMB1.6 trillion, down by 10.7% year-on-year (equivalent to 241.8 billion US dollars, or down by 8.8% year-on-year). In 2018, China's enterprises signed 7,721 new contracts of overseas contracted engineering projects in countries along the "One Belt and One Road", with a value of 125.78 billion US dollars, accounting for 52% of all the newly signed contracts of overseas contracted engineering projects of China in the same period, registering a year-on-year decrease of 12.8%. A turnover of 89.33 billion US dollars was completed, accounting for 52.8% of the total amount of the same period, up by 4.4% year-on-year.

Cement industry. In 2018, China's accumulative cement production totaled 2.177 billion tons, up by 3% year-on-year. The cement price stayed high due to the supply-demand relation improvement, and corporate profitability kept ameliorating.

BUSINESS OVERVIEW

Civil explosives industry. Civil explosives industry is under key supervision of China and has a high access threshold. In 2018, the Ministry of Industry and Information Technology printed and distributed the Opinions on Promoting High-Quality Development of the Civil Explosives Industry (《關於推進民爆行業高質量發展的意見》) and the Technical Development Direction and Goal for Civil Explosives Industry (2018 edition) (《民用爆炸物品行業技術發展方向及目標(2018年版)》), introducing new requirements for the high-quality development of the civil explosives industry. It is expected that the industry will see increased concentration and technology trending to stress safety and reliability, greenness and environmentally friendliness, and intelligent manufacturing.

Real estate industry. In 2018, China's real estate development investment totaled RMB12.03 trillion, up by 9.5% year-on-year, and the growth rate rising by 2.5 percentage points over last year. The amount of national investment in property development, area of building construction and new construction, the sales gross floor area of commodity properties, sales of commodity properties, land purchase area and other major indicators continued to grow.

2 OVERVIEW OF BUSINESS DEVELOPMENT

The Company is a large comprehensive group company that provides overall solutions and full industry chain services to industries such as energy and power, infrastructure and real estate in China as well as over the world.

In 2018, the Company adhered to high-quality development and accelerated transformation and upgrading. The Company rolled out comprehensive measures and carried forward work in a solid manner with an aim to move the Company's production and operation to a new level and steer a steady course towards building an "industry-leading and world-class" and internationally competitive engineering company. The Company successfully defended its position in the Fortune's Global 500 and the China Enterprise Confederation's Top 500 Chinese Enterprises. The Company took the 12th place in the 2018 ENR Top 250 Global Contractors, the 21st place in the ENR Top 250 International Contractors, the 4th place in the ENR Top 150 Global Design Firms, and the 18th place in the ENR Top 225 International Design Firms.

The Company has sped up business transformation and vigorously restructured its businesses. Its dominant businesses managed to secure sound market performance, presenting a favorable trend including enhanced and improved dominant businesses, better-organized business structures, better-devised development paths, and steadily-progressing business performance. The Company keeps maintaining its leader status in China's and the global power and energy construction sectors, exhibiting its global competitiveness and powerful strength as a growable comprehensive contractor. In 2018, the international business, domestic power business, domestic non-power business and other sectors of the Company achieved a consolidated landscape of coordinated development, with its international engineering, non-power engineering and EPC businesses of transformation continuing to ameliorate, the newly signed contracted value of which three growing by 7.06%, 3.55% and 16.95% year-on-year, respectively. In 2018, the Company obtained 2 special-grade qualifications for general construction contracting, 1 Class A Engineering Design Qualification for the construction industry, as well as 3 special Class A engineering design qualifications in reservoir hub, irrigation and drainage and channel improvement for the waterworks industry and 1 Class A qualification for marine engineering survey. The Company's qualification strength has been further enhanced.

BUSINESS OVERVIEW

The Company is one of the most growable leading enterprises in China's international engineering contracting sector with the most competitive core businesses. In 2018, the Company pushed forward the launch of strategies of prioritizing development of international businesses, enhanced prevention and control against international operational risks, and consolidated the competitive advantages of the Company in the global power and energy construction market. The Company signed new international contracts valuing RMB142.119 billion throughout the year, accounting for 31% of the Company's annual newly signed contracts in total, up by 7.06% year-on-year. The Company's international businesses developed rapidly, with the direct new contracts with foreign organizations valuing RMB125.9 billion, up by 23.11% year-on-year. The new contracts of international power engineering projects valued RMB118.434 billion, up by 26.18% year-on-year. The Company newly signed international EPC contracts valuing RMB131.8 billion, up by 17.79% year-on-year. The Company has consolidated its status as a main force for the "One Belt and One Road" construction by nurturing the "One Belt and One Road" market in development, and newly signed contracts valuing RMB106.673 billion, up by 37.97% year-on-year. In 2018, the Company successfully signed the contracts for representative international engineering projects such as Pakistan Jamshoro 2×660 MW supercritical coal-fired power plant (巴基斯坦賈姆肖羅2×660兆瓦超超臨界燃煤電站), the Philippines Palauig 1100 MW LNG combined-cycle power plant (菲律賓Palauig 1100兆瓦LNG聯合循環電站), the Indonesia Pasuruan 440 MW integrated pneumatic and electric power plant (印尼巴蘇魯安440兆瓦氣電一體化電站), the Ukraine Odessa waste power plant (烏克蘭敖德薩垃圾電站), the Chad BlueBay photovoltaic power plant (乍得藍海灣光伏電站), the Tanzania Dar-es-Salaam water supply system (坦桑尼亞達雷斯薩拉姆供水系統), the Zambia FTJ Chiluba University housing construction (贊比亞FTJ奇魯巴大學房建), and the Mali Kwala-Mourdiah-Nara Asphalt Highway (馬里科瓦拉—穆赫迪阿—納哈瀝青公路).

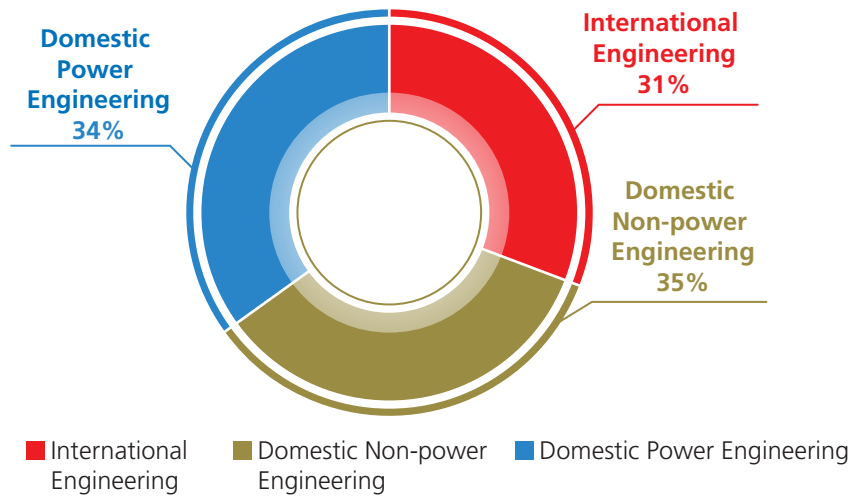
The Company maintained its leading status in the domestic power construction market, and continued to serve as a pacesetter of China's power construction transformation development. In 2018, the Company actively responded to the new trend of China's power transformation development and led the domestic power and energy construction wave while exploring in depth in the thermal power, the hydropower and other traditional power businesses, expanding incremental power businesses and vigorously developing new power energy and markets of new business models. The Company undertook the energy development planning and research consulting for the Guangdong-Hong Kong-Macao Greater Bay Area, further enhancing the contracted performance of power restructuring, further expanding businesses for offshore wind power, ultra-high voltage power grid construction, transformation and upgrading of installed capacity of thermal power generator systems, as well as operation, maintenance and overhaul services of power units. In 2018, the Company's newly signed contracts for the domestic power engineering business valued RMB159.899 billion, accounting for 34% of the Company's annual newly signed contracts in total, down by 7.35% year-on-year. Among which, the newly signed contracts for domestic new energy projects totaled RMB60.127 billion, up by 8.31% year-on-year. The newly signed contracts for domestic waterworks and hydropower projects totaled RMB22.008 billion, up by 66.95% year-on-year. In 2018, the Company signed contracts for a series of representative power engineering projects in China including the Shaanxi Leilongwan 2×1000 MW Power Plant (陝西雷龍灣2×1000兆瓦電廠), Xinjiang Zhudong Wucaiwan North No. 2 Power Plant (新疆准東五彩灣北二電廠), Yellow River Maerdang Hydropower Station (黃河瑪爾擋水電站), Shaanxi Hanjiang River Baihe Hydropower Station (陝西漢江白河水電站), Jiangsu Tianwan Nuclear Power Plant (江蘇田灣核電站), the ultra-high voltage multi-terminal DC transmission lines from Wudongde Power Plant to Guangdong and Guangxi (烏東德電站送電廣東廣西特高壓多端直流輸電線路), Zhudong-East China ±1100 KV ultra-high voltage DC transmission lines (准東-華東±1100千伏特高壓直流輸電線路), the Jarud-Shandong Qingzhou ±800 KV ultra-high voltage converter station (扎魯特送山東特高壓青州±800千伏特高壓換流站), and the Guangdong Yangjiang Nanpeng Island 400 MW Offshore Wind Farm (廣東陽江南鵬島400兆瓦海上風電), the Inner Mongolia Guohong Happiness No. 7 Wind Farm (內蒙國宏幸福7號風電場), and Shanxi Fanshi County Wind Power Heating Project (山西繁峙縣風電供暖).

BUSINESS OVERVIEW

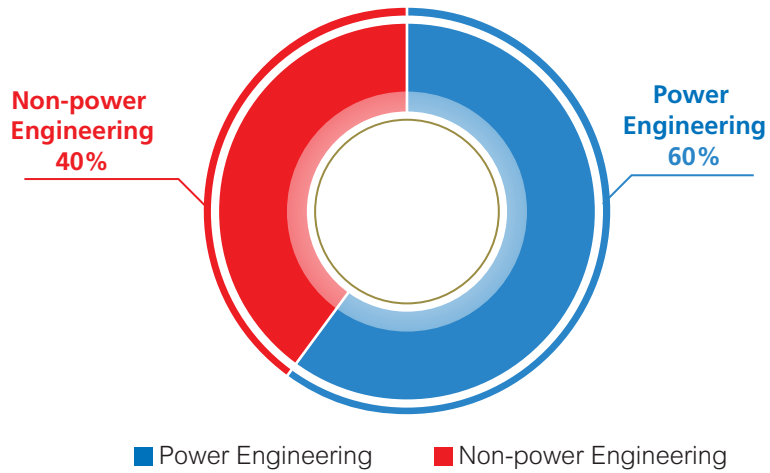
The Company accelerates its domestic business transformation and lays focus on launching “mega building” strategies and expanding the grand market landscape, with new breakthroughs made in its domestic non-power engineering business. In 2018, the Company intensified its overall management of the headquarters over high-end operation and control and management of market development, and fully exerted the advantages and synergies of the CGGC Group, the Planning & Engineering Co., Ltd., the four regional construction investment companies and other platform companies to enhance cooperation with China’s PPP funds and other organizations and improve the operation capabilities for projects in new business models dominated by PPP. The Company grasped the market opportunities as the state stabilizes investment and enhances infrastructure to make up short slabs, and got geared to major national strategies while making active arrangements of key strategic markets such as the Xiong’an New Area, the military-civilian integration, the protection of Yangtze River, the Hainan Free Trade Zone, and the Guangdong-Hong Kong-Macao Greater Bay Area to seize major market opportunities of domestic infrastructure construction. The Company has thus cultivated and procured more high-quality projects in transport, municipal administration, eco-environment protection, mining, shantytowns transformation, park development, urban complex building, housing construction sectors, expanding the Company’s domestic operation space. In 2018, the Company’s newly signed contracts for the domestic non-power engineering business valued RMB159.928 billion, accounting for 35% of the Company’s annual newly signed contracts in total, up by 15.52% year-on-year. Among which, the newly signed contracts for domestic businesses of new business models valued RMB106.417 billion, accounting for 23.04% of the Company’s annual newly signed contracts in total. In 2018, the Company signed contracts for a number of domestically representative non-power engineering projects including the Yunnan Yangliu-Xuanwei Highway (雲南楊柳至宣威高速公路), the Shaanxi Yanchang-Huanglong Highway (陝西延長至黃龍高速公路), the Taihu Lake Economic Development Zone in Anhui (安徽太湖經濟開發區), the new-type urbanization PPP project in east area of Dianjiang County, Chongqing (重慶墊江縣東部片區新型城鎮化PPP項目), the Shaanxi Xi’an No. 14 Subway (陝西西安地鐵十四號線), the ecological management for Xinhe River in Jiaozuo City, Henan (河南焦作市新河生態治理), the mine ecological restoration in Wuxue City, Hubei (湖北武穴市礦山生態修復), the removal settlement building construction for shantytowns transformation in Anqiu City, Ningxia (寧夏安丘市棚戶區改造安置樓建設), and the municipal administration infrastructure construction in Pingwu County, Sichuan (四川平武縣市政基礎設施建設).

BUSINESS OVERVIEW

2018 New Contract Value Composition Figure 1

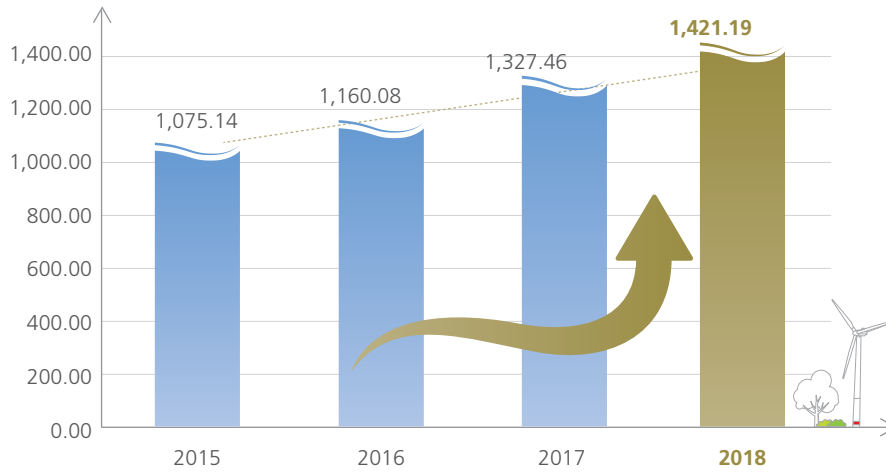


2018 New Contract Value Composition Figure 2

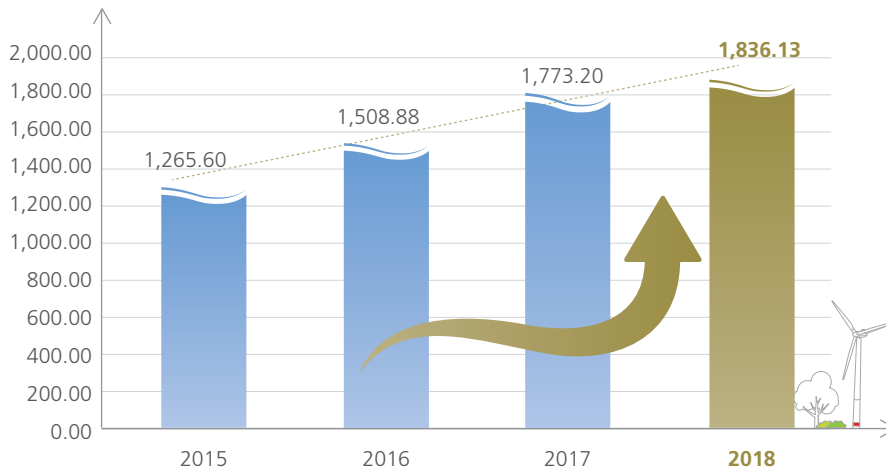


BUSINESS OVERVIEW

**New Contract Value of International Engineering
(RMB 100 million)**



**New Contract Value of Non-power Engineering
(RMB 100 million)**



BUSINESS OVERVIEW

The following table lists the newly signed contracts value of the Company in 2018:

Currency: RMB Unit: 100 million

Business Segment	New Contract Value		
	2018	2017	Change
Survey, design and consulting services	112.25	109.01	2.97%
Including: Thermal power	27.37	27.64	-0.98%
Waterworks and hydropower	1.59	6.38	-75.08%
Nuclear power	4.20	1.20	250.00%
New energy	14.32	10.89	31.51%
Power transmission and transformation	55.67	55.80	-0.24%
Non-power	9.10	7.09	28.26%
Construction and contracting	4,393.05	4,207.39	4.41%
Including: Thermal power	1,114.20	1,189.14	-6.30%
Waterworks and hydropower	544.93	383.82	41.97%
Nuclear power	6.24	33.42	-81.33%
New energy	763.97	686.67	11.26%
Power transmission and transformation	136.68	148.23	-7.79%
Non-power	1,827.03	1,766.11	3.45%
Industrial manufacturing	114.16	121.33	-5.91%
Total	4,619.46	4,437.73	4.10%

In 2018, the Company recognized RMB461.946 billion as to the value of newly signed contracts, up by 4.1% year-on-year. Among which, the value of domestic newly signed contracts amounted to RMB319.827 billion, representing a year-on-year increase of 2.83%; the value of international newly signed contracts amounted to RMB142.119 billion, representing a year-on-year increase of 7.06%. As of 31 December 2018, the aggregate outstanding contract value of the Company was RMB1,072.436 billion.

BUSINESS OVERVIEW

2.1 Survey, Design and Consulting Services Business

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; plan and the policy consultation for the power industry; and evaluation, assessment and supervision for power projects. In 2018, the revenue before inter-segment elimination of survey, design and consulting services business was RMB12.22 billion, representing a year-on-year decrease of 8.03%. The Company's newly signed contracts for survey, design and consulting services business amounted to RMB11.225 billion, up by 2.97% year-on-year and accounting for 2.43% of the Company's annual newly signed contracts in total. Among which, the newly contracted value for the new energy, non-power and nuclear power businesses amounted to RMB1.432 billion, RMB910 million, RMB420 million, up by 31.51%, 28.26% and 250%, year-on-year, respectively. The newly signed contracts for power transmission and transformation, thermal power, waterworks and hydropower businesses valued RMB5.567 billion, RMB2.737 billion and RMB159 million, respectively, with the value for the power transmission and transformation and thermal power businesses running flat with the last year, and that for the waterworks and hydropower businesses declining by 75.08% year-on-year. As of 31 December 2018, the outstanding contract value of survey, design and consulting business was RMB31.161 billion.

In 2018, the Company consolidated its leading position in high-end survey and design businesses in the domestic market, and sharpened its market competitiveness with science and technology innovation, and took serious measures to develop key businesses such as high-capacity ultra-supercritical units, new energy, ultra-(super-)high voltage power transmission and transformation and intelligent power grids to effectively respond to the domestic coal-fired power control and slowed growth of power grid investment. The Company's domestic survey, design and consulting business recognized a newly contracted value of RMB10.444 billion, up by 8.33% year-on-year. Among which, the value of newly signed contracts for domestic thermal power business amounted to RMB2.218 billion, representing a year-on-year increase of 23.09%; the value of newly signed contracts for domestic new energy business amounted to RMB1.382 billion, representing a year-on-year increase of 29.89%; the value of newly signed contracts for domestic power transmission and transformation business amounted to RMB5.368 billion, representing a year-on-year decrease of 1.47%. The Company signed contracts for representative domestic power projects including the Great Wall 2×1000 MW Power Plant in Erdos City, Inner Mongolia (內蒙鄂爾多斯市長城2×1000兆瓦電廠新建), the expansion of Jiangsu Tianwan Nuclear Power Plant (No. 5 and No. 6 units) (江蘇田灣核電站(5、6號機組)擴建), the Zhundong-East China ±1100 KV ultra-high voltage DC transmission lines (淮東-華東±1100千伏特高壓直流輸電線路), the ultra-high voltage multi-terminal DC power transmission lines from Wudongde Power Plant to Guangdong and Guangxi (烏東德電站送電廣東廣西特高壓輸電線路), the Taizhou ultra-high voltage AC transformer substation (泰州特高壓交流變電站), and the Phase I 400 MW offshore wind farm of Huizhou Port in Guangdong Province (廣東惠州港口一期400兆瓦海上風電). The Company augmented its transformation of survey and design businesses and actively expanded housing construction, comprehensive underground pipe racks, urban rail transit and other markets. The contracted value of domestic non-power business grew by 28.02% year-on-year, with newly signed contracts for survey and design projects including the renovation of comprehensive underground pipe racks and roads of Tanpeixin Road of urban Wuhan City, Hubei (湖北武漢市區譚鑫培路地下綜合管廊及道路改造), the transit lines (Line No. 1 and Line No. 2) of Wuhu City, Anhui (安徽蕪湖市軌道(1、2號線)), the "Beautiful Town" construction in Deqing County, Zhejiang (浙江德清縣「美麗城鎮」建設). The Company actively expanded international survey, design and consulting businesses and markets with the international competitiveness of advantageous survey and design businesses in thermal power, new energy, and power transmission and transformation sectors on a steady rise. The Company signed contracts for survey and design projects including the 2×1000 MW coal-fired power plant in Khammouan, Laos (老撾甘蒙2×1000兆瓦燃煤電站), the India Godda 2×800 MW coal-fired power plant (印度Godda 2×800兆瓦燃煤電站), the Steam Gas Power Plant in Rybinsk City, Russia (俄羅斯雷賓斯克市蒸汽燃氣電站), the Matiari-Lahore ±660 KV DC power transmission in Pakistan (巴基斯坦默蒂亞里至拉合爾±660千伏直流輸電), the Achema transformer substation renovation in Lithuania (立陶宛Achema變電站改造), the 700 MW solar thermal power generation project in Dubai, the United Arab Emirates (阿聯酋迪拜700兆瓦光熱發電), and the Mangystau Region PV power generation in Kazakhstan (哈薩克斯坦Mangystau Region光伏發電).

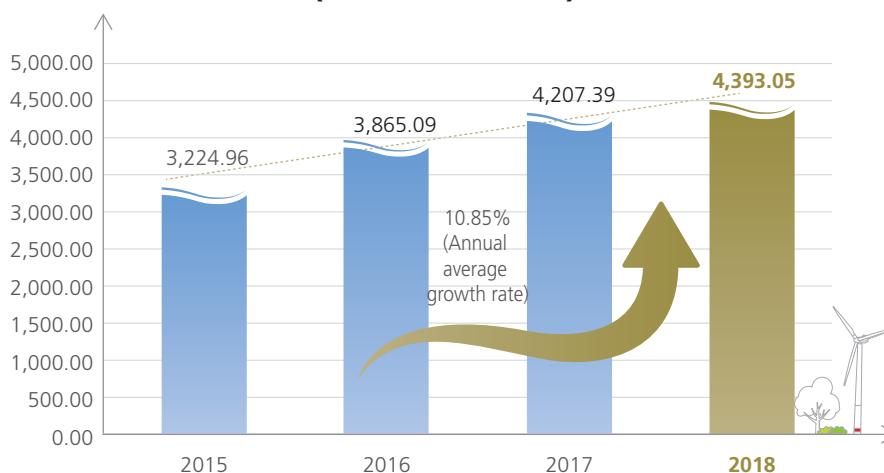
BUSINESS OVERVIEW

2.2 Construction and Contracting Business

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. In 2018, the revenue before inter-segment elimination of construction and contracting business was RMB159.19 billion, representing a year-on-year decline of 5.66%. The Company's newly signed contracts for the construction and contracting business amounted to RMB439.305 billion, up by 4.41% year-on-year and accounting for 95.1% of the Company's annual newly signed contracts in total.

The Company strengthens its comprehensive measures of "maintaining power businesses and developing non-power ones, maintaining domestic market and developing international one, and maintaining regular businesses and developing high-end ones" to collect information, enhance public relations, make elaborate plans and deliver more results, expanding the grand construction landscape. In 2018, the Company effectively coped with the new domestic context of power and energy transformation development and standardized development of the PPP business and seized new opportunities of power engineering upgrading and transformation as well as non-power engineering market, with its newly signed contracts for domestic construction and contracting business amounting to RMB298.807 billion, up by 2.75% year-on-year. The Company stayed highly consistent with strategic opportunities such as the "One Belt and One Road" construction, the international capacity cooperation, the interconnection of neighboring infrastructure, and the Sino-African cooperation to build new momenta for sustained growth of international businesses. As a result, the Company's international construction and contracting business continued the rapid growth, with a recognized newly contracted value of RMB140.498 billion, up by 8.15% year-on-year. In its construction and contracting business, the newly contracted value of waterworks and hydropower, new energy, non-power businesses achieved rapid year-on-year growth. The newly signed contracts for power engineering debugging and project operation and maintenance businesses amounted to RMB10.166 billion, extending the full-life-cycle services of power engineering projects. As of 31 December 2018, the outstanding contract value of construction and contracting business of the Company was RMB1,027.161 billion.

**New Contract Amount of Construction and Contracting Business
(RMB 100 million)**



BUSINESS OVERVIEW

(1) Thermal power construction

In 2018, influenced by the decrease in domestic power construction investment, the newly signed contracts for the Company's thermal power construction and contracting business amounted to RMB111.42 billion, down by 6.3% year-on-year, yet its thermal power construction and contracting business scale is still leading the globe. The Company stressed on developing the markets in countries with rapid thermal power demand growth and sound thermal power prospect, enhancing its competitive advantages in international thermal power construction business. The newly signed contracts for the Company's international thermal power business increased by 32.33% year-on-year, covering representative projects such as the Indonesia Pasuruan 440 MW integrated gas and electric power plant (印度尼西亞巴蘇魯安440兆瓦氣電一體化電站), the Philippines Palauig 1100 MW LNG combined-cycle power plant (菲律賓Palauig 1100兆瓦LNG聯合循環電站), and the Steung Hav Special Economic Zone 2×300 MW coal-fired power plant in Sihanoukville, Cambodia (柬埔寨西哈努克斯敦豪經濟特區2×300兆瓦燃煤電站). The Company takes the initiative to adapt to China's power transformation development trend, and actively responds to domestic power restructuring while exerting the full-chain advantages in power construction to secure its domestic market share for thermal power construction proactively, which allows the Company to remain at the top place nationwide. The Company signed contracts for representative projects including the Shaanxi Leilongwan 2×1000 MW Power Plant (陝西雷龍灣2×1000兆瓦電廠), Xinjiang Zhudong Wucaiwan North No. 2 Power Plant (新疆准東五彩灣北二電廠), and the Yuhai Power Cogeneration of Zhuhai City, Guangdong (廣東珠海市鈺海天然氣熱電聯產).

(2) Waterworks and hydropower construction and contracting

In 2018, the newly contracted value of the Company's waterworks and hydropower construction and contracting business amounted to RMB54.493 billion, up by 41.97% year-on-year. Among which, the domestic newly contracted value and the international newly contracted value grew by 72.36% and 26.99% year-on-year, respectively. Leveraging its core technologies in river diversion and interception, dam construction, underground engineering, large metal structure manufacturing and installation, large unit installation and other sectors as well as its brand advantages for hydropower construction, the Company undertakes a constant stream of domestic and overseas world-class waterworks and hydropower projects, securing its leading position for domestic and overseas large-scale waterworks and hydropower construction and contracting. The Company actively fights for domestic waterworks and hydropower construction projects and successfully signed contracts for representative projects including the Yellow River Maerdang Hydropower Station (黃河瑪爾擋水電站), the power plant on the right bank of Jinsha River Baihetan Dam (金沙江白鶴灘水電站右岸電站) and the installation and commissioning of electrical equipment for the power plant on the left bank of Wudongde Power Plant of Jinsha River (金沙江烏東德水電站左岸電站機電設備安裝與調試), the west-to-center water transfer project (Phase I) of Sanya City, Hainan (海南三亞市西水中調工程(一期)), the Shaanxi Hanjiang River Baihe Hydro-Plant (陝西漢江白河水電站), and the Tuxikou Reservoir in Dazhou City, Sichuan (四川達州市土溪口水庫). The Company maintained its strong market competitiveness in large-scale high-end international hydropower construction projects and signed contracts for representative projects including the Tajikistan Shurob Hydropower Plant (塔吉克斯坦舒羅布水電站) and the Ecuador starter dam (厄瓜多爾初期壩).

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(3) Nuclear power construction

In 2018, the Company's newly signed contracts for nuclear power construction and contracting business amounted to RMB624 million, down by 81.33% year-on-year, as a result of the tender projects for domestic nuclear power construction decreasing stage-by-stage. The Company keeps enhancing its capabilities in undertaking nuclear power engineering and construction, and signed contracts for representative projects including the conventional island civil construction of Jiangsu Tianwan Nuclear Power Plant (No. 3 and No. 4 units) (江蘇田灣核電站(3、4號機組)常規島土建施工), part of the instrument control project and conventional island machinery auxiliaries of the Fangchenggang Nuclear Power plant (No. 1 and No. 2 units) in Guangxi (廣西防城港核電廠(1、2號機組)部分儀控項目和常規島機械輔機), and the Karachi (K2/K3) Nuclear Power in Pakistan (巴基斯坦卡拉奇(K2/K3)核電).

(4) New energy construction

In 2018, the newly signed contract value of the Company for the new energy construction and contracting business amounted to RMB76.397 billion, up 11.26% year-on-year, shining out in China's and the global new energy construction market at large. At present, China's new energy is rapidly transforming from supplemental energy to substitute energy, and renewable and distributed energy sources also enjoy fast growth. The Company seized the domestic new energy development opportunities and undertook new energy construction businesses such as solar power, wind power and biomass power generation in the EPC model. The Company's annual newly contracted value for the domestic new energy business amounted to RMB58.745 billion, up by 7.89% year-on-year. It signed contracts for representative projects including the Guangdong Yangjiang Nanpeng Island 400 MW Offshore Wind Farm (廣東陽江南鵬島400兆瓦海上風電), the Inner Mongolia Guohong Happiness No. 7 Wind Farm (內蒙國宏幸福7號風電場), the 200 MW wind power project in Longyang Township, Tongwei County, Gansu (甘肅通渭縣隴陽200兆瓦風電), the Henan Sanmenxia 100 MW photovoltaic power generation project (河南三門峽100兆瓦光伏發電), the Xintun Biomass combined heat and power generation project in Benxi City, Liaoning (遼寧本溪鑫墩瓦生物質熱電聯產), the incineration of municipal solid wastes power generation project in Fuyang City, Anhui (安徽阜陽市生活垃圾焚燒發電). The Company vigorously expanded the international new energy construction business and actively exerted its full-chain service advantages. The Company's annual newly contracted value for the international new energy business amounted to RMB17.652 billion, up by 24.15% year-on-year. The Company signed contracts for representative projects including the United States Rice solar thermal power generation project (美國萊斯光熱發電), the 700 MW solar thermal power generation project in Dubai, the United Arab Emirates (阿聯酋迪拜700兆瓦光熱發電), the 100 MW wind power project in Pampas, Argentine (阿根廷潘帕100兆瓦風電), the MP205 MW wind power project in Ukraine (烏克蘭MP205兆瓦風電), and the Negeri Sarawak biomass power plant in Malaysia (馬來西亞沙撈越州生物質電站).

(5) Power transmission and transformation construction

In 2018, the Company's newly signed contract value for the power transmission and transformation construction and contracting business amounted to RMB13.668 billion, down by 7.79% year-on-year. The Company seized opportunities in domestic ultra-high voltage construction market and stepped up mid and low-voltage distribution grid and micro-grid project development. It signed contracts for representative projects including the ultra-high voltage multi-terminal DC power transmission lines from Wudongde Power Plant to Guangdong and Guangxi (烏東德電站送電廣東廣西特高壓多端直流輸電線路), the Zhangbei flexible DC engineering converter station (張北柔性直流工程換流站), the energy supply for Xinjiang Zhundong PV Park (新疆准東光伏園區配套供能), the 220

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KV transformer substation in Hefei, Anhui (安徽合肥220千伏變電站), the power cabling of Guangxi Nanning rail transit Line No. 2 (廣西南寧軌道交通2號線電力管線), and the power distribution system of 110 KV transformer substation for Tianjin Caozhuang Data Center (天津曹莊數據中心110千伏變電站配電系統). The Company actively explores the traditional markets along the "One Belt and One Road", and signed contracts for projects including the Laos Ponton power transmission and transformation (老撾蓬通輸變電), the power grid EPC for Misan oil field in Iraq (伊拉克米桑油田電網總承包), the looped grid for Male Island in Maldives (馬爾代夫馬累島環網), and the power transmission and transformation for Tachilek Hydropower Plant in Myanmar (緬甸大其力水電站輸變電).

(6) Non-power construction

In 2018, the Company's newly signed contracts for the non-power construction and contracting business amounted to RMB182.703 billion, up 3.45% year-on-year. The Company highlights the development of a grand construction market landscape and stays close to the requirements for developing non-power engineering businesses to optimize and adjust organizational structures, and bring the synergy of the CGGC Group, CPE, the construction investment companies and the platform company into play. The Company keeps augmenting resource input in non-power engineering businesses and seizes the market opportunities brought about by the Xiong'an New Area, the military-civilian integration, the Grand Protection of Yangtze River, the Guangdong-Hong Kong-Macao Greater Bay Area, the Hainan Free Trade Zone, the "One Belt and One Road" construction, and international capacity cooperation to further empower the Company's construction and contracting businesses. The newly contracted value of the non-power construction and contracting business accounted for 39.75% of the Company's annual newly signed contracts in total, becoming a key business growing point of the Company.

The Company strives to open up domestic non-power sectors including the transport, the municipal administration, the eco-environmental protection, mining, shantytowns transformation, park development, housing construction and other domestic non-power sectors, with the newly contracted value of its domestic non-power construction and contracting business amounting to RMB159.028 billion, up by 15.46% year-on-year. The Company signed contracts for non-power engineering projects including the Yunnan Yangliu-Xuanwei Highway (雲南楊柳至宣威高速公路), the Shaanxi Xi'an No. 14 Subway (陝西西安地鐵十四號線), the Guangdong Jiangmen International Green Light Source Fair and Expo Center (廣東江門國際綠色光源博覽交易中心), the reform program for the Guangdong Shenzhen Tieshi Water Source Area (廣東深圳鐵石水源片區正本清源), mine ecological restoration in Wuxue City, Hubei (湖北武穴市礦山生態修復), Xinjiang Wucaiwan Open Pit Coal Mine Blasting and Stripping Program (新疆五彩灣露天煤礦爆破採剝), the removal settlement building construction for shantytowns transformation in Anqiu City, Ningxia (寧夏安丘市棚戶區改造安置樓建設), and the Education Park construction in Qingfeng County, Henan (河南清豐縣教育園區建設). The Company adheres to standardized, efficient and win-win operations, and strives to improve the competition capabilities of its domestic businesses in new business models dominated by the PPP business. The Company's newly signed contract value for the PPP projects amounted to RMB106.417 billion, running flat with that of last year, and accounting for 23.04% of the Company's annual newly signed contracts in total. Popular segments in the domestic PPP market were almost fully covered. The Company signed contracts for projects including the new-type urbanization project in East Area of Dianjiang County, Chongqing (重慶市墊江縣東部片區新型城鎮化), the Guangdong Fengkai County domestic sewage treatment (廣東封開縣生活污水處理) and the ecological management for Xinhe River in Jiaozuo City, Henan (河南焦作市新河生態治理). The Company actively implements the national requirements for development PPP business in accordance with the law and regulations, and enhances standardized operation or projects and risk management and control while optimizing project management models and procedures. This has promoted the launch and implementation

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of key projects, with the PPP projects contribution to the Company's revenue on a steady rise. The Company strives to open up international non-power engineering business and optimize its overseas market layout. It seizes market opportunities in the municipal administration, transport, housing construction and other sectors, and signed contracts for non-power engineering projects including the Jakarta World Financial Tower in Indonesia (印度尼西亚雅加達世界金融塔), the Tanzania Dar-es-Salaam water supply system (坦桑尼亞達雷斯薩拉姆供水系統), the Awajir-oju Road in Benue State, Nigeria (尼日利亞貝努埃州阿瓦吉至奧道路), the Mali Kwala-Mourdiah-Nara Asphalt Highway asphalt road in Mali (馬里科瓦拉—穆赫迪阿—納哈瀝青公路), the Temeen Chululut copper mine EPC in the Bayandun County, Eastern Province, Mongolia (蒙古東方省巴彥東縣Temeen Chululut銅礦總承包), the FTJ Chiluba University housing construction in Zambia (贊比亞FTJ奇魯巴大學房建).

2.3 Industrial Manufacturing Business

The industrial manufacturing business of the Company primarily includes cement production, civil explosives and equipment manufacturing businesses. In 2018, the revenue before inter-segment elimination of industrial manufacturing business was RMB21.82 billion, representing a year-on-year increase of 9.32%. Specifically, the revenue before inter-segment elimination of cement manufacturing business was RM8.90 billion, representing a year-on-year increase of 33.23%; the revenue before inter-segment elimination of civil explosives business was RMB3.18 billion, representing a year-on-year increase of 4.95%; the revenue before inter-segment elimination of equipment manufacturing business was RMB9.74 billion, representing a year-on-year decline of 4.98%. The Company sticks to concerted development, transformation and upgrading as well as enhancement and improvement for its industrial manufacturing business, and focuses on the businesses related to the Company's construction and contracting to further elevate its competitive advantages in the target areas and segments.

(1) Cement production business

In 2018, the Company has stabilized the core market and extended into related market for the cement production business. The development of key projects has achieved remarkable results. Multi-party strategic cooperation has steadily advanced. The Company keeps elevating its product quality in cement production, optimizing market resource allocation and consolidating its advantages in core areas to further raise the statuses of core suppliers in key projects in Hubei province. The Company accelerates its pace of "going global" and its first international project – the project of Kazakhstan Heli Clinker Cement Production Line with Daily Output of 2,500 Tonnes (哈薩克斯坦斯坦克西裡日產2,500噸熟料水泥生產線項目) was commissioned for test run. The Company seized the favorable market trends and actively promoted sales by real cash. Its annual sales of commercial concrete reached 1.73 million cubic meters, and that of aggregate reached 6.37 million tonnes, up 7% and 25% year-on-year, respectively. The Company enhanced cost control throughout the cement production process and strictly implements staggering production. It adopts intelligent equipment to improve productivity and keeps elevating its refined management. The raw coal consumption by clinker and the comprehensive power consumption of clinker continued to drop year-on-year, with the comprehensive cost reduction and efficiency enhancement measures strengthened, and the cement production business achieving fast growth in economic performance. The Company obtained 50 national patents over the year, including 7 invention patents, and 6 national standards that the Company contributed to were rolled out.

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During the Reporting Period, the Company's cement capacity reached 24.6 million tonnes, and its clinker capacity reached 17.07 million tonnes. The annual sales of cement and clinker totaled 25.42 million tonnes, up by 8.77% year-on-year. Specifically, the cement sales recorded 23.26 million tonnes, and the clinker sales recorded 2.16 million tonnes.

(2) Civil explosives business

In 2018, the Company stuck 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 lead the country. The Company purchased and restructured the civil explosives operational assets of Sichuan Tongda Chemicals Pengzhou Branch. The Company accelerated the development of related businesses and signed a number of mining EPC and aggregate contracts, with the revenue of related auxiliary industries contributing 33%. The Company actively cultivated the security sector and green mines among other new businesses. The Company coordinated and adjusted the industrial explosives capacity distribution, and was awarded with 10,000 tonnes of capacity as industry award, with the capacity utilization being 20 percentage points higher than the industry-wide level. The Company focused on expanding international markets in Kuwait, Malaysia, Niger and others and smoothly launched a number of projects. The Company adhered to science and technology innovation and set up academician expert workstations to undertake multiple technical standard compilation tasks for the explosive industry, and carry on key scientific research subjects from the Ministry of Industry and Information Technology of China, leading to a constant rise in its technological presence in the industry. The Company set up scientific and technological result incubation bases to smoothly push forward trial production and use of digital electronic detonators, small charging devices, emulsion matrix distribution vehicles, marking important progress made in scientific and technological result conversion.

During the reporting period, the industrial explosives capacity of the Company's civil explosives business reached 326,500 tonnes, up by 15.16% year-on-year. It produced 275,000 tonnes of industrial explosives over the year, up by 22.33% year-on-year, and produced 23.52 million industrial detonators, up by 5.4% year-on-year.

(3) Equipment manufacturing business

The equipment manufacturing business of the Company is to design, manufacture and sell various segments of 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 for large-scale power plants. Its main products include power station auxiliary equipment, power grid equipment, distributed energy equipment and energy saving equipment, metal structures, etc. In 2018, influenced by a declining growth in domestic power investment, the Company's newly signed contracts for the equipment manufacturing business valued RMB11.416 billion, down by 5.91% year-on-year, accounting for 2.47% of the Company's annual newly signed contracts in total. As of 31 December 2018, the Company's outstanding contract value of the equipment manufacturing business was RMB14.114 billion.

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In 2018, the Company closely followed the trends of domestic power, energy and environmental protection equipment manufacturing market, while expanding its product application and services, and improving its brand image as the largest power plant auxiliary machinery and power grid equipment supplier nationwide. Its medium-speed pulverizers, piping prefabrication, enclosed bus and UHV reactors, electric iron towers, line hardware, structural metallic engineering of waterworks, mechanical engineering of waterworks and other advantageous products maintained strong competitiveness. The Company accelerated its equipment manufacturing business transformations and upgrades and actively cultivated business growth points, boosting up the shares of clean energy, intelligent grids and energy-saving and environment-friendly products, with its packaged business capability constantly enhanced. The Company set foot in the construction energy conservation market and invested in and acquired Hangzhou Huadian Huayuan Environment Engineering Company Limited. The Company tapped into the energy storage sector. Its first 10 KW molten salts heat storage unit project passed the completion acceptance. Construction of Wuhan Equipment Industrial Park of the CGGC Group progresses smoothly. Major products of the Company's equipment manufacturing business won in succession the bids of representative projects in the domestic market including the Shandong Penglai Phase I 2×1000 MW coal-fired power plant (山東蓬萊一期2×1000兆瓦燃煤電廠), the Heilongjiang Suihua biomass combined heat and power generation project (黑龍江綏化生物質熱電聯產), the Shaanxi Zhen'an County pumped storage power plant (陝西鎮安抽水蓄能電站), the Kunbei converter station (昆北換流站), the Ningxia Zhongying Zhengyuan Huianpu 100 MW wind farm (寧夏中贏正源惠安堡100兆瓦風電), the Xinjiang Kumul solar thermal power generation project (新疆哈密太陽能光熱). In the international market, the Company won in succession the bids of projects including the Indonesia Delong Power Plant (印度尼西亞印尼德龍電廠), the Santa Cruz Hydropower Plant in Argentina (阿根廷聖克魯斯水電站), the Matiari-Lahore DC power transmission project in Pakistan (巴基斯坦默蒂亞里—拉合爾直流輸電), and the Blue Bridge Cement Plant in Nigeria (尼日利亞藍橋水泥廠). The Company accelerated its equipment manufacturing technological innovation and yielded a series of new results. Among which, the straw briquetting machine and other core biomass power generation products were off the assembly line successfully, the R&D for trough condensers of heliostats made breakthroughs, and the molten salts heat storage unit project passed the completion acceptance.

2.4 Clean Energy, Environmental Protection and Water Utilities Business

The clean energy environmental protection and water utilities business included businesses such as clean energy environmental protection and water utilities. In 2018, the revenue before inter-segment elimination of the business was RMB20.83 billion, representing a year-on-year decrease of 13.16%. Among which, the revenue before inter-segment elimination of clean energy business was RMB1.31 billion, representing a year-on-year increase of 3.15%; the revenue before inter-segment elimination of environmental protection business was RMB18.06 billion, representing a year-on-year decrease of 18.65%; the revenue before inter-segment elimination of waterworks business was RMB1.46 billion, representing a year-on-year increase of 186.27%.

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(1) Clean energy business

In 2018, the Company kept augmenting its effort in power investment business development and optimized and expanded the clean and efficient power generation businesses. It laid stress on investing in new energy development in China and investing in large clean thermal power, hydropower and new energy projects in overseas markets, forming a landscape featuring scaled evolution and rolling development. The Company sped up the approval and construction paces of new energy investment projects in China, and boosted a number of wind power projects such as in XilinGol League in Inner Mongolia, Xinfeng in Guangdong and Ruyang in Henan, PV projects such as the aquaculture-solar hybrid project in Qingyuan, Guangdong (廣東清遠漁光互補), and the greenhouse-roof solar power generation project in Yongjia, Zhejiang (浙江永嘉農光互補等光伏項目), as well as a number of ongoing engineering projects such as the comprehensive use of straw in Suihua, Heilongjiang (黑龍江綏化秸稈綜合利用), and the biomass combined heat and power generation project in Ye County, Henan (河南葉縣生物質熱電聯產). The PV project in Kongping County, Liaoning (遼寧康平光伏), the Baiyunxian Phase II wind farm in Rucheng, Hunan (湖南汝城白雲仙二期風電), and the Zishanao wind farm in Nanxiong City, Guangdong (廣東南雄梓衫坳風電等項目投產發電), invested by the Company were put into power production. The Company actively acquired high-quality assets and focused on pushing forward the equity acquisition of Anhui Langxi PV project (安徽郎溪光伏), the Shanxi Qinshui wind farm (山西沁水風電) and the Heilongjiang Bin County wind farm (黑龍江賓縣風電) among other projects. The Hai Duong fossil-fuel power project in Vietnam (越南海陽火電工程) invested by the Company represents so far the biggest single investment in thermal power project by a Chinese company in Vietnam, and the project is under construction as scheduled. The SK hydropower project in Pakistan (巴基斯坦SK水電項目) is so far the largest hydropower project invested and constructed by a Chinese enterprise in overseas markets, and also a key project in the first priority list for the China-Pakistan Economic Corridor development. The projects are under construction as scheduled. The Company strengthened its international power and energy investment reserves and focused on following up with new energy projects in countries such as Argentina.

During the reporting period, the capacity of the installed power units held by the Company that is in operation and under construction at the end of the year were 1,420 MW and 2,400 MW, respectively. In 2018, the installed capacity of grid-connected power generation held by the Company totaled 3.823 billion KWH, up by 6.4% year-on-year.

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(2) Environmental protection business

In 2018, the Company made efforts to develop competitive advantages in the environmental protection field, in a bid to establish an intensive investment layout in renewable resource utilization, hydro environment management and sewage and sludge management, new types of road materials, solid waste treatment and other segments. The Company improved its environmental technical expertise and industrial value, staying committed to shaping its full-chain capabilities for environmental protection and striving to step into deep processing, refined processing and other medium-to-high-end segments of the industrial chain. The Company's comprehensive strength in the renewable resource business ranks among the top industry-wide. It owns advanced sorting, cleaning, and processing technologies and extends its business reach with the environmental protection industrial park as the center. It gradually structures a national recycling, processing and sales system for renewable resources which is capable of recycling and reusing a vast majority of types of renewable resource across the country. The Huai'an Industrial Park, the Laohekou Industrial Park have been put into production, and the scrap breaker production line of Huaiyuan Industrial Park has been built up. The Company accelerated the development of solid waste treatment business. Its first cement kiln for co-processing of contaminated soils project was smoothly put into production. The Company made an active endeavor to push forward Zhongxiang cement kiln and Dangyang cement kiln and other household waste disposal and hazardous waste disposal. The Company's integrated sludge machinery dehydration chemical modification technology won the Practical Achievement Award of China's Excellent Environmental Protection Science and Technology Innovation. The Company enhanced efforts in tackling core problems in sludge treatment science and technology, with its technologies including the integrated treatment of river and lake sludge dehydration tail water, the corridor-pattern artificial wetland patent, the HAS sludge solidification, while piled mountain landscaping technologies have been successfully applied to multiple large projects. The Company's road materials business is dominated by comprehensive services with new-type environmentally friendly materials to promote new materials, new technical R&D and application. Specifically, its steel slag asphalt concrete product was included in the Construction Materials Catalog for Xiong'an New Area, and will be applied to the construction of multiple highways in Shandong and other areas. The Company's hydro environment business chain is becoming increasingly improved. The Company invested to acquire Rizhao Sainuo Environment Science and Technology Company Limited, paving the way for the Company to march into waste water treatment membrane manufacturing sector, in which the Company's core technologies boast leading advantages nationwide.

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(3) Waterworks business

In 2018, the Company's waterworks operation and management capabilities were continuously strengthened. The Company operated and managed 58 water plants, 1,000-plus kilometers of pipes and 33 pump stations. Its designed water handling capacity is up to 3 million tonnes/day and is distributed across Beijing, Tianjin, Shandong, Henan, Hebei, Hunan, Hubei, Sichuan, Zhejiang and other regions, with its business layout becoming increasingly improved. The Company actively develops international waterworks projects in Brazil and other places, and has completed the acquisition of 100% equity interest in San Noronso Water Supply project in Brazil, with a concession right lasting 25 years. The project is capable of supplying 410,000 tonnes of water per day and was officially put into commercial operation in July 2018, delivering sound operational benefits. The Company strengthened science and technology innovation and application of achievements and vigorously pushed forward standardized construction to improve professional operation capabilities. The water quality was stable and the discharged water quality was up to standard throughout the year.

2.5 Investment and Other Businesses

In 2018, the revenue before inter-segment elimination of investment and other businesses was RMB21.68 billion, representing a year-on-year increase of 9.30%. Among which, the operating revenue of real estate business was RMB7.44 billion, representing a year-on-year increase of 17.91%; the revenue of expressway business was RMB1.92 billion, representing a year-on-year increase of 20.75%; the revenue of financial business was RMB240 million, representing a year-on-year increase of 200.00%; the revenue of other businesses was RMB12.08 billion, representing a year-on-year increase of 1.94%.

(1) Real estate business

In 2018, the Company stuck to a path of stable and innovative development of real estate business to establish ourselves as a high-value real estate brand. The Company invests great effort in deepening its business growth in first-tier cities and making core second-tier cities and promising third-tier cities as the key targets for its business development, while positioning itself as a high-quality property company and specifying its range of products. 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 members of the Chinese Academy of Sciences, with its brand image being improved. During the reporting period, the Company obtained 4 new land reserves, areas with interests of which amounted to 183,400 square meters by the investment of RMB8.516 billion in land interests, and the corresponding total gross floor area was 376,100 square meters. The Company's real estate business newly commenced the construction of the gross area of 757,100 square meters, and the gross area of completed projects was 758,900 square metres. The equity construction area of in-construction projects totaled 4.6851 million square meters. The sales area covered 425,200 square meters, with the contracted sales amount reaching RMB10.131 billion. As at the end of the Reporting Period, the available for sale area launched by the Company was 200,000 square meters.

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(2) Expressway operation business

In 2018, the Company actively pushed forward the “integrated investment, construction and operation” model for expressways and strove to build an industry standard featuring “standardized, programmed, intensive and information-based”. Its expressway operation business welcomed steady growth, with its brand presence further enhancing. The total mileage of expressway operated by the Company was 457 kilometers, including G55 (Xiangyang, Hubei-Jingzhou section), G45 (Hubei Macheng-Xishui section), Sichuan Neijiang-Suining expressway and Shandong Jitai expressway connection, the operations of which were in good condition with the traffic flow growing significantly on a year-on-year basis. The 10 in-construction expressways undertaken by the Company including the Sichuan Bawan Expressway and the Shaanxi Yanchang-Huanglong Expressway stretch for a total of 1,077 kilometers and are progressing as scheduled.

(3) Financial business

The financial business of the Company includes the financial business for financial companies (loans, entrusted loans and guarantees for member enterprises), finance leases and industrial funds. The financial companies, finance lease companies, fund management companies and other financial enterprises under it stick to “relying on the company to serve entities” while playing featured financial functions, promoting industry-finance integration and finance-driven production to support main businesses of the Company.

In 2018, the Company stressed to exert the financial functions of finance companies and enhance centralized management of capital to integrate internal capital, and improve the financial services and capital use efficiency. At the end of the reporting period, the Company’s capital concentration was significantly elevated year-on-year. The deposit balances taken in by financial companies rose by 86.2% year-on-year, and the loan balances rose by 112.38% year-on-year. The Company joined hands with commercial banks in launching syndicated loans to activate external financing, which has played an important role in bringing down the Company’s liability level and financial expense. Financial leasing companies actively expanded their financing channels, and strove to increase current funds, save financial costs and support undertaken engineering projects for their enterprises through direct leasing, after-sale leaseback and other approaches. They also provide finance leasing services to project owners to facilitate the Company’s enterprises to collect accounts receivables. In 2018, the Company set up fund management joint ventures with advantageous enterprises in the industry to utilize social capital to boost the Company’s businesses in new business models and investment businesses of the Company.

3 SCIENCE AND TECHNOLOGY INNOVATION

In 2018, the Company implemented the innovation-driven development strategies and built up a three-layer R&D mechanism: special projects for significant technologies, special scientific and technological crowdfunding projects, and independent project approval by various units. It has established a R&D system composed of 2 national and 46 provincial research institutions, 4 academician expert workstations, 10 post-doctoral research stations, with its high-tech enterprises numbering as many as 84. The science and technology innovation system kept improving, and its technical innovation capability was further elevated.

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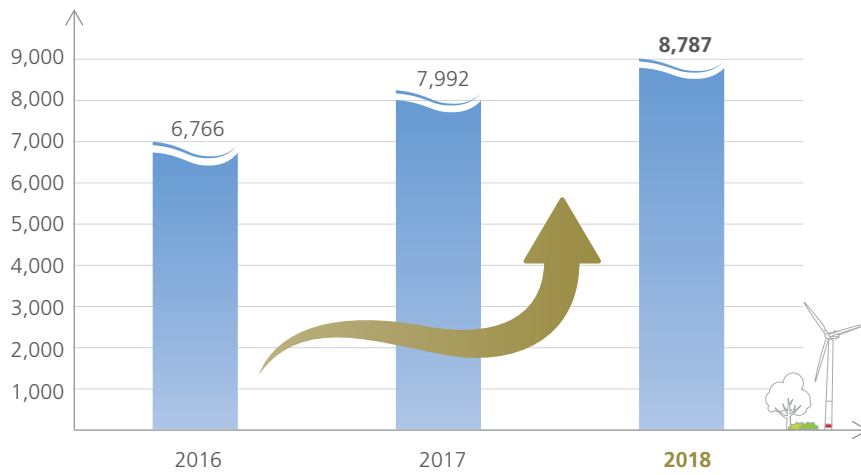
In 2018, the research and development expenses amounted to RMB4,004 million, representing a year-on-year increase of 14.54%. The Company focused on the scientific and technological research and development work in clean fuel-fired power generation, new energy, intelligent power grids, environmental protection, engineering safety and other fields. The Company undertook 14 national key scientific and technological research projects including the “study on key technical standards for solar thermal power generation and heat utilization”, the “study on key technologies and engineering project demonstration of high-voltage and large-capacity flexible DC power transmission” and the “coupling and demonstration of risk management and restoration technologies of venues with green and sustainable pollution”. The Company started four key scientific and technological projects, namely the “study and application of concrete intelligent construction technologies”, the “study on new-energy power optimization technologies”, the “study on intelligent energy technologies” and the “study on construction and contracting safety technologies”. The Company coordinated for its units to jointly launch research projects including the “supercritical CO₂ Brayton cycle power generation technologies”, the “designing technologies of large auxiliary systems with medium to low heat values related to synthesis gas and gas turbines”, and the “key designing technologies of electrochemical energy storage stations”.

In 2018, the Company completed key technologies research projects such as the “key technologies of ± 1100 kV ultra-high-voltage DC power transmission design”, the “flexible AC power transmission design technologies”, the “key technologies related to active power distribution grid planning and designing”, “optimization technologies of three-dimensional thermodynamic performance of large cooling towers”, “automatic welding and information control technologies of new-type steel for power plants”, and “phased-array ultrasonic inspection and measurement technologies” and yielded various research and development results, seizing the technical commanding heights of the industry and improving the Company’s market competitiveness in these fields. The Company won 2 national scientific and technological awards, and 217 provincial and industry-level scientific and technological awards, with the growth rate of awards above the provincial and industry level being 24% year-on-year. Specifically, the “key making and application technologies of high-resilience fibre concrete in safe service for major engineering structures” offered key materials and technical support to the service performance of concrete structures for high dams and other major projects in China, and won the second prize of National Award for Technological Invention. The “development and application of package technologies for key metal structure materials for ultra-large hydropower plants” formed a full-chain innovation technology cluster with international competitiveness and won the second prize of National Science and Technology Progress Award.

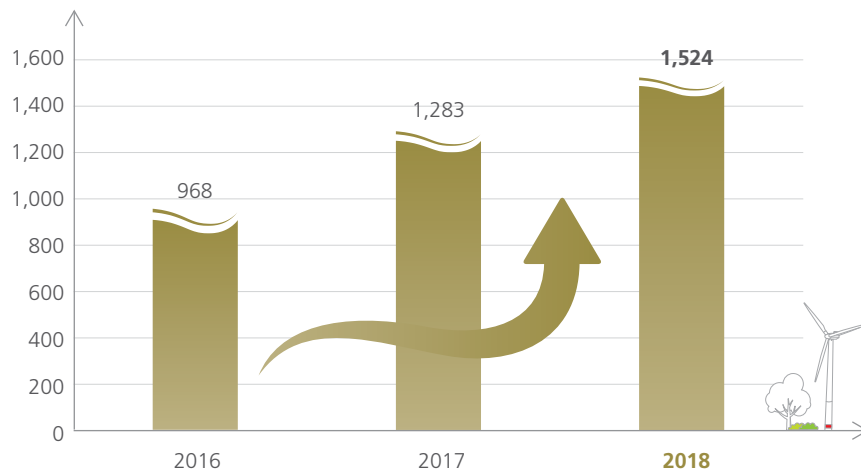
In 2018, the Company obtained 1,280 patent licenses, including 229 invention patents, with the patents in force of the Company adding up to 8,787, including 1,524 invention patents. It obtained 106 software copyrights and compiled and completed 3 international standards (IEEE standard), and 86 national and industry standards. The world’s first solar thermal power generation design standard, the compilation of which was led by the Company, was issued. For the latest three years, the number of effective patents owned by the Company increased significantly from 6,766 in 2016 to 8,787 in 2018, with an average annual growth rate of 13.96%. Specifically, the effective invention patents owned increased from 968 in 2016 to 1,524 in 2018, with an average annual growth rate of 25.47%. The conversion and application of research results in the hydropower, thermal power, power grids, new energy and non-power projects constructed by the Company, has created significant economic and social benefits.

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Number of Effective Patents Owned



Number of Effective Invention Patents Owned



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4 OUTLOOK

According to the prediction of the Chinese Academy of Social Sciences, China's investment tends to become streamlined and stable in 2019, with the consumption situation being relatively positive. The export trade is expected to grow further but at a slower rate. The GDP growth rate will be approximately 6.3%, slightly lower than that in last year.

Domestic power market

Looking forward to 2019 to 2020, the energy and power structure of China will continue to be optimized and adjusted following a green, low carbon, efficient, diversified and intelligent agenda. It is expected that there will still be regional and structural market opportunities for traditional coal-fired power. The upgrading and transformation as well as the operation and maintenance of existing units will have relatively larger markets. There exists a relatively larger market for natural gas power generation, while nuclear power construction is expected to be resumed. Regular hydropower and pumped storage will maintain a stable trend, biomass energy will maintain a stable growth, while waste-to-power still have a relatively larger room for development. Solar thermal power generation demonstration projects will be accelerated, and power storage as well as hydrogen energy will have potentials for long-term development; under the current premise of the country promoting the steady growth of infrastructure construction, which situation is expected to improve significantly, power grid construction will continue to maintain having a relatively larger scale of investment. In general, the long-term positive momentum of China's energy and power development remain unchanged.

Domestic non-power market

According to the prediction of the Chinese Academy of Social Sciences, the total national investment in fixed assets will reach RMB81.4 trillion in 2019, representing a nominal growth of 5.6% and an actual growth of 0.4%, of which investments in real estate and infrastructure will increase by approximately 6.3% and 7.8% year-on-year, respectively, continuing to be the main force of stabilized investment and steady growth. In general, the domestic infrastructure construction market has a large room for expansion, which is embodied in:

- (1) Hydropower projects: The main water-taming conflicts in the new era have shifted from the one between people's demand for eliminating water hazards and booming water conservancy and the insufficient capability of waterworks projects, to the one between people's demand for water resources, water environment and water ecosystem and the insufficient regulatory competence of the waterworks industry. Hydropower projects usually involve multiple points of network, broad coverages and large volumes, and are an important area for expanding effective investment and making up short slabs in infrastructure. In 2019, the Ministry of Water Resources of China will continue to advance the construction schedule of 172 major waterworks projects in accordance with the principle of "start a project as long as condition is ripe", and create conditions to carry forward the construction of other major projects.

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- (2) Transport projects: In 2019, it is expected that around RMB1.8 trillion will be invested in fixed assets of highway and waterway in China. 200,000 kilometers of rural roads will be rebuilt, 400 kilometers of up-to-standard inland high-grade river channels will be newly built, 5,000 incorporated villages with access to passenger cars will be added, another 350 million tonnes of cargoes will be shipped via railway, and the container railway-waterway combined shipping volume will grow by more than 15%. In 2019, Civil Aviation Administration of China will enhance infrastructure supply, and strives to increase fixed asset investment to RMB85 billion.
- (3) Urban infrastructure: In 2019, China will advance in depth the sponge city construction, step up its efforts in treating black and odorous water body and making up short slabs of drainage and waterlogging prevention facilities in cities. China formulates a three-year action plan for implementing urban sewage treatment for quality and efficiency improvement, and accelerates the construction of non-hazardous treatment facilities for domestic waste in cities and counties while continuing to advance underground comprehensive pipe rack construction according to local conditions.
- (4) Housing construction: In 2019, the Ministry of Housing and Urban-Rural Development will continue to advance the shantytowns transformation and strictly manage the shantytowns transformation scope and standards, with the stress laid on dirty, noisy and disorder shantytowns in the old urban areas and state-owned industrial and mining areas, forest areas and reclamation shantytowns, while strengthening the construction of supporting infrastructures.

International Market

Looking forward to 2019, the world economy will carry on a mild growth. As China establishes its new pattern of all-round opening-up, the bilateral and multilateral cooperation between China and the rest of the world will continue to get deepened. The "One Belt and One Road" initiative, the Sino-African cooperation, the China-Central and Eastern Europe 16+1 cooperation, and the cooperation between SCO member states continue to proceed in depth. China's opening-up scope keep expanding and its opening-up level keeps improving, creating a sound development environment for foreign contracting construction enterprises. With the support and promotion of the "One Belt and One Road" and the international capacity cooperation policies, the competitive strengths of China's overseas contracting companies in the fields of power, transport, and property construction were more highlighted.

BUSINESS OVERVIEW

- (1) Countries along the “One Belt and One Road” enjoy broad space for power construction market growth. According to the IEA (International Energy Agency) statistics, the population in countries along the “One Belt and One Road” totaled 4.6 billion, with the per capita power use of 1,600 kWh/year, far lower than the per capita of approximately 3,100 kWh/year in the world, showing broad space for increase. It is expected that the newly installed capacity may exceed 1 billion KW by 2030, representing an average annual growth of 4%. The second “One Belt and One Road” Forum for International Cooperation will be held in Beijing in April 2019, marking a new stage of “One Belt and One Road” construction. In the future, the Company 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, the Middle East and the Latin America, in a bid to gradually cover major engineering contracting markets around the world.
- (2) The international non-power infrastructure construction market has a large room for expansion. According to the Global Infrastructure Outlook issued by the Global Infrastructure Hub (GIH), the global infrastructure investment will average at USD3.7 trillion by 2040, with Asian and African countries accounting for 60% by around USD2.2 trillion, mirroring the broad infrastructure construction market. While consolidating the traditional advantages in the power market, the Company will actively extend its businesses to non-power sectors such as the hydropower, housing construction, municipal administration, environmental protection, highways and bridges, 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.

The international market has a broad prospect. The Company will continue to invest much effort in seizing major strategic opportunities of the “One Belt and One Road” and international capacity cooperation, and fully play the Company’s core competitive advantages throughout the industrial chain to further optimize the international market landscape, innovate international business operation models and promote high-quality development of international businesses.

MANAGEMENT DISCUSSION AND ANALYSIS



1 OVERVIEW

In 2018, the Company achieved the revenue of RMB224,034.3 million, representing a year-on-year decrease of 4.41%; among which, revenue from international business was RMB38,985.4 million, representing a year-on-year decrease of 2.07%; revenue from domestic business was RMB185,048.9 million, representing a year-on-year decrease of 4.89%; revenue from power business was RMB126,575.5 million, representing a year-on-year decrease of 17.38%; revenue from non-power business was RMB97,458.8 million, representing a year-on-year increase of 20.07%. The total profit before tax was RMB11,676.8 million, representing a year-on-year decrease of 2.33%; net profit attributable to the equity shareholders of the Company was RMB4,570.7 million, representing a year-on-year decrease of 13.12%.

MANAGEMENT DISCUSSION AND ANALYSIS

2 CONSOLIDATED OPERATING RESULTS

Items	For the year ended 31 December		
	2018 (RMB in million)	2017 (RMB in million)	Percentage of change (%)
Revenue	224,034.3	234,370.1	(4.41)
Cost of sales	(194,271.0)	(206,741.4)	(6.03)
Other income	2,406.1	3,095.9	(22.28)
Net impairment losses on financial assets and contract assets	(851.5)	–	–
Other net gains and losses	795.4	(245.5)	(423.99)
Selling expenses	(2,372.0)	(2,085.9)	13.72
Administrative expenses	(12,014.2)	(11,091.9)	8.32
Research and development expenses	(4,003.6)	(3,495.4)	14.54
Finance income	795.5	715.2	11.23
Finance costs	(3,827.0)	(3,077.7)	24.35
Share of profits of joint ventures	304.4	301.4	1.00
Share of profits of associates	680.5	210.5	223.28
Profit before tax	11,676.8	11,955.3	(2.33)
Income tax	(3,125.3)	(2,891.1)	8.10
Profit for the year	8,551.5	9,064.2	(5.66)

In 2018, the actual selling expenses of the Company amounted to RMB2,372.0 million, representing a year-on-year increase of 13.72%. Primarily due to the increase in sales agency of cement business and the selling and advertising activities of real estate business, the percentage of selling expenses to the revenue increased from 0.89% in 2017 to 1.06% in 2018.

In 2018, the actual administrative expenses of the Company amounted to RMB12,014.2 million, representing a year-on-year increase of 8.32%. Primarily due to the growth in salary, agency and institution fees as well as safety and environmental protection fees, the percentage of administrative expenses to the revenue increased from 4.73% in 2017 to 5.36% in 2018.

In 2018, the actual finance costs of the Company amounted to RMB3,827.0 million, representing a year-on-year increase of 24.35%; Primarily due to the increase in total debts, the percentage of finance costs to the revenue increased from 1.13% in 2017 to 1.71% in 2018.

MANAGEMENT DISCUSSION AND ANALYSIS

3 OPERATING RESULTS BY SEGMENTS

Conditions of Industry Segments of Principal Businesses (For the year ended 31 December)									
Industry segments	2018			2017			Change in percentage (%) / 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	12,216.3	7,986.2	34.63	13,282.6	7,604.2	42.75	(8.03)	5.02	(8.12)
Construction and contracting	159,192.0	144,954.1	8.94	168,751.7	155,297.8	7.97	(5.66)	(6.66)	0.97
Industrial manufacturing	21,819.6	15,913.7	27.07	19,958.9	15,775.8	20.96	9.32	0.87	6.11
Clean energy, environmental protection and water utilities	20,826.1	19,715.5	5.33	23,982.5	23,683.2	1.25	(13.16)	(16.75)	4.08
Investment and other business	21,675.5	17,342.3	19.99	19,830.8	15,595.8	21.36	9.30	11.20	(1.37)
Inter-segment elimination ⁽¹⁾	(11,695.1)	(11,641.8)	–	(11,436.4)	(11,216.5)	–	–	–	–
Unallocated items ⁽²⁾	–	1.0	–	–	1.1	–	–	–	–
Total	224,034.3	194,271.0	13.29	234,370.1	206,741.4	11.79	(4.41)	(6.03)	1.50

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 decreased by 4.41% from RMB234,370.1 million in 2017 to RMB224,034.3 million in 2018. The decrease was primarily attributable to the decrease in its survey, design and consulting services business, construction and contracting business as well as its clean energy, environmental protection and water utilities business.

The cost of sales of the Company decreased by 6.03% from RMB206,741.4 million in 2017 to RMB194,271.0 million in 2018. The decrease was primarily due to the decline in cost of construction and contracting business and in cost of environmental protection business of clean energy, environmental protection and water utilities.

The gross profit of the Company was RMB27,628.7 million and RMB29,763.4 million in 2017 and 2018, respectively, and the gross profit margin of the Company in the same period was 11.79% and 13.29%, respectively. The increase in the gross profit was primarily due to the increase in the gross profit of domestic non-power construction and contracting, sales of cement, sales of properties, power generation and expressway operation business.

MANAGEMENT DISCUSSION AND ANALYSIS

3.1 Survey, Design and Consulting Services Business

This business generates revenue primarily from providing survey and design services for thermal, hydro, nuclear, 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 decreased by 8.03% from RMB13,282.6 million in 2017 to RMB12,216.3 million in 2018. The decrease was primarily attributable to the decrease in volume of thermal power business of this segment affected by the regulation policies on the coal-fired power in PRC.

Cost of sales before inter-segment elimination of survey, design and consulting services business of the Company increased by 5.02% from RMB7,604.2 million in 2017 to RMB7,986.2 million in 2018. The increase was primarily due to the increase in labour costs, etc.

The gross profit before inter-segment elimination of survey, design and consulting services business of the Company was RMB5,678.4 million and RMB4,230.1 million in 2017 and 2018, respectively, and gross profit margin in the same period was 42.75% and 34.63%, respectively. The decrease in the gross profit margin was primarily due to the following factors combined: (i) a decrease in revenue caused by an intensified competition within the industry, along with the influence of the regulation policies on the coal-fired power; (ii) an increase in labour costs to guarantee the reserve for professional technicians as the industry is technology-intensive.

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 the construction and contracting business of the Company decreased by 5.66% from RMB168,751.7 million in 2017 to RMB159,192.0 million in 2018. The decrease was primarily attributable to the decrease in thermal power business affected by the regulation policies on the coal-fired power in PRC.

Cost of sales before inter-segment elimination of construction and contracting business of the Company decreased by 6.66% from RMB155,297.8 million in 2017 to RMB144,954.1 million in 2018, slightly higher than that of revenue in the same period.

Gross profit before inter-segment elimination of construction and contracting business of the Company was RMB13,453.9 million and RMB14,237.9 million in 2017 and 2018, respectively, and gross profit margin was 7.97% and 8.94% in the same period, respectively. The increase of gross profit margin was mainly due to the higher proportion of revenue from non-power projects with higher profit margin for the current year.

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, energy conservation and environmental protection equipment, manufacture and sale of civil explosives, cement products, and the provision of explosive service.

MANAGEMENT DISCUSSION AND ANALYSIS

Revenue before inter-segment elimination of industrial manufacturing business of the Company increased by 9.32% from RMB19,958.9 million in 2017 to RMB21,819.6 million in 2018, mainly due to the rising of selling price of cement.

Cost of sales before inter-segment elimination of industrial manufacturing business of the Company increased by 0.87% from RMB15,775.8 million in 2017 to RMB15,913.7 million in 2018, which slightly increased.

Gross profit before inter-segment elimination of industrial manufacturing business of the Company was RMB4,183.1 million and RMB5,905.9 million in 2017 and 2018, respectively, and gross profit margin was 20.96% and 27.07% in the same period, respectively. The increase in gross profit margin was primarily due to the year-on-year increase in selling price of cement products.

3.4 Clean Energy, Environmental Protection and Water Utilities Business

The 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 13.16% from RMB23,982.5 million in 2017 to RMB20,826.1 million in 2018. The decrease was primarily attributable to the decline in revenue of environmental protection business.

Cost of sales before inter-segment elimination of clean energy, environmental protection and water utilities business of the Company decreased by 16.75% from RMB23,683.2 million in 2017 to RMB19,715.5 million in 2018. The decrease was primarily attributable to the decline in cost of environmental protection and power generation business.

The gross profit before inter-segment elimination of the clean energy, environmental protection and water utilities business of the Company was RMB299.3 million and RMB1,110.6 million in 2017 and 2018, respectively, and gross profit margin was 1.25% and 5.33% in the same period, respectively. The increase was primarily due to the Company's adjustment on the structure of the recycling business for the renewable resources, causing a reduction in the sales of volume of recycling business for renewable resources that has a lower gross profit and the outsourcing patterns of sales.

3.5 Investment and Other Business

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

Revenue before inter-segment elimination of investment and other businesses of the Company increased by 9.30% from RMB19,830.8 million in 2017 to RMB21,675.5 million in 2018. The increase was primarily attributable to increase in revenue of real estate development business, expressway operation business and financial services.

Cost of sales before inter-segment elimination of investment and other businesses of the Company increased by 11.20% from RMB15,595.8 million in 2017 to RMB17,342.3 million in 2018. The increase was primarily due to

MANAGEMENT DISCUSSION AND ANALYSIS

the increase in the cost of real estate development business, resulted from policies on encouraging the sales of finely decorated rooms promulgated by the government in PRC.

Gross profit before inter-segment elimination of investment and other businesses of the Company was RMB4,235.0 million and RMB4,333.2 million in 2017 and 2018, respectively. Gross profit margin decreased from 21.36% in 2017 to 19.99% in 2018, primarily attributable to the decreased gross profit margin of real estate development business that had a larger contribution to the gross profit.

4 CASH FLOW

	For the year ended 31 December	
	2018 (RMB in million)	2017 (RMB in million)
Net cash (used in)/generated from operating activities	5,059.0	5,632.5
Net cash (used in)/generated from investing activities	(20,358.4)	(13,252.7)
Net cash (used in)/generated from financing activities	14,283.7	9,497.4
Net (decrease)/increase in cash and cash equivalents	(1,015.7)	1,877.2
Cash and cash equivalents at the beginning of the year	47,699.8	46,774.1
Effects of exchange rate changes	959.0	(951.5)
Cash and cash equivalents at the end of the year	47,643.1	47,699.8

4.1 Cash Flow Generated from Operating Activities

The net cash generated from operating activities decreased from RMB5,632.5 million in 2017 to RMB5,059.0 million in 2018, representing a decrease of RMB573.5 million or 10.18%, primarily due to (i) the net profit of operating activities during the year amounting to RMB15,872.7 million, representing a decrease compared to the same period of last year; (ii) the increase in properties under development for sale of RMB982.60 million resulting from business expansion (iii) prepaid amounts for construction contracts increased by RMB4,248.3 million; (iv) paid income tax of RMB3,106.7 million. The decrease was offset by the net cash inflow of RMB1,482.5 million due to the combined effects of the increase in amount receivables and the extension of settlement cycle to suppliers accordingly following the increase of business volume; at the same time, the net cash inflow of RMB4,685.5 million due to the corresponding increase of contract asset and the contract liability.

4.2 Cash Flow Used in Investing Activities

Net cash used in investing activities increased from the RMB13,252.7 million in 2017 to the RMB20,358.4 million in 2018. The increase of RMB7,105.7 million or 53.62%, primarily due to: (i) payment of RMB15,790.8 million in the intangible assets and property, plant and equipment; (ii) the increase of RMB3,887.8 million of the capital contributions to associates and joint ventures; (iii) payment of RMB7,719.0 million in the acquisition of the financial assets; (iv) the consideration of acquisition of the subsidiaries of RMB1,093.6 million; (v) the increase of RMB2,295.4 million in pledged deposits. The cash outflow was offset by the decrease in the structured deposit of RMB2,140.0 million and the cash generated from disposal of financial asset of RMB8,073.6 million.

MANAGEMENT DISCUSSION AND ANALYSIS

4.3 Cash Flow Generated from Financing Activities

The net cash generated from financing activities increased by RMB4,786.3 million or 50.40% from RMB9,497.4 million in 2017 to RMB14,283.7 million in 2018, primarily due to: (i) the total proceeds of RMB4,200.0 million from the issuance of the 5 year corporate bonds and green bonds; (ii) the proceeds of RMB1,180.0 million from the issuance of the 2018 debt financing plan; (iii) the newly increased bank borrowings and other borrowings of RMB61,345.1 million. The cash inflow was offset by the repayment of bank borrowings and other borrowings of RMB48,175.1 million and the payment of interests on borrowings and bonds of RMB4,551.5 million.

4.4 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	
	2018 (RMB in million)	2017 (RMB in million)
Property, plant and equipment	6,916.6	4,007.6
Prepaid lease payments	1,324.9	231.7
Intangible assets	12,056.1	6,192.5
Investment properties	2.2	3.1
Total	20,299.8	10,434.9

5 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 return on assets while maintaining prudent capital and financial policies.

MANAGEMENT DISCUSSION AND ANALYSIS

6 INDEBTEDNESS

As at 31 December 2018, the Company's total liabilities amounted to RMB294,221.6 million and total assets amounted to RMB389,385.5 million, with a gearing ratio of 75.56%, representing a decrease of 1.22 percentage points from 76.78% for last year. The Company's total indebtedness amounted to RMB111,988.6 million. The following table sets forth the details of bank borrowings, other borrowings, corporate bonds and finance lease payables of the Company as at the dates indicated:

	As at 31 December	
	2018 (RMB in million)	2017 (RMB in million)
Long-term		
Bank borrowings		
Unsecured	24,280.5	14,853.8
Secured	16,107.7	16,268.7
Other borrowings		
Secured	501.7	1,427.2
Corporate bonds ⁽¹⁾	15,141.8	15,140.0
Sub-total	56,031.7	47,689.7
Short-term		
Bank borrowings		
Unsecured	32,813.2	25,527.5
Secured	6,421.6	2,971.4
Other borrowings		
Unsecured	11,846.8	9,372.1
Secured	144.5	99.0
Corporate bonds ⁽¹⁾	4,730.8	11,231.8
Finance lease payables ⁽²⁾	–	0.9
Sub-total	55,956.9	49,202.7
Total	111,988.6	96,892.4

Notes:

- (1) The corporate bonds of the Company are unsecured medium-term notes, corporate bonds and assets-based security products.
- (2) The Company leased certain machinery for construction operations.

MANAGEMENT DISCUSSION AND ANALYSIS

As at 31 December 2018, bank and other borrowings denominated in currencies other than the functional currencies of respective entities are set out as below:

	As at 31 December	
	2018	2017
	(RMB in million)	(RMB in million)
USD	11,142.2	5,037.1
Japanese Yen	121.9	119.1
Total	11,264.1	5,156.2

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

	As at 31 December	
	2018	2017
	(RMB in million)	(RMB in million)
Guaranteed by:		
Third parties	128.9	119.1

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

	As at 31 December	
	2018	2017
	(RMB in million)	(RMB in million)
Repayable within 1 year	51,959.9	49,202.7
Repayable after 1 year but within 2 years	8,870.8	10,233.6
Repayable after 2 years but within 3 years	18,278.0	6,049.3
Repayable after 3 years but within 4 years	2,880.5	11,567.4
Repayable after 4 years but within 5 years	7,023.0	3,372.6
Repayable after 5 years	22,976.4	16,466.8
Total	111,988.6	96,892.4

MANAGEMENT DISCUSSION AND ANALYSIS

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

	As at 31 December	
	2018	2017
Bank borrowings	1.05-9.00	1.05-8.70
Other borrowings	3.92-4.61	4.66-8.00
Corporate bonds	3.14-5.37	3.14-5.37
Finance lease payables	–	6.77-7.56

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			
	2018		2017	
	(RMB in million)	%	(RMB in million)	%
Fixed rate bank and other borrowings	36,988.8	1.05-8.00	30,879.1	1.05-8.00
Floating rate bank and other borrowings	55,127.2	1.20-9.00	39,640.6	1.20-8.70
Total	92,116.0		70,519.7	

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 increased by RMB15,096.2 million from 1 January 2018 to 31 December 2018, mainly due to the working capital requirement.

To supplement liquid capital, the Company issued corporate bonds on 20 April 2018 valuing RMB3 billion with a maturity of 5 years, appended with the Company's adjustment in coupon rate option, the redemption option, and the investor put-back option at the end of the third year, with the face value being RMB100 and annual interest rate being 4.65%.

To support the green industry projects, China Gezhouba Group Lvyuan Technology Co. Ltd, a subsidiary of the Company, issued corporate bonds in September 2018 valuing RMB1.2 billion with a maturity of 5 years, appended with the issuer's adjustment in coupon rate option and the investor put-back option at the end of the third year, with the face value being RMB100 and annual interest rate being 4.74%.

MANAGEMENT DISCUSSION AND ANALYSIS

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 2018, the Company had RMB28.8 billion of authorized but unissued debt securities, namely the unsecured corporate bonds and perpetual bonds with guarantees.

As at 31 December 2018, the Company had RMB379.0 billion of unutilized and unrestricted bank facilities. As at the reporting date, the Company was not subject to any material restrictive terms in the borrowings.

7 PLEDGE OF ASSETS AND CONTINGENT LIABILITIES

7.1 Pledges of assets

As at 31 December 2018, 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	
	2018 (RMB in million)	2017 (RMB in million)
Property, plant and equipment	3,977.2	2,946.8
Prepaid lease payments	279.6	340.6
Intangible assets	12,988.9	7,484.8
Trade receivables	2022.8	410.4
Properties under development for sale	24,105.5	21,388.6
Completed properties for sale	–	32.3
Bank deposits	5,749.2	3,453.7
Total	49,123.2	36,057.2

7.2 Contingent liabilities

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.

MANAGEMENT DISCUSSION AND ANALYSIS

The following contingent liabilities arised from guarantees given to banks and other financial institutions in respect of certain bank loans and finance leases, as well as mortgage loan guarantees provided to banks in favor of the customers of the Company. Details are set out in note 41 to the “Consolidated Financial Statement” of this annual report.

	As at 31 December	
	2018 (RMB in million)	2017 (RMB in million)
Guarantees given to banks and other financial institutions in respect of bank loans and finance leases granted to ⁽¹⁾ :		
Joint ventures	736.9	938.8
Associates	3,594.4	3,405.1
Third party ⁽³⁾	258.9	258.9
Investee recognised as available-for-sale financial asset	–	33.6
Investee recognised as financial assets at FVOCI	24.5	–
	4,614.7	4,636.4
Mortgage loan guarantees provided by the Company to banks in favor of its customers ⁽²⁾	1,790.4	833.1
Total	6,405.1	5,469.5

Notes:

- (1) At initial recognition, the fair value of these guarantee contracts is insignificant. There has been no material change in contingent liabilities of the Company since 31 December 2018 to the date of this report.
- (2) The Company has 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 a 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 upon the buyer obtained the individual property ownership certificate. The fair values of these financial guarantee contracts of the Company are insignificant at initial recognition, and the possibility of default by the relevant buyers is remote and, in case of default in payments, the net realizable 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.
- (3) One subsidiary of the Company has provided guarantee in respect of a finance leasing contract with one financial institution to a third party.

8 SUBSEQUENT EVENTS

Details of the subsequent events of the Company for the year ended 31 December 2018 are set out in note 48 to the “Consolidated Financial Statements” of this annual report.

MANAGEMENT DISCUSSION AND ANALYSIS

9 RISK

9.1 Business risk

(1) Policy risk

In 2019, the domestic economic growth continues to fall, rendering macroeconomic policies and industry policies subject to the risk of change. This may lead to increasing difficulties in market exploring, narrowed financing channels, increasing financing costs, slower transformation and upgrading, and a synchronous increase in operational risks and financial risks. The Company will intensify industry policy research, consolidate the traditional market, strengthen business transformation and upgrading, 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, increasingly fierce international competition, rapidly changing business models, and rising exchange rate, legal, compliance and security risks. The Company will refine its international operational management system, improve the international business market layout, and avoid disorderly internal competition and vicious external competition while strictly implementing international work procedures for market development, intensifying research on exchange rate, legal and compliance risks, and improving the overseas security risk prevention system to elevate overseas security and emergency response capabilities.

(3) Construction project management risk

The inadequate planning breadth and depth in the early stage of projects, the less-satisfactory contracting quality, the sub-standard subcontract management, the deficient construction resource allocation and other reasons jointly contributed to the unsmooth contract fulfillment of projects, leading to delayed schedules, non-compliant product performance and quality, and ultimately to a property loss and a damage of brand image. The Company will strengthen examination and assessment of execution ability of system, especially examination of subcontracting system execution, standardize subcontracting management and supervise strict execution of management system. The Company will continue to strengthen management and check and special supervision on domestic and international construction projects and timely detect and solve existing problems. The Company will strengthen supervision and guidance on project planning and management and uplift project performance and profitability.

(4) Legal dispute risk

The number and value of legal dispute cases grew, and some cases were complicated. In the event of inappropriate response, they may directly lead to economic loss, and may even produce negative impact on the reputation, market development and production and operation of the Company. The Company will strengthen dispute case management, improve the handling performance of major cases, carry out legal research of PPP, investment and other businesses in depth to keep potential legal risks under control. The Company will consolidate the legal audits, prioritise risk prevention, so as to effectively serve production and operation.

(5) Investment risk

The Company is undergoing business transformation with its invested business constantly expanding, especially the constant rise of its PPP business. If risk element identification and analysis are not profound enough, implementation management 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 implementation may occur. The Company will establish and improve its full-process investment risk management system, strictly enforce the access criteria for investment projects, and forbid investment in non-economically efficient projects, enhance project supervision, inspection and appraisal and urge investing entity to rectify when discovered problems and weak links within a defined time period.

MANAGEMENT DISCUSSION AND ANALYSIS

(6) Cash flow risk

Subject to factors of centralized investments, receivables, cost management and operation loss, some certain sub-enterprises are short of cash flow with the risk of debt default and declining credit. The Company will strengthen budget management, optimize debt structure, broaden financing channels, lower financial costs, strengthen management on inventory and receivables and supervision on capital operation, further strengthen capital concentration and commit to enhancing capital operation capability. The Company will enhance the management on centralized procurement, carry out task of cost deduction and fee control and steadily uplift the operating capacity of the enterprise.

(7) Safety and environmental 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, security and environmental protection are always exposed to risks. If the management is less adequately practised and not well arranged, safety and environmental accidents may occur, leading to loss of life or property or environmental destruction. The Company will clarify the subject of liability for safety and environmental protection, strictly observe the redline of health and safety, 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.

9.2 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 the income and expenses denominated in foreign currencies will be increased accordingly. The exchange rate fluctuation may have influence on the service pricing and the cost of procurement of materials and equipment of the Company by foreign exchange and therefore influence the financial position and operating performance of the Company. The Company will carry out risk controls by means of contracts and financial instruments, make reasonable commercial arrangements and select suitable foreign currency and exchange rate for settlement or payment so as to prevent exchange rate fluctuation risk.

10 NUMBER OF EMPLOYEES, SHARE OPTION SCHEME AND TRAINING PROGRAM

As of the end of 2018, the Company has a total of 124,503 employees, and a legion of high-quality talents, including 36,140 management personnel, 39,815 professional technicians, and 29,426 skilled operators.

The Company has 11,344 talents with various national registered qualifications. Also, the Company has a team of top talents of China, including the 32 experts who enjoy the State Council governmental special subsidies, 5 national engineering survey and design masters, 2 national nuclear industry engineering survey and design masters, 4 national candidates of the "Millions of Talents of the New Century" project, 2 national young and middle-aged experts with outstanding contribution, and 25 national technical experts.

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 and 16 November 2018 and the circular of the Company dated 6 October 2016.

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 460,400 employees in 2018 and actually trained 480,100 employees, including on-the-job training for 328,300 employees, continuing education training for 36,100 employees, and other training for 115,700 employees.

MANAGEMENT DISCUSSION AND ANALYSIS

11 PLAN FOR SIGNIFICANT INVESTMENT OR PURCHASE OF CAPITAL ASSET OF THE COMPANY IN THE FUTURE

In 2018, the Company has addressed the Company's investment direction and special investment business plans for the upcoming period of time.

- (1) Eyeing driving engineering business and facilitating transformation and upgrading, the Company, based on its resource endowment, seized the opportunities from the national effort to make up infrastructure short slabs and vigorously open up domestic and overseas engineering contracting market by means of BOT, BOOT and PPP among others to drive its major engineering business. Besides, the Company also utilized the Group's advantages to promote the development of its system debugging, operation, maintenance and equipment businesses and push forward transformation and upgrading of enterprises.
- (2) Centering around the goal of building a "digital intelligent power station and information-based smart enterprise" with international competitiveness, the Company utilized multiple means such as mergers and acquisitions, and made functional investment in asset-light and intelligent target enterprises or target enterprises with high technical content, high added value, and sound market prospect both domestically and internationally, including waterworks and hydropower as well as 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 high-end equipment manufacturers in clean energy, smart grids, energy-saving and environmental protection sectors, so as to improve the Company's industrial chain of the major engineering industry and enterprise functions, drive engineering business development and enhance international operation capabilities.

In 2018, the Company did not hold any significant investment projects exceeding the net assets of the Company by 10% and are required to be considered and approved by the Board.

12 GEARING RATIO

As at 31 December 2018, the gearing ratio of the Company was 117.7%, representing a decrease of 3.6 percentage points as compared to 121.3% for the same period of 2017. Gearing ratio represents interest-bearing debts divided by total equity at the end of the year.

13 ACQUISITION AND DISPOSAL OF SUBSIDIARIES

Details of acquisition and disposal of subsidiaries by the Company in the year ended 31 December 2018 are set out in notes 44 to the "Consolidated Financial Statements" of this annual report. There is no material disposal of subsidiaries in the year.

14 SIGNIFICANT INTANGIBLE ASSETS

Details of the significant intangible assets of the Company for the year ended 31 December 2018 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 2018.

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(s)
The Board	Wang Jianping	58	Chairman of the Board and Executive Director
	Ding Yanzhang	54	Vice chairman of the Board, Executive Director and General Manager
	Zhang Xianchong ⁽⁷⁾	59	Executive Director and Deputy General Manager
	Ma Chuanjing	61	Non-executive Director
	Liu Xueshi	53	Non-executive Director
	Si Xinbo	51	Non-executive Director
	Ding Yuanchen ⁽¹⁾	69	Independent Non-executive Director
	Wang Bin ⁽²⁾	64	Independent Non-executive Director
	Zheng Qiyu	64	Independent Non-executive Director
	Cheung Yuk Ming	65	Independent Non-executive Director
The Supervisory Committee	Wang Zengyong	57	Chairman of the Supervisory Committee
	Lian Yongjiu ⁽³⁾	59	Employee Representative Supervisor and the Head of Auditing Department
	Li Fangyi ⁽⁴⁾	54	Employee Representative Supervisor and the Head of Auditing Department
	Kan Zhen	55	Employee Representative Supervisor and the Head of the Party-Masses Work Department
	Fu Dexiang	68	Supervisor
	Wei Zhongxin	65	Supervisor
Senior Management	Ding Yanzhang	54	Vice chairman of the Board, Executive Director and General Manager
	Zhang Xianchong ⁽⁷⁾	59	Executive Director and Deputy General Manager
	Nie Kai ⁽⁵⁾	60	Deputy General Manager
	Wu Chunli	55	Deputy General Manager
	Yu Gang	57	Deputy General Manager
	Zhou Hougui	56	Deputy General Manager
	Lan Chunjie ⁽⁶⁾	60	Deputy General Manager
	Chen Guanzhong	49	Chief Accountant
	Wu Yun	54	Deputy General Manager
	Duan Qirong	57	Secretary to the Board and the Joint Company Secretary

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Notes:

- (1) The proposal of Mr. Ding Yuanchen as a member of the Nomination Committee of the second Board of the Company was considered and approved at the sixth meeting of the second session of the Board held on 16 November 2018.
- (2) Mr. Wang Bin passed away in August 2018.
- (3) Mr. Lian Yongjiu resigned as the employee representative supervisor on 14 June 2018.
- (4) Mr. Li Fangyi was appointed as the employee representative supervisor through democratic election on 14 June 2018.
- (5) The resignation of Mr. Nie Kai as the deputy general manager of the Company was considered and approved at the fifth meeting of the second session of the Board held on 30 August 2018.
- (6) The resignation of Mr. Lan Chunjie as the deputy general manager of the Company was considered and approved at the fourth meeting of the second session of the Board held on 28 June 2018.
- (7) 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.

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

1 BOARD OF DIRECTORS

Executive Directors

Mr. Wang Jianping

Aged 58, 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 54, 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. Zhang Xianchong

Aged 59, is a professor-level senior engineer and obtained a master's degree in engineering. He joined the Group in 2011, and is currently an executive Director of the Company. Mr. Zhang started his career in 1982, and served as the head of the Cadres Office under the Personnel and Education Department of the Ministry of Electric Power (電力部人事教育司幹部處), the deputy director of Human Resources Bureau of State Power Corporation of China (國家電力公司人事勞動局), the deputy director of the Human Resources and Directors Department of State Power Corporation of China (國家電力公司人事與董事部), the general manager of China Electric Power Technology IMP. EXP. Corporation (中國電力技術進出口公司), the deputy general manager of Sichuan Electric Power Corporation (四川省電力公司), the general manager of Jilin Province Electric Power Company Limited (吉林省電力有限公司), the deputy chief engineer of State Grid Corporation of China (國家電網公司) and the deputy general manager of China Energy Engineering Group Co., Ltd., the deputy general manager of China Energy Engineering Corporation Limited.

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Non-executive Directors

Mr. Ma Chuanjing

Aged 61, 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 Sinochem Group Co., Ltd. (中國中化集團公司) and 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).

Mr. Liu Xueshi

Aged 53, 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 51, 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 the 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 director of the General Department of Training Development (Education & Training Bureau) of China Development Bank (國家開發銀行), director of the No. 4 and No. 3 Audit Divisions of the Audit Appraisal Bureau and director of the Department of Audit Affairs Management of China Development Bank (國家開發銀行), and vice president of Qinghai Branch of China Development Bank.

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Independent Non-executive Directors**Mr. Ding Yuanchen**

Aged 69, 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 Co., Ltd. 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. Zheng Qiyu

Aged 64, is a national first-class construction engineer and obtained a master's degree in economics and engineering. He joined the Group in 2014, and is currently an independent non-executive Director and the chairman of the Remuneration and Assessment Committee of the Board of the Company. Mr. Zheng served as the general manager of China Geo-Engineering Company (中國地質工程公司), the chairman of the board of directors and the general manager of China Geo-Engineering Corporation (中國地質工程集團公司), the deputy general manager of China New Era Group Corporation (中國新時代控股(集團)公司), and the deputy general manager of China Energy Conservation and Environmental Protection Group (中國節能環保集團公司), the chairman of the board of directors of China Geothermal Industry Development Group Limited (中國地熱能產業發展集團有限公司) (Stock Code: 8128.HK).

Mr. Cheung Yuk Ming

Aged 65, is a member of the Hong Kong Institute of Certified Public Accountants, the Chartered Institute of Arbitrators, 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).

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

2 THE SUPERVISORY COMMITTEE

Mr. Wang Zengyong

Aged 57, 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 China Power Engineering Consulting Group Beijing Luosida Science and Technology Development Co., Ltd. (中電工程北京洛斯達科技發展有限公司); and the head of the general office (office of the board of directors) of Energy China Group.

Mr. Li Fangyi

Aged 54, is a professor-level senior engineer. He joined the Group in 1983, and is currently the employee representative supervisor and head of the audit department (Office of the Supervisory Committee) of the Company. 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 55, 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.

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Fu Dexiang

Aged 68, senior accountant, 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 65, 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).

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

3 SENIOR MANAGEMENT

Mr. Ding Yanzhang

Aged 54, 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 55, professor-level engineer, obtained a bachelor's degree in hydrogeology. He joined the Group in 1999, 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 57, professor-level senior engineer, 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 Corporation (中國電力工程顧問集團公司), 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..

PROFILE OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Zhou Hougui

Aged 56, professor-level senior engineer, 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 49, senior accountant, 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 Corporation (中國電力工程顧問集團公司), and the deputy chief accountant and chief accountant of China Energy Engineering Group Co., Ltd..

Mr. Wu Yun

Aged 54, 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 and research division, director and general manager assistant 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 57, senior economist, 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 director of China Energy Engineering Group Equipment Co., Ltd. (中國能建集團裝備有限公司) and China Gezhouba Group Co., Ltd., respectively. Mr. Duan started his career in 1982, and served as deputy head and head of the Party Committee Office of CGGC Group, 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..

REPORT OF THE BOARD

1 PRINCIPAL ACTIVITIES

The Company is a global comprehensive service provider engaged in construction project planning and consultancy, survey and design, construction and contracting, industrial manufacturing and investment operations, and is one of the largest integrated solution providers in the electric power industry both domestically and internationally. The Company is determined to become a “scientific, managerial, international and diversified” engineering company with international competitiveness.

2 BUSINESS REVIEW

In 2018, the Company grasped the development trend, followed the development law, comprehensively implemented policies, and continued to develop steadily and make progress on the basis of sustained and rapid development in recent years. Over the past year, the Company has adhered to strategic guidance, maintained strategic strength, focused on the development goal of building a “industry-leading, world-class” internationally competitive engineering company, and vigorously pursued high-quality development. The comprehensive strength of the Company has continued to increase; we have adhered to deepening reforms, steadily implemented the adjustment of organization structure, and further optimized the resource allocation; by adhering to the transformation and development, the business model was more complete, the business structure was more reasonable, and the development capability was steadily improved; by adhering to the standardized operations, the management system was more complete, the management mechanism was continuously improved, and the management and control capabilities were significantly improved.

Details of the business development, future development and outlook of the Company in 2018 are set out in the “Business Overview” of this annual report.

Details of the analysis of operation performance of the Company, risk analysis, details of employees and the subsequent events after the balance sheet date for the year of 2018 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 for the year of 2018 are set out in the “Report of the Board” of this annual report.

Details of the compliance with the relevant laws and regulations which have a significant impact on the Company for the year of 2018 are set out in the “Report of the Board” and the “Report of the Supervisory Committee” of this annual report.

REPORT OF THE BOARD

3 FINANCIAL PERFORMANCE

Profit of the Company for the year ended 31 December 2018 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 DIVIDEND

The Board recommended the payment of a final dividend of RMB0.0306 per share (tax inclusive) for the year to shareholders appear on the register of members of the Company on 11 July 2019 (Thursday). Payment will be made on 26 August 2019 subject to the approval by the shareholders at the annual general meeting to be held on 28 June 2019.

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, accounting for 69.15% of the total shares; H shares were 9,262,436,000, accounting for 30.85% of the total shares. Details of the share capital of the Company as at 31 December 2018 are set out in note 36(c) to the “Consolidated Financial Statements” of this annual report.

7 RESERVE

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

8 DISTRIBUTABLE RESERVE

The details of distributable reserve of the Company as at 31 December 2018 is set out in the “Consolidated Financial Statements” of this annual report.

REPORT OF THE BOARD

9 USE OF PROCEEDS FROM THE LISTING

The Company raised total net proceeds of RMB10,890.22 million from the initial public offering on 10 December 2015 and exercise of over-allotment option on 8 January 2016. Pursuant to the Resolution on Adjustment to the Categories of the Use of Proceeds of the Company was considered and approved at the nineteenth meeting of the first session of the Board, the Company will transfer the proceeds and interests used for power and infrastructure construction and contracting projects abroad into those for power and infrastructure construction and contracting projects in mainland China, the amount of proceeds was adjusted to RMB10,986 million. Upon the consideration and approval at the third meeting of the second session of the Board, the proceeds RMB3,262.16 million in 2018 was paid in accordance with the proposal of the prospectus. As of 31 December 2018, RMB3,262.16 million as the actual payment according to the approved proposal was paid, in which:

- (1) RMB2,239 million being used as actual payment for the domestic and international power infrastructure engineering and construction projects.
- (2) RMB557 million being used as actual payment for purchasing equipment for core business.
- (3) RMB283 million being used as actual payment for investing in necessary fixed assets for expansion and upgrading of production capacities.
- (4) RMB156.25 million being used as actual payment for the key project for improving the scientific and research and management level of the Company.
- (5) RMB26.91 million being used as actual payment of working capital for general corporate purpose.

As of 31 December 2018, the net proceeds were applied as accumulated expenses in aggregate of RMB10,986 million according to the use of proceeds as set out in the prospectus and such proceeds had been fully utilized for payments.

10 MAJOR CUSTOMERS AND SUPPLIERS

For the year ended 31 December 2018, the sales revenue from the five largest customers of the Company accounted for approximately 1.43%, 1.07%, 0.89%, 0.65%, 0.60% of the total revenue of the Company respectively, totally representing 4.64% of the total revenue of the Company.

For the year ended 31 December 2018, the purchase amount from the five largest suppliers of the Company accounted for approximately 0.31%, 0.31%, 0.26%, 0.25%, 0.22% of the aggregate amount of the procurement of goods, the procurement of subcontracts and other costs of the Company respectively, totally representing 1.35% of the total cost of the Company.

None of the Directors, supervisors and their close 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.

REPORT OF THE BOARD

11 SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

The details of the principal subsidiaries, joint ventures and associates of the Company for the year ended 31 December 2018 are set out in notes 16, 17 and 18 to the “Consolidated Financial Statements” of this annual report, respectively.

12 DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

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

Name	Position(s)	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	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
Wang Bin ⁽¹⁾	Independent Non-executive Director	28 December 2017
Zheng Qiyu	Independent Non-executive Director	28 December 2017
Cheung Yuk Ming	Independent Non-executive Director	28 December 2017

Note:

- (1) Mr. Wang Bin passed away in August 2018.

The table below sets out certain information of the supervisors during the Reporting Period:

Name	Position(s)	Date of appointment
Wang Zengyong	Chairman of the Supervisory Committee	28 December 2017
Lian Yongjiu ⁽¹⁾	Employee Representative Supervisor	28 December 2017
Li Fangyi ⁽²⁾	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

Notes:

- (1) Mr. Lian Yongjiu resigned as employee representative supervisor on 14 June 2018.
- (2) Mr. Li Fangyi was appointed as the employee representative supervisor through democratic election on 14 June 2018.

REPORT OF THE BOARD

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

Name	Position(s)	Date of appointment
Ding Yanzhang	Vice chairman of the Board, Executive Director and General Manager	28 December 2017
Zhang Xianchong ⁽³⁾	Executive Director and Deputy General Manager	28 December 2017
Nie Kai ⁽¹⁾	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
Lan Chunjie ⁽²⁾	Deputy General Manager	28 December 2017
Chen Guanzhong	Chief Accountant	28 December 2017
Wu Yun	Deputy General Manager	28 December 2017
Duan Qirong	Secretary to the Board and the Joint Company Secretary	28 December 2017

Notes:

- (1) The resignation of Mr. Nie Kai as the deputy general manager of the Company was considered and approved at the fifth meeting of the second session of the Board held by the Company on 30 August 2018.
- (2) The resignation of Mr. Lan Chunjie as the deputy general manager of the Company was considered and approved at the fourth meeting of the second session of the Board held by the Company on 28 June 2018.
- (3) 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, Mr. Zheng Qiyu 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.

13 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.

REPORT OF THE BOARD

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)	Subtotal (RMB)
Directors:					
Wang Jianping	206,800.00	34,932.00	58,222.80	684,212.33	984,167.13
Ding Yanzhang	206,800.00	34,932.00	58,222.80	684,212.33	984,167.13
Zhang Xianchong	186,120.00	34,932.00	58,222.80	659,310.00	938,584.80
Ma Chuanjing	-	-	-	-	-
Liu Xueshi	-	-	-	-	-
Si Xinbo	-	-	-	-	-
Ding Yuanchen	60,000.00	-	-	-	60,000.00
Wang Bin ⁽¹⁾	40,000.00	-	-	-	40,000.00
Zheng Qiyu	60,000.00	-	-	-	60,000.00
Cheung Yuk Ming	122,004.00	-	-	-	122,004.00
Supervisors:					
Wang Zengyong	373,624.68	34,932.00	58,222.80	444,216.6	910,996.08
Lian Yongjiu	207,718.63	19,692.00	32,821.80	283,784.65	544,017.08
Li Fangyi	137,728.35	15,240.00	25,401.00	121,788.55	300,157.90
Kan Zhen	345,418.56	34,932.00	58,222.80	420,404.76	858,978.12
Fu Dexiang	54,000.00	-	-	-	54,000.00
Wei Zhongxin	54,000.00	-	-	-	54,000.00
Senior Management:					
Ding Yanzhang	206,800.00	34,932.00	58,222.80	684,212.33	984,167.13
Zhang Xianchong	186,120.00	34,932.00	58,222.80	659,310.00	938,584.80
Nie Kai ⁽²⁾	124,080.00	22,740.00	37,902.00	561,850.00	746,572.00
Wu Chunli	186,120.00	34,932.00	58,222.80	563,910.00	843,184.80
Yu Gang	185,086.00	34,932.00	58,222.80	655,605.58	933,846.38
Zhou Hougui	185,086.00	34,932.00	58,222.80	650,305.58	928,546.38
Lan Chunjie ⁽³⁾	92,543.00	16,644.00	27,741.60	532,213.00	669,141.60
Chen Guanzhong	185,086.00	34,932.00	58,222.80	655,605.58	933,846.38
Wu Yun	184,052.00	34,932.00	58,222.80	330,835.18	608,041.98
Duan Qiurong	371,424.00	34,932.00	58,222.80	446,417.28	910,996.08

REPORT OF THE BOARD

Notes:

- (1) Mr. Wang Bin passed away on 15 August 2018.
- (2) Mr. Nie Kai resigned as the deputy general manager of the Company on 30 August 2018. Mr. Lan Chunjie resigned as the deputy general manager of the Company on 28 June 2018.
- (3) Mr. Lian Yongjiu resigned as employee representative supervisor of the Company on 14 June 2018. Mr. Li Fangyi was appointed as the employee representative supervisor of the Company on 14 June 2018.
- (4) Disclosure information is the pre-tax salary (including the previous annual remuneration issued in 2018) issued by the Directors, supervisors and senior management personnel of the Company during the Reporting Period, and the final remuneration of the senior management personnel approved by the State-owned Assets Supervision and Administration Commission of the State Council for 2018 (excluding the previous annual remuneration issued in 2018) has not yet been determined. After confirmation, a supplementary announcement will be issued and disclosed.

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

As at 31 December 2018, 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 2018, 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 2018 to 22 November 2019 in an amount of US\$40 million in accordance with Provision A.1.8 of the Corporate Governance Code. Except for such insurances, 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.

REPORT OF THE BOARD

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 2018, 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 position 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⁾⁽³⁾	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	—
China Reform Holdings Corporation Ltd. (中國國新控股有限責任公司) ⁽⁴⁾	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) ⁽⁴⁾	H Shares	Interest of controlled corporation	633,704,000 (L)	2.11	—	6.84
		Beneficial owner	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) ⁽⁴⁾	H Shares	Beneficial owner	633,704,000 (L)	2.11	—	6.84
Buttonwood Investment Holding Company Ltd. ⁽⁵⁾	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) ⁽⁵⁾	H Shares	Beneficial owner	1,462,338,000 (L)	4.87	—	15.79
Central Huijin Investment Ltd. ⁽⁶⁾	H Shares	Interest of controlled corporation	961,300,000 (L)	3.20	—	10.38
China Construction Bank Corporation ⁽⁶⁾	H Shares	Investment manager	961,300,000 (L)	3.20	—	10.38
State Grid Corporation of China ⁽⁷⁾	H Shares	Interest of controlled corporation	974,892,000 (L)	3.25	—	10.53
State Grid International Development Co., Ltd. ⁽⁷⁾	H Shares	Interest of controlled corporation	974,892,000 (L)	3.25	—	10.53
State Grid International Development Limited ⁽⁷⁾	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

REPORT OF THE BOARD

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 approximate percentage of 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 2018.
- (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) The Company was notified by Energy China Group that as at 31 December 2018, it held 306,275,000 H shares, representing approximately 3.31% of the total issued H shares of the Company. Pursuant to the SFO, the shareholders of the Company shall only submit the disclosure form for the equity interest held subject to fulfilling certain conditions.
- (4) 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).
- (5) These shares are directly held by Silk Road Fund Co., Ltd. (絲路基金有限責任公司). Buttonwood Investment Holding Company Ltd. holds 65% equity interests in Silk Road Fund Co., Ltd. (絲路基金有限責任公司). Therefore, Buttonwood Investment Holding Company Ltd. is deemed to be interested in shares held by Silk Road Fund Co., Ltd. (絲路基金有限責任公司).
- (6) 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.
- (7) 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.; and State Grid International Development Co., Ltd. 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

REPORT OF THE BOARD

22 COMPETING BUSINESSES

Retained Business of Energy China Group: the competition between the Company and the retained business of Energy China Group namely 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 China Energy Engineering Group Shanxi Electric Power No. 2 Construction Company (中國能源建設集團山西省電力建設二公司) is limited for the following reasons:

Beijing Electric Power Construction Company (北京電力建設有限公司) is engaged in the construction of power engineering projects only, whereas the Company's business consists of five segments, including survey, design and consultancy, 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. That company is principally conducting business in Hebei Province. However, Hebei Province is not the main market of the Company. Our company business covers a range of areas in China and foreign countries. In 2018, the revenue and the contract amount of that company are quite minimal which compared with the revenue and the contract amount of the construction and contracting segment of the Company as of the same period.

Shanxi Electric Power No. 2 Construction Company (山西省電力建設二公司) has undertaken liquidation and except few outstanding signed contracts, all other businesses have been terminated and staff diversion and allocation are basically completed.

To safeguard the interests of the Company and its shareholders, the Company has entered into the custodian service agreement with Energy China Group. Pursuant to which the Company can exercise various management and operation rights over the above-mentioned two companies, 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 the Company and the above-mentioned two companies.

To 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, and EPPE Company is a subsidiary of Energy China Group, thus a connected person of our Company as defined under Chapter 14A of the Listing Rules; Finance Company is a subsidiary of the Company. Thus, the following transactions in this chapter constitute the connected transactions under the Listing Rules.

23.1 Financial Services Framework Agreement 2018-2020

As considered and approved at the second meeting of the second session of the Board, 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 them, the maximum daily credit balance limit provided by the 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.

REPORT OF THE BOARD

In 2018, the maximum daily credit balance provided by Finance Company to Energy China Group and its subsidiaries was RMB250 million; Finance Company charged RMB0 for other financial services provided to Energy China Group and its subsidiaries.

23.2 Daily Production and Operation Framework Agreement 2018-2020

As considered and approved at the second meeting of the second session of the Board, 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 Company and its subsidiaries as well as Energy China Group and its subsidiaries will provide each other with daily production and operation services including project survey and design, planning and consultancy, labor services, integrated information services, construction, installation and other daily services related to the principal businesses. Among them, 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 2018, the total fee for services provided to the Group by Energy China Group and its subsidiaries was RMB216 million; the total fee for services provided to Energy China Group and its subsidiaries by the Group was RMB27 million.

23.3 Property Lease Framework Agreement 2018-2020

As considered and approved at the second meeting of the second session of the Board, 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 2018, the actual rents of the Group's leased properties from Energy China Group and its subsidiaries amounted to RMB167 million.

23.4 Capital and Share Increase Agreement of Finance Company

As considered and approved at the seventh meeting of the second session of the Board, the agreement in relation to the capital increase to Finance Company was entered into between the Company, CPE, 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 RMB82 million to the Finance Company (the final amounts shall be subject to the filings required by the SASAC 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, China Gezhoubu Group Co., Ltd., China Gezhoubu Group Stock Company Ltd. and China Energy Engineering Group Planning and Design Co., Ltd., 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. The relevant capital increase to Finance Company shall be subject to the approval of the relevant institutions of China Banking and Insurance Regulatory Commission and has not been implemented during the Reporting Period.

REPORT OF THE BOARD

The above transactions comply with the relevant requirements in Chapter 14A of the Listing Rules. Save as disclosed in this annual report, there is 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 2018. The above connected transactions have been included in the transactions between the ultimate holding company and the fellow subsidiaries under the sub-table of the significant related party transactions of note 43 to the "Consolidated Financial Statements" of this annual report.

23.5 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 are belong 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 are carried out pursuant to the agreed terms of the relevant transactions and in the interests of the listed issuer's shareholders as a whole.

23.6 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 letters containing their findings and conclusions in respect of the continuing connected transactions. Copies of the auditors' letters have 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.

REPORT OF THE BOARD

- (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 2018, 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 INTEREST INCENTIVE POLICY

The Company comprehensive 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 based on the remuneration standard stipulated by the SASAC under the State Council, the remuneration of the executive Directors who are also senior management based on the results of their performance appraisal and the relevant regulatory requirements on remuneration.

REPORT OF THE BOARD

The implementation of the equity interest incentive during the Reporting Period is as follows:

On 21 November 2016, "Initial Grant for the Restricted Share Incentive Scheme of China Energy Engineering Corporation Limited" (《中國能源建設股份有限公司限制性股票激勵計劃首次授予方案》) was implemented upon the consideration at the twelfth meeting of the first session of the Board of the Company. The scheme participants shall include the Directors, senior management and core technical and management personnel who directly influence the overall business performance and sustainable development of the Company. As the SASAC requires the heads of the central government enterprises not to participate in equity interest incentive schemes, the initial grant did not include the Directors and senior management under the administration of the party committee of SASAC. The number of grantees under the initial grant was 542 and the total number of shares granted thereunder was 287.50 million. 516 persons were actually granted, and the number of shares granted was 273.674 million, accounted for 0.912% of the total issued share capital of the Company, as detailed in the table below. The scheme participants paid the subscription amounts based on the granted amount multiplied by the grant price (HK\$0.66 per share).

No.	Name	Position(s)	Number of shares granted (0'000 shares)	Proportion to the total amount granted	Proportion of the target shares to the total share capital
1	Duan Qiurong	Secretary to the Board	80	0.29%	0.003%
2	Middle-level staff and core staff (515 persons)		27,287.4	99.71%	0.909%
Restricted shares are granted to 516 in total			27,367.4	100%	0.912%

On 16 November 2018, as considered and approved by the sixth meeting of the second session of the Board of the Company in 2018, the target of the Company's performance for the first period of unlocking under the Incentive Scheme has been reached, of which 481 has fulfilled the conditions for this unlocking, 83.994 million Restricted Shares granted to them were unlocked on 22 November 2018 (212,000 shares which had been awarded to 6 persons and transferred back to the entrusted management agency were deducted, as they were partially unlocked due to the results of their personal performance assessment). As of 31 December 2018, pursuant to the Restricted Share Incentive Scheme, 5.618 million shares which had been granted to 11 persons were transferred back to the entrusted management agency; 3.566 million shares which had been granted to 22 persons were transferred back to the entrusted management agency as they failed to reach the unlocking conditions due to the results of their business performance assessment; 366,000 shares which had been granted to 2 persons suspended unlocking.

On 21 November 2016, the Secretary to the Board, Duan Qiurong, was initially granted 800,000 restricted shares at a price of HK\$0.66. 264,000 shares were unlocked as at 31 December 2018.

Save for the above-mentioned Restricted Share Incentive Scheme, the Company did not implement any share option scheme during 2018.

29 STAFF RETIREMENT BENEFITS

Details of the staff retirement benefits of the Company are set out in note 33 to the "Consolidated Financial Statements" of this annual report.

REPORT OF THE BOARD

30 DONATIONS

The Company made donations in a total amount of RMB8.453 million in 2018. 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 CODE OF CORPORATE GOVERNANCE

The Company has complied with all the code provisions set out in the Code of Corporate Governance 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 and BDO China Shu Lun Pan Certified Public Accountants LLP as its international and domestic auditors of the Company, respectively, for the financial statements for the year ended 31 December 2018.

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 State Council, 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 onsite 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 of Directors, supervisors and chief executives and short positions, 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 not any 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.

REPORT OF THE BOARD

34 ENVIRONMENTAL POLICY AND PERFORMANCE OF THE COMPANY

The Company has formulated the Regulations on Management of Environmental Protection and Energy Conservation and Emission Reduction, the Assessment Management Practices of Environmental Protection and Energy Conservation and Emission Reduction and the Management Measures for the Handling of Environmental Incident Reporting and Investigation and other systems, enacted the Guidance on Strengthening the Special Fund Management for Energy Conservation and Emission Reduction and the Guidelines for Creating the Green Construction Demonstration Projects and issued and revised the Contingency Plans for Environmental Contingencies. In 2018, focusing on the main business and new business environment management, we will sort out the environmental protection laws, regulations and management requirements of the three levels of the country, industry and Company, and issue a list of effective energy conservation and environmental protection laws and regulations and management requirements, guide and promote all units to carry out environmental protection work in accordance with laws and regulations. By signing the Special Target Responsibility Document of Energy Conservation and Emission Reduction layer upon layer, the Company has implemented responsibilities to all entities and work posts, made comprehensive check and evaluation to the annual responsibility targets as well as the implementation of work, and incorporated the results of the appraisal into the business performance evaluation of responsible persons of the enterprise, and linked with their performance-based remuneration, for the effective implementation of responsibilities in energy conservation and environmental protection. 2018 witnessed neither a single environmental incident nor energy conservation and emission reduction non-compliance.

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.

Reference is made to Projects in Iran on page 232 of the Company's prospectus and the contract entered into for the construction and operation of sewage collection and treatment systems and pumping station projects signed by the subsidiaries of the Company in January 2018 (the project is located in Iran with a contract value of approximately US\$36.4 million and expected to be completed by July 2020). According to the legal advice provided by professional lawyers, none of the above items involve the target behaviors indicated in the OFAC guidelines, as the US authorities may regard the activities that constitute the sanctioned activities are less risky to be sanctioned. The Company has not received any inquiries from any relevant agencies in the US regarding the above projects.

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.

REPORT OF THE BOARD

37 REVIEW OF ANNUAL REPORT

The Audit Committee has reviewed the Company's annual results of 2018, and the financial statements for the year ended 31 December 2018 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徵管問題的通知》(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/arrangements 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/arrangements 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.

REPORT OF THE BOARD

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》), 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.

By order of the Board
Wang Jianping
Chairman of the Board

REPORT OF THE SUPERVISORY COMMITTEE

1 BASIC COMPOSITION OF THE SUPERVISORY COMMITTEE

1.1 Basic information

As of 31 December 2018, the Supervisory Committee consists of five members, namely Mr. Wang Zengyong, Mr. Li Fangyi, Mr. Kan Zhen, Mr. Fu Dexiang and Mr. Wei Zhongxin, among whom Mr. Wang Zengyong is the chairman of the Supervisory Committee, Mr. Li Fangyi and Mr. Kan Zhen are employee representative supervisors. The term of office of supervisors is three years. Supervisors can be reappointed upon re-election after the term of office expires.

1.2 Changes in supervisors

Mr. Lian Yongjiu resigned as the employee representative supervisor on 14 June 2018.

Mr. Li Fangyi was appointed as the employee representative supervisor through democratic election on 14 June 2018.

Details of the existing supervisors of the Company are set out in the “Profile of Directors, Supervisors and Senior Management” of this annual report.

2 MEETINGS OF THE SUPERVISORY COMMITTEE

In 2018, the Supervisory Committee convened seven meetings, the details are as follows:

- The second meeting of the second session of the Supervisory Committee was held on 28 January 2018. All members of the Supervisory Committee attended the meeting, of which the supervisor Mr. Kan Zhen entrusted the supervisor Mr. Lian Yongjiu to attend the meeting on his behalf. Mr. Wang Zengyong, the Chairman of the Supervisory Committee, served as the convener. Three resolutions were considered and approved at the meeting by voting.
- The third meeting of the second session of the Supervisory Committee was held on 29 March 2018. All members of the Supervisory Committee attended the meeting, of which the supervisor Mr. Kan Zhen entrusted the supervisor Mr. Lian Yongjiu to attend the meeting on his behalf. Mr. Wang Zengyong, the Chairman of the Supervisory Committee, served as the convener. Six resolutions were considered and approved at the meeting by voting.
- The fourth meeting of the second session of the Supervisory Committee was held by way of communication on 30 May 2018. One resolution was considered and approved at the meeting by voting of the members of the Supervisory Committee.
- The fifth meeting of the second session of the Supervisory Committee was held on 28 June 2018. All members of the Supervisory Committee attended the meeting, with Mr. Wang Zengyong, the Chairman of the Supervisory Committee, being the convener. One resolution was considered and approved at the meeting by voting.

REPORT OF THE SUPERVISORY COMMITTEE

- The sixth meeting of the second session of the Supervisory Committee was held on 30 August 2018. All members of the Supervisory Committee attended the meeting, of which the supervisor Mr. Wei Zhongxin entrusted the supervisor Mr. Fu Dexiang to attend the meeting on his behalf. Mr. Wang Zengyong, the Chairman of the Supervisory Committee, served as the convener. Two resolutions were considered and approved at the meeting by voting.
- The seventh meeting of the second session of the Supervisory Committee was held on 16 November 2018. All members of the Supervisory Committee attended the meeting, with Mr. Wang Zengyong, the Chairman of the Supervisory Committee, being the convener. Two resolutions were considered and approved at the meeting by voting.
- The eighth meeting of the second session of the Supervisory Committee was held by way of communication on 27 December 2018. One resolution was considered and approved at the meeting by voting of the members of the Supervisory Committee.

3 SUPERVISORY COMMITTEE'S PRESENCE ON OTHER MEETINGS

On 28 June 2018, the Supervisory Committee attended the annual general meeting of the Company for the year 2017.

In 2018, the Supervisory Committee attended 5 Board meetings and listened to 30 resolutions which were considered and approved by the Board.

4 BASIC EVALUATION OF THE SUPERVISORY COMMITTEE ON PERFORMANCE OF THE BOARD AND SENIOR MANAGEMENT

During the Reporting Period, by the supervision on the Directors and senior management of the Company, Supervisory Committee was of the view that: the Board of the Company was able to duly perform its duties in strict compliance with the requirements under the Company Law, the Listing Rules and the Articles of Association and of relevant laws and regulations, and operate in accordance with laws. The major business decision making procedures of the Company were legitimate and effective; the Directors and senior management of the Company performed their duties strictly in accordance with the national laws and regulations, the Articles of Association and resolutions of the general meeting and the Board. The Supervisory Committee had not found any acts of Directors and senior management being against the interests of the Company and the shareholders or in breach of laws and regulations.

REPORT OF THE SUPERVISORY COMMITTEE

5 INDEPENDENT OPINIONS OF THE SUPERVISORY COMMITTEE ON OPERATION OF THE COMPANY

5.1 Independent Opinions on the Financial Position of the Company

The financial report of the year is prepared in accordance with International Financial Reporting Standards and has been audited by KPMG, which reflected the actual financial position and operation results of the Company.

5.2 Independent Opinions on Disclosure of Information by the Company

During the Reporting Period, the Supervisory Committee attended the annual general meeting and the Board meeting and listened to the report about information disclosure. The Supervisory Committee believed that the information disclosure procedures were in compliance with the Administrative Provisions on Information Disclosure of China Energy Engineering Corporation Limited (《中國能源建設股份有限公司信息披露事務管理規定》) and complied with the regulatory requirements of the place in which the Company is listed.

5.3 Independent Opinions on the Connected Transactions of the Company

During the Reporting Period, the Supervisory Committee conducted supervision on the connected transactions of the Company and was of the view that the approval and disclosure procedure of the connected transactions of the Company were in compliance with the relevant laws and regulations such as the Listing Rules and requirements of the Articles of Association, and the pricing of which was fair and reasonable.

5.4 Independent Opinions on the Management and Use of Proceeds of the Company

During the Reporting Period, the Supervisory Committee conducted supervision on the management and use of proceeds of the Company. The Supervisory Committee believed that the Company managed and used the proceeds in strict compliance with the Listing Rules and relevant requirements under the Administrative Measures for Fundraising of China Energy Engineering Corporation Limited (《中國能源建設股份有限公司募集資金管理辦法》).

6 WORKING PLAN

In 2019, the Supervisory Committee will strictly comply with the relevant requirements under the Company Law, Securities Law, Listing Rules and Articles of Association to continue perfecting the corporate governance structure of the Company as a legal person and further improve the standard of corporate governance. The Supervisory Committee will continually strengthen supervision functions and will step up its efforts in supervision of financial position, information disclosure, connected transactions and management and use of proceeds so as to better safeguard the interests of shareholders.

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.

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 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 CODE PROVISIONS OF THE 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 none of the Directors or supervisors of the Company hold shares of the Company or breach any of the regulations therein.

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 number of 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.

CORPORATE GOVERNANCE REPORT

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 jointly holding 3% or more of the shares of the Company are entitled for proposing resolutions to the Company. Shareholders individually or jointly 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 supplementary 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 resolutions by voting 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
The annual general meeting of 2017	28 June 2018	Onsite	7	22,955,975,742	76.47%

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

CORPORATE GOVERNANCE REPORT

5 BOARD OF DIRECTORS

5.1 Composition of the Board

During the Reporting Period, the composition of the Board is as follows:

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	WANG Bin	Independent non-executive Director (passed away in August 2018)
9	ZHENG Qiyu	Independent non-executive Director
10	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.

All the Directors of the Company do not have any financial, business, family or other material relationship with each other. The number of the independent non-executive Directors represents one-third of the total number of members of the Board, 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 and Rule 3.10A of the Listing Rules.

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.

CORPORATE GOVERNANCE REPORT

5.2 Board Meetings

In 2018, the Company held six Board meetings in total. A total of 30 resolutions were considered and passed at the meetings, including the 2018 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:

Director(s)	Attendance of Board Meeting				Attendance of General Meeting		
	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 ⁽¹⁾	6	5	1	100%	1	0	0
DING Yanzhang ⁽²⁾	6	5	1	100%	1	1	100%
ZHANG Xianchong ⁽³⁾	6	5	1	100%	1	1	100%
MA Chuanjing ⁽⁴⁾	6	5	1	100%	1	0	0
DING Yuanchen	6	6	0	100%	1	1	100%
WANG Bin ⁽⁵⁾	3	3	0	100%	1	1	100%
ZHENG Qiyu	6	6	0	100%	1	1	100%
CHEUNG Yuk Ming ⁽⁶⁾	6	5	1	100%	1	0	0
LIU Xueshi ⁽⁷⁾	6	3	3	100%	1	1	100%
SI Xinbo	6	6	0	100%	1	1	100%

Notes:

- (1) Mr. WANG Jianping was unable to attend the fourth meeting of the second session of the Board of the Company held on 28 June 2018 due to other work engagements, and designated Mr. DING Yanzhang as proxy to attend and preside over the meeting; Mr. WANG Jianping was unable to attend the annual general meeting of 2017 held on 28 June 2018 due to other work engagements.
- (2) Mr. DING Yanzhang was unable to attend the third meeting of the second session of the Board of the Company held on 29 March 2018 due to other work engagements, and designated Mr. WANG Jianping as proxy to attend the meeting.
- (3) Mr. ZHANG Xianchong was unable to attend the second meeting of the second session of the Board of the Company held on 28 January 2018 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting.
- (4) Mr. MA Chuanjing was unable to attend the fourth meeting of the second session of the Board of the Company held on 28 June 2018 due to other work engagements, and designated Mr. LIU Xueshi as proxy to attend the meeting; Mr. MA Chuanjing was unable to attend the annual general meeting of 2017 held on 28 June 2018 due to other work engagements.
- (5) Mr. WANG Bin passed away in August 2018.
- (6) Mr. CHEUNG Yuk Ming was unable to attend the fourth meeting of the second session of the Board of the Company held on 28 June 2018 due to other work engagements, and designated Mr. Ding Yuanchen as proxy to attend the meeting; Mr. CHEUNG Yuk Ming was unable to attend the annual general meeting of 2017 held on 28 June 2018 due to other work engagements.
- (7) Mr. LIU Xueshi was unable to attend the third meeting of the second session of the Board of the Company held on 29 March 2018 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting; Mr. LIU Xueshi was unable to attend the fifth meeting of the second session of the Board of the Company held on 30 August 2018 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting; Mr. LIU Xueshi was unable to attend the sixth meeting of the second session of the Board of the Company held on 16 November 2018 due to other work engagements, and designated Mr. MA Chuanjing as proxy to attend the meeting;

CORPORATE GOVERNANCE REPORT

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 of not less than fourteen days are given 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, Procedures 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 shareholder meetings and reporting its work to the general meetings;
- Implementing resolutions of the general meeting;
- Deciding on 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 on 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 on the establishment of the internal management organization of the Company;

CORPORATE GOVERNANCE REPORT

- Appointing or removing the general manager and secretary to the Board of the Company; Appointing or removing vice 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 on the establishment of special committees 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 shall be 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 2 special investigations and 1 communication session between the Chairman of the Board and 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 to listen to work reports on a regular basis. The special committees under the Board of Directors listened to work report six times as an effort to stay updated with major issues.

CORPORATE GOVERNANCE REPORT

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 vice 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, preciseness and completeness of such reports.

CORPORATE GOVERNANCE REPORT

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)	Responsibilities and related regulations of directors	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
WANG Bin ⁽¹⁾	1	1	1
ZHENG Qiyu	1	1	1
CHEUNG Yuk Ming	1	1	1
LIU Xueshi	1	1	1
SI Xinbo	1	1	1

⁽¹⁾ Mr. WANG Bin passed away in August 2018.

5.5 Special Committees of the Board

The establishment of the special committees of the Company was approved by the fifth meeting of the first session of the Board held on 3 August 2015, and the change of the session of the Board was completed at the first meeting of the second session of the Board on 28 December 2017.

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 propose advice on aforementioned matters to the Board of Directors.

At the end of the reporting period, the Strategy Committee consists of four members, namely 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 2 resolutions

CORPORATE GOVERNANCE REPORT

and listened to 1 report. The following table shows the attendance of each committee member at the Strategic Committee meetings:

Committee member	Number of required 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; reviewing the structure, size, composition and related qualifications, of the Board of Directors, reviewing the composition of Board of Directors at diversified levels and oversee 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.

In order to foster the continuous and balanced development of the Company, the Nomination Committee has adopted the Board diversity policy, in which set out the policy adopted so as to achieve Board diversity. The Nomination Committee also adopted a Nomination Policy (the "Nomination Policy"), 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 put in sufficient time and effectively performed the duty.
- 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 renewed.
- The candidate submitted the required personal information and letter of consent in prescribed format, agreed to be appointed as a Non-executive director, and agreed to publicly disclose the personal information on any documents or relevant websites in relation to the matters about the election of Non-Executive Directors or anything related.

CORPORATE GOVERNANCE REPORT

- 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 searched and selected the candidate in accordance with the selection criteria of the Nomination Policy.
- If necessary, the Nomination Committee assessed the candidate, including but not limited to the personal interview and background check, etc.
- The Nomination Committee convened the meeting of the Nomination Committee to consider and the matters regarding nomination of the candidate, and forms a resolution.
- The Nomination Committee proposed to convene the general meeting and the Board Meetings to consider and the matters regarding nomination of the candidate, and forms a resolution.
- Appointing the Director(s) in accordance with the resolution 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 Policy and reconsider 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.

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

Committee member	Number of required attendance	Number of attendance in person	Number of attendance by proxy
WANG Jianping	1	1	0
WANG Bin ⁽¹⁾	1	1	0
CHEUNG Yuk Ming	1	1	0
DING Yuanchen ⁽²⁾	0	0	0

Notes:

- (1) Mr. WANG Bin passed away in August 2018.
- (2) Mr. DING Yuanchen was appointed on 16 November 2018.

CORPORATE GOVERNANCE REPORT

5.5.3 Remuneration and Assessment Committee

Major duties of the Remuneration and Assessment Committee include: proposing recommendations to the Board of Directors regarding the overall remuneration policies and structures of Directors and senior management personnel of the Company; formulating the specific compensation packages for all executive Directors and senior management personnel, 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 personnel; 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 executive Directors managed by the SASAC and acting as Directors of the Company is closely related to their positions and business performance assessment and should be differentiated 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 3 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 required attendance	Number of attendance in person	Number of attendance by proxy
ZHENG Qiyu	2	2	0
WANG Bin ⁽¹⁾	1	1	0
CHEUNG Yuk Ming	2	2	0
LIU Xueshi	0	0	2

Note:

(1) Mr. WANG Bin passed away in August 2018.

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:

- 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 questions of its resignation or dismissal;

CORPORATE GOVERNANCE REPORT

- Reviewing and monitoring the external auditor's independence and objectivity and the effectiveness of the audit process in accordance with applicable accounting standards;
- Developing and implementing policy on engaging an external auditor to provide non-audit services;
- Monitoring the truthfulness, completeness and accuracy of the financial statements, reports and accounts of the Company, and reviewing significant financial reporting opinions contained therein;
- Examining the Company's financial controls, internal control and risk management systems;
- Being responsible for the communication between internal audit departments and external auditors in order to ensure coordination between the internal and external auditors;
- Reviewing the financial and accounting policies and practices of the Company;
- Reviewing the risk management strategies and solutions for key risk management issues of the Company;
- Other duties conferred by the Board.

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

In 2018, the Audit Committee convened 6 meetings, considered 12 resolutions and listened to 6 reports. The following table shows the attendance of each committee member at the Audit Committee meetings:

Committee member	Number of required attendance	Number of attendance in person	Number of attendance by proxy
DING Yuanchen	6	6	0
MA Chuanjing	6	5	1
CHEUNG Yuk Ming	6	6	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, lowering the risk of management control 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.

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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 Corporate Governance Functions

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

- Developing and reviewing the Company's policies and practices on corporate governance and making recommendations to the Board;
- Reviewing and monitoring the training and continuous professional development of the Directors and senior management;
- Reviewing and monitoring the Company's policies and practices on compliance with legal and regulatory requirements;
- Developing, reviewing and monitoring the code of conduct and compliance manual applicable to employees and the Directors; and
- 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 members 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 2018, 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. LI Fangyi and Mr. KAN Zhen act as employee representative supervisors.

CORPORATE GOVERNANCE REPORT

In 2018, the Board of Supervisors convened 7 meetings to consider and approve 16 resolutions, including resolutions on the annual report, connected transactions and fundraising of the Company. The following table shows the attendance of each supervisor at the Board of Supervisors meetings during the Reporting Period:

Supervisor	Number of required attendance	Number of attendance in person	Number of attendance by proxy
WANG Zengyong	7	7	0
LIAN Yongjiu ⁽¹⁾	3	3	0
LI Fangyi ⁽²⁾	4	4	0
KAN Zhen	7	5	2
FU Dexiang	7	7	0
WEI Zhongxin	7	6	1

(1) Mr. LIAN Yongjiu resigned as employee representative supervisor on 14 June 2018.

(2) Mr. LI Fangyi was appointed as the employee representative supervisor through democratic election on 14 June 2018.

Other details are set out in the “Report of the Supervisory Committee” of this annual report.

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 distribute 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 accounting standard of the international or overseas listed place (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 assistant manager of listing services division of TMF Hong Kong Limited, as the joint company secretaries of the Company. Ms. Mok Ming Wai resigned as the joint company secretary of the Company on 16 November 2018 because of other work engagements.

Mr. DUAN Qiurong, the joint company secretary and the authorized representative of the Company, is the main internal liaison officer 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.

CORPORATE GOVERNANCE REPORT

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 system 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 2018, 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 businesses to identify and urge the rectification of internal control absence, 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 2018, reviewed the Company's financial declaration system, 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 and 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 AUDITORS' REMUNERATION

The Company has appointed KPMG and BDO China Shu Lun Pan Certified Public Accountants LLP as the international and the domestic auditors, respectively, of the Company.

		RMBO'000
	KPMG (tax included)	BDO China Shu Lun Pan Certified Public Accountants LLP (tax included)
Interim review	388	–
Annual report	760	815
Annual report of Gezhouba Group	–	265
Internal control audit of Gezhouba Group	–	70
Others	120	65
Total	1,268	1,215

CORPORATE GOVERNANCE REPORT

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 pursuant to the requirements. With prudent judgment of information which might constitute to the inside information of the Company, the Company will disclose the discloseable 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 conforms to relevant laws and regulations and applicable accounting standards, and ensure the timely publication of the financial statements of the Company's ability to continue as a going concern.

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 ARTICLES OF ASSOCIATION AND ITS AMENDMENTS

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

14 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 Investors Relations and the Measures on the Further Clarification of Voluntary Information Disclosure of China Energy Engineering Corporation Limited, with an aim to allow investors to further understand the information of the Company. In addition, the Company has set up a relevant department for investors relations, which is responsible for investors' calls, visits and on-site inspections by investors, and coordinates 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 for investors and the Company's website (www.ceec.net.cn). 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 investors' relations.

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 105 to 261, which comprise the consolidated statement of financial position as at 31 December 2018, 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 2018, 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 ("HKSA") 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.

Independent auditor's report

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
<p>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 67% of the Group's revenue for the year ended 31 December 2018.</p>	<p>Our audit procedures to assess accuracy of construction contract accounting estimates included the following:</p> <ul style="list-style-type: none"> • assessing the design, implementation and operating effectiveness of key internal controls which govern the budgeting process and contract revenue recognition;
<p>The Group has initially adopted IFRS 15 on 1 January 2018. Under the transition methods chosen, the Group recognises cumulative effect of the initial application of IFRS 15 as an adjustment to the opening balance of equity at 1 January 2018.</p>	<ul style="list-style-type: none"> • obtaining an understanding of management's assessment of the impact of the adoption of IFRS 15, testing the accuracy of the data used in the calculation of cumulative effect of initial application on a sample basis;
<p>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</p>	<ul style="list-style-type: none"> • selecting a sample of contracts, using a variety of quantitative and qualitative criteria, and performing the following procedures for each contract selected: <ul style="list-style-type: none"> – inspecting the contract and discussing with management to obtain an understanding of the specific terms and risks associated with the individual construction contracts; and
<p>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.</p>	<ul style="list-style-type: none"> – 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;

Independent auditor's report

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.	<ul style="list-style-type: none">• 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 documentation, on a sample basis;• identifying and assessing possible onerous contracts by comparing the total budgeted costs, taking into consideration the actual costs incurred up to 31 December 2018, with the total contract revenue for individual construction contracts as agreed with customers;

Independent auditor's report

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
	<ul style="list-style-type: none"> • assessing the impact of possible management bias in budgeting costs by: <ul style="list-style-type: none"> – 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 2017 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 2018 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 2018 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.

Independent auditor's report

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

The carrying value of the Group's trade receivables and contract assets for construction contracts as at 31 December 2018 totalled RMB97,494 million after deduction of an allowance for expected credit losses of RMB4,646 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.

How the matter was addressed in our audit

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;
- 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 2018 with bank statements and relevant underlying documentation, on a sample basis.

Independent auditor's report

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.

Independent auditor's report

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 HKSAAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in 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 HKSAAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.
- 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.

Independent auditor's report

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

- 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
29 March 2019

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2018 (Expressed in Renminbi)

	Note	2018 RMB'000	2017 (Note (i)) RMB'000
Revenue	4	224,034,347	234,370,110
Cost of sales		(194,270,958)	(206,741,440)
Gross profit		29,763,389	27,628,670
Other income	5	2,406,061	3,095,879
Net impairment losses on financial assets and contract assets	6(a)	(851,503)	–
Other net gains and losses	6(b)	795,350	(245,458)
Selling expenses		(2,371,991)	(2,085,930)
Administrative expenses		(12,014,225)	(11,091,892)
Research and development expenses		(4,003,592)	(3,495,380)
Finance income	7	795,528	715,191
Finance costs	7	(3,827,043)	(3,077,702)
Share of profits of joint ventures	17	304,385	301,386
Share of profits of associates	18	680,450	210,498
Profit before taxation		11,676,809	11,955,262
Income tax	10	(3,125,298)	(2,891,021)
Profit for the year	8	8,551,511	9,064,241
Other comprehensive income for the year:			
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
– Remeasurement of defined benefit obligations	33	(618,640)	894,178
– Income tax relating to remeasurement of defined benefit obligations		8,037	(14,625)
– Equity investments at fair value through other comprehensive income-net movement in fair value reserve (non-recycling)		(435,501)	–
– Income tax relating to equity investments at fair value through other comprehensive income-net movement in fair value reserve (non-recycling)		64,919	–
		(981,185)	879,553
<i>Items that may be reclassified subsequently to profit or loss:</i>			
– Exchange differences on translating foreign operations		(312,108)	(193,944)
– Net fair value loss on available-for-sale financial assets (note (ii))		–	(330,806)
– Reclassification adjustment to profit or loss on disposal of available-for-sale financial assets (note (ii))		–	(543,683)
– Income tax relating to items that may be reclassified subsequently to profit or loss		–	129,441
		(312,108)	(938,992)
Other comprehensive income for the year		(1,293,293)	(59,439)
Total comprehensive income for the year		7,258,218	9,004,802

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2018 (Expressed in Renminbi)

	Note	2018 RMB'000	2017 (Note (i)) RMB'000
Profit for the year attributable to:			
Equity shareholders of the Company		4,570,685	5,261,145
Holders of perpetual capital instruments		717,620	292,447
Non-controlling interests		3,263,206	3,510,649
		8,551,511	9,064,241
Total comprehensive income for the year attributable to:			
Equity shareholders of the Company		3,606,913	5,538,481
Holders of perpetual capital instruments		717,620	292,447
Non-controlling interests		2,933,685	3,173,874
		7,258,218	9,004,802
Earnings per share			
– Basic (RMB cents)	11(a)	15.34	17.58
– Diluted (RMB cents)	11(b)	15.33	17.58

Notes:

- (i) The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).
- (ii) The amount arose under the accounting policies applicable prior to 1 January 2018. As part of the opening balance adjustments as at 1 January 2018, the balance of this reserve has been reclassified to fair value reserve (non-recycling) and will not be reclassified to profit or loss in any future periods. See note 2(c)(i).

The notes on pages 112 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 36(b).

Consolidated Statement of Financial Position

At 31 December 2018 (Expressed in Renminbi)

	Note	2018 RMB'000	2017 (Note) RMB'000
Non-current assets			
Property, plant and equipment	12	34,819,904	30,781,364
Prepaid lease payments	13	9,048,720	8,130,103
Investment properties	14	579,341	611,065
Intangible assets	15	35,105,733	23,606,431
Investments in joint ventures	17	4,200,462	3,387,187
Investments in associates	18	10,703,688	4,179,464
Goodwill	19	1,576,496	1,375,110
Available-for-sale financial assets	20(c)	–	8,592,521
Deferred tax assets	21(b)	1,961,576	1,702,844
Trade receivables	22	23,869,816	16,573,131
Prepayments, deposits and other receivables	23	1,915,998	2,049,215
Finance lease receivables	24(b)	706,584	569,230
Financial assets at fair value through other comprehensive income	20(a)	2,051,154	–
Financial assets at fair value through profit or loss	20(b)	5,253,100	–
		131,792,572	101,557,665
Current assets			
Inventories	25	12,456,931	11,565,777
Properties under development for sale	26	45,858,785	40,718,775
Completed properties for sale	26	2,239,218	2,510,362
Amounts due from customers for construction contracts	27(a)	–	34,473,565
Contract assets	27(a)	36,071,661	–
Trade and bills receivables	22	56,075,508	55,479,403
Prepayments, deposits and other receivables	23	43,297,055	41,009,007
Prepaid lease payments	13	261,128	229,150
Other loans	24(a)	4,999,011	4,267,544
Financial assets at fair value through profit or loss	20(b)	1,150,618	52,167
Finance lease receivables	24(b)	387,245	159,295
Pledged deposits	28(a)	5,749,150	3,453,706
Bank and cash balances	28(a)	49,046,642	48,410,641
		257,592,952	242,329,392
Current liabilities			
Trade and bills payables	29	94,294,218	90,139,818
Amounts due to customers for construction contracts	27(b)	–	7,278,552
Contract liabilities	27(b)	42,845,942	–
Other payables and accruals	30	30,310,576	55,576,402
Income tax payable	21(a)	1,505,720	1,441,301
Bank and other borrowings	31	51,226,123	37,969,971
Defined benefit obligations	33	1,048,956	596,887
Corporate bonds	32	4,730,776	11,231,753
Finance lease payables		–	902
Provisions	34	350,512	101,503
		226,312,823	204,337,089
NET CURRENT ASSETS		31,280,129	37,992,303
TOTAL ASSETS LESS CURRENT LIABILITIES		163,072,701	139,549,968

Consolidated Statement of Financial Position

As at 31 December 2018 (Expressed in Renminbi)

	Note	2018 RMB'000	2017 (Note) RMB'000
NON-CURRENT LIABILITIES			
Other payables and accruals	30	328,625	1,099,926
Bank and other borrowings	31	40,889,908	32,549,797
Corporate bonds	32	15,141,776	15,139,976
Defined benefit obligations	33	9,580,792	9,210,517
Deferred tax liabilities	21(b)	1,142,352	908,608
Deferred revenue	35	825,392	785,434
		67,908,845	59,694,258
NET ASSETS			
		95,163,856	79,855,710
Capital and reserves			
Issued share capital	36(c)	30,020,396	30,020,396
Reserves		20,612,288	18,933,039
Equity attributable to equity shareholders of the Company			
Perpetual capital instruments	37	19,400,000	8,220,000
Non-controlling interests		25,131,172	22,682,275
TOTAL EQUITY			
		95,163,856	79,855,710

Approved and authorised for issue by the Board of Directors on 29 March 2019.

Wang Jianping
Director

Ding Yanzhang
Director

Note: The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

The notes on pages 112 to 261 form part of these financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2018 (Expressed in Renminbi)

	Attributable to equity shareholders of the Company														Total equity
	Issued share capital	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 (recycling)	Investments revaluation reserve (non-recycling)	Foreign currency translation reserve	Retained earnings	Total equity attributable to equity shareholders of the Company	Perpetual capital instruments	Non-controlling interests	
Balance at 1 January 2017	30,020,396	-	8,038,065	692,477	4,576	428,108	429,083	177,546	-	(37,392)	4,640,433	44,393,292	10,100,000	19,495,707	73,988,999
Total comprehensive income	-	-	-	-	-	-	791,411	(325,122)	-	(188,953)	5,261,145	5,538,481	292,447	3,173,874	9,004,802
Purchase of own shares under restricted share incentive scheme (note 36)	-	(282,524)	-	-	-	-	-	-	-	-	(282,524)	-	-	-	(282,524)
Issue of perpetual capital instruments (note 37)	-	-	-	-	-	-	-	-	-	-	-	-	3,670,000	-	3,670,000
Transfer to debt instrument (note 31)	-	-	-	-	-	-	-	-	-	-	-	-	(5,550,000)	-	(5,550,000)
Cash capital contributed by non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	1,135,762	1,135,762
Non-cash capital contributed by non-controlling interests	-	-	868	-	-	-	-	-	-	-	-	868	-	125,147	126,015
Acquisition of additional interests in subsidiaries	-	-	24,274	-	-	-	-	-	-	-	-	24,274	-	(41,713)	(17,439)
Acquisition of subsidiaries (note 44)	-	-	88,948	-	-	-	-	-	-	-	-	88,948	-	334,587	423,535
Transfer to reserves	-	-	-	814,035	-	60,851	-	-	-	-	(874,886)	-	-	-	-
Dividends declared to perpetual capital instruments holders	-	-	-	-	-	-	-	-	-	-	-	-	(292,447)	-	(292,447)
Dividends declared (note 36)	-	-	-	-	-	-	-	-	-	(888,604)	(888,604)	-	-	-	(888,604)
Dividends declared to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,534,727)	(1,534,727)
Effect of share based compensation (note 36)	-	-	-	-	39,983	-	-	-	-	-	-	39,983	-	-	39,983
Others	-	-	38,717	-	-	-	-	-	-	-	-	38,717	-	(6,362)	32,355
Balance at 31 December 2017 (Note)	30,020,396	(282,524)	8,190,872	1,506,512	44,559	488,959	1,220,494	(147,576)	-	(226,345)	8,138,088	48,953,435	8,220,000	22,682,275	79,855,710
Balance at 31 December 2017 (Note)	30,020,396	(282,524)	8,190,872	1,506,512	44,559	488,959	1,220,494	(147,576)	-	(226,345)	8,138,088	48,953,435	8,220,000	22,682,275	79,855,710
Impact on initial application of IFRS 9 (note 2(c))	-	-	-	(6,554)	-	-	-	147,576	(147,576)	-	(876,441)	(882,995)	-	59,680	(823,315)
Adjusted 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 36)	-	(22,555)	-	-	-	-	-	-	-	-	-	(22,555)	-	-	(22,555)
Effect of shares under restricted share incentive scheme vested (note 36)	-	101,997	(22,871)	-	(31,789)	-	-	-	-	-	-	47,337	-	-	47,337
Issue of perpetual capital instruments (note 37)	-	-	-	-	-	-	-	-	-	-	-	-	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 (note 44)	-	-	-	-	-	-	-	-	-	-	-	-	-	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 36)	-	-	-	-	-	-	-	-	-	(918,624)	(918,624)	-	-	-	(918,624)
Dividends declared to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,186,607)	(1,186,607)
Effect of share based compensation (note 36)	-	-	-	-	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

Note: The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

The notes on pages 112 to 261 form part of these financial statements.

Consolidated Statement of Cash Flows

At 31 December 2018 (Expressed in Renminbi)

	Note	2018 RMB'000	2017 (Note) RMB'000
Operating activities			
Cash generated from operations	28(b)	8,165,715	8,454,648
Income tax paid		(3,106,737)	(2,822,088)
Net cash generated from operating activities		5,058,978	5,632,560
Investing activities			
Interest received		881,484	617,347
Purchase of property, plant and equipment		(4,009,491)	(4,204,606)
Addition to prepaid lease payments		(362,437)	(226,691)
Addition to investment properties	14	(2,191)	(3,125)
Addition to intangible assets		(11,781,315)	(6,902,024)
Addition to finance lease		(574,680)	(728,525)
Capital contributions to joint ventures		(508,371)	(239,383)
Capital contributions to associates		(3,379,424)	(762,438)
Net cash proceeds from investment		2,743,670	343,324
Purchase of available-for-sale financial assets		–	(4,746,142)
Purchase of financial assets at fair value through other comprehensive income		(62,808)	–
Purchase of financial assets at fair value through profit or loss		(7,656,204)	–
Proceeds from disposal of property, plant and equipment		235,212	217,456
Proceeds from disposal of prepaid lease payments		369,939	107,040
Proceeds from disposal of intangible assets		8,930	8,459
Proceeds from disposal of investment properties	14	–	15,100
Proceeds from disposal of associates		83	–
Proceeds from disposal of available-for-sale financial assets		–	2,645,566
Proceeds from disposal of financial assets at fair value through other comprehensive income		41,280	–
Proceeds from disposal of financial assets at fair value through profit or loss		8,032,346	–
Proceeds from finance lease		227,015	–
Net increase in pledged deposits	28(a)	(2,295,444)	(755,130)
Dividends received from associates	18	16,331	70,372
Dividends received from available-for-sale financial assets	5	–	165,365
Dividends received from financial assets at fair value through other comprehensive income	5	101,173	–
Dividends received from financial assets at fair value through profit or loss	5	73,054	–
Net (placement)/withdrawal of deposits with original maturity of over three months	28(a)	(692,685)	1,630,169
Acquisition of subsidiaries, net of cash acquired	44	(1,093,648)	339,009
Disposal of subsidiaries, net of cash disposed		39,940	6,796
Net decrease/(increase) in other loan and receivables		90,760	(10,278)
Net increase in loan to related parties		(815,787)	(1,009,194)
Government grants received related to assets		14,880	168,793
Net cash used in investing activities		(20,358,388)	(13,252,740)

Consolidated Statement of Cash Flows

At 31 December 2018 (Expressed in Renminbi)

	Note	2018 RMB'000	2017 (Note) RMB'000
Financing activities			
Capital injections from non-controlling interests		438,183	1,135,762
Issue of perpetual capital instruments	37	1,180,000	3,670,000
Interests paid on perpetual capital instruments	28(c)	(717,620)	(292,447)
Acquisition of additional interests in subsidiaries		(10,208)	(17,439)
Interests paid on bank and other borrowings	28(c)	(3,634,996)	(3,096,590)
Interests paid on corporate bonds	28(c)	(816,498)	(1,548,739)
New bank and other borrowings	28(c)	61,345,100	18,424,794
Repayments of bank and other borrowings	28(c)	(48,175,080)	(10,489,187)
New corporate bonds	28(c)	4,200,000	581,753
Repayments of corporate bonds	28(c)	(650,000)	(550,000)
Repayment of finance lease payables	28(c)	(902)	(299,567)
Repayment of finance lease interests	28(c)	(3)	(32,514)
Net increase in borrowings from related parties		2,994,872	4,241,104
Dividends paid to equity shareholders of the Company		(918,624)	(888,604)
Dividends paid to non-controlling interests		(950,535)	(1,340,872)
Net cash generated from financing activities		14,283,689	9,497,454
Net (decrease)/increase in cash and cash equivalents		(1,015,721)	1,877,274
Cash and cash equivalents at the beginning of the year		47,699,837	46,774,085
Effects of exchange rate changes		959,037	(951,522)
Cash and cash equivalents at the end of the year	28(a)	47,643,153	47,699,837

Note: The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

The notes on pages 112 to 261 form part of these financial statements.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2018 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 and financial assets at fair value through profit or loss (see note 2(h)) are stated at their fair value.

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.

(c) Changes in accounting policies

The IASB has issued a number of new IFRSs and amendments to IFRSs that are first effective for the current accounting period of the Group. Of these, the following developments are relevant to the Group's financial statements:

- (i) IFRS 9, *Financial instruments*
- (ii) IFRS 15, *Revenue from contracts with customers*
- (iii) IFRIC 22, *Foreign currency transactions and advance consideration*

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period, except for the amendments to IFRS 9, *Prepayment features with negative compensation* which have been adopted at the same time as IFRS 9.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) *IFRS 9, Financial instruments, including the amendments to IFRS 9, Prepayment features with negative compensation*

IFRS 9 replaces IAS 39, *Financial instruments: recognition and measurement*. It sets out the requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items.

The Group has applied IFRS 9 retrospectively to items that existed at 1 January 2018 in accordance with the transition requirements. The Group has recognised the cumulative effect of initial application as an adjustment to the opening equity at 1 January 2018. Therefore, comparative information continues to be reported under IAS 39.

The following table summarises the impact of transition to IFRS 9 on retained earnings and reserves and the related tax impact at 1 January 2018.

	RMB'000
Retained earnings	
Recognition of fair value change of financial assets at FVPL	57,705
Recognition of additional expected credit losses on contract assets	(974,533)
Related tax	40,387
Net decrease in retained earnings at 1 January 2018	(876,441)
Statutory reserve	
Recognition of fair value change of financial assets at FVPL	4,382
Recognition of additional expected credit losses on contract assets	(10,936)
Net decrease in statutory reserve at 1 January 2018	(6,554)
Fair value reserve (recycling)	
Transferred to fair value reserve (non-recycling) relating to equity securities now measured at FVOCI	147,576
Fair value reserve (non-recycling)	
Transferred from fair value reserve (recycling) relating to equity securities now measured at FVOCI and increase in fair value reserve (non-recycling) at 1 January 2018	(147,576)
Non-controlling interests	
Transferred from available-for-sale financial assets to FVPL and increase in non-controlling interests at 1 January 2018	59,680

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) *IFRS 9, Financial instruments, including the amendments to IFRS 9, Prepayment features with negative compensation (continued)*

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

a. *Classification of financial assets and financial liabilities*

IFRS 9 categorises financial assets into three principal classification categories: measured at amortised cost, at fair value through other comprehensive income (“FVOCI”) and at fair value through profit or loss (“FVPL”). These supersede IAS 39’s categories of held-to-maturity investments, loans and receivables, available-for-sale financial assets and financial assets measured at FVPL. The classification of financial assets under IFRS 9 is based on the business model under which the financial asset is managed and its contractual cash flow characteristics. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are not separated from the host. Instead, the hybrid instrument as a whole is assessed for classification.

The following table shows the original measurement categories for each class of the Group’s financial assets under IAS 39 and reconciles the carrying amounts of those financial assets determined in accordance with IAS 39 to those determined in accordance with IFRS 9.

	IAS 39 carrying amount at 31 December 2017	Reclassification	Remeasurement	IFRS 9 carrying amount at 1 January 2018
	RMB’000	RMB’000	RMB’000	RMB’000
Financial assets carried at amortised cost				
Contract assets (note (i))	–	34,473,565	(985,469)	33,488,096
Financial assets at FVOCI (non-recyclable)				
Equity investments not held for trading (note (ii))	–	2,465,127	–	2,465,127
Financial assets carried at FVPL				
Units in funds and other non-equity investments (note (iii))	–	1,932,623	–	1,932,623
Equity investments not held for trading (note (ii))	–	4,194,771	121,767	4,316,538
Trading securities (note (iv))	52,167	–	–	52,167
	52,167	6,127,394	121,767	6,301,328
Financial assets classified as available-for-sale under IAS 39 (notes (ii), (iii))	8,592,521	(8,592,521)	–	–

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) *IFRS 9, Financial instruments, including the amendments to IFRS 9, Prepayment features with negative compensation (continued)*

a. *Classification of financial assets and financial liabilities (continued)*

Notes:

- (i) Amounts due from customers for construction contracts of RMB34,474 million were reclassified to contract assets at 1 January 2018 as a result of the initial application of IFRS 15 (see note 2(c)(ii)).
- (ii) Under IAS 39, equity securities not held for trading were classified as available-for-sale financial assets. These equity securities are classified as at FVPL under IFRS 9, unless they are eligible for and designated at FVOCI by the Group. At 1 January 2018, the Group designated certain equity investments held for strategic purposes at FVOCI (non-recycling) (see note 20).
- (iii) Under IAS 39, units in funds and other non-equity investments were classified as available-for-sale financial assets. They are classified as at FVPL under IFRS 9.
- (iv) Trading securities were classified as financial assets at FVPL under IAS 39. These assets continue to be measured at FVPL under IFRS 9.

For an explanation of how the Group classifies and measures financial assets and recognises related gains and losses under IFRS 9, see respective accounting policy notes in notes 2(h), (m)(i), (p) and (q).

The measurement categories for all financial liabilities remain the same, except for financial guarantee contracts (see note 2(m)(ii)). The carrying amounts for all financial liabilities (including financial guarantee contracts) at 1 January 2018 have not been impacted by the initial application of IFRS 9.

The Group did not designate or de-designate any financial asset or financial liability at FVPL at 1 January 2018.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) *IFRS 9, Financial instruments, including the amendments to IFRS 9, Prepayment features with negative compensation (continued)*b. *Credit losses*

IFRS 9 replaces the “incurred loss” model in IAS 39 with the “expected credit loss” (“ECL”) model. The ECL model requires an ongoing measurement of credit risk associated with a financial asset and therefore recognises ECLs earlier than under the “incurred loss” accounting model in IAS 39.

The Group applies the new ECL model to 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);
- lease receivables; and
- financial guarantee contracts issued (see note 2(m)(ii)).

For further details on the Group’s accounting policy for accounting for credit losses, see notes 2(m)(i) and (ii).

The following table reconciles the closing loss allowance determined in accordance with IAS 39 as at 31 December 2017 with the opening loss allowance determined in accordance with IFRS 9 as at 1 January 2018.

	RMB’000
Loss allowance at 31 December 2017 under IAS 39	4,618,231
Additional credit loss recognised at 1 January 2018 on:	
– Contract assets recognised on adoption of IFRS 15	985,469
Loss allowance at 1 January 2018 under IFRS 9	5,603,700

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) *IFRS 9, Financial instruments, including the amendments to IFRS 9, Prepayment features with negative compensation (continued)*

c. *Transition*

Changes in accounting policies resulting from the adoption of IFRS 9 have been applied retrospectively, except as described below:

- Information relating to comparative periods has not been restated. Differences in the carrying amounts of financial assets resulting from the adoption of IFRS 9 are recognised in retained earnings and reserves as at 1 January 2018. Accordingly, the information presented for 2017 continues to be reported under IAS 39 and thus may not be comparable with the current period.
- The following assessments have been made on the basis of the facts and circumstances that existed at 1 January 2018 (the date of initial application of IFRS 9 by the Group):
 - the determination of the business model within which a financial asset is held; and
 - the designation of certain investments in equity instruments not held for trading to be classified as at FVOCI (non-recycling).
- If, at the date of initial application, the assessment of whether there has been a significant increase in credit risk since initial recognition would have involved undue cost or effort, a lifetime ECL has been recognised for that financial instrument.

(ii) *IFRS 15, Revenue from contracts with customers*

IFRS 15 establishes a comprehensive framework for recognising revenue and some costs from contracts with customers. IFRS 15 replaces IAS 18, *Revenue*, which covered revenue arising from sale of goods and rendering of services, and IAS 11, *Construction contracts*, which specified the accounting for construction contracts.

IFRS 15 also introduces additional qualitative and quantitative disclosure requirements which aim to enable users of the financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(ii) IFRS 15, Revenue from contracts with customers (continued)

The Group has elected to use the cumulative effect transition method and has recognised the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2018. Therefore, comparative information has not been restated and continues to be reported under IASs 11 and 18. As allowed by IFRS 15, the Group has applied the new requirements only to contracts that were not completed before 1 January 2018.

The adoption of IFRS 15 has no material impact on the consolidated financial statements of the Group except for presentation.

Further details of the nature and effect of the changes on previous accounting policies are set out below:

a. Timing of revenue recognition

Previously, revenue arising from construction contracts and provision of services was recognised over time, whereas revenue from sale of goods was generally recognised at a point in time when the risks and rewards of ownership of the goods had passed to the customers.

Under IFRS 15, revenue is recognised when the customer obtains control of the promised good or service in the contract. This may be at a single point in time or over time. IFRS 15 identifies the following three situations in which control of the promised good or service is regarded as being transferred over time:

- A. When the customer simultaneously receives and consumes the benefits provided by the entity's performance, as the entity performs;
- B. When the entity's performance creates or enhances an asset (for example work in progress) that the customer controls as the asset is created or enhanced;
- C. When the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

If the contract terms and the entity's activities do not fall into any of these 3 situations, then under IFRS 15 the entity recognises revenue for the sale of that good or service at a single point in time, being when control has passed. Transfer of risks and rewards of ownership is only one of the indicators that is considered in determining when the transfer of control occurs.

The adoption of IFRS 15 does not have a significant impact on when the Group recognises revenue.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(ii) IFRS 15, Revenue from contracts with customers (continued)

b. Significant financing component

IFRS 15 requires an entity to adjust the transaction price for the time value of money when a contract contains a significant financing component, regardless of whether the payments from customers are received significantly in advance of revenue recognition or significantly deferred.

The adoption of IFRS 15 does not have a significant impact on recognising financing component, as it is not common in the Group's arrangement with its customers to defer payments or receive payments in advance beyond normal course of business.

c. Presentation of contract assets and liabilities

Under IFRS 15, a receivable is recognised only if the Group has an unconditional right to consideration. If the Group recognises the related revenue (see note 2(x)) before being unconditionally entitled to the consideration for the promised goods and services in the contract, then the entitlement to consideration is classified as a contract asset. Similarly, a contract liability, rather than a payable, is recognised when a customer pays consideration, or is contractually required to pay consideration and the amount is already due, before the Group recognises the related revenue. 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 (see note 2(o)).

Previously, contract balances relating to construction contracts in progress were presented in the statement of financial position under "amounts due from customers for construction contracts" or "amounts due to customers for construction contracts" respectively.

To reflect these changes in presentation, the Group has made the following adjustments at 1 January 2018, as a result of the adoption of IFRS 15:

- (i) "Amounts due from customers for construction contracts" amounting to RMB345 million is now included under contract assets (note 27(a)); and
- (ii) "Amounts due to customers for construction contracts" amounting to RMB73 million is now included under contract liabilities (note 27(b)).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(ii) IFRS 15, Revenue from contracts with customers (continued)

- d. *Disclosure of the estimated impact on the amounts reported in respect of the year ended 31 December 2018 as a result of the adoption of IFRS 15 on 1 January 2018.*

The following tables summarise the estimated impact of adoption of IFRS 15 on the Group's consolidated financial statements for the year ended 31 December 2018, by comparing the amounts reported under IFRS 15 in these consolidated financial statements with estimates of the hypothetical amounts that would have been recognised under IAS 18 and IAS 11 if those superseded standards had continued to apply to 2018 instead of IFRS 15. These tables show only those line items impacted by the adoption of IFRS 15:

	Amounts reported in accordance with IFRS 15	Hypothetical amounts under IASs 18 and 11	Difference: Estimated impact of adoption of IFRS 15 on 2018
	(A)	(B)	(A)-(B)
	RMB'000	RMB'000	RMB'000
Line items in the consolidated statement of financial position as at 31 December 2018 impacted by the adoption of IFRS 15:			
Amounts due from customers for construction contract	–	35,821,943	(35,821,943)
Contract assets	36,071,661	–	36,071,661
Total current assets	257,592,952	257,343,234	249,718
Amounts due to customers for construction contract	–	12,169,113	(12,169,113)
Contract liabilities	42,845,942	–	42,845,942
Other payables and accruals	30,310,576	60,987,405	(30,676,829)
Provisions	350,512	100,794	249,718
Total current liabilities	226,312,823	226,063,105	249,718
Net current assets	31,280,129	31,280,129	–
Total assets less current liabilities	163,072,701	163,072,701	–
Total non-current liabilities	67,908,845	67,908,845	–
Net assets	95,163,856	95,163,856	–
Total equity attributable to equity shareholders of the Company	50,632,684	50,632,684	–
Total equity	95,163,856	95,163,856	–

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(ii) IFRS 15, Revenue from contracts with customers (continued)

- d. *Disclosure of the estimated impact on the amounts reported in respect of the year ended 31 December 2018 as a result of the adoption of IFRS 15 on 1 January 2018. (continued)*

	Amounts reported in accordance with IFRS 15 (A) RMB'000	Hypothetical amounts under IASs 18 and 11 (B) RMB'000	Difference: Estimated impact of adoption of IFRS 15 on 2018 (A)-(B) RMB'000
Line items in the reconciliation of profit before taxation to cash generated from operations for year ended 31 December 2018 (note 28(b)) impacted by the adoption of IFRS 15:			
Increase in amounts due from customers for construction contract	–	(2,140,253)	2,140,253
Increase in contract assets	(2,328,211)	–	(2,328,211)
Increase in amounts due to customers for construction contract	–	9,268,373	(9,268,373)
Increase in contract liabilities	7,013,737	–	7,013,737
Increase/(decrease) in other payables and accruals	453,719	(1,800,917)	2,254,636
Increase/(decrease) in provisions	61,051	(126,907)	187,958

There is no material differences except for presentation as a result of the changes in accounting policies described above.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(iii) *IFRIC 22, Foreign currency transactions and advance consideration*

This interpretation provides guidance on determining “the date of the transaction” for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) arising from a transaction in which an entity receives or pays advance consideration in a foreign currency.

The Interpretation clarifies that “the date of the transaction” is the date on initial recognition of the non-monetary asset or liability arising from the payment or receipt of advance consideration. If there are multiple payments or receipts in advance of recognising the related item, the date of the transaction for each payment or receipt should be determined in this way. The adoption of IFRIC 22 does not have any material impact on the financial position and the financial result of the Group.

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(e) Subsidiaries and non-controlling interests (continued)

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders 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 shareholders 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).

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(f) Associates and joint ventures (continued)

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). 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.

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.

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).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(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.

(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 38. These investments are subsequently accounted for as follows, depending on their classification.

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For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(h) Other investments in debt and equity securities (continued)

(A) Policy applicable from 1 January 2018

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.

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 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).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(h) Other investments in debt and equity securities (continued)

(B) Policy applicable prior to 1 January 2018

Investments in securities held for trading were classified as financial assets measured at FVPL. Any attributable transaction costs were recognised in profit or loss as incurred. At the end of each reporting period the fair value was remeasured, with any resultant gain or loss being recognised in profit or loss.

Dated debt securities that the Group had the positive ability and intention to hold to maturity were classified as held-to-maturity securities. Held-to-maturity securities were stated at amortised cost (for impairment see note 2(m)(i) – policy applicable prior to 1 January 2018).

Investments which did not fall into any of the above categories were classified as available-for-sale financial assets. At the end of each reporting period the fair value was remeasured, with any resultant gain or loss being recognised in other comprehensive income and accumulated separately in equity in the fair value reserve (recycling). Dividend income from equity investments and interest income from debt securities calculated using the effective interest method were recognised in profit or loss in accordance with the policies set out in notes 2(x)(v) and 2(x)(vi), respectively. Foreign exchange gains and losses arising from debt securities were also recognised in profit or loss. When the investments were derecognised or impaired (see note 2(m)(i) – policy applicable prior to 1 January 2018), the cumulative gain or loss recognised in equity was reclassified to profit or loss.

(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).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Other property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 2(m)(iii)).

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.

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

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.

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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.

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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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.

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

An arrangement, comprising a transaction or a series of transactions, is or contains a lease if the Group determines that the arrangement conveys a right to use a specific asset or assets for an agreed period of time in return for a payment or a series of payments. Such a determination is made based on an evaluation of the substance of the arrangement and is regardless of whether the arrangement takes the legal form of a lease.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(I) Leased assets (continued)

(i) *Classification of assets leased to the Group*

Assets that are held by Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases, with the following exceptions:

- property held under operating leases that would otherwise meet the definition of an investment property is classified as an investment property on a property-by-property basis and, if classified as investment property, is 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 cannot be measured separately from the fair value of a building situated thereon at the inception of the lease, is accounted for as being held under a finance lease, unless the building is also clearly held under an operating lease. For these purposes, the inception of the lease is the time that the lease was first entered into by the Group, or taken over from the previous lessee.

(ii) *Assets acquired under finance leases*

Where the Group acquires 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 are recognised as property, plant and equipment and the corresponding liabilities, net of finance charges, are recorded as obligations under finance leases. Depreciation is provided at rates which write off the cost or valuation of the assets over the term of the relevant lease or, where it is likely the Group will obtain ownership of the asset, the life of the asset, as set out in note 2(j). Impairment losses are accounted for in accordance with the accounting policy as set out in note 2(m)(iii). Finance charges implicit in the lease payments are 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 are charged to profit or loss in the accounting period in which they are incurred.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets (continued)

(iii) Operating lease charges

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

The cost of acquiring land held under an operating lease is amortised on a straight-line basis over the period of the lease term.

(m) Credit losses and impairment of assets

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

(A) Policy applicable from 1 January 2018

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.

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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(A) *Policy applicable from 1 January 2018 (continued)*

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.

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(A) *Policy applicable from 1 January 2018 (continued)*

ECLs are measured on either of the following bases: (continued)

For all other financial instruments (including loan commitments issued), 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.

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(A) *Policy applicable from 1 January 2018 (continued)*

Significant increases in credit risk (continued)

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).

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(A) *Policy applicable from 1 January 2018 (continued)*

Basis of calculation of interest income (continued)

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 delinquency in interest or principal payments;
- 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(B) *Policy applicable prior to 1 January 2018*

Prior to 1 January 2018, an “incurred loss” model was used to measure impairment losses on financial assets not classified as at FVPL (e.g. trade and other receivables, available-for-sale investments and held-to-maturity debt securities). Under the “incurred loss” model, an impairment loss was recognised only when there was objective evidence of impairment. Objective evidence of impairment included:

- significant financial difficulty of the debtor;
- a breach of contract, such as a default or delinquency in interest or principal payments;
- it becoming probable that the debtor will enter bankruptcy or other financial reorganisation;
- significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; and
- a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(B) *Policy applicable prior to 1 January 2018 (continued)*

If any such evidence exists, any impairment loss was determined and recognised as follows:

- For trade and other receivables and other financial assets carried at amortised cost, impairment loss was measured as the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate, where the effect of discounting was material. This assessment was made collectively where these financial assets shared similar risk characteristics, such as similar past due status, and had not been individually assessed as impaired. Future cash flows for financial assets which were assessed for impairment collectively were based on historical loss experience for assets with credit risk characteristics similar to the collective group.

If in a subsequent period the amount of an impairment loss decreased and the decrease could be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss was reversed through profit or loss. A reversal of an impairment loss was only recognised to the extent that it did not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised in prior years.

When the recovery of a trade debtor or other financial assets carried at amortised cost was considered doubtful but not remote, associated impairment losses were recorded using an allowance account. When the Group was satisfied that recovery was remote, the amount considered irrecoverable was written off against the gross carrying amount of those assets directly. Subsequent recoveries of amounts previously charged to the allowance account were reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly were recognised in profit or loss.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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)*

(B) *Policy applicable prior to 1 January 2018 (continued)*

- For available-for-sale securities, the cumulative loss that had been recognised in the fair value reserve (recycling) was reclassified to profit or loss. The amount of the cumulative loss that was recognised in profit or loss was the difference between the acquisition cost (net of any principal repayment and amortisation) and current fair value, less any impairment loss on that asset previously recognised in profit or loss.

Impairment losses recognised in profit or loss in respect of available-for-sale equity securities were not reversed through profit or loss. Any subsequent increase in the fair value of such assets was recognised in other comprehensive income.

Impairment losses recognised in profit or loss in respect of available-for-sale debt securities were reversed if the subsequent increase in fair value could be objectively related to an event occurring after the impairment loss was recognised. Reversals of impairment losses in such circumstances were recognised in profit or loss.

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

(ii) Credit losses from financial guarantees issued (continued)

(A) Policy applicable from 1 January 2018

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.

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.

(B) Policy applicable prior to 1 January 2018

Prior to 1 January 2018, a provision would be recognised if and when it became probable that (i) the holder of the guarantee would call upon the Group under the guarantee, and (ii) the amount of that claim on the Group was expected to exceed the amount carried in “trade and other payables” in respect of the guarantee.

(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;
- investment property;
- pre-paid interests in leasehold land classified as being held under an operating lease;
- intangible assets;
- goodwill; and
- investments in subsidiaries, associates and joint ventures in the Company’s statement of financial position.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

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).

– *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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

(iv) *Interim financial reporting and impairment*

Under the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, 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.

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 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(n) Inventories and other contract costs (continued)

(i) Inventories (continued)

– Property development (continued)

– 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.

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(n) Inventories and other contract costs (continued)

(ii) *Other contract costs (continued)*

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).

(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 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 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)).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(o) Contract assets and contract liabilities (continued)

Policy prior to 1 January 2018

In the comparative period, contract balances were recorded for construction contracts at the net amount of costs incurred plus recognised profit less recognised losses and progress billings. These net balances were presented as the “Amounts due from customers for construction contracts” (as an asset) or the “Amounts due to customers for construction contracts” (as a liability) respectively on a contract-by-contract basis. Progress billings not yet paid by the customer were included under “Trade and bills receivables”. Amounts received before the related work was performed were presented as “Advance from customers” under “Other payables and accruals”. These balances have been reclassified on 1 January 2018 as shown in note 27 (see note 2(c)(ii)).

(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).

(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)).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(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.

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. When the benefits of a plan are changed, or when a plan is curtailed, 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. 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(u) Employee benefits (continued)

(ii) *Defined benefit retirement plan obligations (continued)*

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).

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 tax 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(w) Provisions and contingent liabilities

(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).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(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.

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)).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Revenue and other income (continued)

(i) Sale of products (continued)

– 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.

In the comparative period, revenue from sales of products was recognised when the products were delivered to the customers' premises, which was taken to be the point in time when the customer had accepted the goods and the related risks and rewards of ownership. The change in accounting policy for made-to-order manufacturing arrangements does not have a significant impact as it is not common in the Group's arrangements with customers to provide such products, and no adjustments have been made to opening balances as at 1 January 2018.

(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).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Revenue and other income (continued)

(ii) *Sale of properties (continued)*

In the comparative period, revenue arising from sales of properties was recognised upon the later of the signing of the sale and purchase agreement and the completion of the properties, which was taken to be the point in time when the risks and rewards of ownership of the property had passed to the buyer. Deposits and instalments received on properties sold prior to the date of revenue recognition were included in the statement of financial position under trade and other payables and no interest expense was accrued on payments received in advance. The change in accounting policy for accruing interest on payments in advance does not have a significant impact and no adjustments have been made to opening balances as at 1 January 2018.

(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.

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).

Revenue for construction contracts was recognised on a similar basis in the comparative period under IAS 11.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Revenue and other income (continued)

(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. Contingent rentals 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 using the effective interest method. 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 ("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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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.

In the comparative period, the contract assets arising from construction contracts were included in amounts due from customers for construction contracts.

(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 38.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 2018. Details are set out in note 15.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 33. 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 2018.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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.

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 services for large scale power generation, transformation and transmission projects of fossil-fuel power, hydropower, nuclear power, wind farm 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 and 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 2018

4 SEGMENT INFORMATION (CONTINUED)

For the year ended 31 December 2017

	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	–	–	18,472,358	23,982,397	18,899,047	–	61,353,802
Over time	13,031,410	159,984,898	–	–	–	–	173,016,308
External segment revenue	13,031,410	159,984,898	18,472,358	23,982,397	18,899,047	–	234,370,110
Inter-segment revenue	251,193	8,766,801	1,486,582	109	931,760	(11,436,445)	–
Segment revenue	13,282,603	168,751,699	19,958,940	23,982,506	19,830,807	(11,436,445)	234,370,110
Segment results	2,769,556	6,432,133	1,524,618	1,264,364	1,306,967	166,364	13,464,002
Unallocated items:							
Cost of sales							(1,076)
Other income							963,556
Other net gains and losses							(245,458)
Selling expenses							(7,599)
Administrative expenses							(361,093)
Research and development expenses							(6,443)
Finance income							715,191
Finance costs							(3,077,702)
Share of profits of joint ventures							301,386
Share of profits of associates							210,498
Profit before taxation							11,955,262

Note: The Group has initially applied IFRS 15 using the cumulative effect method. Under this method, the comparative information is not restated and was prepared in accordance with IAS 18 and IAS 11 (see note 2(c)).

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

4 SEGMENT INFORMATION (CONTINUED)

Revenue expected to be recognised in the future arising from contracts with customers in existence at the end of reporting period:

As at 31 December 2018, the aggregated amount of the transaction price allocated to the remaining performance obligations under the Group's existing contracts is RMB452,555 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 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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:

	2018 RMB'000	2017 RMB'000
Segment revenue		
Mainland China	185,048,912	194,560,129
Overseas:		
Pakistan	9,313,681	8,856,767
Vietnam	3,430,570	4,424,902
Angola	3,094,393	3,405,500
Indonesia	2,988,719	3,670,129
Others	20,158,072	19,452,683
Total	224,034,347	234,370,110

	2018 RMB'000	2017 RMB'000
Non-current assets		
Mainland China	87,966,184	69,146,540
Overseas:		
Vietnam	4,086,860	1,261,572
Pakistan	3,755,302	2,514,684
Kazakhstan	680,821	158,120
Kuwait	226,503	118,016
Argentina	169,152	40,235
Liberia	124,483	141,014
Indonesia	113,388	54,592
Others	827,647	505,166
Total	97,950,340	73,939,939

Note: Non-current assets exclude financial instruments and deferred tax assets.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 2018 (2017: nil).

5 OTHER INCOME

	2018	2017
	RMB'000	(Note (ii)) RMB'000
Government grants		
– grants related to income (note (i))	2,041,337	2,725,556
– grants related to assets (note 35)	50,277	61,213
Dividend income from available-for-sale financial assets	–	165,365
Dividend income from financial assets at FVOCI	101,173	–
Dividend income from financial assets at FVPL	73,054	191
Compensation income on contract violation	40,308	33,803
Waived payables from suppliers and others	99,912	109,751
Total	2,406,061	3,095,879

Note:

- (i) 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 2018.
- (ii) The Group has initially applied IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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

	2018	2017
	RMB'000	(Note) RMB'000
Trade receivables (note 38)	382,407	–
Contract assets (note 38)	(67,397)	–
Other receivables (note 23)	84,870	–
Cash advances to certain suppliers (note 23)	451,623	–
Total	851,503	–

Note: The Group has initially applied IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

(b) Other net gains and losses

	2018	2017
	RMB'000	(Note (i)) RMB'000
Net foreign exchange gain/(loss)	463,589	(476,797)
Gain/(loss) on disposals of:		
– Financial assets at FVPL	75,429	211
– Available-for-sale financial assets	–	210,986
– Property, plant and equipment	52,328	60,897
– Prepaid lease payments	170,933	4,053
– Subsidiaries	37,331	3,238
– Intangible assets	–	(65)
Impairment loss recognised in respect of:		
– Trade receivables	–	(492,234)
– Other receivables (note 23)	–	(9,291)
– Available-for-sale financial assets	–	(26,172)
– Property, plant and equipment (note 12)	(21,393)	(10,930)
– Prepaid lease payments (note 13)	–	(551)
Fair value changes of financial assets at FVPL	403,103	(14,521)
Cumulative gain on disposal of available-for-sale financial assets	–	543,683
Loss arising from the “Transfer” (note (ii))	(349,183)	–
Others	(36,787)	(37,965)
Total	795,350	(245,458)

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

6 NET IMPAIRMENT LOSSES ON FINANCIAL ASSETS AND CONTRACT ASSETS AND OTHER NET GAINS AND LOSSES (CONTINUED)

(b) Other net gains and losses (continued)

Notes:

- (i) The Group has initially applied IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).
- (ii) In accordance with relevant policies issued by State-owned Assets Supervision and Administration Commission of the State Council ("SASAC") and Ministry of Finance of PRC ("MOF"), 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

7 FINANCE INCOME AND FINANCE COSTS

	2018 RMB'000	2017 RMB'000
Interest income on:		
Bank and cash balances and pledged deposits	746,424	472,000
Other loans	32,316	191,759
Defined benefit plan assets	16,788	51,432
Total finance income	795,528	715,191
Interest expenses on:		
Bank and other borrowings	4,352,355	2,845,825
Corporate bonds	767,321	967,231
Asset based security ("ABS")	43,548	10,236
Finance leases	3	32,514
Discounted bills	132,497	101,979
Defined benefit obligations	420,040	367,560
	5,715,764	4,325,345
Less: Interest capitalised in		
– Construction in progress	(333,762)	(151,839)
– Properties under development for sale	(1,280,146)	(1,095,804)
– Intangible assets	(274,813)	–
Total finance costs	3,827,043	3,077,702

Borrowing costs were capitalised to the qualifying assets based on the effective interest rates of bank and other borrowings and corporate bonds.

The borrowing costs have been capitalised at rates of 3.86% to 9.00% for the year ended 31 December 2018 (2017: 3.80% to 8.00%).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

8 PROFIT FOR THE YEAR

Profit for the year has been arrived at after charging/(crediting):

	2018 RMB'000	2017 RMB'000
Directors' and supervisors' emoluments (note 9)	5,971	5,089
Other staff costs:		
Salaries and other labor costs	16,702,070	16,535,485
Retirement benefits and pensions	2,828,596	2,669,893
Other social benefits	4,411,542	4,224,397
Effect of share based compensation	6,043	39,983
Total staff and labor costs	23,954,222	23,474,847
Less: Capitalised in construction in progress	(90,153)	(45,342)
Less: Capitalised in properties under development for sale	(74,110)	(146,452)
	23,789,959	23,283,053
Depreciation:		
– Property, plant and equipment (note 12)	2,737,148	2,552,582
– Investment properties (note 14)	30,752	33,139
Less: Released from deferred revenue under sales and leaseback transactions (note 35)	(6,048)	(7,354)
	2,761,852	2,578,367
Less: Capitalised in construction in progress	(1,618)	(761)
Less: Capitalised in properties under development for sale	(3,163)	(5,514)
	2,757,071	2,572,092
Amortisation:		
– Intangible assets (included in cost of sales)	110,871	371,723
– Intangible assets (included in administrative expenses)	436,566	123,337
– Intangible assets (included in selling expenses)	459	280
Subtotal (note 15)	547,896	495,340
– Prepaid lease payments (note 13)	206,369	195,929
Less: Capitalised in construction in progress	(6,040)	(585)
	748,225	690,684
Auditor's remuneration	22,280	20,107
Recognition/(reversal) of allowance on:		
– Inventories	31,044	117,893
– Trade receivables (note 38)	382,407	492,234
– Contract assets (note 38)	(67,397)	–
– Other receivables (note 23)	84,870	9,291
– Cash advances to certain suppliers (note 23)	451,623	–
Cost of inventories recognised as expense	68,151,447	76,436,504
Operating lease expenses	502,806	432,050
Gross rental income from investment properties	(53,663)	(55,025)
Less: Direct operating expenses (including depreciation of investment properties) incurred for investment properties that generated rental income	36,787	35,395
	(16,876)	(19,630)

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 RMB'000	Salaries and other allowances RMB'000	Discretionary bonus RMB'000	Retirement benefit scheme contributions RMB'000	Share based compensation under restricted share incentive scheme RMB'000	Total 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

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.

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

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.

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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

9 DIRECTORS', CHIEF EXECUTIVE'S, SUPERVISORS' AND EMPLOYEES' EMOLUMENTS
(CONTINUED)

	Directors' fee RMB'000	Salaries and other allowances RMB'000	Discretionary bonus RMB'000	Retirement benefit scheme contributions RMB'000	Share based compensation under restricted share incentive scheme RMB'000	Total RMB'000
For the year ended 31 December 2017						
Executive directors and chief executive:						
Mr. WANG Jianping	-	226	455	53	-	734
Mr. DING Yanzhang (chief executive)	-	226	455	53	-	734
Mr. ZHANG Xianchong	-	207	410	53	-	670
	-	659	1,320	159	-	2,138

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.

Non-executive directors:						
Mr. MA Chuanjing	-	-	-	-	-	-
Mr. LIU Xueshi (Appointed in December 2017)	-	-	-	-	-	-
Mr. SI Xinbo (Appointed in December 2017)	-	-	-	-	-	-
Independent non-executive directors:						
Mr. DING Yuanchen	60	-	-	-	-	60
Mr. WANG Bin	60	-	-	-	-	60
Mr. ZHENG Qiyu	60	-	-	-	-	60
Mr. ZHANG Yuming	113	-	-	-	-	113
	293	-	-	-	-	293

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.

Supervisors:						
Mr. WANG Zengyong	-	404	443	53	-	900
Mr. LIAN Yongjiu	-	386	411	53	-	850
Mr. KAN Zhen	-	377	370	53	-	800
Mr. WEI Zhongxin	-	54	-	-	-	54
Mr. FU Dexiang	-	54	-	-	-	54
	-	1,275	1,224	159	-	2,658
Total	293	1,934	2,544	318	-	5,089

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

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 2018, the five highest paid employees were neither directors, supervisors nor chief executive of the Group (2017: Nil).

Details of the remuneration of the five highest paid individuals during the year are as follows:

	2018 RMB'000	2017 RMB'000
Basic salaries and other allowances	2,676	3,705
Discretionary bonus	3,978	4,093
Retirement benefit scheme contributions	232	243
Share based compensation under restricted share incentive scheme	170	–
	7,056	8,041

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:

	2018 RMB'000	2017 RMB'000
Hong Kong Dollar ("HKD") 1,000,001 to HKD1,500,000	2	–
HKD1,500,001 to HKD2,000,000	3	3
HKD2,000,001 to HKD2,500,000	–	2
	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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

10 INCOME TAX

	2018 RMB'000	2017 RMB'000
Current enterprise income tax	2,790,889	2,769,307
Deferred tax (note 21(b))	(23,861)	(230,874)
Land appreciation tax ("LAT")	358,270	352,588
	3,125,298	2,891,021

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:

	2018 RMB'000	2017 RMB'000
Profit before taxation	11,676,809	11,955,262
National tax on profit before taxation, calculated at the rates applicable to profits in the countries concerned	2,919,202	2,988,816
Effect of expenses that are not deductible for tax purposes	212,414	130,349
Tax effect of share of profit of joint ventures	(76,096)	(75,347)
Tax effect of share of profit of associates	(170,113)	(52,625)
Effect of tax-exempted income	(48,417)	(58,479)
Effect of unrecognised deductible losses and unrecognised deductible temporary differences	915,084	609,902
Effect of using previously unrecognised deductible losses and previously unrecognised deductible temporary differences	(170,053)	(270,775)
Tax concession	(716,523)	(650,905)
LAT	358,270	352,588
Tax effect of LAT	(89,567)	(88,147)
Others	(8,903)	5,644
Actual tax expense	3,125,298	2,891,021

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

11 EARNINGS PER SHARE

(a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to the equity shareholders of the Company excluding cash dividend attributable to the shares under restricted share incentive scheme expected to be vested in the future of RMB4,568 million (2017: RMB5,253 million) and the weighted average of 29,783,730,000 ordinary shares in issue during the year ended 31 December 2018 (2017: 29,875,307,000 shares).

The weighted average number of ordinary shares is calculated as follows:

	2018 '000	2017 '000
Issued ordinary shares at 1 January	29,790,770	30,020,396
Effect of shares under restricted share incentive scheme vest (note 36(e))	10,586	–
Effect of shares under restricted share incentive scheme purchase (note 36(d))	(17,626)	(145,089)
Weighted average number of ordinary shares at 31 December	29,783,730	29,875,307

(b) Diluted earnings per share

The calculation of diluted earnings per share is based on the profit attributable to the equity shareholders of the Company of RMB4,571 million (2017: RMB5,261 million) and the weighted average of 29,815,613,000 ordinary shares (diluted) in issue during the year ended 31 December 2018 (2017: 29,875,307,000 shares). There was no dilutive effect arising from restricted share incentive scheme for the year ended 31 December 2017.

The weighted average number of ordinary shares (diluted) is calculated as follows:

	2018 '000	2017 '000
Weighted average number of ordinary shares at 31 December	29,783,730	29,875,307
Effect of shares under restricted share incentive scheme (note 36(d))	31,883	–
Weighted average number of ordinary shares (diluted) at 31 December	29,815,613	29,875,307

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

12 PROPERTY, PLANT AND EQUIPMENT

	Property, plant and equipment							Total
	Buildings	Machinery	Transportation vehicles/ vessels	Electronic equipment	Office equipment	Others	Construction in progress	
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost:								
At 1 January 2017	20,921,977	20,261,174	3,361,291	1,430,998	460,767	669,176	1,343,516	48,448,899
Additions	513,872	517,742	354,621	108,648	60,575	69,316	2,382,801	4,007,575
Transfer within property, plant and equipment	461,270	790,999	10,132	11,008	1,437	7,097	(1,281,943)	-
Acquisition of subsidiaries	101,437	315	686	414	324	122	80,084	183,382
Contribution by non-controlling interests	12,912	4,681	1,101	-	202	553	-	19,449
Transfer from investment properties (note 14)	11,392	-	-	-	-	-	-	11,392
Write off/disposals	(475,042)	(752,314)	(158,882)	(55,466)	(23,966)	(16,440)	-	(1,482,110)
Disposal of subsidiaries	-	-	(15,435)	-	(15)	-	-	(15,450)
Transfer to investment properties (note 14)	(24,058)	-	-	-	-	-	-	(24,058)
Exchange adjustment	-	(56,157)	(18,859)	(2,851)	(569)	(1,283)	(481)	(80,200)
At 31 December 2017	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 (note 44)	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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

12 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

	Buildings	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
Accumulated depreciation and impairment:								
At 1 January 2017	(4,790,464)	(10,188,966)	(2,313,848)	(907,207)	(277,803)	(410,065)	(28,459)	(18,916,812)
Provided for the year (note 8)	(767,253)	(1,241,063)	(277,960)	(128,881)	(46,045)	(91,380)	-	(2,552,582)
Transfer from investment properties (note 14)	(5,615)	-	-	-	-	-	-	(5,615)
Write off/disposals	209,598	703,658	140,862	46,742	19,442	12,687	-	1,132,989
Disposal of subsidiaries	-	-	12,066	-	5	-	-	12,071
Transfer to investment properties (note 14)	6,111	-	-	-	-	-	-	6,111
Impairment for the year (note 6(b))	(8,045)	(2,542)	(45)	(35)	(79)	(184)	-	(10,930)
Exchange adjustment	-	37,775	6,579	2,219	98	582	-	47,253
At 31 December 2017	(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(b))	(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)
Net book value:								
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
At 31 December 2017	16,168,092	10,075,302	1,102,309	505,589	194,373	240,181	2,495,518	30,781,364

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

12 PROPERTY, PLANT AND EQUIPMENT (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 RMB21 million was made for the year ended 31 December 2018 (2017: RMB11 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 is 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 RMB3,977 million as at 31 December 2018 (2017: RMB2,947 million) to secure loan facilities granted to the Group. Details of pledge of assets are set out in note 42.
- (c) The carrying amounts of property, plant and equipment held under finance leases as at 31 December 2018 amounted to RMB22 million (2017: RMB43 million). Leased assets are pledged as security for the related finance lease liabilities.
- (d) As at 31 December 2018, the Group was in the process of applying the title certificates of certain of its buildings with aggregate carrying amounts of approximately RMB426 million (2017: RMB357 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.

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13 PREPAID LEASE PAYMENTS

	2018 RMB'000	2017 RMB'000
Cost:		
At beginning of the year	9,249,476	9,128,787
Additions	1,324,945	231,691
Acquisition of subsidiaries (note 44)	31,025	–
Disposals	(212,842)	(111,002)
At end of the year	10,392,604	9,249,476
Accumulated amortisation and impairment:		
At beginning of the year	(890,223)	(701,758)
Charge for the year (note 8)	(206,369)	(195,929)
Disposals	13,836	8,015
Impairment for the year (note 6(b))	–	(551)
At end of the year	(1,082,756)	(890,223)
Net book value:		
At end of the year	9,309,848	8,359,253
At beginning of the year	8,359,253	8,427,029
Analysed for reporting purposes as:		
Non-current	9,048,720	8,130,103
Current	261,128	229,150
	9,309,848	8,359,253

As at 31 December 2018, the Group pledged leasehold land with carrying amount of RMB280 million (2017: RMB341 million) to secure loan facilities of the Group. Details of pledge of assets are set out in note 42.

As at 31 December 2018, the Group was in the process of applying the title certificates of certain of its land use rights in the PRC with aggregate carrying amount of approximately RMB10 million (2017: RMB13 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.

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14 INVESTMENT PROPERTIES

	2018 RMB'000	2017 RMB'000
Cost:		
At the beginning of the year	805,361	806,862
Transfer from property, plant and equipment (note 12)	47,054	24,058
Disposals	–	(17,292)
Acquisition of subsidiaries	2,074	–
Transfer to property, plant and equipment (note 12)	(34,198)	(11,392)
Additions	2,191	3,125
At the end of the year	822,482	805,361
Accumulated depreciation:		
At the beginning of the year	(194,296)	(162,853)
Transfer from property, plant and equipment (note 12)	(25,840)	(6,111)
Provided for the year (note 8)	(30,752)	(33,139)
Disposals	–	2,192
Transfer to property, plant and equipment (note 12)	7,747	5,615
At the end of the year	(243,141)	(194,296)
Net book value:	579,341	611,065

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.

As at 31 December 2018, the Group is in the process of applying for the title certificates for certain of its investment properties with an aggregate carrying amount of RMB67 million (2017: RMB71 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 leasehold payments cannot be allocated reliably between the land and building elements, as such the entire lease is classified as finance lease and accounted for as investment properties.

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For the year ended 31 December 2018

14 INVESTMENT PROPERTIES (CONTINUED)

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	
	2018 RMB'000	2017 RMB'000	2018 RMB'000	2017 RMB'000
Investment properties	579,341	611,065	1,337,419	1,218,260

The fair value of the investment properties as at 31 December 2017 and 2018 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

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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 2017	262,854	632,357	115,857	17,041,645	316,141	18,368,854
Additions	17,380	106,808	97,900	5,831,634	138,732	6,192,454
Acquisition of subsidiaries	–	–	–	1,924,455	–	1,924,455
Transfer within intangible assets	55,243	5,045	–	–	(60,288)	–
Write off/disposal	(30,533)	(8,357)	–	–	(616)	(39,506)
At 31 December 2017	304,944	735,853	213,757	24,797,734	393,969	26,446,257
Additions	6,475	65,764	27,329	11,821,297	135,263	12,056,128
Transfer within intangible assets	92,631	2,103	4,673	–	(99,407)	–
Write off/disposal	(1,178)	(2,916)	(6,290)	–	(3,181)	(13,565)
At 31 December 2018	402,872	800,804	239,469	36,619,031	426,644	38,488,820
Accumulated amortisation and impairment:						
At 1 January 2017	(119,978)	(456,676)	(30,221)	(1,729,181)	(39,412)	(2,375,468)
Charge for the year (note 8)	(35,121)	(100,208)	(11,065)	(340,206)	(8,740)	(495,340)
Transfer within intangible assets	–	(3,495)	–	–	3,495	–
Write off/disposal	25,496	5,486	–	–	–	30,982
At 31 December 2017	(129,603)	(554,893)	(41,286)	(2,069,387)	(44,657)	(2,839,826)
Charge for the year (note 8)	(36,785)	(70,884)	(22,723)	(401,097)	(16,407)	(547,896)
Transfer within intangible assets	–	(103)	(244)	–	347	–
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)
Net book value:						
At 31 December 2018	236,677	178,975	175,216	34,148,547	366,318	35,105,733
At 31 December 2017	175,341	180,960	172,471	22,728,347	349,312	23,606,431

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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 plant and hydraulic power plant (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 road income under three (2017: two) concession agreements with an aggregate carrying amount of RMB12,989 million as at 31 December 2018 (2017: RMB7,485 million) were pledged to obtain bank borrowings (note 42).

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16 SUBSIDIARIES

During the year ended 31 December 2018, the Group has reorganised its structure by setting up a planning and engineering platform company and four regional investment companies in North, Northwest, East, and South China.

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 RMB	Equity interests attributable to the Group at 31 December		Principal activities
			2018	2017	
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	1,184,085,100	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	2,142,732,300	100%	–	Survey, design, consulting and construction
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	601,571,900	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	1,007,476,900	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	1,404,369,100	100%	–	Investment holding

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

16 SUBSIDIARIES (CONTINUED)

Note:

English name of all these companies 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.

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	
		2018	2017	2018	2017	2018	2017
				RMB'000	RMB'000	RMB'000	RMB'000
CGGC (note 3(a)(i))	PRC	57.66%	57.66%	3,502,981	3,481,596	24,336,979	22,276,883
Others				180,528	58,790	4,121,105	805,061
Eliminations (note)				(420,303)	(29,737)	(3,326,912)	(399,669)
Total				3,263,206	3,510,649	25,131,172	22,682,275

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.

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16 SUBSIDIARIES (CONTINUED)

CGGC and subsidiaries

	2018 RMB'000	2017 RMB'000
Non-controlling interests percentage	57.66%	57.66%
Current assets	129,777,332	123,188,853
Non-current assets	88,431,934	63,734,820
Current liabilities	117,963,839	101,363,827
Non-current liabilities	45,160,799	44,464,532
Net assets	55,084,628	41,095,314
Carry amounts:		
Perpetual capital instruments holders	19,400,000	8,220,000
Non-controlling interests	24,336,979	22,276,883
Revenue	100,625,670	106,807,100
Profit for the year	5,959,894	5,513,583
Total comprehensive income for the year	5,073,322	4,796,763
Profit attributable to perpetual capital instruments holders	717,620	292,447
Profit attributable to non-controlling interests	3,502,981	3,481,596
Dividends paid to non-controlling interests	1,152,966	1,287,066
Net cash inflows/(outflows) from operating activities	1,277,804	(823,888)
Net cash outflows from investing activities	(13,894,128)	(9,160,096)
Net cash inflows from financing activities	12,948,526	7,459,004

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17 INTERESTS IN JOINT VENTURES

	2018	2017
	RMB'000	RMB'000
Cost of unlisted interests in joint ventures	3,569,901	3,061,011
Share of post-acquisition profits, net of dividends received and receivables	630,561	326,176
	4,200,462	3,387,187

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	
			2018	2017	2018	2017
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 name 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 all comprise 5 directors each, 2 of which are appointed by the Group. Unanimous approvals by all directors are required for decision on directing the relevant activities of these two entities. Hence, in the opinion of the Directors, the Group's interest in these two entities are accounted for as joint ventures.
- (b) Under the joint venture agreement, the boards of directors of Fangchenggang comprise 7 directors, 2 of which are appointed by the Group. Unanimous approvals by at least three-fourths of directors are required for decision 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.

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.

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17 INTERESTS IN JOINT VENTURES (CONTINUED)

Zhenglin

	2018 RMB'000	2017 RMB'000
Gross amount of Zhenglin		
Current assets	4,626,331	5,043,127
Non-current assets	2,032	494
Current liabilities	1,784,809	1,768,677
Non-current liabilities	–	1,024,000
Equity	2,843,554	2,250,944
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	441,940	483,177
Non-current financial liabilities (excluding trade and other payables and provisions)	–	1,024,000
Revenue	2,705,626	1,211,731
Profit and other comprehensive income for the year	592,560	116,643
The above profit for the year includes the following:		
Finance income	–	1,468
Income tax expense	(197,520)	(38,881)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in Zhenglin recognised in these consolidated financial statements:

	2018 RMB'000	2017 RMB'000
Net assets of the joint venture	2,843,554	2,250,944
Proportion of the Group's interest in Zhenglin	49%	49%
Carrying amount of the Group's interest in Zhenglin	1,393,341	1,102,963

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17 INTERESTS IN JOINT VENTURES (CONTINUED)

Rumao

	2018 RMB'000	2017 RMB'000
Gross amount of Rumao		
Current assets	3,343,389	3,623,715
Non-current assets	438	12,081
Current liabilities	1,204,055	605,045
Non-current liabilities	–	921,900
Equity	2,139,772	2,108,851
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	267,362	182,132
Non-current financial liabilities (excluding trade and other payables and provisions)	–	921,900
Revenue	339,749	2,511,670
Profit and other comprehensive income for the year	37,645	548,839
The above profit for the year includes the following:		
Income tax expense	(8,516)	(177,372)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in Rumao recognised in these consolidated financial statements:

	2018 RMB'000	2017 RMB'000
Net assets of the joint venture	2,139,772	2,108,851
Proportion of the Group's interest in Rumao	49%	49%
Carrying amount of the Group's interest in Rumao	1,048,488	1,033,337

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17 INTERESTS IN JOINT VENTURES (CONTINUED)

Fangchenggang

	2018 RMB'000	2017 RMB'000
Gross amount of Fangchenggang		
Current assets	1,498,540	1,069,425
Non-current assets	7,135,747	7,258,253
Current liabilities	1,180,084	1,185,842
Non-current liabilities	4,923,973	4,618,651
Equity	2,530,230	2,523,185
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	546,509	343,416
Current financial liabilities (excluding trade and other payables and provisions)	432,780	460,036
Non-current financial liabilities (excluding trade and other payables and provisions)	4,877,597	4,576,377
Revenue	2,793,804	1,622,591
Profit/(Loss) and other comprehensive income for the year	7,044	(80,934)
The above profit/(loss) for the year includes the following:		
Depreciation and amortisation	(164,385)	(214,779)
Finance income	9,435	2,061
Finance costs	(248,134)	(224,305)
Income tax expense	(579)	(803)

Reconciliation of the above summarised financial information to the carrying amount of the Group's interest in Fangchenggang recognised in these consolidated financial statements:

	2018 RMB'000	2017 RMB'000
Net assets of the joint venture	2,530,230	2,523,185
Proportion of the Group's interest in Fangchenggang	30%	30%
Carrying amount of the Group's interest in Fangchenggang	759,069	756,956

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17 INTERESTS IN JOINT VENTURES (CONTINUED)

Aggregate information of joint ventures that are not individually material:

	2018	2017
	RMB'000	RMB'000
The Group's share of (loss)/profit and other comprehensive income	(3,257)	–
Aggregate carrying amount of the Group's interests in these joint ventures	999,564	493,931

18 INTERESTS IN ASSOCIATES

	2018	2017
	RMB'000	RMB'000
Cost of unlisted interests in associates	10,110,289	4,250,874
Share of post-acquisition profits, net of dividends received and receivable	633,881	(30,428)
Provision for impairment	(40,482)	(40,982)
	10,703,688	4,179,464

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/country of establishment and operations	Proportion of Ownership interest held by the Group at 31 December		Principal activities
		2018	2017	
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%	–	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%	–	Expressway operation

* English name of this company is for reference only and has not been registered.

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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. At 31 December 2018, the other equity holder had not injected the capital.
- (c) Under the associate agreement, two directors out of four were appointed by the Group. More than 50% 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. At 31 December 2018, all other equity holders had not injected the capital.

WCRLGRE

	2018 RMB'000	2017 RMB'000
Gross amount of WCRLGRE		
Current assets	6,075,842	5,914,851
Non-current assets	9,517	6,213
Current liabilities	3,292,869	3,115,545
Non-current liabilities	427,000	430,000
Equity	2,365,490	2,375,519
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	316,058	456,826
Current financial liabilities (excluding trade and other payables and provisions)	–	371,583
Non-current financial liabilities (excluding trade and other payables and provisions)	427,000	430,000
Revenue	1,224	519
Loss and other comprehensive income for the year	(10,029)	(22,164)
The above loss for the year includes the following:		
Finance income	5,681	4,469
Income tax expense	(3,286)	(5,277)

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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:

	2018 RMB'000	2017 RMB'000
Net assets of the associate	2,365,490	2,375,519
Proportion of the Group's interest in WCRLGRE	40%	40%
Carrying amount of the Group's interest in WCRLGRE	946,196	950,208

WGLPD

	2018 RMB'000
Gross amount of WGLPD	
Current assets	4,960,966
Equity	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:

	2018 RMB'000
Net assets of the associate	4,960,966
Proportion of the Group's interest in WGLPD	50%
Carrying amount of the Group's interest in WGLPD	2,480,773

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For the year ended 31 December 2018

18 INTERESTS IN ASSOCIATES (CONTINUED)

SGYNE

	2018 RMB'000
Gross amount of SGYNE	
Current assets	655,956
Non-current assets	1,947,278
Current liabilities	652,748
Non-current liabilities	486
Equity	1,950,000
The above amounts of assets and liabilities include the following:	
Cash and cash equivalents	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:

	2018 RMB'000
Net assets of the associate	1,950,000
Proportion of the Group's interest in SGYNE	40%
Carrying amount of the Group's interest in SGYNE	1,950,000

Aggregate information of associates that are not individually material:

	2018 RMB'000	2017 RMB'000
The Group's share of profit and other comprehensive income	684,454	219,363
Cash dividends received	16,331	70,372
Aggregate carrying amount of the Group's interests in these associates	5,326,719	3,229,256

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For the year ended 31 December 2018

19 GOODWILL

	2018	2017
	RMB'000	RMB'000
Cost:		
At the beginning of the year	1,375,110	1,287,918
Arising on acquisition of subsidiaries	201,853	87,613
Disposal of subsidiaries	(467)	(421)
At the end of the year	1,576,496	1,375,110
Impairment losses:		
At the beginning and end of the year	–	–
Net book value:		
At the end of the year	1,576,496	1,375,110
At the beginning of the year	1,375,110	1,287,918

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:

	2018	2017
	RMB'000	RMB'000
CGGC Group	1,539,598	1,337,746
CEEPE	22,150	22,150
CEESC	9,743	9,743
Others	5,005	5,471
	1,576,496	1,375,110

During the year ended 31 December 2018, goodwill represents an amount of RMB98 million arising on the acquisition of the business of 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"), RMB62 million arising on the acquisition of 葛洲壩水務(保定)有限公司 (Gezhouba Water (Baoding) Co., Ltd.) and RMB40 million arising on the acquisition of 杭州華電華源環境工程有限公司 (Hangzhou Huadian Huayuan Environmental Engineering Co., Ltd.) by CGGC Group.

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19 GOODWILL (CONTINUED)

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, arising on acquisition of 葛洲壩鍾祥水泥有限公司 (Gezhouba Zhongxiang Cement Company Limited) (the "Zhongxiang Cement") by CGGC Group in 2014 included in civil explosives and cement production business of the Group, is principally engaged in the production and sales of cement businesses. The recoverable amount of this cash generating unit as at 31 December 2018 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 9.50% (2017: 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.

Goodwill with an amount of RMB508 million, arising 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 Group during 2016 included in investment business of the Group, are principally engaged in investment management business of water plants. The recoverable amounts of the cash generating units as at 31 December 2018 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 12.50% (2017: 9.00% and 12.00%), 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 Sichuan Tongda Chemical by CGGC Group in 2018 included in civil explosives and cement production business of the Group, is principally engaged in the production and sales of civil explosives businesses. The recoverable amount of this cash generating unit as at 31 December 2018 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 10.74%. 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 5.4% to 17% (2017: 5.4% to 15.7%). 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.

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20 FINANCIAL INSTRUMENTS

(a) Financial assets at FVOCI (non-recycling)

	31 December 2018 RMB'000	1 January 2018 RMB'000	31 December 2017 (Note (i)) RMB'000
Listed investments:			
Equity securities listed in Mainland China	830,426	1,242,441	–
Equity securities listed in Hong Kong	70,480	116,886	–
Subtotal	900,906	1,359,327	–
Unlisted investments:			
Private companies (note (ii))	800,533	701,814	–
Listed company (note (iii))	349,715	403,986	–
Subtotal	1,150,248	1,105,800	–
Total	2,051,154	2,465,127	–
Analysed for reporting purposes as:			
Non-current	2,051,154	2,465,127	–

(b) Financial assets at FVPL

	31 December 2018 RMB'000	1 January 2018 RMB'000	31 December 2017 RMB'000
Listed investments:			
Equity securities listed in Mainland China	33,504	52,167	52,167
Unlisted investments:			
Private companies	4,754,135	4,316,538	–
Units in funds and other non-equity investments	1,616,079	1,932,623	–
Total	6,403,718	6,301,328	52,167
Analysed for reporting purposes as:			
Non-current	5,253,100	4,699,161	–
Current	1,150,618	1,602,167	52,167

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20 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Available-for-sale financial assets

	31 December 2018 RMB'000	1 January 2018 RMB'000	31 December 2017 RMB'000
Listed investments:			
Equity securities listed in Mainland China	–	–	1,242,441
Equity securities listed in Hong Kong	–	–	116,886
Subtotal	–	–	1,359,327
Unlisted investments:			
Private companies	–	–	6,969,558
Listed company	–	–	403,986
Provision for impairment	–	–	(140,350)
Subtotal	–	–	7,233,194
Total	–	–	8,592,521
Analysed for reporting purposes as:			
Non-current	–	–	8,592,521

Notes:

- (i) The Group has initially applied IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. Available-for-sale financial assets were reclassified to financial assets measured at FVPL and equity securities designated at FVOCI (non-recycling) upon the initial application of IFRS 9. See note 2(c).
- (ii) 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.
- (iii) 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.

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21 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(a) Tax payable/(recoverable) in the consolidated statement of financial position represents:

	2018 RMB'000	2017 RMB'000
Net tax payable at 1 January	1,086,161	786,121
Provision for the year (note 10)	3,149,159	3,121,895
Acquisition of subsidiaries	14,326	233
Income tax paid	(3,106,737)	(2,822,088)
Net tax payable at 31 December	1,142,909	1,086,161
Representing:		
Tax payable	1,505,720	1,441,301
Tax recoverable	(362,811)	(355,140)
	1,142,909	1,086,161

Notes to the Consolidated Financial Statements

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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	Fair value changes of available-for-sale financial assets	Fair value changes of financial assets	Differences between book value and tax basis of assets acquired not under common control	Others	Total
	(Note (a))							(Note (b))	(Note (b))			
	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 2017	255,145	586,632	-	297,367	68,513	20,110	(586,268)	(244,643)	-	(16,703)	68,393	448,546
Credit/(charge) to profit or loss (note 10)	52,390	60,887	-	172,327	726	(262)	(75,022)	-	-	1,347	18,481	230,874
(Charge)/credit to other comprehensive income	(14,625)	-	-	-	-	-	-	129,441	-	-	-	114,816
At 31 December 2017	292,910	647,519	-	469,694	69,239	19,848	(661,290)	(115,202)	-	(15,356)	86,874	794,236
Impact on initial application of IFRS 9	-	(551,433)	610,085	-	-	-	-	115,202	(124,306)	-	(9,161)	40,387
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/(decrease) from acquisition of subsidiaries (note 44)	-	-	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

Notes:

- (a) Upon the initial application of IFRS 9, the Group has recognised deferred tax assets on the additional credit losses recognised under the ECL model (see note 2(c)).
- (b) Upon the initial application of IFRS 9, the Group has recognised deferred tax liabilities on the fair value gains of financial assets (see note 2(c)).

Notes to the Consolidated Financial Statements

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21 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(b) Deferred taxation (continued)

The following is the analysis of the deferred tax balances for financial reporting purposes:

	2018	2017
	RMB'000	(Note) RMB'000
Net deferred tax asset recognised in the consolidated statement of financial position	1,961,576	1,702,844
Net deferred tax liability recognised in the consolidated statement of financial position	(1,142,352)	(908,608)
	819,224	794,236

Note: The Group has initially applied IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

Details of tax losses not recognised are set out below:

	2018	2017
	RMB'000	RMB'000
Tax losses	9,196,728	7,332,789

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:

	2018	2017
	RMB'000	RMB'000
2018	–	513,383
2019	928,544	1,132,450
2020	1,413,277	1,643,585
2021	1,692,592	1,904,174
2022	2,126,301	2,139,197
2023	3,036,014	–
	9,196,728	7,332,789

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22 TRADE AND BILLS RECEIVABLES

	2018 RMB'000	2017 RMB'000
Trade receivables	51,785,125	54,427,426
Retention receivables	13,273,089	10,358,119
Less: loss allowance	(3,635,803)	(3,282,441)
	61,422,411	61,503,104
Bills receivable	5,707,995	5,221,724
Build-transfer ("BT")/BOT project receivables	12,814,918	5,327,706
Total trade and bills receivables	79,945,324	72,052,534
Analysed for financial reporting purpose:		
Non-current	23,869,816	16,573,131
Current	56,075,508	55,479,403
	79,945,324	72,052,534

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 2018, the Group pledged its trade receivables amounting to approximately RMB2,023 million (2017: RMB410 million) to secure loan facilities granted to the Group. Details of pledge of assets are set out in note 42.

As at 31 December 2018, trade receivables of RMB2,493 million (2017: RMB522 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.

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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:

	2018 RMB'000	2017 RMB'000
0 to 6 months	56,620,651	48,959,537
6 months to 1 year	8,384,627	8,033,600
1 year to 2 years	6,458,729	8,169,220
2 years to 3 years	4,744,210	3,573,992
3 years to 4 years	1,793,825	1,727,523
4 years to 5 years	1,115,599	839,368
Over 5 years	827,683	749,294
	79,945,324	72,052,534

(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:

	2018 RMB'000	2017 RMB'000
Ultimate holding company	103	119
Fellow subsidiaries	23,185	12,088
Joint ventures	801,721	128,395
Associates	3,728,313	5,051,323
Total	4,553,322	5,191,925

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.

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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:

	2018	2017
	RMB'000	RMB'000
Brazilian Real ("BRL")	6,122,392	–
United States Dollar ("USD")	266,709	640,531
Euro ("EUR")	256,758	–
Others	193,709	182,930
	6,839,568	823,461

23 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2018	2017
	RMB'000	RMB'000
Advance to suppliers	21,412,760	20,957,551
Cash advances to certain suppliers (note (i))	1,053,785	–
Other receivables (note (ii))	14,026,526	17,213,720
Receivables for the Transfer (note 6(b)(ii))	2,156,044	–
Prepayments for acquisition of property, plant and equipment	1,668,713	1,589,612
Prepaid taxes	4,837,085	2,854,564
Dividends receivable	16,106	68,666
Interests receivable	12,536	115,280
Deposits for prepaid lease payments	29,498	31,628
Deposits for investments	–	227,201
	45,213,053	43,058,222
Analysed for financial reporting purpose:		
Non-current	1,915,998	2,049,215
Current	43,297,055	41,009,007
	45,213,053	43,058,222

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23 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES (CONTINUED)

Notes:

- (i) During the year ended 31 December 2018, one non-wholly owned indirect subsidiary of CGGC made cash advances to some of its suppliers, including a related company of its minority shareholder. At 31 December 2018, the net carrying amount of cash advances to these suppliers is approximately RMB1,054 million, netting off an impairment loss of RMB452 million as a result of expected credit loss analysis.
- (ii) Other receivables mainly represent bidding bonds, performance bonds and various deposits required for the Group's business operations.

Movements in the loss allowance are set out as follows:

	2018 RMB'000	2017 RMB'000
At the beginning of the year	1,335,790	1,361,194
Loss allowance recognised (note 8)	536,493	9,291
Written off	(44,421)	(34,367)
Effect on disposal of subsidiaries	(1,699)	(241)
Exchange adjustment	(1)	(87)
At the end of the year	1,826,162	1,335,790

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:

	2018 RMB'000	2017 RMB'000
Ultimate holding company		
– Non-trade nature	2,375,569	223,843
Fellow subsidiaries		
– Trade nature	142,924	51,117
– Non-trade nature	680,683	697,426
Joint ventures		
– Non-trade nature	156,006	12,474
Associates		
– Non-trade nature	1,263,194	1,089,793
Total	4,618,376	2,074,653

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24 OTHER LOANS AND FINANCE LEASE RECEIVABLES

(a) Other loans

At 31 December 2018, 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:

	2018 RMB'000	2017 RMB'000
Amounts due from:		
Fellow subsidiaries	245,000	190,000
Associates	4,219,493	3,452,266
Third parties	534,518	625,278
	4,999,011	4,267,544
Analysed for financial reporting purpose:		
Current	4,999,011	4,267,544
Loans:		
With ultimate holding company guarantee	245,000	190,000
With third party guarantees	–	500,000
Without guarantees	4,754,011	3,577,544
	4,999,011	4,267,544
Interest-bearing loans (fixed rate)	3,018,404	4,137,414
Interest-free loans repayable on demand	1,980,607	130,130
	4,999,011	4,267,544
Range of interest rate (per annum)	4.35% to 10.00%	4.35% to 10.00%

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24 OTHER LOANS AND FINANCE LEASE RECEIVABLES (CONTINUED)

(b) Finance lease receivables

In 2018, the Group entered into finance lease arrangements for certain of its transportation vehicles and manufacturing facilities. The periods of finance leases entered into is ranged from 9 months to 7 years.

The finance lease receivables were mainly with floating interest rates reference to the benchmark interest rate of PBOC. The interest rates of finance lease receivables were adjusted periodically with reference to the benchmark interest rates. As at 31 December 2018, the carrying amount of these finance lease receivables was RMB1,094 million (2017: RMB729 million), of which approximately RMB387 million (2017: RMB159 million) was classified as current assets.

25 INVENTORIES

	2018 RMB'000	2017 RMB'000
Materials in transit	82,096	60,698
Raw materials	4,206,766	3,814,879
Work in progress	1,531,734	1,406,196
Finished goods	6,388,040	6,052,456
Low value consumables and spare parts	348,634	349,736
	12,557,270	11,683,965
Less: write-down of inventories	(100,339)	(118,188)
	12,456,931	11,565,777

26 PROPERTIES UNDER DEVELOPMENT FOR SALE/COMPLETED PROPERTIES FOR SALE

	2018 RMB'000	2017 RMB'000
Properties under development for sale	45,858,785	40,718,775
Completed properties for sale	2,239,218	2,510,362
	48,098,003	43,229,137

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26 PROPERTIES UNDER DEVELOPMENT FOR SALE/COMPLETED PROPERTIES FOR SALE (CONTINUED)

The amount of properties under development for sale not expected to be completed within the next twelve months is as follows:

	2018 RMB'000	2017 RMB'000
Properties under development	27,149,142	32,265,661

Certain properties under development for sale and completed properties for sale of the Group were pledged against the loans and borrowings, details of which are set out in note 42.

27 CONTRACT ASSETS AND CONTRACT LIABILITIES**(a) Contract assets**

	31 December 2018 RMB'000	1 January 2018 Note (i) RMB'000	31 December 2017 Note (i) RMB'000
Contract assets			
Arising from performance under construction contracts (note (ii) (iii))	36,071,661	33,676,055	–
Gross amounts due from customers for construction work (note (iii))	–	–	34,473,565
Receivables from contracts with customers within the scope of IFRS 15, which are included in "Trade and bills receivables" (note 22)	67,130,406	66,724,828	

Notes:

- (i) The Group has initially applied IFRS 9 and IFRS 15 using the cumulative effect method and adjusted the opening balances as at 1 January 2018.
- (ii) Upon the adoption of IFRS 9, opening adjustments were made as at 1 January 2018 to recognise additional expected credit losses (ECLs) on contract assets. This has resulted in a decrease in this balance as at that date (see note 2(c)(i)).
- (iii) Upon the adoption of IFRS 15, amounts previously presented as "gross amounts due from customers for construction work" were reclassified to contract assets (see note 2(c)).

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27 CONTRACT ASSETS AND CONTRACT LIABILITIES (CONTINUED)

(a) Contract assets (continued)

Typical payment terms which impact on the amount of contract assets recognised:

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 RMB7,569 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 RMB17,938 million (2017: RMB16,813 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:

	2018	2017
	RMB'000	RMB'000
Joint ventures	498,915	166,350
Associates	1,498,013	173,281
	1,996,928	339,631

The transactions between these related parties were based on prices mutually agreed between the parties after taking reference of the market prices.

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27 CONTRACT ASSETS AND CONTRACT LIABILITIES (CONTINUED)

(b) Contract liabilities

	31 December 2018 RMB'000	1 January 2018 Note (i) RMB'000	31 December 2017 Note (i) RMB'000
Contract liabilities			
Billings in advance of performance under construction contracts	(42,845,942)	(35,700,745)	–
Gross amounts due to customers for construction work (note (ii))	–	–	(7,278,552)

Notes:

- (i) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balances as at 1 January 2018.
- (ii) Upon the adoption of IFRS 15, amounts previously presented as “gross amounts due to customers for construction work” were reclassified to contract liabilities (see note 2(c)).

Typical payment terms which impact on the amount of contract liabilities recognised:

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

	2018 RMB'000
Balance at 1 January	(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	30,939,788
Increase in contract liabilities as a result of billing in advance of construction activities	(38,084,985)
Balance at 31 December	(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 RMB4,959 million (2017: RMB4,761 million, which were included under “other payables and accruals”).

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For the year ended 31 December 2018

27 CONTRACT ASSETS AND CONTRACT LIABILITIES (CONTINUED)

(b) Contract liabilities (continued)

Movements in contract liabilities (continued)

Contract liabilities above include amounts attributable to joint ventures and associates as follows:

	2018 RMB'000	2017 RMB'000
Joint ventures	173,487	–
Associates	43,077	32,198
	216,564	32,198

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:

	2018 RMB'000	2017 RMB'000
Bank and cash balances	48,827,839	48,439,660
Time deposits	5,967,953	3,424,687
	54,795,792	51,864,347
Less: Pledged deposits for		
Bills payable	1,289,921	1,214,195
Letter of credit	1,223,205	1,005,107
Others	3,236,024	1,234,404
	5,749,150	3,453,706
Bank and cash balances at end of year	49,046,642	48,410,641
Less: Non-pledged time deposits with original maturity of three months or more when acquired	1,403,489	710,804
Cash and cash equivalents in the consolidated statement of cash flows	47,643,153	47,699,837

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 3.41% per annum as at 31 December 2018 (2017: 0.10% to 3.00% per annum).

Notes to the Consolidated Financial Statements

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28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(a) Cash and cash equivalents comprise: (continued)

As at 31 December 2018, the bank deposits of RMB1,380 million (2017: RMB711 million) carried fixed rate interests ranging from 1.00% to 3.41% per annum (2017: 1.10% to 2.75% 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.

(b) Reconciliation of profit before taxation to cash generated from operations:

	Note	2018 RMB'000	2017 (Note) RMB'000
Operating activities			
Profit before taxation		11,676,809	11,955,262
Adjustment for:			
Depreciation of property, plant and equipment	12	2,737,148	2,552,582
Depreciation of investment properties	14	30,752	33,139
Amortisation of prepaid lease payments	13	206,369	195,929
Amortisation of intangible assets	15	547,896	495,340
Amortisation of unrealised profit on sale and leaseback transactions	35	(6,048)	(7,354)
Amortisation of government grant related to income	35	(280,532)	(244,309)
Interest on finance lease		(17,639)	–
Finance costs	7	3,827,043	3,077,702
Finance income	7	(795,528)	(715,191)
Net foreign exchange (gain)/loss	6(b)	(463,589)	476,797
Gain on disposal of available-for-sale financial assets	6(b)	–	(754,669)
Gain on disposal of financial assets at FVPL	6(b)	(75,429)	–
Gain on disposal of property, plant and equipment	6(b)	(52,328)	(60,897)
Gain on disposal of prepaid lease payments	6(b)	(170,933)	(4,053)
Gain on disposal of subsidiaries	6(b)	(37,331)	(3,238)
Loss on disposal of intangible assets	6(b)	–	65
Recognition of allowance for trade receivables	6	382,407	492,234

Notes to the Consolidated Financial Statements

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28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(b) Reconciliation of profit before taxation to cash generated from operations: (continued)

	Note	2018 RMB'000	2017 (Note) RMB'000
Operating activities (continued)			
Recognition of allowance for other receivables	6	84,870	9,291
Reversal of allowance for contract assets	6	(67,397)	–
Recognition of allowance on inventories	8	31,044	117,893
Impairment on available-for-sale financial assets	6(b)	–	26,172
Impairment on property, plant and equipment	6(b)	21,393	10,930
Impairment on prepaid lease payments	6(b)	–	551
Dividend income from available-for-sale financial assets	5	–	(165,365)
Dividends received from financial assets at FVPL	5	(73,054)	–
Dividends received from financial assets at FVOCI	5	(101,173)	–
Fair value changes of financial assets at FVPL	6(b)	(403,103)	14,521
Share based compensation expense	8	6,103	39,983
Waiver of certain payables from suppliers and others	5	(99,912)	(109,751)
Government grants related to assets	5	(50,277)	(61,213)
Share of profits of joint ventures	17	(304,385)	(301,386)
Share of profits of associates	18	(680,450)	(210,498)

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28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(b) Reconciliation of profit before taxation to cash generated from operations:
(continued)

Note	2018 RMB'000	2017 (Note) RMB'000
Operating cash flows before movements in working capital	15,872,726	16,860,467
Increase in trade and bill receivables	(2,345,549)	(12,670,264)
(Increase)/decrease in prepayments, deposits and other receivables	(4,248,343)	6,916,547
Increase in inventories	(748,975)	(2,189,536)
Decrease/(increase) in completed properties for sale	271,144	(1,062,919)
Increase in properties under development for sale	(9,826,010)	(14,762,001)
Increase in amounts due from customers for construction contracts	–	(10,668,876)
Increase in contract assets	(2,328,211)	–
Increase in amounts due to customers for construction contracts	–	1,544,433
Increase in contract liabilities	7,013,737	–
Increase in trade and bills payables	3,828,039	15,777,823
Increase in other payables and accruals	453,719	8,117,408
(Decrease)/increase in defined benefit obligations	(199,548)	499,828
Increase in government grants related to income	361,935	374,639
Increase/(decrease) in provisions	61,051	(286,395)
Decrease in financial assets at FVPL	–	3,494
Cash generated from operations	8,165,715	8,454,648

Note: The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 2(c).

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28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(c) Reconciliation of liabilities arising from financing activities:

	Bank loans and other borrowings	Corporate bonds	Finance leases	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 (note 44)	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

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28 BANK AND CASH BALANCE, PLEDGED DEPOSITS (CONTINUED)

(c) Reconciliation of liabilities arising from financing activities: (continued)

	Bank loans and other borrowings	Corporate bonds	Finance leases	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 2017	51,138,319	26,921,484	300,469	118,837	10,100,000	88,579,109
Changes from financing cash flows:						
New bank and other borrowings	18,424,794	–	–	–	–	18,424,794
Net increase in borrowings from related parties	4,241,104	–	–	–	–	4,241,104
Repayment of bank and other borrowings	(10,489,187)	–	–	–	–	(10,489,187)
New corporate bonds	–	581,753	–	–	–	581,753
Repayment of corporate bonds	–	(550,000)	–	–	–	(550,000)
Repayment of finance lease payables	–	–	(299,567)	–	–	(299,567)
Issue of perpetual capital instruments	–	–	–	–	3,670,000	3,670,000
Interest paid	–	(1,548,739)	(32,514)	(3,096,590)	(292,447)	(4,970,290)
Total changes from financing cash flows	12,176,711	(1,516,986)	(332,081)	(3,096,590)	3,377,553	10,608,607
Exchange adjustments	(343,279)	–	–	(3,203)	–	(346,482)
Other changes:						
Interest expenses	–	967,231	32,514	1,710,397	292,447	3,002,589
Capitalised borrowing costs	–	–	–	1,247,643	–	1,247,643
Transfer to debt instrument	5,550,000	–	–	–	(5,550,000)	–
Acquisition of business (note 44)	1,998,017	–	–	–	–	1,998,017
Others	–	–	–	280,303	–	280,303
Total other changes	7,548,017	967,231	32,514	3,238,343	(5,257,553)	6,528,552
At 31 December 2017	70,519,768	26,371,729	902	257,387	8,220,000	105,369,786

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29 TRADE AND BILLS PAYABLES

	2018 RMB'000	2017 RMB'000
Trade payables	85,637,507	83,770,646
Bills payable	8,656,711	6,369,172
	94,294,218	90,139,818

The credit period on purchases of goods or services ranges from 30 days to 180 days.

As at 31 December 2018, retention payables of RMB5,252 million (31 December 2017: RMB5,713 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:

	2018 RMB'000	2017 RMB'000
Within 1 year	80,322,846	76,069,115
1 to 2 years	6,216,968	6,181,565
2 to 3 years	2,857,369	4,117,945
More than 3 years	4,897,035	3,771,193
	94,294,218	90,139,818

The amounts due to fellow subsidiaries, joint ventures and associates included in trade and bills payables are analysed as follows:

	2018 RMB'000	2017 RMB'000
Fellow subsidiaries	99,913	100,092
Joint ventures	1,058	–
Associates	6,331	12,521
	107,302	112,613

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.

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30 OTHER PAYABLES AND ACCRUALS

	2018	2017
	RMB'000	(Note (ii)) RMB'000
Advance from customers	–	28,422,193
Other payables	24,382,525	22,804,088
Accrued payroll and welfare	2,404,305	2,335,579
Non-income tax related tax payables	2,288,994	2,637,019
Dividend payables	456,134	220,062
Accrued interests	1,107,243	257,387
	30,639,201	56,676,328
Analysed for financial reporting purpose:		
Current	30,310,576	55,576,402
Non-current	328,625	1,099,926
	30,639,201	56,676,328

Notes:

- (i) The balances of other payables mainly include payments made by third parties on behalf of the Group, deposits payable and others.
- (ii) The Group has initially applied IFRS 15 at 1 January 2018. Under the transition method chosen, comparative information is not restated. As a results of the adoption of IFRS 15, advance from customers are included in contract liabilities and disclosed in note 27, 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:

	2018	2017
	RMB'000	RMB'000
Ultimate holding company	1,245,296	1,289,087
Fellow subsidiaries	336,965	159,531
Joint ventures	467,326	21,968
Associates	1,775,041	1,248,860
	3,824,628	2,719,446
Analysed by nature:		
Trade nature	–	37,636
Non-trade nature (note)	3,824,628	2,681,810
	3,824,628	2,719,446

Note: The above amounts due to related parties are unsecured, non-interest bearing and have no fixed terms of repayment.

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31 BANK AND OTHER BORROWINGS

	2018 RMB'000	2017 RMB'000
Current		
Short term bank borrowings:		
– unsecured	29,191,719	17,505,972
– secured	798,000	489,773
Short term other borrowings:		
– unsecured	11,846,837	9,372,097
Current portion of long term bank borrowings:		
– unsecured	3,621,515	8,021,478
– secured	5,623,559	2,481,606
Current portion of long term other borrowings:		
– secured	144,493	99,045
	51,226,123	37,969,971
Non-current		
Long term bank borrowings:		
– unsecured	24,280,463	14,853,835
– secured	16,107,708	16,268,731
Long term other borrowings:		
– secured	501,737	1,427,231
	40,889,908	32,549,797

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31 BANK AND OTHER BORROWINGS (CONTINUED)

	2018 RMB'000	2017 RMB'000
Carrying amount is repayable as follows (note):		
Within one year	50,229,123	37,076,611
More than one year but within two years	8,120,787	9,033,633
More than two years but within three years	6,878,038	5,299,302
More than three years but within four years	2,880,537	1,567,382
More than four years but within five years	1,031,273	3,172,616
More than five years	22,976,273	14,370,224
	92,116,031	70,519,768
Less:		
Carrying amounts of bank loans that contain a repayment on demand clause (shown under current liabilities) but repayable:		
– More than five years	997,000	893,360
– Amounts due within one year	50,229,123	37,076,611
Amounts shown under current liabilities	51,226,123	37,969,971
Amounts shown under non-current liabilities	40,889,908	32,549,797

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:

	2018 RMB'000	2017 RMB'000
Ultimate holding company	2,796,763	1,653,037
Fellow subsidiaries	1,561,919	1,146,970
Joint ventures	3,077,510	2,528,510
Associates	2,102,697	1,215,500
	9,538,889	6,544,017

Bank borrowings and other borrowings were secured by certain assets of the Group, details of which are set out in note 42.

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31 BANK AND OTHER BORROWINGS (CONTINUED)

The amounts of bank and other borrowings guaranteed by third parties are analysed as follows:

	2018 RMB'000	2017 RMB'000
Guaranteed by third parties	128,907	119,098

Bank and other borrowings denominated in currencies other than the functional currencies of respective entities are set out below:

	2018 RMB'000	2017 RMB'000
USD	11,142,156	5,037,077
Japanese Yen ("JPY")	121,907	119,098
	11,264,063	5,156,175

The carrying amount of the bank and other borrowings and the range of interest rates are as below:

	2018		2017	
	RMB'000	%	RMB'000	%
Fixed rate bank and other borrowings	36,988,821	1.05-8.00	30,879,063	1.05 – 8.00
Floating rate bank and other borrowings	55,127,210	1.20-9.00	39,640,705	1.20 – 8.70
	92,116,031		70,519,768	

The floating rate bank and other borrowings are arranged at the interest rate based on benchmark interest rates of the People's Bank of China or London Interbank Offered Rate.

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32 CORPORATE BONDS

	2018 RMB'000	2017 RMB'000
Carrying amount repayable based on repayment term (note (i)):		
Within one year	1,730,776	1,231,753
More than one year but within two years	750,000	1,200,000
More than two years but within three years	11,400,000	750,000
More than three years but within four years	–	10,000,000
More than four years but within five years	5,991,776	200,000
More than five years	–	12,989,976
	19,872,552	26,371,729
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 five years (note (ii))	–	10,134,523
Amounts due within one year	1,730,776	1,097,230
Amounts shown under current liabilities	4,730,776	11,231,753
Amounts shown under non-current liabilities	15,141,776	15,139,976
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%

Notes:

- (i) The amounts due are based on scheduled repayment dates set out in the bond agreements.
- (ii) On 9 March 2018, bondholders of perpetual corporate bonds (the “Bonds”), which was issued by CGGC, a subsidiary of the Group, in 2016 with face value of RMB10,000 million, voted in favour of the amendment of the terms, and the resolution has been duly passed. Pursuant to the amended terms dated 9 March 2018, the Bonds fall into the definition of equity instrument under IFRSs thereafter.

33 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.

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33 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

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 on 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 RMB267 million (2017: RMB1,133 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 2018 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 2018 and 31 December 2017 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.

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33 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

The principal assumptions used for the purposes of the actuarial valuations are as follows:

	2018	2017
Discount rate	3.00%-3.25%	3.75%-4.00%
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 rates	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:

	2018 RMB'000	2017 RMB'000
Past service costs	539,187	326,121
Interest costs	420,040	367,560
Less: interest income	16,788	51,432
Components of defined benefit costs recognised in profit or loss	942,439	642,249
Component of defined benefit income recognised in other comprehensive income	618,640	(894,178)
Total	1,561,079	(251,929)

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.

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33 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

The amount of retirement and supplemental benefit obligations recognised in the consolidated statement of financial position are determined as follows:

	2018 RMB'000	2017 RMB'000
Liability arising from defined benefit obligations	11,476,277	10,903,919
Fair value of Defined Benefit Plan Asset	(846,529)	(1,096,515)
Less: net amount due within one year	1,048,956	596,887
Net amount due after one year	9,580,792	9,210,517

Movements in the present value of the retirement and supplemental benefit obligations during the year are as follows:

	2018 RMB'000	2017 RMB'000
At beginning of the year	10,903,919	12,063,621
Past service costs	539,187	326,121
Interest costs	420,040	367,560
Benefits paid	(1,005,509)	(959,205)
Actuarial loss/(gain) arising from changes in financial assumptions	618,640	(894,178)
At end of the year	11,476,277	10,903,919

Movements in the present value of Defined Benefit Plan Asset during the year are as follows:

	2018 RMB'000	2017 RMB'000
At beginning of the year	1,096,515	2,177,995
Interest income	16,788	51,432
Cash received by the Group from ENERGY CHINA GROUP	(266,774)	(1,132,912)
At end of the year	846,529	1,096,515

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.

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33 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.

	2018 RMB'000	2017 RMB'000
Actuarial assumptions		
Discount rate		
– increase by 0.25%	(250,280)	(240,770)
– decrease by 0.25%	278,320	251,150
Supplemental benefit rate		
– increase by 1.00%	842,790	238,500
– decrease by 1.00%	(713,020)	(201,270)
Medical cost trend rate		
– increase by 1.00%	269,550	787,920
– decrease by 1.00%	(211,630)	(681,890)

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.

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33 DEFINED BENEFIT OBLIGATIONS (CONTINUED)

The average duration of the benefit obligations can be analysed as follows:

	2018 No. of years	2017 No. of years
Retired members	17	17
Civil retirees	5	5
Early retired staff	5	4
Standby staff with injury	9	10
Dependents of deceased employees	14	14
Terminated staff	7	7

34 PROVISIONS

The movements of provisions are as follows:

	Provision for relocation	Provision for onerous performance obligations (Note)	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017	7,589	–	136,502	144,091
Additions	–	–	6,112	6,112
Paid	–	–	(48,700)	(48,700)
At 31 December 2017	7,589	–	93,914	101,503
Impact on initial application of IFRS 15	–	187,958	–	187,958
At 1 January 2018	7,589	187,958	93,914	289,461
Additions	–	61,760	23,521	85,281
Paid	–	–	(24,230)	(24,230)
At 31 December 2018	7,589	249,718	93,205	350,512

Note: Upon the initial application of IFRS 15, the Group has reclassified the provision for onerous performance obligations used to be recognised in gross amounts due from customers for construction work.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

35 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 2017	388,552	110,199	56,127	554,878
Additions	168,793	374,639	–	543,432
Released to profit or loss	(61,213)	(244,309)	(7,354)	(312,876)
At 31 December 2017	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

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

36 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	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
Balance at 1 January 2017	30,020,396	17,010,521	–	4,576	206,429	47,241,922
Profit and total comprehensive income for the year	–	–	–	–	412,624	412,624
Purchase of own shares under restricted share incentive scheme	–	–	(282,524)	–	–	(282,524)
Dividends declared	–	–	–	–	(888,604)	(888,604)
Effect of share based compensation	–	–	–	39,983	–	39,983
Balance at 31 December 2017	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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

36 CAPITAL AND RESERVE (CONTINUED)

(b) Dividends

(i) Dividends payable to equity shareholders of the Company attributable to the year

During the current year, a final dividend of RMB0.0306 per share in respect of the year ended 31 December 2017 was approved at the annual general meeting of the Company held on 28 June 2018. The aggregate amount of the final dividends of the year ended 31 December 2017 approved and paid in the current year amounted to RMB919 million, paid to the holders of 30,020,396,000 shares.

A final dividend of RMB0.0306 per share in respect of the year ended 31 December 2018, comprising 30,020,396,000 shares existing as at 31 December 2018, has been proposed by the Directors and is subject to the approval by the shareholders in the forthcoming annual general meeting.

(ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year

	2018 RMB'000	2017 RMB'000
Final dividend in respect of the previous financial year, approved and paid during the year, of RMB0.0306 per share (2017: RMB0.0296 per share)	918,624	888,604

(c) Issued share capital

The details of the Company's issued share capital are as follows:

	At 31 December 2018		At 31 December 2017	
	Number of shares '000	Nominal value RMB'000	Number of shares '000	Nominal value 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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

36 CAPITAL AND RESERVE (CONTINUED)

(d) Purchase of shares under restricted share incentive scheme

During the year ended 31 December 2018, the Company purchased shares under restricted share incentive scheme by a trustee on the Stock Exchange as follows:

Month/year	Number of shares purchased	Highest price paid per share	Lowest price paid per share	Aggregate price paid
		HKD	HKD	RMB'000
January 2018	11,700,000	1.5163	1.3316	14,107
February 2018	72,000,000	1.4936	1.3701	8,448
				22,555

During the year ended 31 December 2017, the Company purchased shares under restricted share incentive scheme by a trustee on the Stock Exchange as follows:

Month/year	Number of shares purchased	Highest price paid per share	Lowest price paid per share	Aggregate price paid
		HKD	HKD	RMB'000
January 2017	68,260,000	1.4825	1.2819	80,799
February 2017	13,700,000	1.4766	1.3774	17,396
March 2017	19,700,000	1.5366	1.4138	25,951
April 2017	8,900,000	1.5435	1.4286	11,631
May 2017	16,600,000	1.4797	1.4342	21,365
June 2017	20,300,000	1.5785	1.4530	26,048
July 2017	20,500,000	1.5752	1.4130	26,521
August 2017	12,200,000	1.4792	1.3995	15,065
September 2017	11,100,000	1.4713	1.3856	13,428
October 2017	12,600,000	1.4502	1.3800	15,067
November 2017	9,450,000	1.3900	1.3400	10,934
December 2017	16,316,000	1.3930	1.2200	18,319
				282,524

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

36 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. On 21 November 2016, 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 3 years from the date of grant. The vesting conditions of restricted shares are subject to achievement of financial performance of the Company 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. During the year ended 31 December 2018, 248,526,000 shares were acquired from the market (2017: 229,626,000 shares, note 36(d)). And upon the fulfillment of vesting conditions, 83,994,000 shares were vested to 481 grantees.

Movements in number of restricted shares granted and related fair value are as follows:

	2018		2017	
	Average fair value (per share) HKD	Number of restricted shares granted	Average fair value (per share) HKD	Number of restricted shares granted
At the beginning of the year	0.66	275,272	0.66	287,500
Forfeited	0.66	(10,994)	0.66	(12,228)
Vested	0.66	(83,994)	–	–
At the end of the year	0.66	180,284	0.66	275,272

(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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

36 CAPITAL AND RESERVE (CONTINUED)

(f) Capital management (continued)

The capital structure of the Group consists of net debt (which includes bank and other borrowings, finance lease payables, corporate bonds, net of pledged deposits and bank and cash balances, as disclosed in notes 31, 32 and 28 respectively), perpetual capital instruments and equity attributable to equity shareholders of the Company. The net debt of the Group as at 31 December 2018 is RMB57,193 million (2017: RMB45,028 million).

There were no changes in the Group's approach to capital management compared with previous years.

37 PERPETUAL CAPITAL INSTRUMENTS

Perpetual capital instruments as at 31 December 2018:

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	3.24	2,500,000
21 July 2016	3.48	2,500,000
3 August 2016	3.15	2,000,000
3 August 2016	3.43	3,000,000
28 July 2017	5.80	1,000,000
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
Total		19,400,000

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 have 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

37 PERPETUAL CAPITAL INSTRUMENTS (CONTINUED)

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS

(a) Categories of financial instruments

	31 December 2018 RMB'000	1 January 2018 RMB'000	31 December 2017 RMB'000
Financial assets			
Loans and receivables:			
Trade and bills receivables	79,945,324	72,052,534	72,052,534
Deposits and other receivables	14,055,168	17,397,666	17,397,666
Finance lease receivables	1,093,829	728,525	728,525
Other loans	4,999,011	4,267,544	4,267,544
Pledged deposits	5,749,150	3,453,706	3,453,706
Bank and cash balances	49,046,642	48,410,641	48,410,641
	154,889,124	146,310,616	146,310,616
Financial assets at FVOCI	2,051,154	8,592,521	–
Financial assets at FVPL	6,403,718	6,301,328	52,167
Available-for-sale financial assets	–	–	8,592,521
Financial liabilities			
Amortised cost:			
Trade and bills payables	94,294,218	90,139,818	90,139,818
Other payables	25,945,902	23,281,537	23,281,537
Bank and other borrowings	92,116,031	70,519,768	70,519,768
Finance lease payables	–	902	902
Corporate bonds	19,872,552	26,371,729	26,371,729
	232,228,703	210,313,754	210,313,754

(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 finance lease payables. 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

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 finance lease payables.

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 (2017: 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 2018 would increase/decrease by approximately RMB36 million (2017: RMB36 million).

If interest rates had been 50 basis points (2017: 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 2018 would decrease/increase by approximately RMB53 million (2017: RMB88 million).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 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	
	2018 RMB'000	2017 RMB'000	2018 RMB'000	2017 RMB'000
USD	10,979,975	14,925,041	13,441,853	8,525,098
BRL	6,776,104	–	4,320,952	–
Dinar	642,186	–	783,137	–
EUR	417,532	463,996	720,007	4,878
HKD	15,325	168,628	–	–
Others	4,061,000	3,201,760	5,125,309	1,148,260

Sensitivity analysis

The sensitivity analysis below has been determined based on a 6% (2017: 6%) increase/decrease in functional currency of respective group entities against the relevant foreign currencies. 6% (2017: 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% (2017: 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% (2017: 6%) against the relevant foreign currency. For a 6% (2017: 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.

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For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

*Market risk (continued)**(ii) Currency risk (continued)*

Sensitivity analysis (continued)

	2018	2017
	RMB'000	RMB'000
Increase/(decrease) in the Group's post-tax profit		
– if RMB strengthens against USD	110,785	(287,997)
– if RMB strengthens against EURO	13,611	(20,660)
– if RMB strengthens against HKD	(690)	(7,588)
– if RMB strengthens against others	(56,245)	(92,408)
Decrease in the Group's other comprehensive income		
– if RMB strengthens against HKD	(3,172)	(5,260)

(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, respectively.

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 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% (2017: 12%) increase/decrease in equity price of the equity securities mentioned above. 12% (2017: 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.

	2018	2017
	RMB'000	RMB'000
(Decrease)/increase in post-tax profit		
– as a result of increase in equity price	3,015	4,695
– as a result of decrease in equity price	(3,015)	(4,695)
(Decrease)/increase in other comprehensive income		
– as a result of increase in equity price	81,082	122,339
– as a result of decrease in equity price	(81,082)	(122,339)

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 41(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 41 (b).

Notes to the Consolidated Financial Statements

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38 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, 5% (2017: 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 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 as at 31 December 2018.

	Expected loss rate	Gross carrying amount	Loss allowance
	%	RMB'000	RMB'000
– SASAC owned enterprises	1%	23,406,126	(234,061)
– Other state-owned enterprises and local governments	3%	16,690,050	(500,702)
– Private enterprises and others			
Current (not past due)	1%	44,877,027	(448,770)
Less than 6 months past due	10%	9,518,780	(951,878)
6 months to 18 months past due	16%	4,103,108	(656,497)
18 months to 30 months past due	30%	1,387,978	(416,393)
30 months to 42 months past due	51%	760,158	(387,681)
42 months to 54 months past due	70%	673,617	(471,532)
Over 54 months past due	80%	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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Comparative information under IAS 39

Prior to 1 January 2018, an impairment loss was recognised only when there was objective evidence of impairment (see note 2(m)(i)(B) – policy applicable prior to 1 January 2018). At 31 December 2017, trade receivables of RMB3,282 million were determined to be impaired. The aging analysis of trade debtors that were not considered to be impaired was as follows:

	2017 RMB'000
Neither past due nor impaired	68,221,092
Less than 6 months past due	149,597
6 months to 1 year past due	57,818
1 to 2 years past due	189,775
2 to 3 years past due	97,658
3 to 4 years past due	32,154
4 to 5 years past due	1,254
Over 5 years past due	20,745
Subtotal	549,001
	68,770,093

Receivables that were neither past due nor impaired related to a wide range of customers for whom there was no recent history of default.

Receivables that were past due but not impaired related to a number of independent customers that had a good track record with the Group. Based on past experience, management believed that no impairment allowance was necessary in respect of these balances as there had been no significant change in credit quality and the balances were still considered fully recoverable.

Notes to the Consolidated Financial Statements

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38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Comparative information under IAS 39 (continued)

Movement in the loss allowance account in respect of trade receivables and contract assets during the year is as follows:

	2018 RMB'000	2017 RMB'000
Balance at 31 December 2017 under IAS 39	3,565,544	
Impact on initial application of IFRS 9	985,469	
Impact on initial application of IFRS 15	(187,958)	
Balance at 1 January	4,363,055	2,991,667
Provided for the year (note 8)	315,010	593,176
Written off	(26,861)	(26,398)
Others	(5,103)	7,099
Balance at 31 December	4,646,101	3,565,544

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 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 undiscounted cash outflow								Carrying amount RMB'000
	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	
	%	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	-

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Liquidity risk (continued)

	Weighted average interest rate	Repayable on demand or within one year	Contractual undiscounted cash outflow					Total undiscounted cash flows	Carrying amount
			In the second year	In the third year	In the fourth year	In the fifth year	After five years		
	%	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2017									
Trade and bills payables	N/A	90,139,818	-	-	-	-	-	90,139,818	90,139,818
Other payables	N/A	23,275,375	-	-	-	-	6,162	23,281,537	23,281,537
Financial lease payables	5.66%	905	-	-	-	-	-	905	902
Corporate bonds	3.74%	11,603,670	1,790,470	1,283,070	10,697,160	161,100	3,161,100	28,696,570	26,371,729
Interest-bearing bank and other borrowings									
- Floating rate	5.84%	19,930,381	4,466,762	6,097,118	2,157,337	1,853,041	12,694,089	47,198,728	39,640,705
- Fixed rate	4.84%	19,639,598	7,157,555	1,992,129	330,311	2,099,819	3,088,607	34,308,019	30,879,063
		164,589,747	13,414,787	9,372,317	13,184,808	4,113,960	18,949,958	223,625,577	210,313,754
Financial guarantee contracts	N/A	5,469,493	-	-	-	-	-	5,469,493	-

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 2018, the aggregate carrying amount of these bank borrowings amounted to RMB997 million (2017: RMB893 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 2018, the aggregate carrying amount of these corporate bonds amounted to RMB3,000 million (2017: RMB10,135 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.

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Liquidity risk (continued)

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

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Fair value measurement (continued)

Fair value hierarchy (continued)

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	
	2018 RMB'000	2017 RMB'000	2018 RMB'000	2017 RMB'000
Financial liabilities				
Bank and other borrowings (fixed rate)	36,988,821	30,879,063	38,542,795	33,513,361
Corporate bonds (fixed rate)	19,872,552	26,371,729	20,087,565	26,647,262
Financial lease payables (fixed rate)	–	902	–	886
	56,861,373	57,251,694	58,630,360	60,161,509

Fair value measurement as at 31 December 2018

	Level 1	Level 2	Level 3	Total
	RMB'000	RMB'000	RMB'000	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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management objectives and policies (continued)

Fair value measurement (continued)

Fair value measurement as at 31 December 2017

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial liabilities				
Bank and other borrowings (fixed rate)	–	33,513,361	–	33,513,361
Corporate bonds (fixed rate)	–	26,647,262	–	26,647,262
Financial lease payables (fixed rate)	–	–	886	886
	–	60,160,623	886	60,161,509

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 2018	01 January 2018	31 December 2017	
Tradable listed equity securities classified as available for sale financial assets	–	–	1,359,327	Level 1
Tradable listed equity securities classified as financial asset at FVOCI	900,906	1,359,327	–	Level 1
Tradable unlisted equity securities classified as financial asset at FVOCI	1,150,248	1,105,800	–	Level 3
Total	2,051,154	2,465,127	1,359,327	
Tradable listed equity securities classified as financial assets at FVPL	33,504	52,167	52,167	Level 1
Tradable unlisted equity securities classified as financial asset at FVPL	6,370,214	6,249,161	–	Level 3
Total	6,403,718	6,301,328	52,167	

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

38 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	2,152,225	Market comparable companies	Discount for lack of marketability	The higher the discount for lack of marketability, the lower the fair value.
Others	704,546			
Toll road and railway	3,944,699	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	348,047			
Others	21,230			
Power plant and others	349,715	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:

	2018 RMB'000	2017 RMB'000
Balance at 31 December 2017 under IAS 39	403,986	–
Impact on initial application of IFRS 9	6,950,975	–
Balance at 1 January	7,354,961	401,570
Payment for purchases	7,719,010	–
Disposal for the year	(8,007,895)	–
Changes in fair value recognised in profit or loss during the year	431,465	–
Changes in fair value recognised in other comprehensive income during the year	22,921	2,416
Balance at 31 December	7,520,462	403,986

From 1 January 2018, 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

39 CAPITAL COMMITMENTS

Capital expenditure:

	2018 RMB'000	2017 RMB'000
Contracted for but not provided in these consolidated financial statements:		
Property, plant and equipment	2,995,665	1,693,123

Investment commitments:

According to relevant agreements, the Group has the following investment commitments:

	2018 RMB'000	2017 RMB'000
Investment commitments in:		
– Joint ventures	366,700	366,700
– Associates	4,450	12,217
	371,150	378,917

40 OPERATING LEASE COMMITMENTS

At the end of the reporting period, the Group had commitments for future minimum lease payments under non-cancellable operating leases which fall due as follows:

	2018 RMB'000	2017 RMB'000
Within one year	359,049	178,831
1 to 3 years	283,631	235,907
Over 3 years	159,840	41,177
	802,520	455,915

Operating lease payments represent fixed rentals payable by the Group for certain of its office premises. Lease of rented premises are negotiated with fixed lease term for 1 to 10 years.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

41 CONTINGENCIES

(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 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. 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

	2018 RMB'000	2017 RMB'000
Guarantees given to banks and other financial institutions in respect of loan facilities and finance lease granted to: (note i)		
Joint ventures (note 43(a))	736,911	938,791
Associates (note 43(a))	3,594,419	3,405,158
Third party (note iii)	258,888	258,888
Investee recognised as available-for-sale financial asset	–	33,550
Investee recognised as financial assets at FVOCI	24,500	–
	4,614,718	4,636,387
Mortgage loan guarantees provided by the Group to banks in favor of its customers (note ii)	1,790,399	833,106
	6,405,117	5,469,493

Notes:

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

- (iii) One subsidiary of the Group has provided guarantee in respect of a finance leasing contract with one financial institution to a third party.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

42 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	2018 RMB'000	2017 RMB'000
Property, plant and equipment	12	3,977,206	2,946,803
Prepaid lease payments	13	279,586	340,558
Intangible assets	15	12,988,866	7,484,795
Trade receivables	22	2,022,816	410,361
Properties under development for sale	26	24,105,537	21,388,648
Completed properties for sale	26	–	32,345
Bank deposits	28	5,749,150	3,453,706
		49,123,161	36,057,216

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

43 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:

	2018	2017
Sales of goods		
Ultimate holding company	96	100
Fellow subsidiaries	647	73
Associates	1,196	282,442
Joint ventures	28	–
	1,967	282,615
Provision of construction services		
Fellow subsidiaries	29,297	33,927
Joint ventures	2,943,643	126,441
Associates	8,528,037	7,372,782
	11,500,977	7,533,150
Purchase of goods		
Fellow subsidiaries	5,561	290
Joint ventures	1,058	301
Associates	15,705	14,919
	22,324	15,510
Purchase of services		
Ultimate holding company	–	8,042
Fellow subsidiaries	210,681	122,115
Joint ventures	–	675
Associates	–	8,935
	210,681	139,767
Lease expense		
Fellow subsidiaries	167,440	158,632
Finance income		
Fellow subsidiaries	8,388	7,364
Associates	258,573	61,700
	266,961	69,064
Finance costs		
Ultimate holding company	36,334	33,919
Fellow subsidiaries	21,205	1,651
	57,539	35,570

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

43 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:

	2018	2017
	RMB'000	RMB'000
Joint ventures (note 41(b))	736,911	938,791
Associates (note 41(b))	3,594,419	3,405,158
	4,331,330	4,343,949

In the opinion of the Directors, the transaction 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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

43 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Compensation of key management personnel

The remuneration of key management during the year was as follows:

	2018 RMB'000	2017 RMB'000
Directors' fee	282	293
Salaries and other allowances	3,746	3,612
Discretionary bonus	7,696	5,679
Retirement benefit schemes contributions	762	702
Share based compensation under restricted share incentive scheme	160	–
	12,646	10,286

The remuneration of key management is determined having regard to the Group's or respective member's performance for such financial period.

During the year, certain key management personnel was granted restricted share, in respect of his service to the Group under the Scheme of the Company. Details of the Scheme are set out in note 36(e).

(d) Applicability of the Listing Rules relating to connected transactions

Certain of the related party transactions included in note 43(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.

44 ACQUISITION OF SUBSIDIARIES

During the year ended 31 December 2018, the Group acquired equity interests of certain companies owned by independent third parties.

On 23 May 2018, two wholly-owned subsidiaries of CGGC acquired 100% equity interests of Sistema Produtor Sao Lourenco S.A. ("SPSL") by entering into a Share Purchase Agreement with two Brazilian companies named Andrade Gutierrez Engenharia S.A. and Construções e Comercio Camargo Correa S.A. After this acquisition, the Group indirectly held SPSL's 100% equity interest in total and obtained control of SPSL. SPSL has entered into a service concession agreement with local water company in Brazil in respect of its water supply system operation during the concession period, which is for 25 years. Such acquisition broadened the Group's development directions and strategies of overseas investment business.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

44 ACQUISITION OF SUBSIDIARIES (CONTINUED)

The acquisition is accounted for using the acquisition method of accounting in accordance with IFRS 3, Business Combinations. The Directors believe that the acquired items constitute a business in accordance with IFRS 3.

Assets and liabilities recognised at the date of acquisition are as follows:

	SPSL RMB'000	Others RMB'000	Total RMB'000
NON-CURRENT ASSETS			
Property, plant and equipment	1,965	248,333	250,298
Prepaid lease payments	–	31,025	31,025
Investments in joint ventures	–	519	519
Investment properties	–	2,074	2,074
Trade and bills receivables	5,677,629	–	5,677,629
Prepayments, deposits and other receivables	7,632	25,555	33,187
Deferred tax assets	–	4,753	4,753
	5,687,226	312,259	5,999,485
CURRENT ASSETS			
Inventories	–	173,223	173,223
Trade and bill receivables	–	275,229	275,229
Prepayments, deposits and other receivables	295,038	178,084	473,122
Cash and cash equivalents	9,715	246,401	256,116
	304,753	872,937	1,177,690
CURRENT LIABILITIES			
Bank and other borrowings	–	84,698	84,698
Trade and bills payables	9,945	255,753	265,698
Contract liabilities	–	131,460	131,460
Other payables and accruals	166,413	82,256	248,669
Income tax payable	915	13,411	14,326
	177,273	567,578	744,851
NET CURRENT ASSETS	127,480	305,359	432,839
TOTAL ASSETS LESS CURRENT LIABILITIES	5,814,706	617,618	6,432,324

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

44 ACQUISITION OF SUBSIDIARIES (CONTINUED)

	SPSL	Others	Total
	RMB'000	RMB'000	RMB'000
NON-CURRENT LIABILITIES			
Deferred tax liabilities	114,797	2,172	116,969
Other payables and accruals	70,368	–	70,368
Bank and other borrowings	4,609,603	–	4,609,603
	4,794,768	2,172	4,796,940
NET ASSETS			
	1,019,938	615,446	1,635,384
Consideration transferred			
– Consideration paid/payable	1,019,938	565,134	1,585,072
Plus: non-controlling interests	–	252,165	252,165
Less: net assets acquired	1,019,938	615,446	1,635,384
Goodwill arising from acquisition (note 19)	–	201,853	201,853
Net cash outflow arising on acquisition			
Total cash consideration paid	(905,264)	(444,500)	(1,349,764)
Add: cash and cash equivalents acquired	9,715	246,401	256,116
Net outflow of cash and cash equivalents in respect of the acquisition	(895,549)	(198,099)	(1,093,648)

The initial fair value/acquisition accounting for SPSL and other subsidiaries was determined provisionally. In accordance with IFRS 3, adjustments to the fair value of the consideration and the assets acquired and liabilities assumed can be made during the 12 months from the date of acquisition.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

45 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	2018	2017
	RMB'000	(Note) RMB'000
NON-CURRENT ASSETS		
Property, plant and equipment	8,713	12,237
Intangible assets	13,173	14,619
Investments in subsidiaries	52,996,869	45,267,631
Financial asset at fair value through other comprehensive income	13,000	–
Available-for-sale financial assets	–	13,000
Prepayments, deposits and other receivables	29,174	22,003
Other loans to subsidiaries	2,808,000	1,978,000
	55,868,929	47,307,490
CURRENT ASSETS		
Other receivables	4,990,567	4,118,433
Other loans to subsidiaries	738,980	1,301,022
Pledged deposits	–	200
Bank and cash balances	1,621,393	4,556,976
	7,350,940	9,976,631
CURRENT LIABILITIES		
Other payables and accruals	5,277,847	5,209,232
Bank and other borrowings	2,071,501	2,393,071
	7,349,348	7,602,303
NET CURRENT ASSETS	1,592	2,374,328
TOTAL ASSETS LESS CURRENT LIABILITIES	55,870,521	49,681,818
NON-CURRENT LIABILITIES		
Other payables and accruals	110,718	–
Bank and other borrowings	1,000,000	–
Corporate bonds	5,991,957	3,158,417
	7,102,675	3,158,417
NET ASSETS	48,767,846	46,523,401
CAPITAL AND RESERVES		
Issued share capital	30,020,396	30,020,396
Reserves	18,747,450	16,503,005
TOTAL EQUITY	48,767,846	46,523,401

Note: The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

46 MAJOR NON-CASH TRANSACTIONS

During the year ended 31 December 2018, the major non-cash transactions are as follows:

- (i) The capital contribution to WGLPD (see note 18), an associate of the Group, of RMB2,481 million was settled by property under development for sale of a subsidiary of the Group.
- (ii) The increase in perpetual capital instrument of RMB10,000 million was transferred from corporate bonds (see note 32(ii)) due to the amended terms.

During the year ended 31 December 2017, the major non-cash transaction is as follow:

- (i) The increase in bank and other borrowings of RMB5,550 million was transferred from perpetual capital instrument.

47 COMPARATIVE FIGURES

The Group has initially applied IFRS 15 and IFRS 9 at 1 January 2018. Under the transition methods chosen, 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 2018.

48 SUBSEQUENT EVENT

On 16 February 2019, CGGC has received the approval from China Securities Regulatory Commission ("CSRC") for the initial issue of perpetual corporate bonds with face value of RMB3,000 million to qualified investors, for the repayment of interest-bearing liabilities and supplementary working capital. The initial issue will be completed within 12 months from the date of approval by CSRC.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

49 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2018

Up to the date of issue of these financial statements, the IASB has issued a number of amendments, new standards and interpretations which are not yet effective for the year ended 31 December 2018 and which have not been adopted in these financial statements. These include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
IFRS 16, <i>Leases</i>	1 January 2019
IFRIC 23, <i>Uncertainty over income tax treatments</i>	1 January 2019
Annual improvements to IFRSs 2015-2017 Cycle	1 January 2019
Amendments to IAS 28, <i>Investment in Associates and Joint Ventures</i>	1 January 2019

The Group is in the process of making an assessment of what the impact of these amendments, new standards and interpretations is expected to be in the period of initial application. So far the Group has identified some aspects of the IFRS 16, which may have a significant impact on the consolidated financial statements. Further details of the expected impacts are discussed below. While the assessment has been substantially completed for IFRS 16, the actual impact upon the initial adoption of this standard may differ as the assessment completed to date is based on the information currently available to the Group, and further impacts may be identified before the standard is initially applied in the Group's interim financial report for the six months ended 30 June 2019. The Group may also change its accounting policy elections, including the transition options, until the standards are initially applied in that financial report.

IFRS 16, Leases

As disclosed in note 2(l), currently the Group classifies leases into finance leases and operating leases and accounts for the lease arrangements differently, depending on the classification of the lease. Upon the adoption of IFRS 16, where the Group is the lessee under the lease, the Group will be required to account for all leases in a similar way to current finance lease accounting, i.e. recognise and measure a lease liability at the present value of the minimum future lease payments and recognise a corresponding "right-of-use" asset at the commencement date of the lease, subject to practical expedients.

Management has initially assessed that the adoption of IFRS 16 would affect the leases of property, plant and equipment as a lessee currently classified as operating leases, which would result in an increase in both assets and liabilities and would impact on the timing of recognition in the statement of profit or loss and other comprehensive income over the period of the leases. The Group will need to perform a more detailed analysis to determine the amounts of new assets and liabilities arising from operating lease commitments on adoption of IFRS 16, after taking into account the applicability of the practical expedient and adjusting for any leases entered into or terminated between now and the adoption of IFRS 16 and effect of discounting.

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 established 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 our 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 our 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 our Company
“CGGC Group”	China Gezhouba Group Company Limited, a subsidiary of our Company.
“CPE”	China Energy Engineering Group Planning & Engineering Co., Ltd., a subsidiary of our Company.
“Board”	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 2018
“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

Glossary of Vocabulary and Technical Terms

“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
“MOC”	refers to Ministry of Commerce of the People’s Republic of China
“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
“Stock Exchange”	refers to The Stock Exchange of Hong Kong Limited, a wholly owned subsidiary of Hong Kong Exchanges and Clearing Limited
“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 oceangoing “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 which 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”	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 technology that directly converts solar energy into electrical energy by making use of the photovoltaic effect of semiconductor materials

Glossary of Vocabulary and Technical Terms

“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, which 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, and environmental friendly and safety use objectives
“sponge city”	refers to the city having a good “flexibility” adapting to environmental changes and response 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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