中石化炼化工程(集团)股份有限公司
SINOPEC ENGINEERING (GROUP) CO., LTD.

中国石化
SINOPEC

Stock Code: 2386

ENGINEERING
A BETTER WORLD

2018 ANNUAL REPORT

IMPORTANT NOTICE

The board of directors (the "Board") and the directors (the "Directors") of SINOPEC ENGINEERING (GROUP) CO., LTD. ("SINOPEC SEG" or the "Company") warrant that there are no false representations, misleading statements or material omissions contained in this annual report and are hereby jointly and severally liable for the authenticity, accuracy and completeness of the content hereof. All Directors have attended and voted at the Second Meeting of the Third Session of the Board (the "Meeting"). Mr. YU Baocai (Chairman of the Board), Mr. XIANG Wenwu (Director and President), Mr. JIA Yiqun (Chief Financial Officer) and Mr. WANG Yi (Head of the finance department) warrant the authenticity and completeness of the financial statements contained in this annual report.

The annual financial statements as at 31 December 2018 (the "Reporting Period") of SINOPEC SEG and its subsidiaries (the "Group"), prepared in accordance with the International Financial Reporting Standards, were audited by Grant Thornton Hong Kong Limited, which has issued a standard unqualified audit report.

This annual report contains forward-looking statements. All statements (other than statements of historical facts) that address business activities, events or developments that the Company expects or anticipates will or may occur in the future (including but not limited to projections, targets, estimates and business plans) are forward-looking statements. The future actual results or development trends may differ materially from those indicated by these forward-looking statements as a result of various factors. The forward-looking statements referred to herein as at 8 March 2019 are made by the Company and, unless otherwise required by the relevant regulatory authorities, the Company undertakes no obligation or responsibility to update these statements.

Contents


生命只有一次 安全伴你一生
初心砥砺奋进

COMPANY PROFILE

The Group is a leading Chinese energy and chemical engineering company with strong international competitiveness. The Group can provide domestic and overseas clients with overall solutions for petrol refining, chemical engineering, aromatics, coal chemicals, inorganic chemicals, pharmaceutical chemicals, clean energy, storage and transportation facilities, environmental protection and energy saving and other sectors, including engineering consulting, technology licensing, project management contracting, financing assistance, EPC contracting, as well as design, procurement, construction and installation, lifting and transportation of large equipment, pre-commissioning, start-up and other industrial chain services.

After more than 60 years of continuous development, the Group currently has an academician of the Chinese Academy of Sciences, two academicians of the Chinese Academy of Engineering and nearly 10,000 high-quality professionals with extensive project management and implementation experience, and owns and cooperatively owns advanced patents and know-how in core business areas. The Group has delivered on schedule hundreds of modern factories with enormous investment, complicated process, advanced technology and high quality to clients in more than 20 countries and regions around the world, established long-term and steady cooperative relationships with large energy and chemical enterprises at home and abroad, established an extensive and stable client base, and enjoys remarkable industrial influence and social reputation.

In the future, the Group will continue to focus on the development strategies of "energy and petrochemical-oriented, innovation-driven, globalization-targeted and value-focused", enhance exploration and development in the fields of hydrogen energy, renewable energy and new materials, and create a new momentum in achieving the vision of "building a world-class engineering company".

BASIC INFORMATION OF THE COMPANY

LEGAL NAME
中石化煉化工程 (集團) 股份有限公司

CHINESE ABBREVIATION
中石化煉化工程

ENGLISH NAME
SINOPEC ENGINEERING (GROUP) CO., LTD.

SINOPEC SEG
SINOPEC SEG

LEGAL REPRESENTATIVE
Mr. YU Baocai

AUTHORISED REPRESENTATIVES
Mr. XIANG Wenwu

Mr. SANG Jinghua

SECRETARY TO THE BOARD
Mr. SANG Jinghua

REGISTERED ADDRESS
Building 8, Shengujiayuan, Shenggu Middle Road,
Chaoyang District, Beijing, the PRC

CORRESPONDENCE ADDRESS
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WEBSITES ON WHICH THIS ANNUAL REPORT IS PUBLISHED
Website designated by The Stock Exchange of Hong Kong Limited (the “Hong Kong Stock Exchange”):

http://www.hkex.com.hk

The Company’s website:

http://www.segroup.cn

PLACE WHERE THIS ANNUAL REPORT IS AVAILABLE FOR INSPECTION

Office of the Board

SINOPEC ENGINEERING (GROUP) CO., LTD.

Building 8, Shengujiayuan, Shenggu Middle Road, Chaoyang District, Beijing, the PRC

PLACE OF LISTING OF SHARES, STOCK NAME AND STOCK CODE

H Shares: the Hong Kong Stock Exchange

Stock name: SINOPEC SEG

Stock code: 2386

UNIFORM SOCIAL CREDIT CODE

911100007109349087

NAMES AND ADDRESSES OF AUDITORS

PRC:

Grant Thornton China (Special General Partnership)
4th, 5th and 10th Floor, Scitech Place,
22 Jianguomen Wai Avenue, Chaoyang District,
Beijing, the PRC

Overseas:

Grant Thornton Hong Kong Limited
Level 12, 28 Hennessy Road, Wan Chai, Hong Kong

NAME AND ADDRESS OF HONG KONG LEGAL ADVISOR

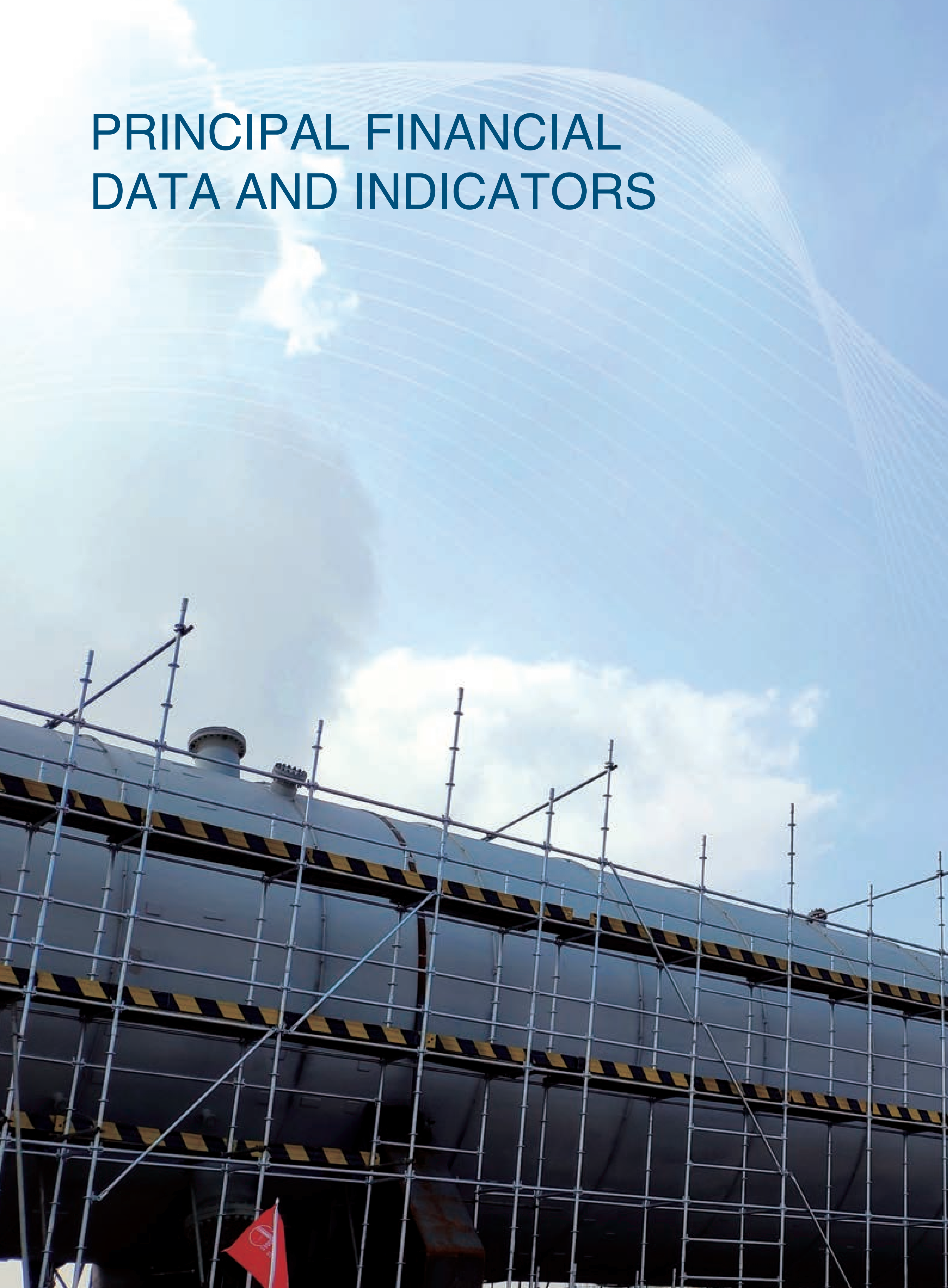
PRC:

Haiwen & Partners
20/F Fortune Financial Center
5 Dong San Huan Central Road
Chaoyang District, Beijing, People's Republic of China

Overseas:

Kirkland & Ellis
26th Floor, Gloucester Tower, The Landmark,
15 Queen's Road Central, Hong Kong

PRINCIPAL FINANCIAL DATA AND INDICATORS



Principal Financial Data And Indicators

Summary of Financial Data and Indicators Prepared in Accordance with International Financial Reporting Standards ("IFRS")

Unit: RMB'000

Items	As at 31 December 2018	As at 31 December 2017	As at 31 December 2016	As at 31 December 2015	As at 31 December 2014	Changes from the end of 2017 (%)
Non-current assets	**7,034,787**	7,540,799	7,871,988	7,977,456	8,052,331	(6.7)
Current assets	**63,837,953**	51,864,822	51,016,799	50,490,979	44,032,264	23.1
Current liabilities	**41,998,840**	31,015,076	30,724,440	30,807,397	26,347,950	35.4
Non-current liabilities	**2,890,751**	2,799,540	2,899,238	2,967,341	2,864,071	3.3
Consolidated equity attributable to equity holders of the Company	**25,978,646**	25,586,839	25,261,201	24,689,960	22,869,116	1.5
Net assets per share of equity holders of the Company (RMB)	**5.87**	5.78	5.70	5.58	5.16	1.5

Unit: RMB'000

Items	Year ended 31 December					Changes over the same period of 2017 (%)
	2018	2017	2016	2015	2014	
Revenue	**47,019,024**	36,208,723	39,402,331	45,498,354	49,345,959	29.9
Gross profit	**5,195,574**	4,026,172	4,295,415	6,157,034	6,290,612	29.0
Operating profit	**1,435,534**	1,112,267	1,942,256	3,845,193	4,039,003	29.1
Profit before taxation	**2,121,515**	1,635,101	2,376,776	4,240,047	4,550,695	29.7
Profit attributable to equity holders of the Company	**1,679,472**	1,129,974	1,670,888	3,317,704	3,489,799	48.6
Basic earnings per share (RMB)	**0.38**	0.26	0.38	0.75	0.79	48.6
Net cash flow generated from operating activities	**6,104,192**	4,240,508	4,670,772	5,793,143	333,312	43.9
Net cash flow generated from operating activities per share (RMB)	**1.38**	0.96	1.05	1.31	0.08	43.9

Items	Year ended 31 December				
	2018	2017	2016	2015	2014
Gross profit margin (%)	11.0	11.1	10.9	13.5	12.7
Net profit margin (%)	3.6	3.1	4.2	7.3	7.1
Return on assets (%)	2.6	1.9	2.8	6.0	7.0

Items	As at 31 December 2018	As at 31 December 2017	As at 31 December 2016	As at 31 December 2015	As at 31 December 2014
Asset-liability ratio (%)	63.3	56.9	57.1	57.8	56.1

CHANGES IN SHARE CAPITAL AND SHAREHOLDINGS OF SUBSTANTIAL SHAREHOLDERS

Changes in Share Capital and Shareholdings of Substantial Shareholders

1 Changes in the Share Capital of the Company

Unit: Share

	As at 31 December 2017		Increase/Decrease during the Reporting Period (+, -)			As at 31 December 2018	
	Number	Percentage (%)	New shares issued	Others	Subtotal	Number	Percentage (%)
Promoter shares (Domestic Shares)	2,967,200,000	67.01	—	—	—	2,967,200,000	67.01
Foreign shares listed overseas (H Shares)	1,460,800,000	32.99	—	—	—	1,460,800,000	32.99
Total number of shares	4,428,000,000	100.00	—	—	—	4,428,000,000	100.00

2 Shareholdings of Substantial Shareholders

As at the end of the Reporting Period, there were a total of 1,023 shareholders of the Company. As at 8 March 2018, the public float of the Company satisfied the minimum requirements under the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Hong Kong Listing Rules**").

(1) Shareholdings of the top ten shareholders

Unit: Share

Name of Shareholders	Increase/ Decrease during the Reporting Period (+,-)	Number of Domestic Shares held at the end of the Reporting Period	Number of H Shares held at the end of the Reporting Period	Percentage at the end of the Reporting Period	
				In total share capital (%)	In relevant class of shares (%)
China Petrochemical Corporation [1]	0	2,967,200,000	—	67.01	100.00
HKSCC NOMINEES LIMITED	+459,000	—	1,458,403,900	1.00	99.8
WONG CHUI CHUNG	0	—	295,000	0.01	0.02
CHAN LAI KUEN SELINA	0	—	195,500	0.00	0.01
WONG CHUI CHUNG	0	—	195,500	0.00	0.01
CHOI LAI MING	0	—	130,000	0.00	0.01
LUK LAN	0	—	60,000	0.00	0.00
PANG KWOK WAI	+60,000	—	60,000	0.00	0.00
CHENG PAT TAN LINDA	+59,000	—	59,000	0.00	0.00
DUN YUK SIM	+23,000	—	23,000	0.00	0.00
Statement on the connected relationship or action in concert among or between the aforementioned shareholders	The Company is not aware of any connection or action in concert among or between the aforementioned top ten shareholders.				

(2) Information disclosed according to the Securities and Futures Ordinance

Except for the information disclosed below, as at the end of the Reporting Period, so far as is known to the Board, no person(s) (not being a Director), chief executive of the Company or supervisor of the Company (the "Supervisor")) had an interest or short position in the shares or underlying shares or debentures of the Company which would fall to be disclosed under the provisions of Division 2 and 3 of Part XV of the Securities and Futures Ordinance (the "SFO") or, who was, directly or indirectly, interested in 5% or more of the nominal value of any class of share capital carrying the rights to vote in all circumstances at general meetings of any other member of the Group:

Name of Shareholders	Class of share	Capacity	Number of shares with interests held or regarded as being held (Share)	Percentage in shares of the Company of the same class (%)(5)	Percentage in the total share capital of the Company (%)(6)
China Petrochemical Corporation(1)	Domestic Share	Beneficial owner/Interests of controlled corporation	2,967,200,000(L)	100.00(L)	67.01(L)
JPMorgan Chase & Co.(2)	H Share	Trustee/Interests of controlled corporation	189,089,714 (L)	12.94 (L)	4.27 (L)
			2,248,003 (S)	0.15 (S)	0.05 (S)
			139,827,613 (P)	9.57 (P)	3.16 (P)
Prudential plc(3)	H Share	Interests of controlled corporation	104,479,200 (L)	7.15 (L)	2.36 (L)
BlackRock, Inc.(4)	H Share	Interests of controlled corporation	73,063,675 (L)	5.00 (L)	1.65 (L)

Notes: (L): long position; (S): short position; (P): lending pool.

Notes:
(1) China Petrochemical Corporation ("Sinopec Group") directly and indirectly holds 2,967,200,000 domestic shares of the Company ("Domestic Shares"), representing 100% of the Domestic Shares and approximately 67.01% of the total share capital of the Company, respectively. Sinopec Assets Management Co., Ltd. is a wholly-owned subsidiary of Sinopec Group and directly holds 59,344,000 Domestic Shares, representing 2.00% of the Domestic Shares and approximately 1.34% of the total share capital of the Company, respectively. For the purposes of the SFO, Sinopec Group is also deemed to be interested in the Domestic Shares held by Sinopec Assets Management Co., Ltd..
(2) The information is based on the Corporate Substantial Shareholders Notice dated 21 December 2018 and filed by JPMorgan Chase & Co. with the Hong Kong Stock Exchange.
(3) The information is based on the Corporate Substantial Shareholders Notice dated 6 December 2018 and filed by Prudential plc with the Hong Kong Stock Exchange.
(4) The information is based on the Corporate Substantial Shareholders Notice dated 29 December 2018 and filed by BlackRock, Inc. with the Hong Kong Stock Exchange.
(5) It is calculated on the basis that the Company has issued 2,967,200,000 Domestic Shares and 1,460,800,000 H Shares.
(6) It is calculated on the basis that the Company has issued 4,428,000,000 shares in total.

CHAIRMAN'S STATEMENT

YU Baocai

Chairman of the Board

Dear shareholders and friends,

On behalf of the Board, I would like to report to the shareholders of the Company ("the Shareholders") on the Company 2018 annual report and express our sincere thanks to the friends supporting the development of the Company.

Never forget why you started and keep forging ahead. In 2018, in the face of the complicated and ever-changing political and economic trends at home and abroad, the Company seized opportunities, worked hard against challenges and acted proactively and thus achieved optimal business performance with its major performance indicators all realizing significant growth. For the year 2018, the Company's revenue was RMB47.019 billion, representing an increase of 29.9% on a year-on-year basis. The net profit was RMB1.680 billion, representing an increase of 48.6% on a year-on-year basis. The asset-liability ratio remained low and cash flow performance remained strong. The total value of its new contracts was RMB50.927 billion, representing an increase of 30.4% on a year-on-year basis, which means a successful attainment of the target of new contracts in 2018. As at the end of 2018, the Group's backlog was RMB94.935 billion, representing an increase of 4.3% on a year-on-year basis. After due consideration of the Company's earnings, return to our shareholders and the needs for future sustainable development as a whole, the Board recommended a final dividend of RMB0.124 per Share for the year 2018. After taking into account the interim dividend of RMB0.100 per Share, the total dividend for the year will be RMB0.224 per Share, representing an increase of 12.0% on a year-on-year basis.

In 2018, the management of the Company led all employees to expand market, consolidate foundation and prevent risks, control cost, push forward optimization and improvement, and achieved stability in the development trend. In respect of the market development, taking the successive commencement of construction of some projects of the "seven major national petrochemical industry bases" and Sinopec Group to build four "world-class refining bases" as the opportunities, we seized possible chances in the market and exerted our competitive advantages to maintain and expand our market shares. In respect of the implementation of projects, by virtue of overall planning and optimizing resources, we worked hard to control the cost of subcontracting and procurement, ensuring that ongoing projects to be carried out smoothly and safely while the quality and progress of the projects fully controlled. In respect of our overseas business, we mainly focused on the sustainable development of the markets we have already accessed to and entered into a series of new contracts in Saudi Arabia, Kuwait and Malaysia. When we cemented recognition from overseas owners by our exceptional performance, we still closely tracked market opportunities in other countries along the Belt & Road, so as to lay foundation for exploiting new overseas markets. In scientific and technological innovations, we worked hard to successfully organise the collaboration of major technologies and the implementation of technological innovation projects, made full use of the distinctive advantages of the R&D center in the development of engineering technology and continuously strengthened the collaboration with famous licensors in the world. We have also created new accomplishments, whereby two of our projects were awarded the 2017 National Prize for Progress in Science and Technology (First Class) and one project was awarded the 2017 National Prize for Progress in Science and Technology (Second Class).

In 2018, the Board earnestly complied with applicable PRC laws and regulations, the articles of association of the Company (the "Articles of Association") and the responsibilities vested by the Shareholders and ensured the implementation of the resolutions of the general meeting. We strengthened our corporate governance to maximize the return to Shareholders. Our work of all respects obtained satisfactory results. Under the strong support of its independent Directors and Shareholders, the Company obtained the approvals from the independent Shareholder meetings for the relevant continuing connected transactions from 2019 to 2021 as part of the standardized operation thereof through entering into supplementary agreement related to the continuing connected transactions. In October 2018, the term of the second session of the Board and the Supervisory Committee expired. The members of the third session of the Board were then successfully elected and the senior management members were reappointed. Mr. LING Yiqun, the chairman of the second session of the Board and two Directors, Mr. LI Guoqing and Mr. WU Derong did not seek reappointment. During their services at the second session of the Board, they worked diligently and fufilled their duties by platying significant roles in scientific decision-making, corporate governance and the reform and development of the Company. On behalf of the Company, I am sincerely grateful for their hard work and great contributions!

In 2018, the Company proactively performed its social responsibilities. The Company developed, promoted and utilised upgraded refined oil products and new environmental protection and energy saving technologies, and thus promoted in the sustainable development of the Company. This will also make due contribution to the sustainable growth of the energy and chemical industry. The Company fully implemented QHSE (quality, health, safety and environment) management, adhered to the people-oriented principle, and cared for employees. The Company also paid much attention to the protection of the legitimate interests of stakeholders, such as customers and suppliers, in the areas where the projects are operated and thus promoted the harmonious and stable development of local society. Meanwhile, in response to the regulations of the Hong Kong Stock Exchange on disclosure of environmental, social and governance matters, we released our 2018 Environmental, Social and Governance Report concurrently with this annual report to meet the needs and expectations of investors and all sectors of the society for the relevant information of the Company.

Recently, the international landscape is undergoing complicated and profound changes. Trade protectionism is on the rise and economic globalization encounters many challenges. The flow of international capital, technologies, and talents is slowing down. While developed countries are generally haunted with domestic conflicts, the development of emerging economies have been faithing. And there are, hence, uncertainties existing in the recovery of the global economy. At the same time, there have been great development potential in the world's technology fields and industries and new technologies, new industries and new mode are booming. In China, the economic development is also experiencing profound changes. The traditional fast-growth mode featured by low-cost factors and large-scale input and at the expense of ecological environment is gradually transformed. This has brought new challenges to the energy engineering industry. Meanwhile, the domestic supply-front reform is further promoted and the industrial structure, consumption structure and energy structure are constantly opitimized. The reform and innovation momentum have been released and the vitality of open economy is bursting out. This has provided the enterprises with favourable environment to promote its fast development.

Never forget why you started and then your mission can be accomplished. Look forward to the future, an important and profound reform is being fermented in the petroleum and petrochemical industries. As China's economy is transforming towards a high-quality development mode, we will stick to the vision of "building a world first-class engineering company", and adhere to the development strategies of "taking energy and chemical as our basis and seeking innovation driving, global development and value focusing". We will actively ride the reform waves, follow development requirements, improve development quality, accelerate new market exploration and new business development, and to strengthen the reforms in fields of quality, efficiency and development drivers. Also, we will promote, with all our strength, the Company to stride towards comprehensively sustainable and high-quality development, and thus make contributions to the society, Shareholders and empolyees by our exceptional performances.

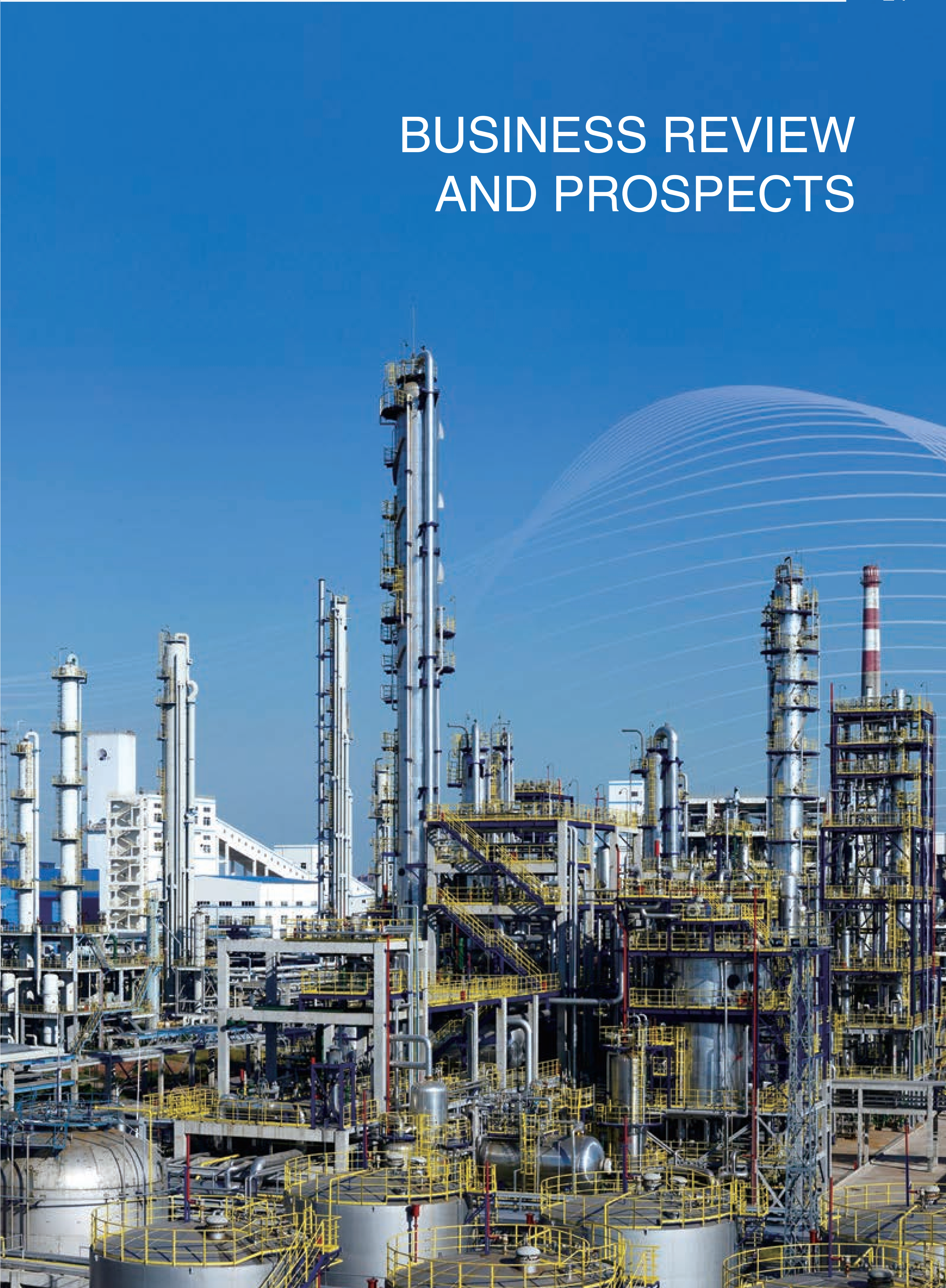
YU Baocai

Chairman of the Board

Beijing, the PRC

8 March 2019

BUSINESS REVIEW AND PROSPECTS



1 Business Review

Mr. XIANG Wenwu

Executive Director and President

(1) Market Environment

In 2018, the world economy recovered slowly, and global trade friction has escalated. Facing the abnormally complicated and severe external environment, the Chinese government continued to promote development while maintain stability. It sticked to the new development ideas, carried on high-quality development and continued to take the supply-front reform as the main thread, so as to further keep overall stable and steady progress and ensured that the national economy operate in a reasonable range. In 2018, China's domestic GDP growth rate reached 6.6%. In 2018, subject to the influence from the decrease of output by major oil producing countries and geopolitics risks, the international oil price fluctuated, rose and once exceeded USD80/barrel. At the end of the year, the international oil price dropped to a certain extent, and maintained above USD60/barrel as a result of the increased productions in major oil-producing countries and the expectation of the global demand.

In 2018, the petroleum and chemical industry of China continued to make a favorable turn while maintaining stabilization. The supply and demand of oil, gas and main chemicals in China were substantially balanced. The rising trend of the general price level continued to speed up and the industrial efficiency has been further improved while the profit continued to grow substantially. Endogenous power has been enhanced, and brought acceleration of engineering industry investment. Meanwhile, our several projects among "seven major petrochemical industrial bases" have continuously entered construction peaks. C2/C3 conversion utilization has become a new market hot point and multiple projects of ethane cracking for production of ethylene have started initial planning or engineering, and oil price rise has enhanced the investment intention of owners of new coal chemical industry project. Both the supply and demand of the natural gas market are thriving with the total consumption rising by 17% on a year-to-year basis. The Chinese government has been accelerating the construction of underground gas storage, coastal LNG receiving station and intensive and large scale LNG storage tank in key regions. The State Council has also issued *Comments of Central Committee of the Communist Party of China and State Council regarding Comprehensive Strengthening of Ecological Environment Protection and Firmly Surmounting Difficulties for Pollution Prevention and Control*, according which, the government has waged wars for the blue sky, clean water and pure land. The coal-fired power plants also entered into a tough stage centering ultra-low emission, energy conservation and efficiency improvement, bringing sustainable development power for energy saving and environmental protection industry.

In 2018, the oil refining chemical engineering market in Middle East has recovered due to the general stable oil price in the region. Gulf countries such as United Arab Emirates and Kuwait also issued new project plans of oil refining chemical market to attract foreign investors. United Arab Emirates issued development plans for the next 5 to 10 years. With the rise of oil price, Russia is planning to restart a series of oil refining plant upgrade and reconstruction projects, and to further increase LNG outputs. In regions such as Middle Asia, Southeast Asia, South Asia and Africa, the Group is also closely following up with the progress of multiple projects.

(2) Operation Overview

During the Reporting Period, the Group's total revenue and net profits attributable to the Company's shareholders were RMB47.019 billion and RMB1.679 billion, respectively. As at the end of the Reporting Period, the Group's backlog was RMB94.935 billion. The value of new contracts entered into by the Group during the Reporting Period was RMB50.927 billion.

The business of the Group mainly comprises four segments: (1) engineering, consulting and licensing; (2) engineeering, prourement and construction contracting ("EPC Contracting"); (3) construction; and (4) equipment manufacturing.

The following table sets forth the revenue generated from each of the segments and their respective percentage of the Group's total revenue (before inter-segment elimination) during the periods indicated:

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
Engineering, consulting and licensing	2,924,408	5.8	2,843,657	7.3	2.8
EPC Contracting	29,135,814	57.3	21,056,256	53.9	38.4
Construction	18,120,864	35.7	14,601,399	37.4	24.1
Equipment manufacturing	630,598	1.2	533,657	1.4	18.2
Subtotal	50,811,684	100.0	39,034,969	100.0	30.2
Total (after inter-segment elimination) [1]	47,019,024	N/A	36,208,723	N/A	29.9

Note:
(1) "Total (after inter-segment elimination)" means the aggregate revenue generated from each business segment after inter-segment elimination to exclude the impact of inter-segment transactions. Inter-segment elimination mainly arises from the inter-segment sales to the EPC Contracting segment made by the construction and equipment manufacturing segments.

During the Reporting Period, the total revenue of the Group was RMB47.019 billion, representing an increase of 29.9% on a period-on-period basis, mainly because several large EPC Contracting projects such as Zhongke Project, Zhong'An Project, and Kuwait Oil Refining Project, had a higher percentage of completion.

The following table sets forth the revenue generated from different industries in which the Group's clients operate for the periods indicated:

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
Oil refining	17,749,091	37.7	13,834,349	38.2	28.3
Petrochemicals	17,133,941	36.4	10,168,655	28.1	68.5
New coal chemicals	8,841,627	18.8	7,214,645	19.9	22.6
Other industries	3,294,365	7.0	4,991,074	13.8	(34.0)
Total	47,019,024	100.0	36,208,723	100.0	29.9

The Group derived its revenue mainly from services provided to clients in the oil refining, petrochemicals, new coal chemicals and other industries. During the Reporting Period, large EPC contracting projects such as Zhong'An Project and Kuwait Oil Refining Project have entered peak execution periods. Among which, Zhongke Project has been started, oil refining, chemical industry and coal chemical income has grown substantially, revenue generated from the oil refining industry was RMB17.749 billion, representing an increase of 28.3% on a period-on-period basis. The Group's revenue generated from the petrochemical industry was RMB17.134 billion, representing an increase of 68.5% on a period-on-period basis. The Group's revenue generated from the new coal chemicals industry was RMB8.842 billion, representing an increase of 22.6% on a period-on-period basis. The Group's revenue generated from other industries was RMB3.294 billion, representing a decrease of 34.0% on a period-on-period basis, as a result of the settlement of large projects such as Tianjin LNG Project and Malaysia RAPID Oil Refining Project, etc.

The following table sets forth the Group's revenue generated in the PRC and overseas for the periods indicated:

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
PRC	**36,932,325**	**78.5**	21,946,224	60.6	68.3
Overseas	**10,086,699**	**21.5**	14,262,499	39.4	(29.3)
Total	**47,019,024**	**100.0**	36,208,723	100.0	29.9

During the Reporting Period, the revenue of the Group generated in the PRC was RMB36.932 billion, representing an increase of 68.3% on a period-on-period basis, mainly because certain large EPC Contracting projects, such as Zhong'An Project and Zhongke Project, generated more revenues. The revenues of the Group generated from overseas was RMB10.087 billion, representing a decrease of 29.3% on a period-on-period basis, mainly because large overseas projects such as the Malaysia RAPID Oil Refining Project and FCC Project of Kazakhstan Atyrau Refinery entered into the final settlement stages, and thus decreased overseas backlog.

As at the end of the Reporting Period, the backlog of the Group amounted to RMB94.935 billion, representing an increase of 4.3% as compared with that as at 31 December 2017, and 2 times of the total revenue of RMB47.019 billion in 2018. During the Reporting Period, the value of new contracts amounted to RMB50.927 billion, representing an increase of 30.4% on a period-on-period basis.

During the Reporting Period, representative domestic projects that the Group signed include: Zhongke Project (oil refining, chemical industry and power station part), Sinopec-SABIC Petrochemical 260 Ktpa polycarbonate project (hereunder abbreviated as "Sinopec-SABIC Project") and Sinopec Luoyang Company EPC Contracting project for residue hydrotreating upgrade project (hereunder abbreviated as "Luoyang Residue Hydrogenation Project"), Sinochem Quanzhou Petrochemical Co., Ltd. 800 Ktpa paraxylene unit EPC Contracting project (hereunder abbreviated as "Sinochem Quanzhou Project"), etc.

Representative overseas projects that were signed by the Group include: Saudi SABIC GAS Phase-9 Air Separation Project (hereunder abbreviated as "SABIC Air Separation Project"), Kuwait New Collection Center (GC-32) Project (hereunder abbreviated as "Kuwait Air Collection Center Project"), Saudi Basic Industries Corporation (SABIC) affiliated national fertilizer company IBN AL-BAYTAR (IBB) ammonia reliability retrofit EPC Contracting project (hereinafter referred to as "Saudi IBB Ammonia Project"), Kuwait National Petroleum Corporation (KNPC) Kuwait MAA refinery UNIFLUX heating furnace replacement EPC Contracting project (hereinafter referred to as "Kuwait Heating Furnace Renovation Project), etc.

During the Reporting Period, our capital expenditure was RMB402 million, which was mainly used for the production base improvement, information system construction, construction machinery and engineering professional software purchase. The discussions on the Group's environmental policies, relationships with its major stakeholders and compliance with applicable laws and regulations which have significant influence on the Group are set out in the "Report on Corporate Environmental, Social and Governance" from page 108 to page 111 of this annual report.

(3) Business Highlights

Successful implementation of major projects

Zhongke Project (oil refining, chemical industry and power station part): please refer to the announcement dated 18 January 2018 and 19 March 2018 published by the Company for further details. As at the end of the Reporting Period, the overall completion percentage of this project was more than 40%. The design development was almost completed, the civil works were completed and equipment installation has comprehensively started.

Sinopec-SABIC Project: please refer to the announcement dated 11 June 2018 published by the Company for further details. As at the end of the Reporting Period, the project is currently at the stage of design development. The workers are working on pile foundation and underground pipeline on site. The overall completion percentage of this project was more than 20%.

Zhong'An Project: please refer to the announcement dated 24 November 2014 published by the Company for further details. In its 2015 Annual Report, the Company disclosed that the project had been suspended as requested by the owner. As at the end of the Reporting Period, the project was at the interim-handover and communicating preparation stage. The completion percentage of this project has exceeded 90%, and overall quality and safety are under control.

Sinochem Quanzhou Project: please refer to the announcement dated 6 June 2017 published by the Company for further details. As at the end of the Reporting Period, the project is at implementation stage and the completion percentage of this project is approximately 30%, and underground pipe and civil work construction were in the process onsite.

Dongjiakou Crude Oil Commercial Reservation Base Project: please refer to the announcement dated 15 April 2016 published by the Company for further details. As at the end of the Reporting Period, the project is at end phase onsite, the overall progress has exceeded 90%, the detailed design is fully completed and the procurement and construction is approaching the end.

Kuwait Oil Refining Project: please refer to the announcement dated 14 October 2015 published by the Company for further details. As at the end of the Reporting Period, the completion percentage of this project has exceeded 80%, ranking 1st among all EPC projects while the HSE, quality, progress, expense and other items related to this project were under control.

Malaysia RAPID Oil Refining Project: please refer to the announcement dated 29 August 2014 published by the Company for further details. As at the end of the Reporting Period, the project was nearly completed. All mechanical work on site has been completed and the devices were about to enter in the start-up and delivery stage.

FCC Project of Kazakhstan Atyrau Refinery: The scope of work under the contract for this project mainly covers the engineering, procurement, construction and commissioning of 13 processing units including 2.43 Mtpa FCC units and 47 utilities units. As at the end of the Reporting Period, the project has completed all aspects of project engineering, procurement, construction and commissioning, and all devices were successfully ramped up and delivered to owners successively.

Continuous enhancement of project maintenance capability

Leveraging the organizational support from the Group, we have established a number of key project work coordination groups based on project characteristics and construction needs. We gave a full play to the overall synergy of the Group and strengthened organizational coordination. We tightened our project monitoring system and established a triple warning mechanism to promote project efficiency and progress, and correct error in a timely manner so as to guarantee the smooth implementation of the project. We established a class-specific management mechanism for projects and published, the list of key projects of the Group yearly. We fully monitored the progress of key projects, ensured early planning, overall coordination, internal resource integration and optimization so as to ensure the quality and safety of projects. The Company's subsidiaries also made full use of their professional management advantages in project execution, proactively provided services to owners and participated in the construction of the Group and the owners. They acted as guarantees for smooth progress of projects.

We established a unified subcontracting database of projects, in order to reduce subcontracting costs and fully opitimize project management. We increased our input in cultivating Level A subcontractors, as a way to maintain our market shares. We also established long-term cooperation with subcontractors and took steps to increase their stickiness to us. In addition, we also helped them to improve their familiarity with the management system of the Group, so as to ensure smooth progress of projects.

We closely monitored the implementation of settlement plans, analyzed problems existing in project settlement and followed up with the project pipeline management. On such basis, we carried out various corresponding policies and measures to strengthen our ability in process management so as to confirm the progress of the projects and make necessary adjustments to the contracts in a timely manner.

Significant results in market development

During the Reporting Period, the Group seized the opportunity of market recovery, made full use of its overall advantages in its industry, business and technical chains, and expanded its presence in the market in a proactive manner. During the Reporting Period, the value of new contracts entered into by the Group was RMB50.927 billion, among which, the value of newly signed domestic contracts amounted to RMB45.925 billion, and the value of newly signed overseas contracts amounted to approximately RMB5.002 billion.

In the PRC, during the Reporting Period, the Group entered into new contracts for a number of large projects, such as Zhongke Project (oil refining, chemical industry and power station part) with a total contract value of approximately RMB19.644 billion, Sinopec-SABIC Project with a total contract value of approximately RMB4.586 billion, Luoyang Residual Oil Hydrotreating Project with a total contract value of approximately RMB1.842 billion, Sinochem Quanzhou Project with a total contract value of approximately RMB1.506 billion. In overseas markets, during the Reporting Period, the Group entered into new contracts for a number of large projects, such as Saudi SABIC Air Separation Project with a total contract value of approximately RMB1.756 billion, Kuwait Air Collection Center Project with a total contract value of approximately RMB867 million, Saudi IBB Ammonia Project with a total contract value of approximately RMB666 million, and Kuwait heating furnace renovation project with a total contract value of approximately RMB206 million.

In addition to the above projects, the Group also followed up with several projects in oil refining, petrochemical engineering, new coal chemical, energy saving and environmental protection fields, and the Company is expected to sign the contracts with the relevant parties regarding such projects in the future.

Continuous promotion of innovation and technological advancement

All engineering technology R&D activities has been steadily promoted

We carried out various researches and development activities focusing our main businesses. During the Reporting Period, we carried out 201 key scientific research projects, in fields where we have comparative advantages such as petroleum refining, petrochemical, inorganic chemical, construction and manufacturing businesses and environment-friendly technologies such as CO_2 utilization, solid waste recycling, and fiber bio-catalytic preparation of bio-based aviation fuel. These researches reflected the increasing demands of the technical market and embodied the overall guiding ideas of "taking energy and chemical as our basis and seeking innovation driving, global development and value focusing".

Key scientific research projects saw major progresses: Our research tasks and a series of key research projects, such as large size liquefied natural gas (LNG) receiving station engineering complete set technology are completed during the Reporting Period. Meanwhile, seven key research projects such as complete set of technology for production of premium hydroisomerization dewax base oil and new complete set of sulfuric acid alkylation technology were successfully applied. Several projects, such as coal chemical sewage comprehensive treatment and near-zero emission technology are now at the practical application stage. Finally, the application of the second-generation of aromatics technology and water-coal slurry gasification technology has entered the site construction stage.

A number of scientific research findings were applied in practice and promoted in engineering projects. The technical certification concerning ethylene and relevant technologies for Gulei refining-chemical integration was completed. A series of scientific research results, including the fixed weld seam automatic welding technology, were applied in Zhong'An Project and Zhongke Project and substantially improved the efficiency and guaranteed engineering quality.

The Luoyang Technology Research and Development Center supported and spearheaded research and development effort

Key projects such as "Comprehensive Processing of Ebullated Bed Residual Hydrotreating and Relevant Technical Researches" are progressing in an orderly manner. The industrial tests for six projects including "technological development for heating furnace condensation-type ceramic air preheater" are completed. Jointly-developed technologies including "Standardized Research on Collection of Corrosive Data at the Site" have been applied in industrial projects.

The special national key project "A Study on Technologies concerning Chemical Site Pollution Governance along the Yangtze River Delta and Integration Demonstration" was reviewed and approved.

The project "Industrial Application of the Aid Reducing the Emission of Catalytic Cracking Gas NOx" was rewarded with the Annual Sinopec Science Advancement Award (third prize). The "Regenerable Absorption Process for SOx Cleanup (RASOC) Technology and LAS Absorbent" was granted with the key support technical certificate for environment protection and clean production in petroleum and petrochemical industries recognized by China Petroleum and Chemical Industry Federation and China Chemical Industry Environmental Protection Association.

Increasing number of patent applications

During the Reporting Period, the Group completed 532 new patent applications, among which, 327 or 61.5% of such patent applications are invention patents applications. 332 of them are licensed patents and 115 of such licensed patents are invention patents.

We continued to achieve numerous fruitful results in technological innovation

During the Reporting Period, the Group was awarded with various awards in scientific innovation and engineering construction fields at the provincial and above level. Among these awards, there were 3 national scientific advancement awards. Among these three awards, the "coal-based oil/olefin large-scale modern coal chemical industry complete technology development and application" and the "high efficiency methanol to olefins whole process technology" were awarded the first prize of national science and technology progress. The Group was also awarded with the Sinopec Science and Technology Progress Award for 19 projects. Among these 19 awarded projects, 6 of them were awarded with the first prize, 4 of them were awarded with second prize and 9 of them were awarded with third prize. The Group was also awarded with 15 provincial and ministerial scientific advancement awards (8 awards of first prize, 3 awards of second prize and 4 awards of third prize) and 8 excellent design awards (1 national award and 7 provincial and ministerial awards). The Group was also awarded with 30 quality engineering awards, including 2 national gold awards and 5 silver awards and 23 other provincial and ministerial awards.

Completion of the Seperation and Transfer of "Water/Electricity/Gas Supply and Property Management"

For legacy reasons, the production and operation auxiliary facilities of certain subsidiaries of the Company have undertaken part of the water supply, electricity supply, heat supply (gas supply) and property management services (the "Water/Electricity/Gas Supply and Property Management") in their employee living areas. According to the "Notice of the Office of the State Council on the State-owned Assets Supervision and Administration Commission of the State Council and the Ministry of Finance Regarding the Guidelines Related to the Separation and Transfer of "Water/Electricity/Gas Supply and Property Management" in the Employee Living Areas of the State-owned Enterprises" (Guobanfa [2016] No. 45) (《國務院辦公廳轉發國務院國資委、財政部關於國有企業職工家屬區「三供一業」分離移交工作指導意見的通知》 (國辦發[2016]45號)), the "Measures for Administration of Subsidies from the Central Treasury for the Separation and Transfer of "Water/Electricity/Gas Supply and Property Management" in the Employee Living Areas of the State-owned Enterprises Supervised by the Central Government" (Cai Zi [2016] No. 38) (《中央企業職工家屬區「三供一業」分離移交中央財政補助資金管理辦法》 (財資[2016]38號)) and other relevant documents, the separation and transfer of the "Water/Electricity/Gas Supply and Property Management" in their employee living areas (the "**Separation and Transfer**") shall be implemented by the state-owned-enterprises nationwide comprehensively. For details relating to the Separation and Transfer, please refer to the Company's announcement dated 10 January 2019.

The Separation and Transfer of "Water/Electricity/Gas Supply and Property Management" is a major initiative to streamlining the social functions undertaken by state-owned enterprises. It allows the state-owned enterprises such as the Group to reduce their liabilities, focus on their major businesses, and promote their long-term development. As such, the directors of the Company were of the view that the Separation and Transfer is fair and reasonable, and is of the interests of the Company and its shareholders as a whole.

Following the requirements of the Ministry of the Finance, the State-owned Assets Supervision and Administration Commission of the State Council and other relevant authorities (the "**Relevant Authorities of the State**"), the Group implemented the Separation and Transfer comprehensively in 2018. The Separation and Transfer mainly require necessary maintenance and renovation on the related equipment and facilities, in order to reach the average level of urban infrastructures. Household units will be established, electric meters will be set up, and charges will be imposed on each household unit, and such equipment and facilities will be then transferred to professional enterprises or institutions (the "**Transfer**"). The transfer was substantially completed by the end of 2018 pursuant to the requirements of the Relevant Authorities of the State.

As at the end of the Reporting Period, pursuant to the relevant policies of the State, the total value of the assets (including lands) transferred by relevant subsidiaries of the Company to the relevant receiving parties on a free-of-charge basis amounted to approximately RMB189 million. The total maintenance and renovation expenses approved by the institutions authorized by the State amounted to approximately RMB632 million. The other maintenance and renovation expenses amounted to approximately RMB179 million. The total government subsidies received in 2018 amounted to approximately RMB123 million. The total net expenses incurred by the Group in 2018 amounted to approximately RMB877 million. Pursuant to the International Financial Reporting Standards, the above expenses and government subsidies shall be categorized as "non-recurring profits or losses". If not taking into account such effects, the net profit as at the end of the Reporting Period was RMB2.557 billion, with an increase of 126.2% on a year-to-year basis. Pursuant to the China Accounting Standards for Business Enterprises, the assets (including lands) transferred to the receiving parties on a free-of-charge basis and the renovation expenses approved by the authorized institutions will offset against equity attributable to equity holders (For certain financial data under the China Accounting Standards for Business Enterprises, please refer to section "SIGNIFICANT EVENTS - 1. H Shares appreciation rights scheme").

Environment protection and energy conservation businesses are constantly expanding

During the Reporting Period, the Group signed energy saving and environmental protection contracts with a value of RMB2.169 billion. These contracts are mainly related to joint sewage treatment plant and alkali waste incinerator EPC general contract of Sinopec Group and Anhui Province, boiler and combustion engine flue gas denitration reconstruction project of Fujian Refining & Petrochemical Company Limited, environmental protection control project of sulphur recovery in Sinopec Guangzhou Branch and boiler flue gas denitration reconstruction project of Yangzi Petrochemical Company and etc.

To save energy, the Group has actively propelled the progress of 46 existing contract energy management projects of Sinopec Group and signed contract for 14 projects, contract negotiation, preparation of feasibility reports or plans for remaining projects are under way. The Group is actively organizing and implementing communications on energy saving technology to enrich energy saving technological resources.

In the field of environmental protection, the Group has signed the EPC project for site pollution restoration, abatement and control project of Dongli plant of Polyether Department of Sinopec Tianjin Petrochemical. The Group has actively propelled the progress of a large-size polluted soil abatement and control project of China. In collaboration with advanced technologies of China and foreign countries the Company, has implemented CO_2 trap, conversion demonstration device program research and the initial stage work of project.

Smooth progress in digital engineering application

During the Reporting Period, the Group has been stably promoting the construction of digital factories. In this regard, the Group published the national standard, *the Standard of Digital Delivery for Oil Refining and Petrochemical Project*. Our digital archives was listed as a national pilot project. Further application of engineering design and production line were used overseas projects, such as Malaysia RAPID Oil Refining Project, Kuwait Oil Refining Project, and US Formosa Plastics Project. We promoted the intelligent P&ID application for key projects, such as Zhongke Project, Sinopec-SABIC Project and Zhenhai Project. We also improved the digital delivery platform, the independent innovation in professional 3D design for equipment and structures, the integrated application of standardized design, electronic archiving, digitalized publishing and reform in the modes of digitalized, networked and intelligent engineering design. All of them promoted the engineering service ability and providing powerful support for the construction of intelligent factories.

Continue to promote safe production

The Group always adheres to a people-oriented QHSSE (quality, occupational health, safety, public security and environment) core value. The Group positions the QHSSE management system as the main thread, and focuses on the construction of a long-term mechanism and aims to implement the accountability system comprehensively. The Group strives to thoroughly identify security risks and major latent risks, strengthen its risk control and cement its “three foundation” management. The Group spares no efforts to promote the construction of quality safety standardization and construction of intrinsic safety ability. The Group also constantly improves its QHSSE management by organizing multi-level training, deepening the design of intrinsic safety management, enhancing supervision and inspection, and further promotion of quality elevation activities and other measure alike. In line with its management philosophy of “all staffs, entire process, all around and all weather”, The Group keeps improving its QHSSE management of overseas projects, so as to ensure successful progress of overseas projects.

As at the end of the Reporting Period, no major safety, quality, environmental, occupational health or overseas public safety accidents occurred in the Group thanks to all employees’ dedication and strict management. As a result, an aggregate of 221.88 million labour safe hours were realised during the Reporting Period.

2 Business Prospects

Looking ahead to 2019, it is expected that as the global industrial production will slow down and the tension of the trade environment will heighten, there will be more uncertain factors affecting the recovery of the world economy. At the same time, China's economy will grow steadily with increasing uncertainties and challenges. It faces both complex and severe external environment and domestic downward pressure, As such, the economic growth rate is expected to maintain in reasonable interval. The international oil market is accelerating rebalancing in 2019, and the extension of the reduction agreement has injected more confidence into the recovery and rebalancing of the oil market, but oil demand and non-OPEC supply uncertainties have increased and international oil prices have remained volatile. In 2019, it is expected that the global industrial investment will continue to grow, and some projects in the national seven petrochemical industry bases and Sinopec Group's four world-class refining bases will have substantial progresses. It is also expected that the production and management in China's refining, chemical engineering industry will be significantly improved, while resource competition will be more intense, and engineering companies still face great cost control pressure.

In 2019, the Group will actively grasp the improvement of the domestic market environment, make full use of its advantages such as collectivisation, integration and economies of scale, continuously enhance its core competitive edge, propel its sustainable and healthy development and make efforts to become a "national business card" of the Chinese oil refinery and chemical engineering industry. In 2019, the target domestic new contract value of the Group is RMB45.0 billion, and the target overseas new contract value is USD1.5 billion.

(1) Continuously promote in-depth reform and accelerate the optimisation of internal resources

In 2019, the Group will systematically promote the reform and innovation in line with market development. The Group has been optimizing the configuration of internal resources, exploring the integration of information technology resources and building the information and digital industry platform for the Group. The Group also promotes regional resource optimisation, achieves complementary advantages of engineering companies and construction enterprises, creates a total force, reduces marginal costs, and improves overall efficiency and competitiveness. Meanwhile, the Company will follow up with the precedents of the world's leading engineering enterprises and further optimize its corporate governance structure in reliance of its own strategies and strengths and in line with the principle "Streamlizing and Efficiency".

(2) Actively explore transformational development to expand new market scope and business modes

In 2019, the Group will adhere to the green low-carbon development strategy and vigorously expand new business areas and new business models. The Group will actively develop biomass gasoline, bio-ethanol and other renewable energy fields, promote the development of new coal chemical market, accelerate into the field of carbon emission reduction and carbon trading with CO_2 capture and utilisation as an opportunity, seize the favorable opportunity of natural gas market, vigorously explore natural gas purification plant, pipeline, receiving station and other engineering markets. The Group will also promote the market development by diversifying the funding channels and participate in various public-private-partnership ("PPP") projects in sewage management, industrial parks construction and infrastructure construction. The Group will also engage its subsidiaries, patents operations and suppliers in the investments through multiple means to make the investments in an efficient and precise manner.

(3) Strengthen process management and project control, take multiple measures simultaneously, and increase cost efficiency

In 2019, the Group will carry out various measures to ensure the smooth implementation of the in-progress projects. The Grop will increase the process control over newly launched large projects and make improvements in the reviewing of the commencement report and major plans of the projects. The Group will focus on the risk assessment of the projects, make quantitative analysis of their overall progress, take corrective measures promptly and conduct dynamic analysis of project cost. The Group will improve the project management and self-inspection systems, further optimize the design management, plan and precision system and further strengthen the EPC capability through such optimization measures. The Group will strengthen the management of man hours, optimize the balance of the human resources of projects and provide more accurate basis for subsequent bidding and quotations.

(4) Holding onto the strategic opportunity of the "Belt and Road" initiative to solidly advance global development.

In 2019, the Group will seize the opportunities of "The Belt and Road" strategy, make full use of its advantages under unified brands and build a market development system that features the joint actions taken by the headquarters, subsidiaries and overseas institutions. The Group will strengthen its analysis and studies on the international market, consolidate the traditional markets in the Middle East, Southeast Asia and Central Asia, implement the strategy of opening up the markets in Russia, South Asia and Africa, pursue global development in a steady manner and expand the export of SINOPEC technology, engineering and equipment.

(5) Focus on Technology Progression to Maintain and Enhance Technology Leading Advantages

In 2019, in line with technology development in the market, the Group will continue to access to technological progress, create business growth through innovations and strengthen its technical capabilities to solid its leading position in the market. The Group will follow the basic principle "technical management serves the project, and technology innovations win the market" in its daily operation. Leveraging the Group's strengths in petrochemical industry, new coal chemical industry, medicine, inorganic chemical industry and large scale construction technology, the Group will actively develop and introduce new technologies, optimize resource allocation in research and development fields, especially in environmental engineering technology areas, and make use of external resources to create a win-win situation. The Group will also utilize the innovative resources of the research and development center, establish a network of innovative technologies, enhance the sharing and application efficiency of innovative resources, talents and new technology achievements in the Group, and thus realise the leading role of technological innovation in the development of the Group.

(6) Vigorously exploit environmental protection and energy saving sectors to create new business growth

In 2019, the Group will actively explore the energy conservation and environment protection markets. The Group will enage its energy saving subsidiaries to provide energy conservation diagnosis and solutions, and explore external business markets such as steel, electric power and coal chemical markets, so as to further expand contractual energy management business and realize profits in such fields. The Group will organize technical communications concerning advanced energy conservation technologies, enrich its technological resources and promote application and piloting of advanced technologies. In soil restoration area, the Group will ensure execution of winning projects, ensure preparation services for site restoration projects for the Group's petrochemical relocation, and also organize communications concerning advanced technologies, so as to improve its market competence. The Group will also strive to explore external market by various cooperation modes.

(7) Promote the establishment of modern human resource management system

In 2019, in line with the strategy to build a world first-class engineering company, the Group will continue to attach great importance to the talent teambuilding, optimize its policies and measures, and initiate reform and innovation in various areas. It will stress the integration of enterprise strategies, corporate culture and human resources management and, by taking target management as the basis, establish complete, regulated, flexible and prudent human resources management mechanism. In addition, the Group will also further improve its remuneration system in which the post-specific salary is adjusted dynamically with performance. Oriented by efficiency and benefits, the Group will speed up the construction of overseas remuneration and welfare system by referring corresponding overseas remuneration and welfare systems. In combination of its business characteristics, the Group will construct a domestic-overseas integrated remuneration management mode suitable for engineering construction enterprises. The Group will also formulate teambuilding targets and training measures for five talent teams, including management team, professional technical team, skill operating team, international talent team, and project manager team. Lastly, the Group will regulate its professional title evaluation, sophisticated talent election, talent growth channels and recruitment procedures, enhance talent teambuilding, and provide human resources support for business development.

(8) Comprehensive commencement of constructing the engineering cloud platform

In 2019, the Group will further improve information reform, exert its overall advantage, cement its foundation and safety defense, stress standardization and integration, and enhance its ability and thus create a first-class enterprise. The Group will eliminate information isolation, continue to promote further application of enterprise resource planning (“ERP”), promote overseas pilot application of ERP, and promote the application of the Build-Work big data analysis in its daily work, and achieve the management and operation in a standardized, streamlized and efficient manner. The Group will focus on the data-based governance, promote the construction of digitalized factory platforms, increase the coverage of the use of engineering data cloud platforms and promote the operation of the engineering cloud platform. The Group will also promote the construction of “big data”, “big application” and “big platform” comprehensively, and will work hard to build new business model, new industry mode and new practice areas driven by the intelligence and information innovations in the engineering industry.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis should be read in conjunction with the Group's audited financial statements and the accompanying notes contained in this annual report. The relevant financial data below, unless otherwise stated, are extracted from the Group's audited financial statements prepared according to the IFRS.

1 Consolidated Results of Operations

The following table sets forth the consolidated comprehensive income and comprehensive income statement of the Group for the indicated years.

	Year ended 31 December				Change
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
Revenue	47,019,024	100.0	36,208,723	100.0	29.9
Cost of sales	(41,823,450)	(89.0)	(32,182,551)	(88.9)	30.0
Gross profit	5,195,574	11.0	4,026,172	11.1	29.0
Other income	559,214	1.2	184,718	0.5	202.7
Selling and marketing expenses	(123,546)	(0.3)	(114,836)	(0.3)	7.6
Administrative expenses	(1,298,652)	(2.8)	(1,181,032)	(3.3)	10.0
Research and development costs	(1,675,692)	(3.6)	(1,002,907)	(2.8)	67.1
Other operating expenses	(36,812)	(0.1)	(797,788)	(2.2)	(95.4)
Other losses - net	(1,184,552)	(2.5)	(2,060)	(0.0)	57,402.5
Operating profit	1,435,534	3.1	1,112,267	3.1	29.1
Finance income	780,375	1.7	600,926	1.7	29.9
Finance expenses	(118,014)	(0.3)	(90,432)	(0.2)	30.5

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
Finance income - net	662,361	1.4	510,494	1.4	29.7
Share of losses of joint arrangements	(46)	(0.0)	(1,372)	(0.0)	(96.6)
Share of profit of associates	23,666	0.1	13,712	0.0	72.6
Profit before taxation	2,121,515	4.5	1,635,101	4.5	29.7
Income tax expense	(441,706)	(0.9)	(504,869)	(1.4)	(12.5)
Profit for the year	1,679,809	3.6	1,130,232	3.1	48.6
Exchange differences arising on translation of foreign operations	(49,746)	(0.1)	(119,110)	(0.3)	(58.2)
Losses on revaluation of retirement benefit plans obligations, net of income tax effect	(157,487)	(0.3)	(12,984)	(0.0)	1,112.9
Total comprehensive income for the year	1,472,576	3.1	998,138	2.8	47.5

(1) Revenue

The revenue of the Group increased by 29.9% from RMB36.209 billion for the year ended 31 December 2017 to RMB47.019 billion for the year ended 31 December 2018, which was mainly due to the increase of income as a result that large EPC Contracting projects such as Zhong'An Project and Zhongke Project have entered startup period.

(2) Cost of sales

The cost of sales of the Group increased by 30.0% from RMB32.183 billion for the year ended 31 December 2017 to RMB41.823 billion for the year ended 31 December 2018, which was mainly due to the corresponding increase of the cost of subcontracting, equipment and materials together with income growth.

(3) Gross profit

The gross profit of the Group increased by 29.0% from RMB4.026 billion for the year ended 31 December 2017 to RMB5.196 billion for the year ended 31 December 2018. Gross profit margin was 11.0%, on a remaining broadly stable on a year-on-year basis. The gross profit margin of the Construction segment increased significantly on a year-on-year basis, due to profit increased by some completed construction projects; while the gross profit margin of the EPC Contracting segment decreased on year-on-year basis, due to the increased price of materials, equipment and labor.

(4) Other income

The other income of the Group increased by 202.7% from RMB185 million for the year ended 31 December 2017 to RMB559 million for the year ended 31 December 2018, which was mainly due to the exchange gains caused by the rise of the USD/RMB exchange rate during the Reporting Period.

(5) Selling and marketing expenses

The selling and marketing expenses of the Group were RMB124 million, remaining broadly stable on a year-on-year basis.

(6) Administrative expenses

The administrative expenses of the Group were RMB1.299 billion, remaining broadly stable on a year-on-year basis.

(7) Research and development costs

The research and development costs of the Group increased by 67.1% from RMB1.003 billion for the year ended 31 December 2017 to RMB1.676 billion for the year ended 31 December 2018, which was mainly due to the Group's efforts in research and development of petroleum refining, petrochemical, inorganic chemical, environmental protection and other process technologies, as well as increased digital engineering design and construction automation R&D investment.

(8) Other operating expenses

The other operating expenses of the Group decreased by 95.4% from RMB798 million for the year ended 31 December 2017 to RMB37 million for the year ended 31 December 2018, which was mainly due to the decrease in provision for impairment of receivables on year-on-year basis in the Reporting Period; and the exchange losses caused by the depreciation of US dollar in the same period last year.

(9) Other losses - net

The net other losses of the Group increased from RMB2 million for the year ended 31 December 2017 to RMB1.185 billion for the year ended 31 December 2018, which was mainly due to the impact of the Separation and Transfer during the Reporting Period. For details, please refer to the announcement issued by the Company on 10 January 2019.

(10) Operating profit

Due to the foregoing reasons, the operating profit of the Group increased by 29.1% from RMB1.112 billion for the year ended 31 December 2017 to RMB1.436 billion for the year ended 31 December 2018.

(11) Finance income - net

The net finance income of the Group increased by 29.7% from RMB510 million for the year ended 31 December 2017 to RMB662 million for the year ended 31 December 2018, which was mainly due to (i) the increase of interest income from our bank deposits; and (ii) the increase of interest income arising from our entrusted loans to the ultimate holding company. Please refer to the Company's circular dated 19 September 2018.

(12) Income tax expense

The Group's income tax expense decreased by 12.5% from RMB505 million for the year ended 31 December 2017 to RMB442 million for the year ended 31 December 2018, and effective income tax rate decreased from 30.9% to 20.8% on a period-on-period basis. This is mainly due to profit fluctuation of several subsidiaries which are subject to different tax rates and national tax incentives.

(13) Profit for the year

Due to the above reasons, the profit in the Reporting Period increased by 48.6% from RMB1.130 billion for the year ended 31 December 2017 to RMB1.680 billion for the year ended 31 December 2018.

(14) Total comprehensive income for the year

As a combined result of the reasons above and the contribution from other comprehensive income of the Group, the total amount of the comprehensive income of the Group increased by 47.5% from RMB998 million for the year ended 31 December 2017 to RMB1.473 billion for the year ended 31 December 2018.

2 Discussion on the Results by Business Segments

The following table sets forth the revenue, gross profit, gross profit margin, operating profit and operating profit margin of each of our business segments for the periods indicated:

	Segment revenue		Segment gross profit		Segment gross profit margin		Segment operating profit		Segment operating profit margin	
	Year ended 31 December		Year ended 31 December		Year ended 31 December		Year ended 31 December		Year ended 31 December	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	(RMB '000)		(RMB '000)		(%)		(RMB '000)		(%)	
Engineering, consulting and licensing	**2,924,408**	2,843,657	**907,915**	881,328	**31.0**	31.0	**39,245**	139,576	**1.3**	4.9
EPC Contracting	**29,135,814**	21,056,256	**2,740,206**	2,517,223	**9.4**	12.0	**1,548,272**	1,228,491	**5.3**	5.8
Construction	**18,120,864**	14,601,399	**1,501,894**	590,882	**8.3**	4.0	**(249,979)**	(291,206)	**(1.4)**	(2.0)
Equipment manufacturing	**630,598**	533,657	**45,559**	36,739	**7.2**	6.9	**23,145**	14,693	**3.7**	2.8
Unallocated	**N/A**	N/A	**N/A**	N/A	**N/A**	N/A	**74,851**	20,713	**N/A**	N/A
Subtotal	**50,811,684**	39,034,969	**5,195,574**	4,026,172	**N/A**	N/A	**1,435,534**	1,112,267	**N/A**	N/A
Total after inter-segment elimination [(3)]	**47,019,024**	36,208,723	**5,195,574**	4,026,172	**11.0**[(1)]	11.1[(1)]	**1,435,534**	1,112,267	**3.1**[(2)]	3.1[(2)]

(1) Total gross profit margin is calculated based on total gross profit divided by total revenue, and total revenue is the gross earnings generated after inter-segment elimination in all the business segments.

(2) Total operating profit margin of the segment is calculated based on the total operating profit of the segment divided by total revenue, and total revenue is the gross earnings generated after inter-segment elimination in all the business segments.

(3) Inter-segment elimination is mainly caused by the inter-segment sales made by the construction and equipment manufacturing segments to the EPC Contracting segment. Other information on inter-segment sales is set out in Note 7 to the financial statements contained in this annual report.

Engineering, Consulting and Licensing

The operating results of the Group's Engineering, Consulting and Licensing business are as follows:

	Year ended 31 December			
	2018		2017	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB '000)	(%)	(RMB '000)	(%)
Revenue	2,924,408	100.0	2,843,657	100.0
Cost of sales	(2,016,493)	(69.0)	(1,962,329)	(69.0)
Gross profit	907,915	31.0	881,328	31.0
Selling and marketing expenses	(27,106)	(0.9)	(23,811)	(0.8)
Administrative expenses	(248,703)	(8.5)	(241,787)	(8.5)
Research and development costs	(628,482)	(21.5)	(433,588)	(15.2)
Other income and expenses	35,621	1.2	(42,566)	(1.5)
Operating profit	39,245	1.3	139,576	4.9

(1) Revenue

The revenue generated from the Group's Engineering, consulting and licensing segment was RMB2.924 billion, remaining broadly stable on a year-on-year basis.

(2) Cost of sales

The cost of sales of the Group's Engineering, consulting and licensing segment was RMB2.016 billion, remaining broadly stable on a year-on-year basis.

(3) Gross profit

The gross profit of the Group's Engineering, consulting and licensing segment was RMB908 million and gross profit margin was 31.0%, remaining broadly stable on a year-on-year basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's Engineering, consulting and licensing segment were RMB27 million, remaining broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's Engineering, consulting and licensing segment was RMB249 million, remaining broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's Engineering, consulting and licensing segment increased by 44.9% from RMB434 million for the year ended 31 December 2017 to RMB628 million for the year ended 31 December 2018, mainly due to the Group's efforts in research and development of petroleum refining, petrochemical, inorganic chemical, environmental protection and other process technologies, as well as increased digital engineering design and construction automation R&D investment.

(7) Operating profit

Due to the above reasons, the operating profit of the Group's Engineering, consulting and licensing segment decreased by 71.9% from RMB140 million for the year ended 31 December 2017 to RMB39 million for the year ended 31 December 2018.

EPC Contracting

The operating results of the Group's EPC Contracting business are as follows:

	Year ended 31 December			
	2018		2017	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB '000)	(%)	(RMB '000)	(%)
Revenue	29,135,814	100.0	21,056,256	100.0
Cost of sales	(26,395,608)	(90.6)	(18,539,033)	(88.0)
Gross profit	2,740,206	9.4	2,517,223	12.0
Selling and marketing expenses	(47,789)	(0.2)	(43,024)	(0.2)
Administrative expenses	(414,005)	(1.4)	(371,349)	(1.8)
Research and development costs	(587,959)	(2.0)	(315,535)	(1.5)
Other income and expenses	(142,181)	(0.5)	(558,824)	(2.7)
Operating profit	1,548,272	5.3	1,228,491	5.8

(1) Revenue

The revenue generated from the Group's EPC Contracting segment increased by 38.4% from RMB21.056 billion for the year ended 31 December 2017 to RMB29.136 billion for the year ended 31 December 2018, which was mainly due to the increase of income as a result that large EPC Contracting projects such as Zhong'An Project and Kuwait Oil Refining Project have entered execution peak period and Zhongke Project has entered startup period.

(2) Cost of sales

The cost of sales of the Group's EPC Contracting segment increased by 42.4% from RMB18.539 billion for the year ended 31 December 2017 to RMB26.396 billion for the year ended 31 December 2018, which was mainly due to the increase of the cost of sub-contracting and outsourcing of equipment and materials.

(3) Gross profit

The gross profit of the Group's EPC Contracting segment increased by 8.9% from RMB2.517 billion for the year ended 31 December 2017 to RMB2.740 billion for the year ended 31 December 2018, and the gross profit margin decreased from 12.0% in the same period of last year to 9.4%, mainly due to the increase of the price of materials, equipment and subcontracting labor, and the decrease of the project gross profit margin on a year-on-year basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's EPC Contracting segment were RMB48 million, remaining broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's EPC Contracting segment were RMB414 million, remaining broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's EPC Contracting segment increased by 86.3% from RMB316 million for the year ended 31 December 2017 to RMB588 million for the year ended 31 December 2018, mainly due to the Group's efforts in research and development of petroleum refining, petrochemical, inorganic chemical, environmental protection and other process technologies, as well as increased digital engineering design and construction automation R&D investment.

(7) Operating profit

Due to the above reasons, and the impact of the exchange gain, reversal of provision for impairment, etc., the operating profit of the Group' EPC Contracting segment increased by 26.0% from RMB1.228 billion for the year ended 31 December 2017 to RMB1.548 billion for the year ended 31 December 2018.

Construction

The operating results of the Group's Construction business are as follows:

	Year ended 31 December			
	2018		2017	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB '000)	(%)	(RMB '000)	(%)
Revenue	18,120,864	100.0	14,601,399	100.0
Cost of sales	(16,618,970)	(91.7)	(14,010,517)	(96.0)
Gross profit	1,501,894	8.3	590,882	4.0
Selling and marketing expenses	(44,377)	(0.2)	(43,478)	(0.3)
Administrative expenses	(617,962)	(3.4)	(548,512)	(3.8)
Research and development costs	(459,146)	(2.5)	(252,276)	(1.7)
Other income and expenses	(630,388)	(3.5)	(37,822)	(0.3)
Operating Loss	(249,979)	(1.4)	(291,206)	(2.0)

(1) Revenue

The revenue generated from the Group's Construction segment increased by 24.1% from RMB14.601 billion for the year ended 31 December 2017 to RMB18.121 billion for the year ended 31 December 2018, which was mainly due to the increase of the workload of construction business.

(2) Cost of sales

The cost of sales of the Group's Construction segment increased by 18.6% from RMB14.011 billion for the year ended 31 December 2017 to RMB16.619 billion for the year ended 31 December 2018, which was mainly due to the increase of the workload of construction business.

(3) Gross profit

The gross profit of the Group's Construction segment increased by 154.2% from RMB591 million for the year ended 31 December 2017 to RMB1.502 billion for the year ended 31 December 2018 and the gross profit margin increased from 4.0% in the same period of last year to 8.3%, mainly due to the increased revenue as a result of the settlement of change orders.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's Construction segment were RMB44 million, remaining broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expense of the Group's Construction segment was RMB618 million, remaining broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's Construction segment increased by 82.0% from RMB252 million for the year ended 31 December 2017 to RMB459 million for the year ended 31 December 2018, mainly due to the Group's intensified investment in research and development on construction automation, etc.

(7) Operating Loss

Due to the above reasons and the Separation and Transfer, the operating loss of the Construction segment of the Group was RMB250 million for the year ended 31 Decemeber 2018.

Equipment Manufacturing

The operating results of the Group's Equipment manufacturing business are as follows:

	Year ended 31 December			
	2018		2017	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB '000)	(%)	(RMB '000)	(%)
Revenue	630,598	100.0	533,657	100.0
Cost of sales	(585,039)	(92.8)	(496,918)	(93.1)
Gross profit	45,559	7.2	36,739	6.9
Selling and marketing expenses	(4,274)	(0.7)	(4,523)	(0.8)
Administrative expenses	(17,982)	(2.9)	(19,384)	(3.4)
Research and development costs	(105)	(0.0)	(1,508)	(0.3)
Other income and expenses	(53)	(0.0)	3,369	0.6
Operating profit	23,145	3.7	14,693	2.8

(1) Revenue

The revenue generated from the Group's Equipment manufacturing segment increased by 18.2% from RMB534 million for the year ended 31 December 2017 to RMB631 million for the year ended 31 December 2018, which was mainly due to the increase of equipment manufacturing orders.

(2) Cost of sales

The cost of sales of the Group's Equipment manufacturing segment increased by 17.7% from RMB497 million for the year ended 31 December 2017 to RMB585 million for the year ended 31 December 2018, which was mainly due to the increase of equipment manufacturing orders.

(3) Gross profit

The gross profit of the Group's Equipment manufacturing segment increased by 24.0% from RMB37 million for the year ended 31 December 2017 to RMB46 million for the year ended 31 December 2018, and the gross profit margin increased from 6.9% in the same period last year to 7.2%, mainly due to the increase of income.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's Equipment manufacturing segment were RMB4 million, remaining broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's Equipment manufacturing segment were RMB18 million, remaining broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's Equipment manufacturing segment were RMB105,000.

(7) Operating profit

Due to the above reasons, the operating profit of the Group's Equipment manufacturing segment increased by 57.5% from RMB15 million for the year ended 31 December 2017 to RMB23 million for the year ended 31 December 2018.

3 Discussion on the results by other classification

The following table sets forth the revenue generated from different industries in which the Group's clients operate:

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
Oil refining	17,749,091	37.7	13,834,349	38.2	28.3
Petrochemicals	17,133,941	36.4	10,168,655	28.1	68.5
New coal chemicals	8,841,627	18.8	7,214,645	19.9	22.6
Other industries	3,294,365	7.0	4,991,074	13.8	(34.0)
Subtotal	47,019,024	100.0	36,208,723	100.0	29.9

As illustrated by the above revenue generated from different industries, during the Reporting Period, influenced by large EPC Contracting projects such as Zhong'An Project and Kuwait Oil Refining Project having entered execution peak period, and Zhongke Project having entered startup period, the income generated from oil refining, petrochemical and coal chemical industries have grown substantially, and the revenue generated from the oil refining industry was RMB17.749 billion, representing an increase of 28.3% on a year-on-year basis; the revenue generated from the petrochemical industry was RMB17.134 billion, representing an increase of 68.5% on a year-on-year basis; the revenue generated from new coal chemical industry was RMB8.842 billion, representing an increase of 22.6% on a year-on-year basis. Influenced by the settlement of large-scale projects such as Tianjin LNG Project and Malaysia RAPID Oil Refining Project, the revenue generated from other industries was RMB3.294 billion, representing a decrease of 34.0% on a year-on-year basis.

The following table sets forth the revenue generated from different regions where the Group's clients operate:

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
PRC	36,932,325	78.5	21,946,224	60.6	68.3
Overseas	10,086,699	21.5	14,262,499	39.4	(29.3)
Subtotal	47,019,024	100.0	36,208,723	100.0	29.9

During the Reporting Period, the revenue of the Group generated in the PRC was RMB36.932 billion, representing an increase of 68.3% on a year-on-year basis, mainly because certain large EPC Contracting projects, such as Zhong'An Project and Zhongke Project, generated more revenue; and the revenue of the Group generated overseas was RMB10.087 billion, representing a decrease of 29.3% on a year-on-year basis, mainly due to the fact that large overseas projects such as the Malaysia RAPID Oil Refining Project and FCC Project of Kazakhstan Atyrou Refinery entered the settlement closing stage, and the backlog from overseas decreased.

The following table sets forth the revenue generated from services provided by the Group for (i) Sinopec Group and its associates; and (ii) non-Sinopec Group and its associates:

	Year ended 31 December				
	2018		2017		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB '000)	(%)	(RMB '000)	(%)	(%)
Sinopec Group and its associates	24,845,535	52.8	13,163,949	36.4	88.7
Non-Sinopec Group and its associates	22,173,489	47.2	23,044,774	63.6	(3.8)
Subtotal	47,019,024	100.0	36,208,723	100.0	29.9

During the Reporting Period, influenced by Sinopec Group and its related projects such as Zhongke Project and Zhong'An Project, the revenue generated from Sinopec Group and its associates increased significantly on a year-on-year basis. The revenue generated from Sinopec Group and its associates was RMB24.846 billion, representing an increase of 88.7% on a year-on-year basis; the revenue generated from non-Sinopec Group and its associates was RMB22.173 billion, remaining broadly stable on a year-on-year basis.

4 Discussion on the backlog and new contracts

Backlog represents the total estimated contract value of work that remains to be completed pursuant to outstanding contracts as at a certain date, net of estimated value added tax, and is based on the Group's assumption that the relevant contracts will be performed in accordance with their terms. Backlog is not a measure defined by generally accepted accounting principles. Any modification, termination or suspension of these contracts by the Group's clients may have a substantial and immediate effect on the Group's backlog. Projects may also remain in the Group's backlog for an extended period of time beyond what was initially anticipated due to various factors beyond the Group's control.

The following table sets forth the total value of backlog for each business segment of the Group as at the dates indicated:

	As at 31 December 2018	As at 31 December 2017	Change
	(RMB '000)	(RMB '000)	(%)
Engineering, consulting and licensing	7,797,111	7,838,104	(0.5)
EPC Contracting	73,892,040	67,712,961	9.1
Construction	12,731,186	14,896,489	(14.5)
Equipment manufacturing	515,127	580,390	(11.2)
Subtotal	94,935,464	91,027,944	4.3

The following table sets forth the total value of backlog categorised by the industries in which the Group's clients operate as at the dates indicated:

	As at 31 December 2018	As at 31 December 2017	Change
	(RMB '000)	(RMB '000)	(%)
Oil refining	33,542,698	32,541,555	3.1
Petrochemicals	29,395,716	24,224,871	21.3
New coal chemicals	10,491,448	15,386,301	(31.8)
Other industries	21,505,602	18,875,217	13.9
Subtotal	94,935,464	91,027,944	4.3

The following table sets forth the total value of the backlog by regions as at the dates indicated:

	As at 31 December 2018 (RMB '000)	As at 31 December 2017 (RMB '000)	Change (%)
PRC	71,720,786	62,728,624	14.3
Overseas	23,214,678	28,299,320	(18.0)
Subtotal	94,935,464	91,027,944	4.3

The following table sets forth the total value of backlog categorised by the clients of each of (i) Sinopec Group and its associates, and (ii) non-Sinopec Group and its associates as at the dates indicated:

	As at 31 December 2018 (RMB '000)	As at 31 December 2017 (RMB '000)	Change (%)
Sinopec Group and its associates	46,294,473	37,667,990	22.9
Non-Sinopec Group and its associates	48,640,991	53,359,954	(8.8)
Subtotal	94,935,464	91,027,944	4.3

As at 31 December 2018, the Group's backlog was RMB94.935 billion, representing an increase of 4.3% from that as at 31 December 2017, and 2 times of the total revenue of RMB47.019 billion in 2018.

The following table sets forth the total value of new contracts entered into categorised by the Group's each business segment in the periods indicated:

	Year ended 31 December		Change
	2018	2017	
	(RMB '000)		(%)
Engineering, consulting and licensing	2,883,414	3,704,714	(22.2)
EPC Contracting	35,314,894	19,838,314	78.0
Construction	12,236,631	14,685,028	(16.7)
Equipment manufacturing	491,605	835,348	(41.1)
Subtotal	50,926,544	39,063,404	30.4

The following table sets forth the total value of new contracts entered into by the Group categorised by the industries in which the Group's clients operate in the periods indicated:

	Year ended 31 December		Change
	2018	2017	
	(RMB '000)		(%)
Oil refining	18,750,233	14,160,084	32.4
Petrochemicals	22,304,787	16,743,703	33.2
New coal chemicals	3,946,775	2,373,623	66.3
Other industries	5,924,749	5,785,994	2.4
Subtotal	50,926,544	39,063,404	30.4

The following table sets forth the total value of new contracts entered into by the Group by regions in the periods indicated:

	Year ended 31 December		Change
	2018	2017	
	(RMB '000)		(%)
PRC	45,924,486	29,070,365	58.0
Overseas	5,002,058	9,993,039	(49.9)
Subtotal	50,926,544	39,063,404	30.4

The following table sets forth the total value of new contracts entered into by the Group with the clients of each of (i) Sinopec Group and its associates, and (ii) non-Sinopec Group and its associates in the periods indicated:

	Year ended 31 December		Change
	2018	2017	
	(RMB '000)		(%)
Sinopec Group and its associates	33,472,018	13,029,781	156.9
Non-Sinopec Group and its associates	17,454,526	26,033,623	(33.0)
Subtotal	50,926,544	39,063,404	30.4

During the Reporting Period, the value of the Group's new contracts was RMB50.927 billion, representing an increase of 30.4% on a year-on-year basis.

5 Assets, Liabilities, Equity and Cash Flows

The Group's funds mainly came from operating activities and were primarily used for working capital, capital expenditure and dividend distribution.

(1) Assets, Liabilities and Equity

Units: RMB'000

	As at 31 December 2018	As at 31 December 2017	Changes
Total assets	70,872,740	59,405,621	11,467,119
Current assets	63,837,953	51,864,822	11,973,131
Non-current assets	7,034,787	7,540,799	(506,012)
Total liabilities	44,889,591	33,814,616	11,074,975
Current liabilities	41,998,840	31,015,076	10,983,764
Non-current liabilities	2,890,751	2,799,540	91,211
Non-controlling interests	4,503	4,166	337
Net assets	25,983,149	25,591,005	392,144
Equity attributable to equity holders of the Company	25,978,646	25,586,839	391,807
Share capital	4,428,000	4,428,000	0
Reserves	21,550,646	21,158,839	391,807

As at the end of the Reporting Period, the total assets of the Group were RMB70.873 billion, the total liabilities were RMB44.890 billion, the non-controlling interests were RMB5 million, and the equity attributable to the equity holders of the Group was RMB25.979 billion. The changes in the assets and liabilities as compared with those as at the end of 2017 and the main reasons are as follows:

As at the end of the Reporting Period, the total assets were RMB70.873 billion, increased by RMB11.467 billion as compared with that as at the end of 2017. In particular, the current assets were RMB63.838 billion, increased by RMB11.973 billion as compared with that as at the end of 2017, mainly attributable to an increase of RMB3.844 billion for contractual assets, an increase of RMB5.337 billion for cash and cash equivalents, an increase of RMB2.673 billion for prepayments and other receivables, an increase of RMB2.500 billion for receivables due from the ultimate holding company; the non-current assets were RMB7.035 billion, decreased by RMB506 million as compared with that as at the end of 2017, mainly due to a decrease in depreciation and amortisation for the non-current assets.

As at the end of the Reporting Period, the total liabilities were RMB44.890 billion, increased by RMB11.075 billion as compared with that as at the end of 2017. In particular, the current liabilities were RMB41.999 billion, increased by RMB10.984 billion as compared with that as at the end of 2017, mainly due to payables of the notes and trade increased by RMB14.666 billion, other payables increased by RMB1.549 billion, and the contract liabilities decreased RMB5.177 billion. The non-current liabilities were RMB28.908 billion, increased by RMB91 million as compared with that as at the end of 2017, mainly due to the increase of RMB100 million in retirement and other supplemental benefit obligations.

The total equity attributable to equity holders of the Company was RMB25.979 billion, increased by RMB392 million as compared with that as at the end of 2017, primarily as the result of the increase in the retained earnings.

(2) Cash Flows

During the Reporting Period, the net increase in cash and cash equivalents was RMB4.949 billion and net cash generated from operating activities was RMB6.104 billion. The following table sets forth the main items and their changes in the Group's consolidated cash flow statements for the year ended 31 December 2018 and 2017, respectively.

Units: RMB'000

Major items of cash flow	Year ended 31 December	
	2018	2017
Net cash generated from operating activities	6,104,192	4,240,508
Net cash generated from/(used in) investing activities	23,954	(3,801,257)
Net cash used in financing activities	(1,179,216)	(179,062)
Net increase in cash and cash equivalents	4,948,930	260,189

During the Reporting Period, the profit before taxation was RMB2.122 billion, and the profit was RMB2.167 billion after adjusting the items in expenses that did not affect the cash flow in operating activities, major non-cash expense items were: depreciation and amortisation were RMB713 million, exchange gains amounted to RMB493 million, net interest income was RMB662 million, and assets handed over in the Separation and Transfer were RMB189 million. Operational receivables and payables increased cash inflow to RMB4.261 billion, which were mainly shown in: increased trade and other payables balance, causing the cash inflow from operating activities of RMB15.840 billion; decreased inventory balance, causing the cash inflow from operating activities of RMB181 million; increased contractual assets, causing the cash outflow from operating activities of RMB3.862 billion; decreased contractual liabilities, causing the cash outflow from operating activities of RMB5.177 billion; increased trade and other receivables balance, causing the cash outflow from operating activities of RMB2.708 billion.

After adjusting non-cash items, receivables and payables for the profit before taxation, and deducting the income tax paid amounting to RMB588 million, increasing received interest amounting to RMB263 million and the net cash generating from operating activities was RMB6.104 billion.

Net cash generated from investing activities was RMB24 million, mainly due to the purchase of plants and equipment to increase cash outflow of RMB229 million, the recovery of fixed deposits to increase cash inflow of RMB2.340 billion, the lendings to the ultimate holding company to increase cash outflow of RMB2.500 billion, and the interests generated from the lendings from the ultimate holding company increased by RMB517 million.

Net cash used in financing activities was RMB1.179 billion, mainly due to the cash used for dividend distribution.

Based on the cash flows during the Reporting Period, the Group has adequate working capital. The Group will continue to strengthen the settlement of trade debts and reduce the use of working capital in operating activities. The Group will also continue to effectively manage the investment risk, as well as expand the scale of investment and increase the return on capital.

(3) Summary of Financial Ratios

The following table sets forth the Group's key financial ratios for the periods indicated:

Main financial ratios	Year ended 31 December	
	2018	2017
Net profit margin (%)	3.6	3.1
Return on assets (%) (1)	2.6	1.9
Return on equity (%) (2)	6.5	4.4
Return on invested capital (%) (3)	6.7	4.6

Main financial ratios	As at 31 December 2018	As at 31 December 2017
Gearing ratio (%) (4)	1.5	1.7
Net debt to equity ratio (%) (5)	net cash	net cash
Current ratio (6)	1.5	1.7
Quick ratio (7)	1.5	1.7

(1) Return on assets = $\frac{\text{Profit for the year}}{\text{(Opening balance of total assets + Closing balance of total assets)/2}}$

(2) Return on equity = $\frac{\text{Profit for the year}}{\text{Total equity at the end of the year}}$

(3) Return on invested capital = $\frac{\text{Earnings before interest and tax (EBIT) for the year x (1 - effective income tax rate)}}{\text{Total interest bearing debt at the end of the year - Credit loans + Total equity at the end of the year}}$

(4) Gearing ratio = $\frac{\text{Total interest bearing debt at the end of the year}}{\text{Total interest bearing debt at the end of the year + Total equity at the end of the year}}$

(5) Net debt to equity ratio = $\frac{\text{Net debt at the end of the year}}{\text{Total equity at the end of the year}}$

(6) Current ratio = $\frac{\text{Current assets}}{\text{Current liabilities}}$

(7) Quick ratio = $\frac{\text{Current assets - Inventories}}{\text{Current liabilities}}$

Return on assets

During the Reporting Period, the Group's return on assets increased to 2.6% from 1.9% for the same period in 2017, mainly due to the increase in net profit during the Reporting Period.

Return on equity

The Group's return on equity increased to 6.5% from 4.4% for the same period in 2017, mainly due to the increase in net profit during the Reporting Period.

Return on invested capital

The Group's return on invested capital increased to 6.7% from 4.6% for the same period in 2017 for the same reasons as the increase in return on equity.

Gearing ratio

The Group's gearing ratio decreased to 1.5% from 1.7% at the end of 2017, mainly due to the decrease in interest-bearing borrowings at the end of the Reporting Period.

Net debt to equity ratio

The Group maintained positive net cash as at 31 December 2017 and as at 31 December 2018.

Current ratio

The Group's current ratio decreased to 1.5 from 1.7 at the end of 2017, mainly due to the increase of current liabilities during the Reporting Period was greater than the increase of current assets.

Quick ratio

The Group's quick ratio decreased to 1.5 from 1.7 at the end of 2017. The Group's inventory accounts for a small proportion of current assets, for the same reasons as the change in current ratio.

SIGNIFICANT EVENTS

1 H Shares appreciation rights incentive scheme

For the details of H Shares appreciation rights scheme of the Company, please refer to the announcement entitled "The Proposed Initial Terms of H Share Appreciation Rights Scheme" published by the Company on 21 August 2017, the circular of the second extraordinary general meeting of the Company for the year 2017 published on 3 November 2017, the "Announcement in Relation to the Approval of the Proposed Initial Terms of H-Share Appreciation Rights Scheme by State-owned Assets Supervision and Administration Commission of the State Council ("SASAC")" published on 12 December 2017, and the "Announcement of Resolutions Passed at the Second Extraordinary General Meeting for the Year 2017" and the announcement entitled "Grant of H Share Appreciation Rights" published on 20 December 2017.

On 20 December 2017, the Company granted 13,143,000 units H Shares appreciation rights (representing 0.30% of the total issued shares of the Company and 0.90% of the total issued H shares of the Company as at the date of the announcement) to 89 incentive recipients, accounting for approximately 0.5% of the total number of contracted employees as at the date of the announcement, including the Directors (other than the independent non-executive Directors), the Company's senior management members (including president, vice president and chief financial officer) and the core management, technical and highly skilled staff of the Company's subsidiaries. The exercise price of each H Share appreciation right granted under the initial grant is HK$6.35.

As reviewed and approved at the 2017 annual general meeting convened on 8 May 2018, the final cash dividend of RMB0.144 (inclusive of applicable tax) per share was paid by the Company. As reviewed and approved in the thirteenth meeting of the second session of the Board convened on 21 August 2018, the Company distributed 2018 interim cash dividend as per RMB0.100 (inclusive of applicable tax) per share. As at the date of this report, the distribution of the final dividends of 2017 and interim dividends of 2018 has been completed. According to Article 28 of "The H Share Appreciation Rights Scheme and the Initial Grant" in Appendix 1 to the circular of the second extraordinary general meeting of the Company for the year 2017 published on 3 November 2017, the Company may adjust the exercise price of the stock appreciate rights in the event of distribution of dividends, then the exercise price of after adjustment will be equal to the exercise price before adjustment minus the amount of dividends distributed per share. In this regard, the exercise price of each stock appreciation right granted by the Company on 20 December 2017 will be adjusted to HKD6.064 per share.

During the Reporting Period, save as the above adjustment to the exercise price, there is no other cases that involve the adjustments to the effectiveness, number of shares and the exercise price of the H Shares appreciation rights scheme. For the details of the Company's H Shares appreciation rights scheme, please refer to Note 39 of the consolidated financial statements in this report.

According to the audited financial report prepared by Grant Thornton China (Special General Partnership) in accordance with the Accounting Standards for Chinese Business Enterprises, part of the financial data of the Company for the fiscal year ended 31 December 2018 are as follows:

Unit: RMB '000

	Ended 31 December 2018 (audited)
Total owner's equity	25,983,149
	Twelve-month periods ended 31 December 2018 (audited)
Operating income	47,207,748
Net profit	2,483,060
Net profit after deduction of non-recurring gains and losses	2,599,090
Return on equity (ROE) (1)	10.08%
Economic value added (EVA) (2)	2,384,997

(1) Return on equity (ROE) $= \dfrac{\text{Net profit after deduction of non-recurring gains and losses}}{\text{(Early owner's equity + End owner's equity)/2}}$

(2) Economic value added (EVA) = Net profit after deduction of non-recurring gains and losses + (Interest expense + R&D expenses) * (1 - Applicable tax rate) - Capital cost

2 Connected Transactions

Continuing Connected Transactions between the Group and Sinopec Group

During the Reporting Period, the Group entered into a series of continuing connected transactions or agreements with Sinopec Group, including the following:

(1) The Engineering and Construction Services Framework Agreement and the supplemental agreement;

(2) The Financial Services Framework Agreement and the supplemental agreement;

(3) The Technology R&D Framework Agreement and the supplemental agreement;

(4) The General Services Framework Agreement and the supplemental agreement;

(5) The Land Use Right and Property Lease Framework Agreement;

(6) The Counter-guarantees provided by Sinopec Group;

(7) The Safe Production Insurance Fund; and

(8) The Trademark Licensing Agreement.

For further details, please refer to the section headed "Connected Transactions" in the Company's prospectus published on 10 May 2013, the Company's announcement entitled "Continuing Connected Transactions - Financial Services Framework Agreement" published on 19 August 2013, the contents related to the Financial Services Framework Agreement in the Company's circular to its shareholders published on 10 September 2013 and the Company's announcement entitled "Adjustments to Annual Caps for Continuing Connected Transactions under the Technology R&D Framework Agreement" published on 17 March 2014, the contents in relation to the Financial Services Framework Agreement and the Engineering Services Framework Agreement in the Company's circular to its shareholders published on 15 September 2015, the Company's announcement entitled "Renewal of Technology R&D Framework Agreement, Financial Services Framework Agreement and Engineering and Construction Services Framework Agreement and the Annual Caps" published on 31 August 2015, the Company's announcement entitled "Renewal of Technology R&D Framework Agreement, Financial Services Framework Agreement and Engineering and Construction Services Framework Agreement and the Annual Caps and the Continuing Connected Transactions and Major Transactions under the Financial Services Framework Agreement" published on 15 September 2015, the Company's announcement entitled "Renewal of the General Services Framework Agreement, the Technology R&D Framework Agreement, the Financial Services Framework Agreement and Engineering and the Construction Services Framework Agreement and the Annual Caps and Major Transactions and the Continuing Connected Transactions under the Financial Services Framework Agreement and the Engineering and Construction Services Framework Agreement" published on 21 August 2018 and the contents in relation to the Financial Services Framework Agreement and the Engineering Services Framework Agreement in the Company's circular to its shareholders published on 19 September 2018.

The Group's Connected Transactions

During the Reporting Period, the aggregate value of the connected transactions entered into by the Group was RMB27.847 billion. In particular, the expenses amounted to RMB2.333 billion and the revenue amounted to RMB25.514 billion (including RMB24.917 billion from the sale of products and services and RMB597 million from interest income).

During the Reporting Period, the engineering and construction services (supply of equipment and materials, procurement services and equipment leasing, technology licensing and other engineering-related services) provided by Sinopec Group to the Group amounted to RMB2.315 billion, which was within the annual cap. The engineering and construction services (preliminary consulting, technology licensing, engineering design, EPC Contracting, construction and equipment manufacturing, etc.) provided by the Group to Sinopec Group amounted to RMB24.728 billion, which was within the annual cap.

During the Reporting Period, the service fees in relation to the settlement and other financial services between the Group and Sinopec Finance Co., Ltd. and Sinopec Century Bright Capital Investment Limited were RMB3 million, which was within the annual cap. The maximum daily balance of deposits and interest income was RMB7.296 billion, which was within the annual cap. The maximum daily balance of entrustment loans was RMB19 billion, which was within the annual cap.

During the Reporting Period, the technology R&D services provided by the Group to Sinopec Group amounted to RMB182 million, which was within the annual cap.

During the Reporting Period, the counter-guarantees provided by Sinopec Group to the Group amounted to USD52 million, which was within the annual cap.

During the Reporting Period, the general services provided by Sinopec Group to the Group amounted to RMB9 million, which was within the annual cap.

During the Reporting Period, the land use right and property lease contracts provided by the Group to Sinopec Group amounted to RMB7 million, which was within the annual cap.

During the Reporting Period, the land use right and property lease contracts provided by Sinopec Group to the Group amounted to RMB6 million, which was within the annual cap.

In terms of the premium payable under the documents on safe production funds, the amount payable by the Group shall not be less than the amount specified in these documents.

For more information on the transactions related to the major related parties (including the connected transactions above) during the Reporting Period, please refer to Note 40 of the consolidated financial statements prepared in accordance with the IFRS in this annual report.

The above-mentioned connected transactions during the Reporting Period were approved at the second meeting of the third session of the Board. The connected transactions carried out during the Reporting Period are in compliance with the Hong Kong Listing Rules.

The external auditor of the Company was engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagement Other Than Audits or Reviews of Historical Financial Information" and Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by Hong Kong Institute of Certified Public Accountants. The auditor has issued an unqualified letter containing the conclusions in respect of the above-mentioned continuing connected transactions in accordance with Rule 14A.56 of the Hong Kong Listing Rules and submitted a copy of the auditor's letter to the Hong Kong Stock Exchange.

Approved the clauses of the agreements for continuing connected transactions and the supplementary agreements thereof. Such continuing connected transactions and the proposed annual caps for the period from 2019 to 2021.

On 21 August 2018, the Company held the thirteenth meeting of the second session of the Board, which reviewed and approved the motions on the agreements between the Company and Sinopec Group, including the General Services Framework Agreement, Technology R&D Framework Agreement, Financial Services Framework Agreement, Engineering and Construction Services Framework Agreement and supplementary agreements thereof, the continuing connected transactions respectively thereunder and the proposed annual caps for the years ending on 31 December 2019, 2020 and 2021, respectively. As provided in Chapter 14A of the Hong Kong Listing Rules, the Financial Services Framework Agreement and the Engineering and Construction Services Framework Agreement together with the supplementary agreements thereof, the continuing connected transactions respectively thereunder and the proposed annual caps for the years ending on 31 December 2019, 2020 and 2021 respectively involved in the above motions need to be submitted to the independent shareholders of the Company for review. Under Chapter 14 of the Hong Kong Listing Rules, the deposit service and entrusted loan service under the Financial Services Framework Agreement and the Group provided engineering service to Sinopec Group and/or its affiliated under the Engineering and Construction Services Framework Agreement both constitute a major transaction of the Company and, as such, need to be submitted to the independent Shareholders of the Company for review. For details of the above, please refer to the Company's announcement entitled "Renewal of General Services Framework Agreement, Technology R&D Framework Agreement, Financial Services Framework Agreement and Engineering and Construction Services Framework Agreement and the Annual Caps and the Continuing Connected Transactions and Major Transactions under the Financial Services Framework Agreement and the Engineering and Construction Services Framework Agreement" published on 21 August 2018, and the contents in relation to the Financial Services Framework Agreement and the Engineering Services Framework Agreement in the Company's circular to its shareholders published on 19 September 2018.

On 26 October 2018, the Company held its first extraordinary general meeting of 2018, where the independent Shareholders reviewed and approved (including): (1) the clauses of the Financial Services Framework Agreement, the continuing connected transactions thereunder and the proposed annual caps for the years ending on 31 December 2019, 2020 and 2021 respectively; and (2) the clauses of the Engineering and Construction Services Framework Agreement, the continuing connected transactions thereunder and the proposed annual caps for the years ending on 31 December 2019, 2020 and 2021 respectively. The details related thereto are set out in the announcement of the Company concerning the resolutions of the first extraordinary general meeting of 2018 issued on 26 October 2018.

As at the end of the Reporting Period, the supplementary agreements for a series of continuing connected transactions between the Group and Sinopec Group have all been signed.

Opinions of Independent Non-executive Directors on the Above-mentioned Continuing Connected Transactions (including Deposits and Entrustment Loan Transactions under the Financial Services Framework Agreement)

The independent non-executive Directors reviewed the nature, implementation of annual caps, pricing policy and internal control procedure of the above-mentioned continuing connected transactions (including deposits and entrustment loans under the Financial Services Framework Agreement), and confirmed as follows:

(a) The transactions were entered into in the ordinary and usual course of business of the Group;

(b) One of the following items was met:

- i The transactions were entered into on normal commercial terms;
- ii If there were not sufficient comparable transactions to decipher whether the transactions were on normal commercial terms, the transactions under the relevant agreements were entered into on terms no less favourable to the Company than terms available to or from independent third parties (as the case may be); or
- iii If there were no appropriate assessments to determine whether the transactions met the conditions under (i) and (ii) above, the transactions were entered into on terms that were fair and reasonable to the shareholders of the Company; and

(c) The transactions were conducted in accordance with the relevant agreements and the terms are fair and reasonable and in the interests of the Company and the Shareholders as a whole.

3 Material Litigation or Arbitration Events

During the Reporting Period, the Company was involved in claims which arose in connection with the collapse of a partially completed oil storage tank of the oil and gas storage tank project in Alberta, Canada on 24 April 2007, which resulted in the deaths of two workers and injuries of four others. The case is still in the evidence exchange and cross-examination phase.

There were no other material litigation or arbitration events during the Reporting Period.

4 Other Material Contracts

Save as disclosed in this annual report, the Group had no other contracts of significance which should be disclosed during the Reporting Period.

5 Repurchase, Sale and Redemption of Shares

During the Reporting Period, the Group did not repurchase, sell or redeem any listed securities of the Company.

6 Reserves

During the Reporting Period, movements in the reserves of the Group were set out in the consolidated statement of changes in equity of the financial report, which was prepared in accordance with IFRS in this report.

7 Use of IPO Proceeds

During the Reporting Period, on 26 October 2018, the first meeting of the third session of the Board approved to adjust the distribution proportion of the net amount of proceeds raised in the global offering without changing the use of the outstanding proceeds. Please refer to the Company's announcement (the "Aforementioned Announcement") dated 26 October 2018. During the Reporting Period, the Group's total amount of proceeds used was RMB662 million, mainly for equity acquisitions, new long-term equity investment and information system construction, which is consistent with the use of proceeds previously disclosed. For the details of the use of IPO proceeds, please refer to the Aforementioned Announcement. As at the end of the Reporting Period, the Group's total amount of proceeds used was RMB3.917 billion, and the remaining net balance of IPO proceeds was approximately HKD8.41 billion.

8 Assets Transactions

During the Reporting Period, except as disclosed in "Business Review and Prospects – 1. Business Review – (3) Business Highlights – Completion of the Seperation and Transfer of "Water/Electricity/Gas Supply and Property Management", the Group had no significant assets transactions other than in the ordinary and usual course of business.

9 Insolvency and Restructuring

During the Reporting Period, the Group was not involved in any insolvency or restructuring matters.

10 Significant Trusteeship, Contracting and Lease

During the Reporting Period, the Group was not involved in significant trusteeship, contracting or lease of any other company's assets, nor placing its assets to or under any other companies' trusteeship, contracting or lease which would require disclosure.

11 Significant Acquisitions and Disposal

During the Reporting Period, the Group had no substantial acquisitions or disposal.

12 Financial Derivatives for Hedging Purposes

On 8 February 2018, the eleventh meeting of the second session of the Board reviewed and approved the resolution in relation to the 2018 annual business plan for financial derivatives. For more details, please refer to the announcement published by the Company on 8 February 2018. In accordance with the 2018 annual business plan for financial derivatives, during the Reporting Period, the Group carried out a forward settlement of the financial derivatives trading business of $590 million, which was fully delivered on 28 December 2018.

On 8 March 2019, the second meeting of the third session of the Board reviewed and approved the resolution in relation to the 2019 annual business plan for financial derivatives. For more details, please refer to the announcement published by the Company on 11 March 2019.

13 Pledged Assets

During the Reporting Period, the Group had no pledged assets.

14 Debt

The Group had USD56 million (about RMB384 million) loans to the ultimate holding company as at the end of the Reporting Period.

15 Review of Annual Report

The audit committee of the Company has reviewed this annual report. The Audit Committee has not expressed any dissent concerning the financial statements in this annual report.

The Audit Committee is comprised of all independent non-executive Directors, namely, Mr. YE Zheng, Mr. HUI Chiu Chung, Stephen and Mr. JIN Yong. Among them, Mr. YE Zheng has the appropriate professional qualifications (including being a member of the Hong Kong Institute of Certified Public Accountants) and more than 23 years of experience in auditing, internal control and consultancy.

16 Property, plant and equipment

Details of the changes in property, plant and equipment of the Company and its subsidiaries during the year are set out in the Note 17 to the financial statement.

17 Other Important Matters

During the Reporting Period, none of the Company, the Board, any Director or any Supervisor was punished by administrative means or criticized through circular by Hong Kong Securities and Futures Commission or publicly condemned by the Hong Kong Stock Exchange.

CORPORATE GOVERNANCE

1 Enhancement of Corporate Governance in the Reporting Period

During the Reporting Period, the Company was strictly in compliance with the domestic and foreign laws and regulations on securities supervision and continuously improved its corporate governance.

During the Reporting Period, in accordance with relevant domestic and foreign laws and regulations and its actual situation, the Company strictly standardised corporate governance based on the working rules, systems and norms such as the Rules of Procedure of Shareholders Meeting, the Rules of Procedure of the Board and the Rules of Procedure of the Supervisory Committee and updated the internal documents in accordance with the Hong Kong Listing Rules and other applicable laws and regulations in a timely manner; as required by the Hong Kong Stock Exchange, the Group appropriately revised the "Work Rules of Audit Committee" to incorporate the function of risk management into the terms of reference of the Audit Committee of the Board; continuously improved the quality of investor relations and information disclosure, receiving the recognition of the capital market; modified its internal control system to intensify the execution thereof.

During the Reporting Period, the Company further enhanced on-the-job training to enhance the awareness of responsibility of all Directors, Supervisors and its senior management (the "Senior Management") and optimised the procedures and detailed services. The Company also provided Directors with reports of "Company Information" every month, which provided the Directors with data and information to make reasonable decisions in a timely and holistic manner. We continue to enhance voluntary information disclosure and the relationship with our investors by strengthening two-way communication and increasing the transparency of the Company. The Company actively performed its social responsibilities and promoted its sustainable development.

During the Reporting Period, the Supervisory Committee had no objection to any supervised matters. Furthermore, no sanctions by any securities regulatory authority or any other relevant authority were issued against the Company, the Board, the Directors, the Supervisors, the Senior Management, controlling shareholders of the Company or the beneficial owners of the Company, nor were any of them censured publicly.

2 Equity Interests of Directors, Supervisors and the Senior Management

During the Reporting Period, none of the Directors, Supervisors or any member of the Senior Management, as well as their respective associates had any interests or short positions in any Shares, underlying Shares or debentures of the Company or any associated corporations (as defined under Part XV of the SFO) which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), or which were required, pursuant to section 352 of the SFO, to be entered in the register maintained by the Company referred to therein, or which are required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") in Appendix 10 to the Hong Kong Listing Rules, to be notified to the Company and the Hong Kong Stock Exchange that are regarded, or treated as being held, in accordance with the SFO in the shares of the Company or any associated corporation. Based on specific enquiries to all Directors and Supervisors, all Directors and Supervisors have confirmed that they complied with the standards stipulated in the Model Code during the Reporting Period.

3 Confirmation of Independence of Independent Non-executive Directors and Overview of their Performance

The Company has a sufficient number of independent non-executive Directors with appropriate professional qualifications or accounting or financial related management expertise in accordance with the Hong Kong Listing Rules. The Company appointed three independent non-executive Directors, Mr. HUI Chiu Chung, Stephen, Mr. JIN Yong and Mr. YE Zheng. The Company received a letter of confirmation from each independent non-executive Director each year regarding their compliance with relevant independence requirements set out in Rule 3.13 of the Hong Kong Listing Rules. The Company considers all of its independent non-executive Directors to be independent.

During the Reporting Period, the independent non-executive Directors earnestly fulfilled their responsibilities prescribed by relevant laws, regulations and the Articles of Association and made positive contributions to the development of the Group. They regularly attended the meetings of the Board and its special committees (for details about the attendance of the meetings, please refer to the Report of the Board in this annual report), carefully reviewed relevant documents, made judgement with their own expertise in offering advices and suggestions on the development strategy, production and operation, internal control, risk management and social responsibility of the Company. The independent non-executive Directors also gave independent opinions according to regulations on connected transactions, external guarantee, dividend distribution plan and appointment of senior management of the Company. The independent non-executive Directors maintained timely and effective communications with the executive Directors, management, external auditors and internal audit department and conducted more than one domestic and overseas investigation or survey in order to better understand the Group's practice and policies on internal control, internal auditing, risk management, environmental protection and social responsibility, information disclosure and oversea project implementation. The independent non-executive Directors also independently and objectively safeguarded the legitimate rights and interests of the Company and investors, especially the medium-small investors, during performance of their duties.

4 The Company's Independence from Controlling Shareholders

After obtaining confirmations from the Company and Sinopec Group, the following statements are issued:

From 1 January 2018 to 31 December 2018, Sinopec Group complied with the principles and terms of the Non-Competition Agreement and undertakings, fulfilled obligation and responsibilities in accordance with the Non-Competition Agreement and undertakings, and did not violate the Non-Competition Agreement and undertakings. The aforesaid was concluded based on Sinopec Group's overall review of the compliance with every provision (including but not limited to the provision of options for new business opportunities, options for acquisitions and pre-emptive rights).

Opinions of the independent non-executive Directors of the Company regarding the compliance with the Non-Competition Agreement of Sinopec Group are as follows:

Based on inspection of related results, the independent non-executive Directors of the Company are of the view that Sinopec Group performed and complied with the Non-Competition Agreement entered into with the Company during the Reporting Period.

5 Construction and Implementation of Internal Control System of the Group

Internal Control Construction

During The Reporting Period, the Company revised, released and implemented the "Internal Control Manual of the Company (2018 Edition)" (the "Internal Control Manual"), which is concurrently released online on the internal control information system. Internal Control Manual regulates internal management, prevent operation risks and guarantee the realisation of the development strategies and operation goals of the Company. The Internal Control Manual implements our domestic and overseas regulatory requirements such as the "Basic Standard for Internal Control of Enterprises", the "Implementation Guidelines for Internal Control of Enterprises", and the "Guidelines for Assessment of Internal Control of Enterprises", which was jointly issued by five ministries and commissions including the Ministry of Finance of PRC, the SFO and the Hong Kong Listing Rules. The risk-oriented Internal Control Manual has realised the top-down integrated management of business processes, unification of internal management standards in business control. The Company pays high attention to the work level of internal control and risk prevention. The newly revised internal control manual has further taken effective measures to strengthen internal control, leading to all-round enhancement of internal control.

Working Plans for Establishment and Improvement of Internal Control System and Implementation

Each year, the Company prepares goals and working plans with regard to internal control, and conducts comprehensive training, daily management and evaluation. Under the uniform deployment of the Company, the subsidiaries and branches of the Company have sorted out, revised and consummated implementing rules on internal control of various units. The Company has established three defense mechanisms for internal control departments: the periodic testing of responsible departments (units), daily management and supervision of audit department over internal control. Accordingly, the Company has created a supervision and evaluation system of internal control.

Setup of Internal Control Examination and Supervision Department

The Department of Strategic Planning of the Company, which is assigned to administer the overall supervision of internal control, is responsible for the daily supervision of internal control and the organisation of individual inspection. The Audit Department is in charge of internal control evaluations and independent, comprehensive inspections and evaluation of internal control. The Company and its subsidiaries have established a two-level internal control inspection and evaluation system where the subsidiaries of the Company conduct self-inspections and evaluate internal control every year and the Company inspects the evaluation of internal control every year in a comprehensive manner.

Arrangement for Internal Control Made by the Board

The Board will review the updated Internal Control Manual annually. The Board is responsible for the communication, supervision and inspection of internal and external auditing through the Audit Committee, as well as the inspection and supervision of the effectiveness of self-evaluation of internal control.

Improvement of the Internal Control System Associated with Financial Accounting

The Internal Control Manual of the Company specifies the internal control requirements with regard to the financial statements and establishes connections with the professional management system. Fund and asset management, costs and expenses accounting and management, financial analysis and budget, connected transactions and the preparation of financial statements, are respectively included in the related work flow, control procedures and control points. At the same time, items and matters in accounting statements are connected with control measures, so that the internal control measures can reasonably ensure that the disclosed financial statements are authentic and reliable.

Inside information management system

During the Reporting Period, with sufficient consideration of the information disclosure stipulations under the Hong Kong Listing Rules and the Guideline for Disclosure of Inside Information issued by the Securities and Futures Commission in June 2012, the Group instructs special institution and staff to take responsibilities for the registration and management of persons who are aware of inside information. The Company also establishes the management archive of persons who are aware of inside information and regular update of the archive and conduct regular trainings to persons who are aware of inside information and management staff, so as to strengthen the consciousness of persons who are aware of inside information to abide by the law.

The Group prohibits senior management members and employees who are likely to get aware of the Group's unpublished inside information or other information about the Group from using confidential or inside information without authorization in accordance with the relevant stipulations of the Inside Information Disclosure Guideline. At the same time, in case of any enquiry about the affairs of the Group, only the secretary to the Board and the relevant authorized personnel are responsible for communicating with external persons.

Internal Control Deficiencies and Rectification

No significant, important and general internal control deficiencies were discovered within the Company during the Reporting Period. The failure to effectively implement control measures in certain areas discovered during the inspections is not considered a deficiency according to the standard of the Company for identifying internal control deficiencies. The management of the Company has designed and adopted various rectification measures, and discussed these measures with external auditors of the Company. After a follow-up examination, all internal control issues relating to financial reporting were rectified during the Reporting Period, and other management deficiencies were rectified or rectification measures were adopted. The rectification was in compliance with relevant requirements.

Businesses with Sanctioned Countries

On 16 January 2016 ("Implementation Day"), the U.S. and EU announced that a number of sanctions on Iran have been lifted under the Joint Comprehensive Plan of Action (the "JCPOA"), following verification by the International Atomic Energy Agency that Iran has met its initial commitments to scale back key aspects of its nuclear program. All UN Security Council (the "UNSC") resolutions that had imposed sanctions on Iran were eliminated on Implementation Day, except for UNSC Resolution 2231, which implemented the JCPOA. As the U.S. lifted most nuclear-related secondary sanctions that had targeted non-U.S. persons, the Company, as a non-U.S. person, may explore potential business opportunities in Iran's oil and gas engineering market without conflicting with prior U.S. sanctions identified in the undertakings to the Hong Kong Stock Exchange ("**Related Undertakings**"). Please refer to the voluntary announcement entitled "Update on Iran Sanctions Developments" issued by the Company on 30 June 2016 for details.

In May 2018, President Trump of the United States announced that the United States will exit from the joint action plan agreement regarding Iran's nuclear program and comprehensively restart the "nuclear-related" sanctions that were terminated as per the joint action plan since January 2016. On 5 November 2018, the United States restarted all such "nuclear-related" sanctions. According to the restarted sanctions, besides other restrictions, non-American persons are restricted from engaging in major transactions in fields such as Iranian energy, shipping, shipbuilding and automobiles, as well as major transactions involving Iranian port operators, the Iranian Central Bank, and specified Iranian financial institutions, including major investments, goods, services or other supports related to the development of Iranian oil and natural gas resources. The United Nations and the European Union have not restarted sanctions against Iran like the US government. As far as the EU is concerned, EU still only imposes limited sanctions on Iran and prohibits EU enterprises from complying with the specific sanctions imposed by US against Iran through implementation of the Blocking Statute. Please refer to "Report of Board – 23. Risk Factors – Risks associated with pursuit of petroleum and natural gas projects in sanctioned countries" in this annual report for more details.

In 2016 and 2017, the Group entered into the contract of engineering, procurement and construction ("EPC") with National Iranian Oil Engineering and Construction Company in relation to Iranian Abadan Refinery Product Upgrading Project Phase I and Phase II, respectively. For details, please refer to the announcements issued by the Company on 27 December 2017 and 22 Feburary 2018.

In order to monitor the possible sanction risks faced by the Company and ensure compliance with the Related Undertakings made to the Hong Kong Stock Exchange, the Company has adopted sufficient and effective internal control measures, including renewal of the appointment of outsourced international legal counsels with necessary expertise and experience in dealing with legal matters related with sanction and the convening of risk management committee meetings to evaluate and monitor sanction risks faced by the Group. The Group completed evaluation on the legal and operating risks related with pertinent projects above and sanction according to the internal control procedures on basis of the relevant information from 2016 to 2018. During the Reporting Period, the Company did not violate the Related Undertakings.

6 Assessment and Incentive Mechanism for the Senior Management

The implementation details of the H Shares appreciation rights scheme of the Group are carried in the section "SIGNIFICANT EVENTS - 1. H Shares appreciation rights scheme" from page 66 to page 67 of this annual report.

7 Corporate Governance Report (pursuant to the Hong Kong Listing Rules)

(1) Compliance with Corporate Governance Code

From the listing date of the Company to 31 December 2018, the Company abided by the provisions in the Corporate Governance Code set out in Appendix 14 to the Hong Kong Listing Rules and did not conduct any act which deviated from such provisions.

A Board

A.1 Board

a. The Board is the decision-making body of the Company, and all decisions made by the Board are carried out by the management of the Company. The Board abides by sound corporate governance practices and procedures, and commits itself to improving the management and standard operations of the Company.

b. The Board holds at least four meetings annually. The Board gives notification of the time of the meeting and its subject matters 14 days prior to the meeting. The documents and materials for the meeting will usually be sent 10 days in advance to each Director. In 2018, the Company held four Board meetings. For details about the attendance of each Director, please refer to the Report of the Board in this annual report.

c. Each member of the Board may submit proposals to be included in the agenda for Board meetings, and each Director is entitled to request other related information.

d. The Board reviewed and evaluated its performance for the past year. The Board was of the view that the composition of the Board was appropriate and balanced. The Board made decisions in compliance with domestic and foreign laws and regulations and the Company's internal rules, prudently listened to the report of the Supervisory Committee, and safeguarded the rights and interests of the Company and its Shareholders. The Directors and the Senior Management diligently fulfilled their responsibilities and actively took part in training and continuing professional development, which led to the improvement of governance of the Company.

e. The secretary to the Board will assist the Directors in handling the routine tasks of the Board and continuously provide the Directors with and keep them informed of the regulations, policies and other requirements as demanded by domestic and overseas regulatory bodies in relation to corporate governance, and ensure that in performing their duties and responsibilities, the Directors comply with domestic and foreign laws and regulations as well as the Articles of Association and so on. The Company has purchased liability insurance for all the Directors to minimise any risk which may arise from the performance of their duties.

A.2 Chairman of the Board and President

a. Mr. YU Baocai serves as the Chairman of the Board, Mr. XIANG Wenwu serves as the President. The Chairman of the Board is elected by the majority, while the President is nominated and appointed by the Board. The duties and responsibilities of the Chairman of the Board and the President are clearly distinguished from each other and the scope of their respective duties and responsibilities are set out in the Articles of Association.

b. The Chairman of the Board is responsible for communication with the independent non-executive Directors and holding meetings with them at least once each year, at which no executive Director shall be present.

c. The Chairman of the Board shall encourage open and active discussions. Directors may speak freely and actively participate in discussions on production and operation, corporate governance and major investments of the Company in Board meetings.

A.3 Board Composition

a. The Board consists of nine members, with one of them being a female (for details, please refer to the section headed "Directors, Supervisors, Other Senior Management Members and Employees" of this annual report). All Directors have rich experience in specialties and governance. Among the nine (9) members, there are 4 executive Directors (including 2 employee representative Directors), 2 non-executive Directors and 3 independent non-executive Directors. The independent non-executive Directors represent one-third of the Board. All the executive Directors and non-executive Directors are experienced in the management of mega refining and chemical engineering, or petroleum and petrochemical enterprise. The independent non-executive Directors are well-known technological experts of chemical engineering, financial and accounting, respectively, and have experiences in managing large corporations, capital operation and finance investments, respectively. The composition of the Board is reasonable and diversified.

b. The Company received a letter of confirmation from each independent non-executive Director regarding his compliance with relevant independence requirements set out in Rule 3.13 of the Hong Kong Listing Rules for the year 2018. The Company concludes that each of the independent non-executive Directors is independent.

A.4 Appointment, Re-election and Dismissal

a. Within the Company, the term of office of each Director (including non-executive Directors) is 3 years, and the term of office (excluding the first tenure) of any independent non-executive Director may not be renewed for more than 6 years. If an independent non-executive Director has already served nine years, his further appointment shall be subject to a separate resolution to be approved at the Shareholders' general meeting.

b. All Directors will be elected through legal procedures, and the Board has no power to appoint temporary Directors.

c. For newly appointed Directors, the Company will engage professional consultants to prepare detailed information, notify such Directors of regulatory requirements of each listing place of the Company and remind such Directors of their rights, obligations and responsibilities.

A.5 Nomination Committee

a. The Company has established a nomination committee (the “Nomination Committee”). Mr. YU Baocai, the Chairman of the Board and a non-executive Director, is the chairman of the Nomination Committee. Mr. HUI Chiu Chung, Stephen, an independent non-executive Director, is the vice chairman of the Nomination Committee. Mr. LU Dong, the Vice Chairman of the Board and an executive Director, and Mr. JIN Yong and Mr. YE Zheng, independent non-executive Directors, are members of the Nomination Committee. The terms of reference of the Nomination Committee have been established and are available on the websites of the Company and the Hong Kong Stock Exchange. The Nomination Committee will recommend the appointment or re-election of the Directors as well as the succession plan of Directors (especially the Chairman of the Board and the President of the Company), seek candidates for Directors with appropriate qualifications and competence; elect and nominate related personnel to be appointed as Directors, and propose recommendations thereof to the Board.

b. Based on discussions, the Nomination Committee is of the view that the structure, number of members and composition of the Board in 2018 are rational and conform to the strategies of the Group.

c. Nomination Committee members may engage independent professionals when performing duties. Reasonable costs arising from or in connection with such consultation are borne by the Group. The expenses of the Nomination Committee will be included in the budget of the Company.

d. Please refer to the “Report of the Board - Meetings Held by the Special Committees of the Board” of this annual report for information about meetings held by the Nomination Committee.

e. The Board has established the Board Diversity Policy, which provides that the nomination and appointment of Board members should be based on the skills and experience necessary for the overall sound operation of the Board, with due considerations given to the goal and requirement for the diversification of Board members. When determining the combination of Board members, the Company should consider their diversity from multiple aspects, including but not limited to sex, age, culture, educational background, race, professional experience, skills, knowledge and length of service.

A.6 Responsibility of Directors

a. All the non-executive Directors of the Company have the same duties and authorities as executive Directors. In addition, the non-executive Directors, especially the independent non-executive Directors, are vested certain specific powers. The rights and obligations of executive Directors and non-executive Directors are clearly defined in the Articles of Association and the Rules of Procedure of the Board of the Company.

b. All Directors were able to devote sufficient time and effort in handling the matters of the Company.

c. All Directors confirmed that they complied with the Model Code during the Reporting Period.

d. The Company is responsible for arranging training for Directors and providing for corresponding expenses. The Directors actively participated in continuing professional development. The Company has received the training records from Directors. Please refer to the Report of the Board in this annual report for details.

A.7 Provision for and Access to Information

a. The meeting agenda as well as other reference documents of the Board and each special committee will be distributed prior to the meeting so that each member will have sufficient time to review them and enable comprehensive discussion at the meetings. Each Director can obtain all related information in a comprehensive and timely manner, and may seek advice from professional consultants if needed.

b. The secretary to the Board is responsible for organising and preparing materials for the Board meetings, including the preparation for each proposal to ensure thorough understanding of each Director. The management of the Group shall provide the Directors with necessary information and materials. The Director may request the President, or request, via the President, relevant departments to provide necessary information of the Group and related explanations.

B Remuneration of Directors and the Senior Management

a. The Company has established a remuneration committee (the "Remuneration Committee"). Mr. HUI Chiu Chung, Stephen, an independent non-executive Director, is the chairman of the Committee, and Mr. YE Zheng and Mr. JIN Yong, independent non-executive Directors, are members of the committee. The terms of reference of the Remuneration Committee are available on the websites of the Company and the Hong Kong Stock Exchange. The Remuneration Committee is responsible for studying the compensation structures and policies of all Directors, Supervisors and Senior Management and proposing recommendations to the Board thereof, or setting and determining the compensation and welfare of individual executive Directors and Senior Management members as authorised by the Board or proposing recommendations thereof to the Board. The Remuneration Committee performs duties, advisory member assists the Remuneration Committee in carrying out specific daily routines. The expenses of the Remuneration Committee are included in the budget of the Company.

b. The Remuneration Committee consults the Chairman and Vice Chairman of the Board regarding the remuneration recommendations for other executive Directors. As assessed by the Remuneration Committee, it is deemed that the executive Directors of the Company implemented the liability clauses specified in each of the service contracts entered into between the Company and the Directors in 2018.

c. Please refer to "Report of the Board - Meetings Held by the Special Committees of the Board" of this annual report for information about meetings held by the Remuneration Committee.

C Accountability and Auditing

C.1 Financial Reporting

a. The Directors are responsible for supervising the compilation of accounts in each financial period so as to ensure that the accounts can authentically and fairly reflect the business conditions, performance and cash flows during the corresponding period. The Board approved the financial statements for the year 2018 and warranted that there were no material omissions, misrepresentations or misleading statements contained in this annual report, and jointly and severally accepted full responsibility for the authenticity, accuracy and integrity of the contents therein.

b. The Company provides financial information, production and operation status to the Directors every month to ensure that the Directors are informed of the Company's latest developments in a timely manner.

c. The Company adopted an internal control mechanism to ensure that the management and relevant departments provide sufficient financial data and related explanations and data to the Board and the Audit Committee.

d. The external auditors of the Company issued a statement about their reporting responsibilities in the financial statements contained in the independent auditors' report.

C.2 Risk Management and Internal Control

a. The Company has established a comprehensive and basic process for risk management that is composed of target setting, risk identification, risk assessment, response to risks, supervision and improvement. At the beginning of each year, the Company and its affiliates will take into account current production and operation situation to analyze and judge the changes and impact of the internal and external environment, identify the risk factors and major risk areas confronting various professional fields, mark and evaluate the identified risks, work out countermeasures and indicators of monitoring and early warning to address the major and principal risks and place operation risks under dynamic monitoring.

b. The Company has integrated risk management with internal control. In the internal control matrix, risks are described according to the Company's list of risks and, on this basis, the internal control measures have been modified and improved to take risk prevention counter-measures in daily business management activities. The Company has clarified the subjects of responsibility and strengthened supervision and inspection through means including internal control evaluation to ensure that its internal risks are controllable and under control.

c. The Board is the highest decision-making authority on the Company's risk control measures. The Board acknowledges that it is its responsibility to ensure that it has established and maintained appropriate and effective risk management and internal control systems. Such systems are designed to manage rather than eliminate risks such as failure to achieve business objectives, and can only provide reasonable, but not absolute, assurance against material misstatement or loss. The Company has established the Risk Management Committee to organise and lead the comprehensive risk management and internal control efforts of the Company. The departments and affiliates of the Company are the organs that specifically implement total risk management and internal control measures. They are responsible for promptly identifying, analyzing and evaluating the risks in production and operations to put forward the counter-measures and solutions for internal control that will then be implemented.

d. For the purpose of inspecting and evaluating the internal risk control measures of the Company, the risk management department of the Company and its affiliates will test the implementation of internal control on a quarterly basis. The audit department of the Company will carry out comprehensive annual inspections and evaluations of the effectiveness of the risk-oriented internal control design and operation of the Company. The general procedures of inspection and evaluation mainly include drawing up a plan for inspection and evaluation of internal control, setting up a work group for inspection and evaluation of internal control, implementing online testing of the internal control system or onsite inspection and evaluation, identifying the defects in internal control, re-checking and confirming the defects, arriving at a conclusion based on onsite evaluation, summarising and analysing the results of inspection and evaluation, compiling the seasonal test report of internal control as well as the annual and semi-annual work report on risk management and internal control and regularly reporting to the management and the Board.

e. The Company compiles the relevant requirements as required by the regulations of the place where it is listed, and prepares the annual reports and interim reports accordingly. The regular reports are examined by the executives and reviewed by the management of the Company before being submitted to the Board and the Supervisory Committee for review and formation of a resolution document. The office of the Board will complete the regular reports according to the opinions of the Board and disclose the reports together with the relevant documents required to be submitted and disclosed on the designated website within the given timeframe. The Company has established procedures on disclosure of inside information to ensure that inside information is promptly identified, assessed and submitted, where appropriate, for the attention of the Board. In case of the occurrence of any major issue that needs to be disclosed, the office of the Board will organise the drafting of an unscheduled report according to the actual conditions and go through the relevant examination and approval procedure according to the Articles of Association and rules of procedure of the Company before disclosing the information.

f. Statement of risk management and internal monitoring: The Company and its affiliates have carried out the inspection and evolution of the risk management and the evolution results indicate that the Company's business processes have been effectively designed, the control measures have been effectively implemented. The Company's business objectives have been basically achieved, the business risks have been substantially under control, and the goals of internal control have been achieved. According to the relevant disclosure regarding the identification of key defects, there has been no major financial report and non-financial report internal control defect identified. The Company has maintained effective internal control in all major aspects in accordance with the Internal Control Manual and related requirements.

C.3 Audit Committee

a. The Company has established the Audit Committee, Mr. YE Zheng, an independent non-executive Director, is the chairman of the Audit Committee, and Mr. HUI Chiu Chung, Stephen and Mr. JIN Yong, both independent non-executive Directors, are members of the committee. In addition, corresponding working rules have been established, the terms of reference of the Audit Committee are available on the websites of the Company and the Hong Kong Stock Exchange. The Audit Committee advises on the appointment, re-appointment, termination of appointment of the independent auditors and their remuneration, reviews the financial statements to be submitted to the Board, and examines the Company's financial policies, internal auditing system, internal control system and risk management system. As verified, none of the members of the Audit Committee had served as a partner or former partner in our current auditing firm.

According to the Letter to Issuers released by the Hong Kong Stock Exchange dated 19 December 2014 and relevant amendments in the "Corporate Governance Code" set out in Appendix 14 to the Hong Kong Listing Rules and in order to improve the corporate governance practice and reinforce the Board of Directors' functions in risk control and internal control, the third meeting of the second session of the Board held by the Company on 18 March 2016 has approved a proposal to incorporate the risk control function into the scope of authority of the Audit Committee and also to amend the terms of reference of the Work Rules of Audit Committee as appropriate to enrich and augment the descriptions of risk control function. This proposal has been implemented after the approval of the Board.

b. Please refer to "Report of the Board - Meetings Held by the Special Committees of the Board" of this annual report for information about meetings held by the Audit Committee. Review opinions signed by the members of the Audit Committee were issued at such meetings and submitted to the Board. During the Reporting Period, the Board and the Audit Committee concurred with the review opinions from the meetings.

c. Members of the Audit Committee may engage independent professionals when performing duties. Reasonable costs arising from or in connection with such consultation are borne by the Group. Meanwhile, the Audit Committee appointed the advisory member to assist the Audit Committee in specific daily routines. The expenses of the Audit Committee are included in the budget of the Group.

d. In the absence of the management, the Audit Committee held meetings with the auditors three times each year, either in writing or through meeting in person, discussed the audition of financial reports and the auditing fee for the year and coordinated the work allocation between the internal and external auditors. The Audit Committee considered the adequacy of resources, staff qualifications and experiences, as well as the training programmes provided to the relevant staffs and the budget of the Company's accounting, internal audit and financial reporting functions during the Reporting Period. The Audit Committee concludes that the Company's management performed their duties and established an effective internal control system during the Reporting Period. In addition, the Audit Committee also considered the adequacy of the resource of the Company's internal audit function, reviewed and monitored the effectiveness of the internal audit function on a constant basis. According to the Company's internal control mechanism, the Company has established whistle-blowing mechanism, whereby the staff and interested parties may have a channel, such as online reporting, reporting through letters, meeting with reporters, complaint mail box, to report and complain on their discovered activities that have breached the Company's internal control system. The Audit Committee has reviewed and approved this system.

D Delegation of Power by the Board

a. The Board, the management and the Special Committees of the Board have clear terms of references. The Articles of Association, the Rules of Procedures for the General Meetings of Shareholders, the Rules and Procedures of the Board and the Working Rules for the President set forth clear scopes of duties, authorities and delegation of power of the Board and the management.

b. In addition to the Nomination Committee, Audit Committee and Remuneration Committee, the Board has also established the Strategy and Development Committee. Mr. LU Dong, Vice Chairman of the Board and an executive Director serves as the chairman of the committee. Mr. JIN Yong, an independent non-executive Director, serves as the vice chairman of the committee. Mr. XIANG Wenwu, President and an executive Director, Mr. WU Wenxin, non-executive Director, Mr. SUN Lili and Mr. ZHOU Yingguan, executive Directors, serve as members of the committee. The Strategy and Development Committee is responsible for studying the long-term development strategies as well as major decisions on capital expenditure, investment and financing of the Company.

c. Each Special Committee of the Board has clear terms of reference in writing, according to which such committees are required to report their decisions or recommendations to the Board.

d. Please refer to "Report of the Board - Meetings Held by the Special Committees of the Board" of this annual report for information about meetings held by the Strategy and Development Committee.

E Investor Relations

a. The Company pays close attention to investor relations. The Senior Management conducts road shows for investors every year to introduce matters that investors may be concerned about, such as development strategies, production and the business performance of the Company. The office of the Board is responsible for communication with investors in compliance with regulatory provisions through meetings with, site visits by and setting up email accounts for investors, which enhanced communication with investors.

b. During the Reporting Period, each resolution was separately proposed in relation to an individual matter at shareholders meetings. All resolutions were voted by poll to safeguard the interests of all the shareholders of the Company. A meeting notice was delivered to each shareholder 45 days (exclusive of the day of the meeting) prior to shareholders meetings.

c. The Chairman of the Board hosted the shareholders meetings as the chairman of such meeting. Members of the Board and the members of the Senior Management also attended shareholders meetings and answered questions raised by the shareholders of the Company.

d. During the Reporting Period, the Company made the following revision for once to Articles of Association. Whereas the Company's registered address was changed, the relevant provisions of the Articles of Association have been revised. For details, please refer to in the Articles of Association of Sinopec Engineering (Group) Co., Ltd. (H-Share) published on 26 October 2018.

F Company Secretary

a. The secretary to the Board is recognised by the Hong Kong Stock Exchange as the Company Secretary, and is nominated by the Chairman of the Board and appointed by the Board. He is a Senior Management and reports to the Company and the Board. The Secretary to the Board gives opinions on corporate governance to the Board and arranges orientation training and professional Development of the Directors.

b. The Secretary to the Board actively participated in professional development training of more than 15 hours during the Reporting Period.

G Shareholders' Rights

a. Shareholders who individually or collectively hold 10% or more of the total voting shares issued by the Company may request in writing for the Board to convene an extraordinary shareholders meeting or class meetings. If the Board fails to grant the request to call the meeting according to the Rules of Procedures for Shareholders Meetings, shareholders may call and hold the meeting at their discretion according to laws, and reasonable expenses arising therefrom are to be borne by the Company. The aforesaid provisions are subject to the following conditions: the proposals proposed at the shareholders meeting shall fall within the terms of reference of the shareholders meetings, with specified proposals and resolutions, and in compliance with the relevant laws, administrative regulations and the Articles of Association.

b. When the Company holds a shareholders meeting, shareholders who individually or collectively hold 3% or more of the total voting shares issued by the Company may propose a temporary proposal 10 days before the date of the meeting.

c. The eligibility for attending the general meeting, the shareholders' rights and the meeting agenda are clearly stated in the notices to all shareholders of the Company.

d. According to the Company's rules, the Secretary to the Board is responsible for establishing an effective communication channel between the Company and its shareholders, setting up a special organisation for contacting shareholders, and passing their opinions and proposals to the Board and the management in a timely manner. Contact details of the Company can be found under the "Investor Relations" section on the website of the Company.

(2) Auditors

At the 2017 annual general meeting of the Company held on 8 May 2018, the Company approved the re-appointment of Grant Thornton China (Special General Partnership) and Grant Thornton Hong Kong Limited as the domestic and international auditors of the Company, respectively, in 2018 and authorised the Board to determine their remunerations. As approved at the twelfth meeting of the second session of the Board, the audit fee for 2018 is RMB4.7 million. The financial statement of 2018 was audited by Grant Thornton Hong Kong Limited.

During the Reporting Period, Grant Thornton China (Special General Partnership) and Grant Thornton Hong Kong Limited did not provide significant non-audit services to the Company.

The Company has not changed its auditors since the commencement of preparation for its listing on the Hong Kong Stock Exchange. Since the current auditors will hold office until the conclusion of the annual general meeting for the year 2018, the Company will put forward an ordinary resolution in the annual general meeting for the year 2018 to re-appoint the domestic auditor and international auditor of the Company and fix their remuneration for the year 2019.

(3) Other Information about Corporate Governance of the Company

Except for their working relationships with the Group, none of the Directors, Supervisors and other Senior Management has any financial, business or family relationships or any relationships in other material aspects with each other. For information regarding changes in share capital and shareholdings of substantial shareholders, please refer to page 12 to page 15. For information regarding meetings of the Board, please refer to page 94. For information regarding the equity interests of Directors, Supervisors and other Senior Management, please refer to page 78. For information regarding the resume and annual remuneration of Directors, Supervisors and other Senior Management Members, please refer to page 118 to page 131.

REPORT OF THE BOARD

The Board is pleased to present the report for the year ended 31 December 2018 for Shareholders' review.

1 Meetings of the Board

During the Reporting Period, the Company held four Board meetings. The details are as follows:

The eleventh meeting of the second session of the Board was held in Beijing, the PRC, on 8 February 2018, whereby the Proposal on 2018 Annual Business Plan of Financial Derivatives was considered and approved.

The twelfth meeting of the second session of the Board was held in Beijing, the PRC, on 16 March 2018, whereby the following resolutions were considered and approved: report of the Board for the year 2017, report on the fulfillment of major targets for the year 2017 and the key work arrangements for the year 2018, description on the operating results, financial performance and other relevant matters for the year 2017, proposal on the audited financial statements for the year of 2017, proposal on the 2017 annual report and results announcement, proposal on the report on environment, social and governance for the year 2017, proposal on the business operation plan, investment plan and financial budget for the year 2018, proposal on the cap for the amount of performance guarantee(s) to be provided by the Company as the parent company for the year 2018, proposal on the final dividend distribution plan for the year 2017 and the authorisation to the Board to determine the interim profit distribution plan for the year 2018 to be put forward for approval at the Company's annual general meeting for the year 2017, proposal on increasing the registered capital of Sinopec Energy Saving Technology Service Co., Ltd., description of the Separation and Transfer of Water/Electricity/Gas and Property Management of the Company, proposal on the re-appointment of domestic auditor and international auditor and the authorisation to the Board to fix their remuneration for the year 2018, proposal on grant of a general mandate to the Board to repurchase domestic shares and/or H shares to be put forward for approval at the annual general meeting and the class meeting for shareholders, proposal on grant of a general mandate to the Board to issue domestic shares and/or H shares of the Company to be put forward for approval at the annual general meeting, and proposal on approval to convene the annual general meeting for the year 2017 and the class meetings.

The thirteenth meeting of the second session of the Board was held in Beijing, the PRC, on 21 August 2018, whereby the following resolutions were considered and approved: the report on the fulfillment of the key targets for the first half of 2018 and the report on the work arrangements for the second half of 2018, description on the operating results, financial performance and other relevant matters for the first half of 2018, audit comments of the independent auditor on the Company's 2018 interim financial report, review comments of the Audit Committee regarding 2018 interim financial report and relevant issues, proposal on audited 2018 interim financial report, proposal on 2018 interim report and results announcement, proposal on 2018 interim dividend distribution plan, proposal on Internal Control Manuals of SINOPEC SEG (Edition 2018), proposal on Amendments to Articles of Association, proposal on cancellation or transfer of overseas branch/subsidiary companies, proposal regarding adjustment/increase of 2018 caps of the continuing connected transactions under the general services framework agreement, proposal regarding signing of supplemental agreement on continuing connected transactions with Sinopec Group and approval of continuing connected transactions from 2019 to 2021 and the respective annual caps, work report of the second session of the Board, work report of the management team of the second session, proposal regarding election of the non-employee representative directors of the third session of the Board, proposal regarding election of the non-employee representative supervisors of the third session of the Supervisor Committee of the Company, and proposal on approval to convene the first extraordinary general meeting for the year 2018.

The first meeting of the third session of the Board was held in Beijing, the PRC, on 26 October 2018, the proposal on election of chairman and vice chairman of the Company, proposal on adjustment of the members of Special Committees of the Board of the Company, proposal on appointment of president of the Company, proposal on appointment of Secretary to the Board and Company Secretary of the Company, proposal on appointment of vice president, chairman of the Staff Union and Chief Financial Officer of the Company, description regarding the service contract for directors of the third session of the Board and Supervisors of Supervisory Committee, proposal on authorizing the president to sign relevant contract documents with external organizations, proposal on appointment of authorized representatives in the Stock Exchange of Hong Kong and proposal on adjusting the proportion of the use of proceeds from IPO.

2 Implementation of Resolutions Approved at Shareholders Meetings by the Board

During the Reporting Period, in accordance with relevant laws and regulations as well as the Articles of Association, all members of the Board diligently implemented the resolutions approved at Shareholders meetings, and have completed various tasks delegated to them at the Shareholders meetings.

3 Attendance of Board Meetings and Shareholders Meetings

During the Reporting Period, the record of the attendance of trainings and meetings of the second session of the Board and the third session of the Board and Shareholders meetings are as follows:

Name	Board Meetings		By proxy (times)	Attendance at the general meeting for the year 2017 and the 2018 extraordinary shareholders meeting	Training
	Physical Meeting	Written Resolutions			
YU Baocai	1	0	0	1	1
LING Yiqun	1	1	1	0	2
LU Dong	3	1	0	2	2
XIANG Wenwu	3	1	0	1	2
LI Guoqing	0	1	2	0	2
WU Wenxin	1	0	1	1	1
SUN Lili	0	1	2	2	2
WU Derong	2	1	1	2	2
ZHOU Yingguan	1	0	0	1	1
HUI Chiu Chung, Stephen	3	1	0	2	2
JIN Yong	3	1	0	2	2
YE Zheng	3	1	0	2	2

Notes:

(1) Since Mr. LING Yiqun, Mr. LI Guoqing and Mr. WU Derong did not seek for re-election of Directors after the expiration of the term of office, they no longer served as Directors since 26 October 2018.

(2) On 26 October 2018, Mr. YU Baocai, Mr. LU Dong, Mr. XIANG Wenwu, Mr. WU Wenxin, Mr. HUI Chiu Chung, Stephen (Independent non-executive Director), Mr. JIN Yong (Independent non-executive Director) and Mr. YE Zheng (Independent non-executive Director) were elected as directors of the third session of the Board of the Company at the first extraordinary general meeting of the Company for the year 2018. In addition, Ms. SUN Lili and Mr. ZHOU Yingguan were elected following democratic procedures to serve as the employee representative Directors of the third session of the Board.

(3) On 26 October 2018, it was approved at the first meeting of the third session of the Board that Mr. YU Baocai was elected as the Chairman of the third session of the Board, and Mr. LU Dong was elected as the Vice Chairman of the third session of the Board.

4 Meetings held by the Special Committees of the Board

The Board has established four special committees, namely, the Audit Committee, the Remuneration Committee, the Nomination Committee and the Strategy and Development Committee. The Company's management has established four special committees, namely, the Risk Control Committee, the Confidentiality Committee, the QHSSE Committee and the Sustainable Development Committee.

During the Reporting Period, the Audit Committee held two meetings. The Remuneration Committee, the Nomination Committee and the Strategy and Development Committee each held one meeting and the members of all committees were present at such meetings. Details of those meetings are as follows:

The fifth meeting of the Audit Committee of the second session of the Board was held in Beijing, the PRC, on 15 March 2018, whereby they reviewed audited comments of independent auditor on financial statements of 2017, description of appointment of independent auditor and authorization of the Board to determine audit remuneration for 2018, execution of continuing connected transactions in 2017, description of 2017 annual report of the Company, description of non-competition situation for the year 2017, work report of internal audit for the year 2017, description of work report of risk management and internal control for the year 2017, description of the report on environment, social and governance for the year 2017, description of increasing the registered capital of Sinopec Energy Saving Technology Service Co., Ltd. and description of Separation and Transfer of Water/Electricity/Gas and Property Management of the Company, and provided review opinions.

The sixth meeting of the Audit Committee of the second session of the Board was held in Beijing, the PRC, on 20 August 2018, whereby they reviewed audit comments of the independent auditor on the Company's 2018 interim financial report, description on the 2018 interim report, work report of risk management and internal control in the first half of 2018, description and the execution of continuing connected transactions in the first half of 2018 and proposal regarding adjustment/increase of the annual caps of the continuing connected transactions under the General Services Tramework Agreement, and provided review opinions.

The second meeting of the Nomination Committee of the second session of the Board was held in Beijing, the PRC, on 21 August 2018, whereby they reviewed the proposal on election of non-employee representative directors of the third session of the Board and proposal on election of chairman and vice chairman of the third session of the Board and provided review opinions.

The first meeting of the Remuneration Committee of the third session of the Board was held in Beijing, the PRC, on 26 October 2018, whereby they reviewed the recommendation to launch the "description of the plan of granting the second batch of H-share stock appreciation rights incentive plan" and the description of the key points on the reform of the three internal policies of the Company", and provided review opinions.

The first meeting of the Strategy and Development Committee of the third session of the Board was held in Beijing, the PRC, on 26 October 2018, whereby they reviewed the description of "Two 3-year and Two 10-year" strategic action plan of the Company and the description of the new business development of the Company, and provided review opinions.

5 Performance

The financial results of the Group for the year ended 31 December 2018 were prepared in accordance with the IFRS and its financial position as at that date and the corresponding analysis are set out from page 36 to page 63 in this annual report.

6 Dividends

At the annual general meeting for the year 2017 convened on 8 May 2018, an ordinary resolution was passed to approve the authorisation to the Board to determine the interim profit distribution plan for the year 2018. The dividend distribution plan of RMB0.100 per share (inclusive of applicable tax) for the six months ended 30 June 2018 was approved at the thirteenth meeting of the second session of the Board convened on 21 August 2018. The dividend distribution plan was implemented.

The final dividend distribution plan for the year ended 31 December 2018 was approved at the second meeting of the third session of the Board. The final dividend distribution shall be calculated based on the total number of Shares as at 21 May 2019 (the "Record Date") and the final cash dividend distribution shall be based on RMB0.124 per Share (inclusive of applicable tax). That distribution plan will be implemented after being reviewed and approved at the annual general meeting on 8 May 2019 to be held by the Company. The final dividend for the year 2018 will be paid on or before Friday, 19 July 2019 to all Shareholders whose names appear on the register of members of the Company at the close of business on Tuesday, 21 May 2019. In order to qualify for the final dividend, the holders of H Shares must lodge all share certificates accompanied by the transfer documents with Computershare Hong Kong Investor Services Ltd. (address: Shops 1712-1716, 17/F, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong) before 4:30 p.m. on Wednesday, 15 May 2019 for registration. For the purpose of ascertaining Shareholders who qualify for the dividend, the register of members for H Shares will be closed from Thursday, 16 May 2019 to Tuesday, 21 May 2019 (both days inclusive).

The dividend will be denominated and declared in Renminbi. The holders of Domestic Shares will be paid in Renminbi and the holders of H Shares will be paid in Hong Kong dollars. The exchange rate for the dividend to be paid in Hong Kong dollars will be the mean of the exchange rates of Hong Kong dollars to Renminbi as announced by the People's Bank of China during the week prior to the date of declaration of the dividend.

In accordance with 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 its implementation regulations, the Company is required to withhold and pay enterprise income tax at the rate of 10% on behalf of the non-resident enterprise Shareholders whose names appear on the register of members for H Shares when distributing the cash dividends. Any H Shares not registered under the name of an individual Shareholder, including HKSCC Nominees Limited, other nominees, agents or trustees, or other organisations or groups, shall be deemed as shares held by non-resident enterprise shareholders. Therefore, on this basis, enterprise income tax shall be withheld from dividends payable to such Shareholders. If holders of H Shares intend to change their shareholder status, please enquire about the relevant procedures with their agents or trustees. The Company will strictly comply with the law or the requirements of the relevant government authority and withhold and pay enterprise income tax on behalf of the relevant Shareholders based on the register of members for H Shares as at the Record Date.

If the individual holders of H Shares are Hong Kong or Macau residents or residents of the countries which had an agreed tax rate of 10% for the cash dividends to them with the PRC under the relevant tax agreement, the Company should withhold and pay individual income tax on behalf of the relevant Shareholders at a rate of 10%. Should the individual holders of H Shares be residents of the countries which had an agreed tax rate of less than 10% with the PRC under the relevant tax agreement, the Company shall withhold and pay individual income tax on behalf of the relevant shareholders at a rate of 10%. In that case, if the relevant individual holders of H Shares wish to reclaim the extra amount withheld (hereinafter referred to as the "Extra Amount") due to the application of 10% tax rate, the Company can apply for the relevant agreed preferential tax treatment provided that the relevant Shareholders submit the evidence required by the notice of the tax agreement to the H share register of the Company. The Company will assist with the tax refund after the approval of the competent tax authority. Should the individual holders of H Shares be residents of the countries which had an agreed tax rate of over 10% but less than 20% with the PRC under the tax agreement, the Company shall withhold and pay the individual income tax at the agreed actual rate in accordance with the relevant tax agreement. In the case that the individual holders of H Shares are residents of the countries which have had an agreed tax rate of 20% with PRC, or which has not entered into any tax agreement with PRC, or otherwise, the Company shall withhold and pay the individual income tax at a rate of 20%.

For investors (including enterprises and individuals) investing in the H Shares (the "Southbound Trading") of the Company listed on the Hong Kong Stock Exchange through the Shanghai Stock Exchange and Shenzhen Stock Exchange, the Company has entered into the Agreement on Appropriation of Cash Dividends of H Shares for Southbound Trading (港股通H股股票現金紅利派發協議) with China Securities Depository and Clearing Corporation Limited, pursuant to which, China Securities Depository and Clearing Corporation Limited, as the nominee of the holders of H Shares for Southbound Trading, will receive all cash dividends distributed by the Company and distribute the cash dividends to the relevant investors of H Shares of Southbound Trading through its depositary and clearing system. The cash dividends for the investors of H Shares of Southbound Trading will be paid in Renminbi.

Pursuant to the relevant requirements under the "Notice on the Tax Policies Related to the Pilot Program of the Shanghai-Hong Kong Stock Connect" (Caishui [2014] No. 81) (《關於滬港通股票市場交易互聯互通機制試點關稅收政策的通知》(財稅[2014]81號) and "Notice on the Tax Policies Related to the Pilot Program of the Shenzhen-Hong Kong Stock Connect" (Caishui [2016] No. 127) (《關於深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[2016]127號), for dividends received by domestic investors from investing in H shares listed on the Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect or Shenzhen-Hong Kong Stock Connect, the Company of such H shares shall withhold and pay individual income tax at the rate of 20% on behalf of the investors. For dividends received by domestic securities investment funds from investing in H shares listed on the Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect or Shenzhen-Hong Kong Stock Connect, the tax payable shall be the same as that for individual investors. The Company of such H shares will not withhold and pay the income tax of dividends for domestic enterprise investors and those domestic enterprise investors shall report and pay the relevant tax themselves.

7 Major Suppliers and Clients

During the Reporting Period, the total purchases from the top five suppliers of the Group accounted for 21.60% of the total purchases of the Group, of which the purchases from the largest supplier accounted for 14.97% of the total purchases of the Group. The total sum of purchase made by the Group from the top five suppliers accounts for not more than 30% of the purchase total sum of the Group mainly because the Group's EPC business and construction business require various equipment, material, and consumables that are in large quantity and in rich kinds, including dynamic & static equipment, electrical instrument, pipe, valve, steel parts, and welded material.

The total sales to the top five clients of the Group accounted for 58.41% of the total sales of the Group, of which sales to the largest client accounted for 36.04% of the total sales. For details on the Group's relationships with major clients and the risks that the Group's business may face due to such relationships, please see the section headed "Report of the Board - 15 Risk Factors - Risk relating to decreased orders from major clients" in this annual report.

During the Reporting Period, other than the connected transactions with the controlling shareholder, Sinopec Group, and its subsidiaries, as disclosed in the section headed "Connected Transactions" of this annual report, none of the Directors, Supervisors and their associates or any Shareholder holding 5% or more of the share capital of the Company had any interest in any of the above-mentioned major suppliers and clients.

8 Bank Loans and Other Borrowings

As at the end of the Reporting Period, the Group's loans to the ultimate holding company amounted to USD56 million (about RMB384 million).

9 Fixed Assets

During the Reporting Period, changes to the fixed assets of the Group are set out in Note 17 to the financial statements prepared in accordance with the IFRS in this annual report.

10 Reserves

Changes to the reserves of the Group during the Reporting Period are set out in the consolidated statement of changes in equity in the financial statements prepared in accordance with the IFRS in this annual report.

11 Donations

During the Reporting Period, the amount of charity donations made by the Group amounted to approximately RMB943,000.

12 Pre-emptive Right

According to the Articles of Association and the applicable laws of the PRC, the Shareholders are not entitled to any pre-emptive rights. Therefore, the existing Shareholders cannot ask the Company for the right of first refusal in proportion to their shareholdings.

13 Repurchase, Sale and Redemption of Shares

During the Reporting Period, neither the Company nor any of its subsidiaries repurchased, sold or redeemed any listed shares of the Company or its subsidiaries.

14 Issuance of Warranty

During the Reporting Period, no warranty has been issued by the Company or any of its affiliated companies.

15 Management Contract

During the Reporting Period, the Company did not sign or have any contract on the management or administrative work of its overall business or any major business.

16 Equity-Linked Agreement

During the Reporting Period, neither the Company nor any of its affiliated companies has signed or is subject to any equity-linked agreement, or specifies that signing of any agreement by the Company would result in or may result in issuance of shares of the Company.

17 Permitted Indemnity Provisions

During the Reporting Period, the Company purchases liability insurance for directors to reduce the risk of directors in the proper performance of their duties. Apart from this, there is not any permitted indemnity provision that was or is in force and benefits the Directors or the directors of the Company's subsidiaries.

18 Accounting Standard

The difference between the main accounting policies adopted by the Company for compilation of 2018 audited consolidated financial statement and the main accounting policies for compilation of 2017 audited consolidated financial statement are indicated in details in Note 3 to the financial statement.

19 Retirement and Employee Benefit Plan

Details of the Group's retirement and employee benefit plan are shown in Note 33 to the financial statement.

20 Compliance with Laws and Regulations

In 2018, the Group strictly abided by laws and regulations such as the Company Law of the People's Republic of China, the Contract Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Construction Law of the People's Republic of China, the Tendering/Bidding Law of the People's Republic of China and the Safe Production Law of the People's Republic of China and the applicable environmental policies in China. The Company also continuously increased or improved various systems, established a relatively complete compliance operation mechanism, prevented and avoided the occurrence of major legal risks to the maximum extent, and provided strong compliance guarantee for its operation and development under the existing system.

21 The Right of Directors and Supervisors to Purchase Share or Debenture

During the Reporting Period, no Director or Supervisor or any of his or her affiliated companies or his or her affiliated person has acquired the right granted by the Company or any of its affiliated companies or execute any such right to purchase share or debenture of the Company or any other cooperative corporation.

22 Core Competitiveness Analysis

The Group is a leading oil refining, petrochemical and new coal chemical engineering company in the PRC. The Group has the legacy of being among the first batch of oil refining and petrochemical engineering enterprises established in the PRC in the 1950s. Leveraging on long operating history and sophisticated industry experiences, we have developed the strongest execution capabilities in the PRC with respect to engineering and constructing large-scale oil refining, petrochemical and new coal chemical complexes, etc., which usually include a series of process units and utilities, and we are highly competitive in the international engineering market.

The competitive strengths of the Group are particularly reflected in the large business scale, strong executive capacity, excellent management and technical team, advanced industrialised proprietary and patented technologies, sound management system, advanced software and equipment, rich and reliable suppliers and subcontractors resources, complete service chain in the technology R&D and licensing, preliminary project consulting, financing assistance, engineering, procurement, construction, trial test/commissioning and maintenance services and excellent one-stop engineering service capability.

Given our competitive advantages in industry chain, business chain, technology chain and supply chain, the Group is now a leader in China's oil refining and engineering industry. The Group is also on the cutting edge of the rapidly developing China and international engineering markets.

23 Risk Factors

Risks relating to macro-economic uncertainties

The business performance of the Group is closely related to the economic situation of the PRC as well as the global economic situation. China's economic development has entered a new normal. Although all countries in the world have adopted various macro-economic policies to eliminate the negative influence caused by factors such as the slowdown of world economic growth, the economic globalization has regressed at present and the prospect of global economic recovery remains uncertain. The Company's operation may also be adversely affected by various other factors, such as the negative impact to the investments in refining and chemical projects as a result of the fluctuations of the international oil prices and the negative impact to the demand for oil and chemical products as a result of the slowdown of economic growth.

Risks brought by changes in market environment

In 2019, under the expected influence of the interest rate increase performed by Federal Reserve Board of the United States of America and the increase of shale oil production in US, the international oil price will maintain a low level fluctuation for a long time. The construction, transformation and expansion of oil refining and petrochemical engineering projects will be restricted. Investors will be more cautious when in investing in large integrated refining and chemical projects. Affected by factors such as the technical problems of demonstration projects, pressure under environmental protection and drop of oil price, the state policy for developing new coal-chemical industry may also change so that progress deceleration, fund shortage and reorganisation may appear in the new coal-chemical projects under construction, while those projects that have already received "green light" from the governments or are being planned may be put on the shelf. The implementation of the new Environmental Protection Law may result in higher standards for the technical level and production management of petrochemical projects, which will invisibly elevate the threshold for new projects. If global oil price stays low for long, the shale gas market will also be enormously impacted, the Group's expansion in such market may encounter further difficulties.

Risks relating to changes in policies

(1) Nationalisation, cancellation, seizure, confiscation, suspension and other risks with regard to projects undertaken by us

Turbulent and unstable political situation in the countries where the Group has overseas projects, policy discontinuity due to partisan policy, and government intervention in overseas investments may elevate political risks. In some regions of Africa, government nationalisation, cancellation, seizure, confiscation, and suspension of refinery projects occur from time to time. Little or even no compensation is paid to investors. Thus, relevant project participants may suffer huge losses. Under such circumstances, the risks relating to exploration of new markets in affected countries are relatively high and this may hinder market expansion of the Group.

(2) Risks relating to host country's inadequate policy and regulation

If the host country's public policies, in particular, security policies, are flawed, for instance, if the regulations on rallies, demonstrations and strikes are imperfect, in the event that certain events occur, project implementation will be directly affected, and even legal proceedings could be initiated. These conditions will indirectly affect any new market exploration in the country hereof.

(3) Risks relating to changes in financial and legal systems

Changes in income tax, customs tax, insurance tax and other aspects of host countries' financial and tax systems will directly affect the economic results of the project and may reduce the profitability of the project. The Group pays taxes in overseas countries and regions where it operates. If the income from overseas business grows, related tax expenses will also increase. It is difficult for the Company to predict changes in tax policies of the overseas host countries or regions, and such policy changes may have a material adverse effect on our profitability and financial performance.

Meanwhile, if changes are made in the legal system of the host regions of projects in the Middle East or Middle Asia, such as changes in environmental protection law, investment law, labour law and other relevant law, and if regulations may become restrictive, the execution of our projects will become more difficult and potentially affect the development of new projects in relevant countries. If laws and regulations on environmental protection, safety and health are revised or updated, or standards are raised, the costs of compliance and business operations will be affected.

Risks relating to project delay and budget overview

(1) Risks relating to inaccurate project quotation and preliminary budget

Insufficient accumulation of basic data required for project quotation and budget (man hour, procurement and construction price) may affect the efficiency and accuracy of preparing quotations and budget, which will in turn affect the decision-making of projects and subsequent project implementation. For large projects with higher complexity, particularly the EPC Contracting Projects, inaccurate initial project quotations and estimations may cause difficulties in implementing the projects as planned.

(2) Risks relating to sub-contractor management

The Group usually engages sub-contractors to provide assistance in completing projects; however, if the resource distribution of sub-contractors is inadequate, it will delay current project completion and impede undertaking of other projects. Concurrently, the delay in sub-contractors' progress will increase the risk of project delay. In addition, the Group assumes joint liability for subcontracted projects, which means that the Group may be subject to compensation liability due to quality problems of sub-contracted projects and may be subject to lawsuits and compensation claims, may undertake joint liability for the on-site security accidents of the sub-contractors and bear the risk of the losses in project performance and damages to company image. It is possible that our business and financial status as well as our business operations will be adversely affected by these matters.

(3) Risks relating to regular fluctuation of raw material prices for construction

The price of steel, cement and other raw materials used in our domestic and overseas projects fluctuates frequently. Any increase in the price of raw materials will lead to a direct increase in procurement costs for our refining projects. This is especially relevant in the international market where competition is intense, and sub-contractors compete by providing low bids in order to win contracts. This, to some degree, directly leads to a decrease in the contractor's profit. If the price of raw materials increases significantly, the risk of completing a project outside the limits of our budget will be elevated.

(4) Risks relating to inflation, including the increase in cost of human resources

The Middle East and Central Asia are the primary target markets of the Group's international business. Currently, we are vigorously developing the regional markets in Southeast Asia. Considering that the economy of areas in such areas as a whole is unstable with high inflation rates, this may directly lead to increase in price of sub-contracting and labour markets. Concurrently, due to the fluctuation in the exchange rate for Renminbi, the cost of exported labour services increases, which further increases project costs.

(5) Risk relating to project management

Risks relating to project management are mainly reflected in financing management, engineering design and capability for claiming indemnity. Some of our on-going overseas projects are financing projects. Insufficient financing management may lead to delays in construction because we may not solve problems in a timely manner. For projects where design standards are substantially different from China's standards, the Group's design team's abilities may be hampered. Delay in design implementation will result in difficulties in the execution of procurement and construction. Due to the complexity of the construction projects, the capability for claiming indemnity may directly affect the profitability of a project. If the project team's experience in claims and counter claims is inadequate to meet the requirements of the undertaken project, especially for our overseas projects, if we fail to properly deal with claims and counter claims in some EPC Contracting projects where the conditions are complex and the demand is high, especially for the overseas projects, these will cause a negative impact on the effectiveness and profitability of such projects.

Risks relating to QHSE

In recent years, both the domestic and overseas markets require better QHSE management, and the media has also become increasingly concerned about QHSE. Thus, the QHSE management ability of a company has become much more important to its survival and future development. The Group is a participant in the petrochemical engineering industry, which has both "petrochemical" and "engineering" production characteristics. The high-risk features of the petrochemical and engineering industries in fact increase the pressure on and difficulty in our QHSE management.

Any non-standard, non-regulated, imperfect situation or insufficient execution in the Group's QHSE management principles, models and system may result in QHSE incidents. On the other hand, if our overseas public safety management cannot fulfil our overseas expansion demand, it can also lead to overseas public safety incidents.

Risks relating to exchange rate

During the Reporting Period, there were accounts receivable and payable and cash balances in relation to our overseas projects, which are settled in foreign currencies. We also raised funds which are settled in foreign currencies by offering H Shares. During the Reporting Period, our foreign currencies mainly consist of U.S. dollars, euros and Saudi Riyals. Exchange rates will affect the pricing of our services as well as our material procurement costs settled in foreign currencies. Thus, fluctuation in exchange rates may affect our business performance and financial status. Moreover, the exchange and remittance of foreign currencies are subject to PRC laws and regulations on foreign currency, and therefore, it cannot be guaranteed that foreign trade policies of current accounts and capital accounts will remain unchanged. Foreign currency policies may limit our ability to obtain adequate foreign currencies. We cannot ensure that we have enough foreign currencies to meet the demand of the Group under certain exchange rates. This will affect the execution of our projects settled in foreign currencies.

Risks relating to financial derivatives

The first relevant risk is the market risk. When the market exchange rate or interest rate trend deviates substantially from the expectation, the exchange cost of the assets in US dollar locked by the Group using financial derivatives in advance may be higher than the cost incurred under the circumstance where the hedging transaction is not performed, resulting in the increase of financial costs. Furthermore, large exchange rate fluctuation will also lead to large change of fair value of financial derivative itself, if it is impossible to get complete hedge for the existing assets, certain influence will be imposed on the Group's book profits and losses. The second relevant risk is the credit risk. If the transaction counterparty of the selected financial derivative is involved in credit default and fails to execute the agreed price or amount at the time of completion of transaction, it may make it impossible for the Group to compensate the exchange loss arousing from the appreciation of the RMB exchange rate through the hedge transaction. The third relevant risk is the operational risk. In the process of engaging in financial derivatives business, subjective and objective factors such as human operation error or imperfect internal control mechanism lead to inaccurate or untimely execution of transaction, resulting in transaction loss.

Risks relating to the uncertainty of obtaining new projects

The Group's revenue mainly comes from offering services in petrochemical and new coal chemical industries services, as well as refining services. Client demands are affected by periodic variation of traditional resources and overall business levels. Resource supply and price variations will significantly affect our ability to obtain new projects. At the same time, the competitiveness of traditional resources in the resource market is the prerequisite of ensuring service demand. If government subsidies or other economic stimulating measures are implemented to lower the prices of substitute resources, and if technological breakthroughs for substitute resource suppliers and users may be achieved, the cost advantages of traditional resources will diminish. This will decrease our business turnover on a large scale.

Risks relating to decreased orders from major clients

The industries in which our clients are involved are capital and technology-intensive with high entrance thresholds. Our major clients are relatively concentrated, resulting in the Group being dependent on a small group of clients, especially on the largest client which is SINOPEC SEG's controlling shareholder (and its associates). If our major clients choose to switch to a competitor of the Group, or reduce orders because of financial difficulties and other factors, we will face severe business or income fluctuations or decreases. We endeavour to attract more new clients for both our domestic and international businesses. However, it is likely that the majority of our clients and revenue will continue to come from our current major clients. Therefore, we cannot guarantee stability and growth of our revenue due to potential risks which may result in significant negative impact on our business performance.

Risks relating to changes in investment strategies and tactics

In recent years, both domestic and overseas engineering companies have placed emphasis on investment strategies such as acquisition, sales and new market exploration. Entering a new business domain by acquisition may result in additional business risks which differ from our previous risk factors. There might be great difficulties in how to recognise all significant risks during our due diligence investigation, how to achieve synergy and resource integration, and how to successfully operate an expanded company after acquisition. We will strive to assist potential buyers to assume liabilities of the business, and execute the contracts and other rights should we sell any part of the Group or pursue acquisitions in the future. The Group plans to explore the overseas markets and potential new businesses. It may also increase research investment in substitute resources and substitute chemical raw materials. The future of these investments and trades will be mainly under the influence of government policies, which is out of our control. We cannot guarantee maintaining our powerful growth momentum. If the investments are not successful, this may result in a significant negative impact on the business and financial status of the Group.

Risks relating to new business segments

The Group is vigorously exploring new businesses such as new coal chemical engineering, energy saving and environmental protection, LNG and shale gas. Faced with the intricate market environment, if the Group does not have comprehensive technological reserves of the new fields, has defects in project engineering and constructional experience, and does not obtain enough information regarding the credit status of its clients, it is very difficult for the Group to fully identify and avoid major risks existing in the new businesses.

Risks relating to the new business models

The Group proactively explores new business models such as contract environmental protection management, contract energy management and BT/BOT. The Group will invest in the whole process of a project, and scale back on costs and earn profits by sharing environmental protection and energy saving benefits with its clients. As it involves the corporate operation and project operation of its clients, the Group will face, for instance, credit risks due to the transferring of project benefits by the clients, the risks brought about by improper corporate operation of the clients or by legal disputes, the project risks in failure to achieve expected targets in terms of energy saving and environmental protection benefits and failures in timely pay-back of investments. In view of the input in contract energy management and contract environmental management projects, the Group may also face transforming risks as an asset-light company.

Risks associated with pursuit of petroleum and natural gas projects in sanctioned countries

In addition, because U.S., EU and other sanctions programs change frequently, new requirements may be imposed, or original requirements may be reimposed, in relevant jurisdictions, including Iran, which could increase scrutiny on the Group's business or result in one of or more of the Group's business activities being deemed to violate sanctions. In view of this, the Group can provide no assurances that its future business will be free of risk under U.S. or other sanctions, or that the Group will conform its business to the expectations and requirements of U.S. authorities or the authorities of any other government that does not have jurisdiction over the Group's business but may impose sanctions on an extraterritorial basis. Shareholders and potential investors should consider (i) if investment in the Company would expose them to any OFAC or sanctions law risk arising from their nationality or residency, and (ii) the risk that, if the Group engages in oil and gas engineering business in sanctioned countries, such business may result in reduction of the marketability of the shares of the Company and may have an adverse effect on the share price of the Company.

24 Report on Corporate Environmental, Social and Governance

Energy saving and environmental protection

As a responsible project contractor, the Group is committed to complying with the relevant laws and regulations on environmental protection, provides the society with the best green design concept by focusing on the three processes of source treatment, process control and zero discharge, creates optimal customised processing plan of high added value for the efficient utilisation of energy and uses technology innovations to materialise a green and healthy road of sustainable development.

Through the seamless integration of continuous technology innovation and fine design, the Group regards the design and construction of environmental-friendly green factories of low energy consumption and high efficiency as its own mission and responsibility, pays high attention to environmental protection and implements whole-process clean management. We are committed to being a green design advocate, green technology developer, green project builder undertaker and green office practitioner, to thread the green and low-carbon ideas through the whole processes of planning, design, procurement, construction and completion services, strives to explore new paths of development and pushes the industry onto a healthy road of low-carbon and environmental-friendly development.

At construction sites, the Group applies environmental protection concept at each management stage. Effective measures of dust prevention and suppression are adopted at construction sites. The emissions from onsite vehicles, machinery and equipment, as well as pollutions from dust, noise and waste during transportation are also under control. Standard workshop of prefabrication is built for project construction where noise reduction barrier is set. SEG would refrain from construction at night and using equipment that would make loud noises so as to reduce noise pollution. In addition, dust removal facilities are provided to reduce dust pollution from sand-blasting and anti-corrosion activities. We have been improving the efficiency of energy utilisation during construction, saving energy, formulating energy-saving measures, using energy-efficient equipment and products, optimising construction process, and making full use of clean and renewable energy. We have also adopted effective measures to supervise and promote the reasonable and economical use of materials, recycle and reuse surplus materials as much as possible, pay attention to the protection of biodiversity and restoration of original ecosystem during construction and strive for the fusion between project construction and natural environment.

Compliance with laws and regulations

The Group has established compliance procedures to ensure compliance with applicable laws, rules and regulations that have a significant impact on the Group. The Group authorises its Legal Department to supervise its policies and practices for compliance with laws and supervision by reviewing such policies and regulations periodically. The employees and affiliated companies will be notified from time to time of any change in the applicable laws, rules and regulations.

The Group has abided by the PRC laws and regulations in all material respects and obtained material licenses, approval documents and permits for its business operation in China from competent regulatory authorities. In overseas regions where it operates, the Group has abided by the local applicable laws and regulations in all material respects and obtained licenses, approval documents and permits important for its local business operations from competent regulatory authorities.

To safeguard its intellectual property rights, the Group has registered its own domain name and applied for or registered a number of trademarks under multiple categories in mainland China, Hong Kong and other related jurisdictions. The Group will take all appropriate actions to protect its own intellectual property rights.

The Group's business activities are regulated by competent authorities, laws and regulations of the Chinese government. For details, please refer to the section headed "Laws and Regulations" in the Company's prospectus dated 10 May 2013 (the "Prospectus"). Among others, the "Environmental Protection Law of the People's Republic of China", the "Work Safety Law of the People's Republic of China", the "Provisions on the Administration of Qualifications of Construction Enterprises", the "Regulation on the Administration of Exploration and Design of Construction Projects", the "Provisions on the Administration of Qualifications for Assessment of Environmental Impact of Construction Projects" have been amended recently and their amendments have taken effect and also been put into force as at the date hereof. Since the abovementioned laws, regulations and decrees still provide for the necessity in legal terms of applying for an approval or recognition of eligibility after being amended, it is estimated that these amendments will not have material effect on the business operations and growth of this Company.

Good work environment

As an equal opportunity employer (EOE), the Group will not discriminate against any employee because of his or her personal characteristics. The Staff Handbook contains terms and conditions of employment, the expectations for staff conduct and behaviour, and the rights and benefits of employees. The policies established and implemented by the Group are aimed to create a harmonious work environment of mutual respect.

The Group is deeply convinced that employees are the most precious asset of an enterprise and sees human resources as a corporate wealth. The Group also provides on-job training and development opportunities to facilitate career progress of employees. The various training programs that are offered have enabled the employees to increase their expertise in corporate operations, occupation and management skills. The Group provides its employees with a full range of benefits and activities, e.g. the Group has afforded a full package of customised benefits for its employees, including physical examination, recuperation allowance, accident insurance for working personnel stationed abroad, corporate annuity, supplementary medical insurance and subsides for those employees in financial distress, etc., in light of the Group's operating conditions and also the circumstances of relevant employees.

Health and safety

The Group commits itself to providing a work environment that is safe, efficient and comfortable and is proud of that. The Group makes appropriate arrangements and provides training courses and guidelines to ensure a healthy and safe work environment. The Group provides its employees with communications on health and safety and exhibits the relevant information to enhance their awareness for occupational health and safety. The Group values the health and well-being of its employees and has arranged courses in medical insurance for the employees to ensure their health and increase their health awareness.

The Group has diligently implemented a responsibility system, monitored the production stages, laid down a solid foundation and urged its employees to ensure production safety and compliance with all applicable standards. So far, it has set up the Assessment Center for Standardisation of Safety Control Measures in Production, has formulated an evaluation and grading system, and has carried out an assortment of campaigns such as public awareness enhancement, trial evaluation, application for official evaluation, monthly “safety first” examinations as well as “production safety” inspections. In addition to ceaselessly bettering its supervisory system for domestic projects, the Group has started to establish a supervisory system for its overseas projects, in an end to enhance its safety control skills and project management skills. The Group has managed to keep the rate of accident and harm to an extremely low level in the year.

Improve supplier management

The Group stresses on ensuring top-design of supplier management in accordance with the ideas concerning creating and optimising supply chains. It has established a complete supplier management system and a supplier evaluation system, and implemented a monthly report system on suppliers’ breach of contract. Suppliers are reviewed and divided into different ranks annually and in accordance with the evaluation results, the procedures of implementation of entry system, catalog system and informational management are optimised, improving evaluation systems and realising continuous improvement. Supplier management system platform is established to achieve network management of global suppliers. The Group has always kept mutually beneficial and win-win partnerships with all ranks of suppliers. It focuses on cultivating strategic suppliers and keeps sound communication with strategic suppliers. The Group provides support and guidance to excellent Chinese network suppliers in enhancing their international business competitiveness, facilitating excellent Chinese suppliers in participating in international competition by virtue of the international business platform of the Group. While expanding its supplier base, the Group also increases its resource optimisation and allocation ability worldwide.

Community participation and social relations

The Group has always adhered to its business motto which features "local connections, policy-based development and win-win situation" and its guiding principle of "putting an equal focus on production and human life, and integrating economic, environmental and social efficiency". The Group contributes to the local community and social harmony, and endeavours to mobilise its employees to freely communicate their ideas and embrace personal growth together. The Group also encourages and guides social organisations and volunteer teams in local community to provide services for the general public in a professional manner, and carries out a full spectrum of activities in the interests of local residents, ranging from fitness coaching, psychological counselling, security guarding to repair and maintenance services, in an effort to solve problems for local residents and build their trust in the Group. During the Reporting Period, the Group, with the theme of "Environmental Protection", strives to build a green environment for local communities and residents to have a pleasant and beautiful place to work, study and live.

By Order of the Board

YU Baocai

Chairman of the Board

Beijing, the PRC

8 March 2019

REPORT OF THE SUPERVISORY COMMITTEE

Mr. ZHU Fei

Chairman of the Supervisory Committee

Dear Shareholders,

Under the leadership of shareholders' general meeting of the Company and under the support of the Board, the Supervisory Committee and all supervisors of the Company earnestly perform the duties assigned by relevant laws and regulations, articles of association of the Company, and the shareholders' general meeting. The Supervisory Committee's responsibilities mainly include inspecting the financial status of the Company timely, supervising directors and senior management members of the Company to perform the duties in the Company, convening meeting of the Supervisory Committee as scheduled, verifing and reviewing relevant proposals planned to be submitted by the Board to the shareholders' general meetings, executing the powers of Supervisory Committee in accordance with relevant laws and regulations as well as the Articles of Association and submitting proposals to shareholders' meetings at appropriate time, adhering to work in a honest, diligent and pious manner, combining normalized supervision with good service, and supporting the chairman of the Board, President and other senior management members of the Company to sufficiently execute their legal rights and exert the functions of Supervisory Committee for the sustainable development of the Company.

During the Reporting Period, the Supervisory Committee held three meetings, in which the 2017 annual report, the 2018 interim report, financial reports, the report of the Supervisory Committee, production and operation plans, investment plans and financial budgets as well as dividend distribution plan were reviewed.

The seventh meeting of the second session of the Supervisory Committee of the Company was held on 16 March 2018. The 2017 annual report, the financial statement of 2017, the business operation plan, investment plan and financial budget for the year 2018, the dividend distribution plan for the year 2017, and the report of the Supervisory Committee for the year 2017 were considered and approved at the meeting.

The eighth meeting of the second session of the Supervisory Committee of the Company was held on 20 August 2018, the 2018 interim financial report, the 2018 interim report, the 2018 interim dividend distribution plan, the report of the second session of the Supervisory Committee, proposal regarding adjustment/increase of 2018 caps of the continuing connected transactions under the general services framework agreement, proposal of continuing connected transactions in 2019 to 2021 and caps of respective years and proposal on implementation of self-evaluation of execution of duty of directors, supervisors and senior management members were considered and approved at the meeting.

The first meeting of the third session of the Supervisory Committee of the Company was held on 26 October 2018, the chairman of the third Supervisory Committee was elected, proposal on adjusting the proportion of the use of proceeds from IPO were considered and approved.

Furthermore, the Supervisory Committee organized supervisors to attend the shareholders meeting of the Company and attended the Board meeting as nonvoting delegates, and also organized self-evaluation of execution of duty of directors, supervisors and senior management members of the Company in the first half of 2018.

Through the supervision of production, business operation and financial management of the Company, the Supervisory Committee and all supervisors believe that in 2018, the Board and senior management members of the Company have faithfully fulfilled the responsibilities and obligations assigned by relevant laws and regulations, the Articles of Association and the shareholders' meeting, further optimized the internal control system and maintained its effective implementation. The decision-making procedures of the Company are in compliance with the relevant requirements of the PRC Company Law and the Articles of Association. The Supervisory Committee did not identify any behavior of any Directors and Senior Management of the Company in violation of applicable PRC laws, regulations or the Articles of Association or in infringement of the interests of the Company and Shareholders in execution of their duties. The financial behaviors of the Company are in compliance with the International Financial Reporting Standard, the China Business Accounting Standard and related regulations. The Company's financial operation is in good condition, and truly and fairly represents financial status and operating results of the Company. The Company strictly implements relevant stipulations on the accumulation of funds, and the actual use of the raised funds are consistent with the previous disclosure. The decision-making procedure for affiliated transaction between the Company and Sinopec comply with the stipulations of relevant laws, regulations and Articles of Association, and there is no infringement of the interests of the Company and independent Shareholders. The Supervisory Committee has no disagreement on the supervised issues during the Reporting Period.

This session of the Supervisory Committee will stick to the principle of integrity, perform its supervisory duties, actively participate in the supervision of key decision-making processes of the Company, put greater efforts in inspection and supervision and protect the interests of the Company and its Shareholders.

ZHU Fei

Chairman of the Supervisory Committee

Beijing, the PRC

8 March 2019

DIRECTORS, SUPERVISORS, OTHER MEMBERS OF SENIOR MANAGEMENT AND EMPLOYEES

1 Directors, Supervisors and Other Members of Senior Management

(1) Directors

Mr. YU Baocai - Chairman of the Board and Non-executive Director

Mr. YU Baocai (喻寶才), aged 53, is the Chairman of the Company and also serves as the Vice President of Sinopec Group and the director of China Petroleum & Chemical Corporation ("**Sinopec Corp**"). Mr. YU is a senior engineer and holds a master's degree. Mr. YU served as the deputy general manager of PetroChina Daqing Petrochemical Company (中國石油大慶石化分公司) from September 1999 to December 2001, the general manager of PetroChina Daqing Petrochemical Company (中國石油大慶石化分公司) from December 2001 to September 2003, the general manager of PetroChina Lanzhou Petrochemical Company (中國石油蘭州石化分公司) from September 2003 to September 2008, and the deputy general manager of China National Petroleum Corporation (中國石油天然氣集團公司) from September 2008 to June 2018, a director of PetroChina Company Limited (中國石油天然氣股份有限公司) from May 2011 to June 2018, the vice president of Sinopec Group since June 2018, the director of Sinopec Corp. since October 2018, and the Chairman of the Board of SINOPEC SEG since October 2018.

Mr. LU Dong (陸東) - Vice Chairman of the Board and Executive Director

Mr. LU Dong (陸東), aged 55, is the Vice Chairman of the Company. Mr. LU is a senior engineer at professor level with a university diploma. From January 2000 to March 2004, he was the vice president of Yangzi Petrochemical Limited Liability Company (揚子石油化工有限責任公司). From March 2003 to July 2004, he worked as the deputy director of Chemical Department of Sinopec Corp. (中國石化股份公司化工事業部). From July 2004 to December 2007, he served as the president of Fujian Petrochemical Company Limited (福建煉油化工有限公司). From July 2004 to October 2014, he was a director of Fujian Petrochemical Company Limited. From December 2005 to October 2014, he worked as the chairman of the board of directors of Fujian Petrochemical Company Limited. From February 2007 to October 2014, he served as the chairman of the board of directors of and president of Fujian Refining & Petrochemical Company Limited (福建聯合石油化工有限公司). He has been the Vice Chairman of the Board of SINOPEC SEG since January 2015.

Mr. XIANG Wenwu (向文武) - Executive Director and President

Mr. XIANG Wenwu (向文武), aged 52, is an executive Director and the President of the Company. Mr. XIANG is a professor-level economist and holds a Ph.D. diploma. Mr. XIANG served as deputy manager of Sinopec Group Second Construction Company (中國石化集團第二建設公司) ("Sinopec Group SCC") from June 1999 to March 2004, the manager of Sinopec Group SCC from March 2004 to December 2008, the general manager of Sinopec Group SCC from December 2008 to July 2010, a director and the general manager of Sinopec Group Nanjing Engineering & Construction Incorporation (中國石化集團南京工程有限公司) from December 2009 to April 2012, an executive director and the general manager of Sinopec Nanjing Engineering & Construction Incorporation (中石化南京工程有限公司) from April 2012 to November 2014, and the vice president of the Company from August 2012 to January 2017. Mr. XIANG has been the President of SINOPEC SEG since January 2017 and has been a Director of SINOPEC SEG since February 2017.

Mr. WU Wenxin - Non-executive Director

Mr. WU Wenxin (吳文信), aged 55, is a non-executive Director of the Company and also serves as the director of the Engineering Department of Sinopec Group (中國石化集團工程部), the director of the Engineering Department of Sinopec Corp. (中國石油化工股份有限公司工程部), an executive Director and the general manager of Sinopec Engineering Quality Monitoring Co., Ltd. (中石化工程質量監測有限公司). Mr. WU is a senior engineer at professor level with a Master degree. From May 2007 to September 2010, he served as the deputy general manager of Fujian Petrochemical Company Limited (福建煉油化工有限公司). From December 2007 to September 2010, he was the director of the refining and ethylene integration project of Fujian Refining & Petrochemical Co., Ltd. (福建聯合石油化工有限公司). From November 2009 to September 2010 he served as director of Fujian Petrochemical Co., Ltd.. From July 2010 to March 2018 he served as deputy director of the engineering department of Sinopec Corp.. From September 2013 to March 2018, he was a deputy director of of the engineering department of Sinopec Group. From October 2017 to October 2018, he was an executive director and general manager of Sinopec Engineering Quality Supervision Co., Ltd. He served as the the director of the Engineering Department of Sinopec Group and the director of the Engineering Department of Sinopec Corp. since March 2018, and he has been the Director of SINOPEC SEG since October 2018.

Ms. SUN Lili (孫麗麗) - Executive Director

Ms. SUN Lili (孫麗麗), aged 57, is an employee representative Director of the Company, and an executive director and president of Sinopec Engineering Incorporation. Ms. SUN is a senior engineer at professor level with a university diploma. From June 2004 to April 2012, she served as the vice president of Sinopec Engineering Incorporation. From January 2006 to May 2008, she served as the vice president of SINOPEC International Petroleum Exploration and Development Co., Ltd. (中國石化國際石油勘探開發有限公司). From September 2011 to March 2015, she has served as the chairman of the Project Supervision and Management Committee of Saudi Yanbu Refinery Joint Venture (沙特延布煉廠合資公司). From December 2011 to March 2015, she has served as the president of Saudi Yanbu Refinery Project and a member of the remuneration committee and audit committee of the board of directors of Saudi Yanbu Refinery Joint Venture. From April 2012 to November 2013, she served as the vice president of SINOPEC Engineering Incorporation. Since November 2013, she has served as the director and president of Sinopec Engineering Incorporation. From January 2014 to November 2014, she served as the Vice President of SINOPEC SEG. She has been a Director of SINOPEC SEG since January 2015.

Mr. ZHOU Yingguan (周嬴冠) - Executive Director

Mr. ZHOU Yingguan (周嬴冠), aged 50, is an employee representative Director of the Company, as well as an executive director and general manager of Sinopec Fourth Construction Co., Ltd. (中石化第四建設有限公司). Mr. ZHOU is a senior engineer with a university diploma. From March 2004 to July 2010, Mr. ZHOU served as the deputy manager of the Sinopec Group Second Construction Company (中國石化集團第二建設公司). From July 2010 to April 2012, he served as the vice president of Sinopec Group Second Construction Company. From April 2012 to April 2017, he has been the vice president of Sinopec Group Nanjing Engineering Co., Ltd. (中國石化集團南京工程有限公司). He was the Supervisor of SINOPEC SEG from January 2015 to October 2018. He has been an executive director and president of Sinopec Fourth Construction Co., Ltd. since April 2017. He has been a Director of SINOPEC SEG since October 2018.

Mr. HUI Chiu Chung, Stephen (許照中) - Independent non-executive Director

Mr. HUI Chiu Chung (許照中), J.P., aged 71, is an independent non-executive Director of the Company. Mr. HUI is currently the Chairman and Chief Executive Officer of Luk Fook Financial Services Limited. He also serves as an independent non-executive director of Zhuhai Holdings Investment Group Limited (Stock Code: 908), Gemdale Properties and Investment Corporation Limited (Stock Code: 535), Lifestyle International Holdings Limited (Stock Code: 1212), China South City Holdings Limited (Stock Code: 1668), Agile Group Holdings Limited (Stock Code: 3383) and FSE Engineering Holdings Limited (Stock Code: 331) and a non-executive director of Luk Fook Holdings (International) Limited (Stock Code: 590), whose shares are listed on the Hong Kong Stock Exchange. Mr. HUI has been appointed as the independent non-executive director of Hong Kong Exchanges and Clearing Limited (Stock Code: 388) by the Hong Kong SAR Government since April 2009, at which his term expires in April 2015. Mr. HUI has over 47 years of experience in the securities and investment industry. He was the Managing Director of UOB Kay Hian (Asia) Limited (大華繼顯（亞洲）有限公司) from 2002 to 2005; Group Managing Director of OSK Asia Holdings Limited (僑豐金融集團有限公司) ("OSK") from August 2005 to March 2007; Chief Executive Officer of OSK from April 2007 to March 2011; and the vice chairman of OSK Asia Holdings Hong Kong Limited (僑豐金融集團（香港）限公司) from April 2011 to September 2011. He served for years as a council member and vice chairman of the Hong Kong Stock Exchange, a member of the Advisory Committee and the Committee on Real Estate Investment Trusts of the Hong Kong Securities and Futures Commission, a director of the Hong Kong Securities Clearing Company Limited, a member of the Listing Committee of the Hong Kong Exchanges and Clearing Limited, an appointed member of the Securities and Futures Appeal Tribunal, a member of the Standing Committee on Company Law Reform, and an appointed member of the Hong Kong Institute of Certified Public Accountants Investigation Panel. Mr. HUI became a Senior Fellow Member of the Hong Kong Securities and Investment Institute and Fellow Member of the Hong Kong Institute of Directors in 2011 and 2002, respectively. Mr. HUI has been an independent non-executive Director of SINOPEC SEG since April 2013.

Mr. JIN Yong (金涌) - Independent non-executive Director

Mr. JIN Yong (金涌), aged 83, is an independent non-executive Director of the Company. Mr JIN currently is a member of Chinese Academy of Engineering, the dean of the Chemical Engineering Science and Technology Research Institute of Tsinghua University (清華大學化工科學與技術研究院), a professor of the Chemical Engineering department of Tsinghua University, an executive officer of China Society of Particuology and an executive officer of Chemical Industry and Engineering Society of China. Mr. JIN worked as an assistant teacher in Electrical Engineering Research Office in the University of Science and Technology of China ("**USTC**") from October 1959 to February 1960. He also served as a teacher engaging in advanced studies in the Chemical Research Office in Tianjin University from February 1960 to February 1961, and worked as a teacher in the Chemistry Department in USTC from February 1961 to May 1973. Since 1973, Mr. JIN has been a lecturer, associate professor, professor and tutor of doctoral candidates at the Chemical Engineering Department of Tsinghua University. Mr. Jin has been an independent non-executive Director of SINOPEC SEG since April 2013.

Mr. YE Zheng (葉政) - Independent non-executive Director

Mr. YE Zheng (葉政), aged 54, is an independent non-executive Director of the Company. Mr. YE is a practicing director of Mazars CPA Limited. He worked in Shanghai Municipal Finance Bureau (上海市財政局) from October 1982 to January 1989. Mr. YE has over 23 years of experience in audit, internal control and consultancy. He served as an auditor in Ernst & Young (安永會計師事務所) from October 1995 to April 2000; an audit manager in KPMG (畢馬威會計師事務所) from May 2000 to December 2001; a senior audit manager in Grant Thornton (均富會計師事務所) from January 2002 to July 2005 and a director in Ernst &Young from August 2005 to October 2006. Mr. YE obtained a bachelor's degree in accounting and finance in May 1993, and a master's degree in business administration in December 1994, both from California State University, Long Beach. Mr. YE became a member of the American Institute of Certified Public Accountants in September 1998 and a member of the Hong Kong Institute of Certified Public Accountants in May 2003. He has been a practicing director of Mazars CPA Limited since November 2006 and an independent non-executive Director of SINOPEC SEG since April 2013. Mr. YE was a consulting expert for the third session of the committee for enterprise internal control standards appointed by the Ministry of Finance of the People's Republic of China from 1 November 2014 to 31 October 2016.

Profile of the Directors of the Third of the Board during the Reporting Period

Name	Gender	Age	Position in the Company	Term of Office as Director
YU Baocai	Male	53	Chairman of the Board and Non-executive Director	October 2018 - October 2021
LU Dong	Male	55	Vice Chairman of the Board and Executive Director	October 2018 - October 2021
XIANG Wenwu	Male	52	Executive Director and President	October 2018 - October 2021
WU Wenxin	Male	55	Non-executive Director	October 2018 - October 2021
SUN Lili	Female	57	Executive Director	October 2018 - October 2021
ZHOU Yingguan	Male	50	Executive Director	October 2018 - October 2021
HUI Chiu Chung, Stephen	Male	71	Independent non-executive Director	October 2018 - October 2021
JIN Yong	Male	83	Independent non-executive Director	October 2018 - October 2021
YE Zheng	Male	54	Independent non-executive Director	October 2018 - October 2021

List of relevant information of the resigned Directors during the Reporting Period

Name	Gender	Age	Position in the Company	Term of office
LING Yiqun	Male	56	Chairman of the Board and Non-executive Director	February 2017 - October 2018
LI Guoqing	Male	61	Non-executive Director	October 2015 - October 2018
WU Derong	Male	58	Executive Director	October 2015 - October 2018

(2) Supervisors

Mr. ZHU Fei (朱斐) - Chairman, Supervisory Committee

Mr. ZHU Fei (朱斐), aged 54, is the Chairman of the Supervisory Committee of the Company. Mr. ZHU is a senior engineer with a university diploma. From October 1998 to July 1999, he was the deputy head of Beijing Design Institute (北京設計院). From July 1999 to December 2002, he undertook different roles at Sinopec Engineering Incorporation. From December 2002 to April 2012, he worked as the vice president of Sinopec Engineering Incorporation. From April 2012 to October 2014, he was the vice president of Sinopec Engineering Incorporation. From November 2014 to April 2017, he was the vice president of Sinopec Fourth Construction Co., Ltd. He has been an employee representative Supervisor of the SINOPEC SEG since January 2015, he has been the Chairman of the Supervisory Committee of SINOPEC SEG since May 2017.

Mr. WANG Guoliang (王國良) - Supervisor

Mr. WANG Guoliang (王國良), aged 58, is a Supervisor of the Company and a vice president of each of Luoyang Petrochemical Engineering Corporation (LPEC)/SINOPEC (中石化洛陽工程有限公司) and Guangzhou Petrochemical Engineering Corporation (GPEC)/SINOPEC (中石化廣州工程有限公司). Mr. WANG is a senior engineer at professor level with a doctorate degree. From September 1997 to November 2001, he worked as the deputy manager of China Petrochemical Luoyang (中國石油化工總公司洛陽石油化工工程公司). From November 2001 to May 2003, he was the secretary of the CPC Committee of Sinopec Group LPEC. From May 2003 to December 2008, he was the deputy manager of Sinopec Group Luoyang Petrochemical Engineering Corporation (中國石化集團洛陽石油化工工程公司). From December 2008 to April 2012, he was the vice president of Sinopec Group Luoyang Petrochemical Engineering Corporation. From April 2012 to September 2012, he was the vice president of Luoyang Petrochemical Engineering Corporation (LPEC)/SINOPEC and Guangzhou Petrochemical Engineering Corporation (GPEC)/SINOPEC. From September 2012 to November 2014, he was an executive director and president of each of Luoyang Petrochemical Engineering Corporation (LPEC)/SINOPEC and Guangzhou Petrochemical Engineering Corporation (GPEC)/SINOPEC. From December 2012 to November 2014, he was the Vice President of the Company. Since November 2014, he has been the vice president of each of Luoyang Petrochemical Engineering Corporation (LPEC)/SINOPEC and Guangzhou Petrochemical Engineering Corporation (GPEC)/SINOPEC. He has been a Supervisor of SINOPEC SEG since January 2015.

Mr. YE Wenbang (葉文邦) - Supervisor

Mr. YE Wenbang (葉文邦), aged 56, is a Supervisor of the Company and also serves as a director and vice president of Sinopec Shanghai Engineering Co., Ltd. (中石化上海工程有限公司). Mr. YE is a senior engineer with a master's degree. From September 2001 to January 2003, Mr. YE worked as the deputy dean of Shanghai Pharmaceutical Industry Design Institute (上海醫藥工業設計院). From January 2003 to April 2012, he served as the deputy general manager and the director of Sinopec Group Shanghai Engineering Co., Ltd. From April 2012 to May 2012, he served as the deputy general manager and the supervisory committee convener of Sinopec Group Shanghai Engineering Co., Ltd. From May 2012 to August 2016, he has been the supervisory committee convener of Sinopec Group Shanghai Engineering Co., Ltd. (中國石化集團上海工程有限公司). He has been the director and deputy general manager of Sinopec Group Shanghai Engineering Co., Ltd. since August 2016. He has been a supervisor of SINOPEC SEG since October 2018.

Mr. WU Jibo (吳吉波) - Supervisor

Mr. WU Jibo (吳吉波), aged 50, is a Supervisor of the Company and also serves as a deputy general manager of Sinopec Nanjing Engineering & Construction Incorporation (中石化南京工程有限公司). Mr. WU is a senior engineer at professor level with a master's degree. From August 2008 to December 2008, Mr. WU worked as the vice manager of Sinopec Second Construction Company (中國石化第二建設公司). From December 2008 to July 2010, he was the vice president of Sinopec Second Construction Company. Since July 2010, he has been the deputy general manager of Sinopec Nanjing Engineering & Construction Incorporation. He has been a Supervisor of SINOPEC SEG since October 2018.

Mr. XU Yijun (許一君) - Employee Representative Supervisor

Mr. XU Yijun (許一君), aged 55, is an employee representative Supervisor of the Company, who is also an executive director of Sinopec Ningbo Engineering Co., Ltd. Mr. XU is a senior economist at professor level with a PhD degree. From April 2001 to September 2003, he was the deputy manager of the Third Construction Company of Sinopec Group (中石化集團第三建設公司). From September 2003 to April 2012, he was the vice president of Ningbo Engineering Co., Ltd. He was the vice president of Sinopec Ningbo Engineering Co., Ltd. from April 2012 to November 2017. He has been an employee representative Supervisor of SINOPEC SEG since January 2015. He has been an executive director of Sinopec Ningbo Engineering Co. Ltd. since November 2017.

Mr. JIANG Dejun (蔣德軍) - Employee Representative Supervisor

Mr. JIANG Dejun (蔣德軍), aged 53, is an employee representative Supervisor of the Company, who is also a vice president of Sinopec Fifth Construction Co., Ltd. (中石化第五建設有限公司). Mr. JIANG is a senior engineer at professor level with a PhD degree. From November 2001 to September 2003, he was the deputy head of Lanzhou Design Institute of Sinopec Engineering and Construction Incorporation (中國石化集團蘭州設計院). From September 2003 to June 2007, he was the director and vice president of Sinopec Ningbo Engineering Co., Ltd. (中石化寧波工程有限公司). From June 2007 to December 2008, he was the deputy manager of SINOPEC Engineering Co., Ltd. (中石化集團煉化工程有限公司). From December 2008 to September 2012, he was the Vice President of SINOPEC SEG. Since September 2012, he has been the vice president of Sinopec Fifth Construction Co., Ltd. He has been an employee representative Supervisor of SINOPEC SEG since January 2015.

Mr. WU Zhongxian (吳忠憲) - Employee Representative Supervisor

Mr. WU Zhongxian (吳忠憲), aged 56, is an employee representative Supervisor of the Company and also serves as a vice president of Sinopec Tenth Construction Company Limited (中石化第十建設有限公司). Mr. WU is a senior engineer at professor level with a university diploma. From March 1996 to April 2012, Mr. Wu was the chief engineer of Sinopec Tenth Construction Company Limited. From October 2006 to December 2008, he was the deputy manager of Sinopec Tenth Construction Company Limited. From December 2008 to April 2012, he was the vice president of Sinopec Tenth Construction Company Limited. From April 2012 to December 2015, he was the vice president the chief engineer of Sinopec Tenth Construction Company Limited. Since December 2015, he has been the vice president of Sinopec Tenth Construction Company Limited. He has been an employee representative Supervisor of SINOPEC SEG since October 2018.

Profile of the Supervisors of the third session of the Supervisory Committee during the Reporting Period

Name	Gender	Age	Position in the Company	Term of Office as Supervisor
ZHU Fei	Male	54	Chairman, Supervisory Committee	October 2018 - October 2021
WANG Guoliang	Male	58	Supervisor	October 2018 - October 2021
YE Wenbang	Male	56	Supervisor	October 2018 - October 2021
WU Jibo	Male	50	Supervisor	October 2018 - October 2021
XU Yijun	Male	55	Employee Representative Supervisor	October 2018 - October 2021
JIANG Dejun	Male	53	Employee Representative Supervisor	October 2018 - October 2021
WU Zhongxian	Male	56	Employee Representative Supervisor	October 2018 - October 2021

Information of the resigned Supervisors during the Reporting Period

Name	Gender	Age	Position in the Company	Term of office
ZHOU Yingguan	Male	50	Supervisor	October 2015 - October 2018
WANG Cunting	Male	51	Supervisor	October 2015 - October 2018

(3) Other Senior Management

Please refer to the "Director" section of this chapter for biographical information of Mr. XIANG Wenwu.

Mr. XIAO Gang (肖剛) - Vice President

Mr. XIAO Gang (肖剛), aged 60, is a Vice President of SINOPEC SEG. Mr. XIAO is a senior economist at professor level with a university diploma. From July 1986 to March 2004, Mr. XIAO has held positions in the Beijing Yanshan Petrochemical Corporation (北京燕山石化公司), Sinopec Engineering Incorporation, the Engineering & Construction Department of China Petrochemical Corporation and Engineering & Construction Management Department of Sinopec Group. Mr. XIAO served as Secretary of CPC Committee and Secretary of Discipline Inspection Committee of Sinopec Group SCC from March 2004 to January 2006; Manager of Sinopec Group FCC from January 2006 to December 2008; President of Sinopec Group FCC from December 2008 to April 2012; and Director and President of FCC from April 2012 to November 2014. He has been a Vice President of SINOPEC SEG since August 2012.

Mr. GUAN Qingjie (官慶杰) - Chairman of Trade Union

Mr. GUAN Qingjie (官慶杰), aged 59, is the Chairman of the Trade Union of SINOPEC SEG. Mr. GUAN is a senior accountant with a university diploma. Mr. GUAN served as Deputy Chief Accountant of Jinzhou Petrochemical Company (錦州石油化工公司) from June 1995 to October 1997; Deputy Director General of the Assets Management and Administration Department of Sinopec Group (中國石化集團) from October 1997 to February 2000; Deputy Director General of the Enterprise Reform Department of Sinopec Group from February 2000 to December 2000; Deputy Head of the Asset Operation and Finance Section under Corporate Restructuring Office of Sinopec Group from December 2000 to September 2001; Deputy Director General of the Refining and Chemical Engineering Enterprise Management Department of Sinopec Group from September 2001 to May 2007; and Deputy Director General of the Operation and Management Division of Sinopec Asset Management Co., Ltd Sinopec Group. ("SAMC", 中國石化集團資產經營管理公司) from March 2006 to July 2010. He was Deputy Director General of the Capital Operation Department of each of Sinopec Group and China Petroleum & Chemical Corporation as well as vice president of SAMC from July 2010 to June 2012; and has been the Chairman of the Supervisory Committee of SINOPEC SEG from August 2012 to March 2015. He has been the Chairman of the Trade Union of SINOPEC SEG since August 2012.

Mr. QI Guosheng (戚國勝) - Vice President

Mr. QI Guosheng (戚國勝), aged 58, is a Vice President of SINOPEC SEG. Mr. QI is a senior engineer at professor level with a university diploma. From August 1983 to February 2002, Mr. QI has held positions in Anti Chemical Command and Engineering Institute of the Chinese People's Liberation Army, Beijing Petrochemical Engineering Company, Engineering & Construction Department of China Petrochemical Corporation, Engineering & Construction Management Department of Sinopec Group and Sinopec Engineering Incorporation. Mr. QI served as vice president of Sinopec Engineering Incorporation from December 2002 to April 2012 and vice president of Sinopec Engineering Incorporation from April 2012 to November 2014. He has been a Vice President of SINOPEC SEG since November 2014.

Mr. JIA Yiqun (賈益群) - Chief Financial Officer

Mr. JIA Yiqun (賈益群), aged 51, is the Chief Financial Officer of SINOPEC SEG. Mr. JIA is a senior engineer with a master degree. From July 1990 to April 2003, Mr. JIA has held positions in Sinopec Research Institute of Petroleum Engineering (中國石化石油化工科學研究院), China Petrochemical International Company (中國石化國際事業公司), Foreign Affairs Bureau of Sinopec Group; Mr. JIA served as Deputy Chief Representative of the Hong Kong Representative Office of Sinopec Corp. from April 2003 to June 2012 and has been the Chief Financial Officer of SINOPEC SEG since August 2012. Mr. JIA obtained the qualifications of Chartered Financial Analyst issued by CFA Institute in September 2006.

Mr. SANG Jinghua (桑菁華) - Vice President, Secretary to the Board, Company Secretary

Mr. SANG Jinghua (桑菁華), aged 51, is a Vice President, the Secretary to the Board and the Company Secretary of SINOPEC SEG. Mr. SANG is a senior engineer with a university diploma. From July 1990 to September 2012, Mr. SANG held positions in the Shijiazhuang Refinery (石家莊煉油廠), and Board Secretariat of Sinopec Corp. Mr. SANG served as Securities Representative of Sinopec Corp. from May 2012 to January 2013. He has been the Secretary to the Board since August 2012, the Company Secretary of SINOPEC SEG since December 2012 and a Vice President of SINOPEC SEG since May 2014.

Mr. SUN Xiaobo (孫曉波) - Vice President

Mr. SUN Xiaobo (孫曉波), aged 58, is a Vice President of SINOPEC SEG, who is also the President of Sinopec Lift and Transportation Company. Mr. SUN is a senior engineer with a university diploma. From April 1980 to October 2012, Mr. SUN has held positions in the Third Design Institute of the Ministry of Chemical Industry, Beijing Heavy Machinery Company of the Ministry of Chemical Industry, Engineering Department of China Petrochemical Corporation, Sinopec Engineering Incorporation, Engineering & Construction Management Department of Sinopec Group and SINOPEC SEG. Mr. SUN served as President Assistant of SINOPEC SEG and Director of Department for Enterprise Reform and Management from October 2012 to April 2014. He has been a Vice President of SINOPEC SEG and President of Sinopec Lift and Transportation Company Since May 2014.

Profile of other members of the Senior Management during the Reporting Period

Name	Gender	Age	Position in the Company	Date of Taking Office
XIANG Wenwu	Male	52	President	January 2017
XIAO Gang	Male	60	Vice President	August 2012
GUAN Qingjie	Male	59	Chairman of Staff Union	August 2012
QI Guosheng	Male	58	Vice President	November 2014
JIA Yiqun	Male	51	Chief Financial Officer	August 2012
SANG Jinghua	Male	51	Vice President Secretary to the Board Company Secretary	May 2014 August 2012 December 2012
SUN Xiaobo	Male	58	Vice President	May 2014

2 Appointment and Resignation of Directors, Supervisors and Other Members of the Senior Management during the Reporting Period

Since Mr. LING Yiqun, Mr. LI Guoqing and Mr. WU Derong did not seek for re-elections, they no longer served as Directors since 26 October 2018. On 26 October 2018, Mr. YU Baocai, Mr. LU Dong, Mr. XIANG Wenwu, Mr. WU Wenxin, Mr. HUI Chiu Chung, Stephen (Independent non-executive Director), Mr. JIN Yong (Independent non-executive Director) and Mr. YE Zheng (Independent non-executive Director) were elected as directors of the third session of the Board of the Company at the first extraordinary general meeting of the Company for the year 2018. In addition, Ms. SUN Lili and Mr. ZHOU Yingguan were elected by democratic procedure to serve as the employee representative Directors of the third session of the Board of the Company. On 26 October 2018, it was approved at the first meeting of the third session of the Board of the Company that Mr. YU Baocai was elected as the Chairman of the third session of the Board of the Company, and Mr. LU Dong was elected as the Vice Chairman of the third session of the Board of the Company.

Since Mr. ZHOU Yingguan and Mr. WANG Cunting did not seek for re-elections, they no longer served as Supervisors of the Company since 26 October 2018. On 26 October 2018, Mr. ZHU Fei, Mr. WANG Guoliang, Mr. YE Wenbang and Mr. WU Jibo were elected as Supervisors of the third session of the Supervisory Committee of the Company at the first extraordinary general meeting of the Company for the year 2018. In addition, Mr. XU Yijun, Mr. JIANG Dejun and Mr. WU Zhongxian were elected by democratic procedure to serve as the employee representative supervisors of the third session of the Supervisory Committee of the Company. On 26 October 2018, it was approved at the first meeting of the third session of the Supervisory Committee of the Company that Mr. ZHU Fei was elected as the Chairman of the third session of the Supervisory Committee of the Company.

On 26 October 2018, it was approved at the first meeting of the third session of the Board of the Company that Mr. XIANG Wenwu was appointed as President of the Company, Mr. SANG Jinghua was appointed as the Secretary to the Board and Company Secretary, Mr. XIAO Gang, Mr. QI Guosheng, Mr. SANG Jinghua and Mr. SUN Xiaobo were appointed as the Vice Presidents, Mr. GUAN Qingjie was appointed as the Chairman of Trade Union of the Company, and Mr. JIA Yiqun was appointed as Chief Financial Officer.

On 11 February 2019. the Board was notified by Mr. XIAO Gang of his resignation as the Vice President of the Company in consideration of his age.

3 The positions of Directors, Supervisors and Other Members of the Senior Management in the shareholder's units or other units competing with the Group during the Reporting Period

During the Reporting Period, Mr. YU Baocai served as the Vice President of Sinopec Group and served as the director of Sinopec Corp.; Mr. WU Wenxin once served as the deputy director of the engineering department of Sinopec Corp. and once served as the deputy director of the engineering department of Sinopec Group, he once served as the executive Director and the President of Sinopec Engineering Quality Monitoring Co., Ltd., and served as the director of the Engineering Department of Sinopec Group and the director of the Engineering Department of Sinopec Corp..

Except for the above, none of the Directors, Supervisors and Other Members of the Senior Management has held positions in shareholder's units or other units competing with the Group during the Reporting Period.

4 Contract Benefits of Directors and Supervisors

As at 31 December 2018 or any time in this year, none of the Directors and Supervisors had signed major contracts which would entitle the Director or the Supervisor with significant benefits with the Company, its holding company or any subsidiaries or fellow subsidiaries.

All executive Directors and non-executive Directors have entered into service agreements with the Company. Such service agreements are effective from the date of their relevant appointment by the shareholders to the expiry of the term of the third session of the Board. The service agreements can be renewed in accordance with the Articles of Association and applicable laws and regulations.

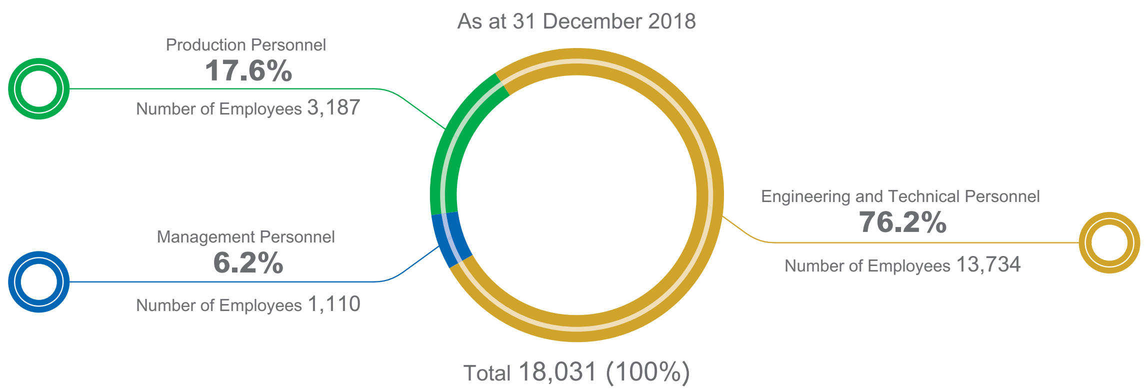
All Supervisors have entered into agreements with the Company concerning the issues of compliance with relevant laws and regulations, the Articles of Association and arbitration regulations. The term of office for Supervisors starts from the date of their relevant appointment to the expiry of the third session of the Supervisory Committee. The service agreements can be renewed in accordance with the Articles of Association and applicable laws and regulations.

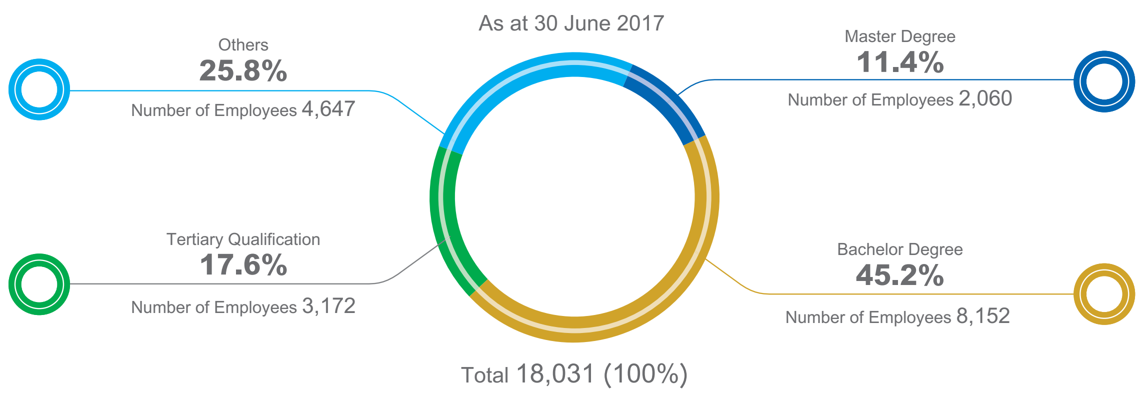
5 Remuneration of Directors, Supervisors and other Senior Management Members

During the Reporting Period, the total number of Directors, Supervisors and other Senior Management Members paid by the Company was 27, and the annual total remuneration paid was RMB22.49 million. Please see notes 15 and 43(b) to the financial statements of this annual report for details.

6 Employees

As at 31 December 2018, there were in total 18,031 employees working in the Group.





7 Employee Remuneration

During the Reporting Period, we maintained good labour relations. The remuneration of our employees mainly consists of salary, discretionary bonuses and contributions to the compulsory social security funds. In accordance with the laws and regulations of the PRC, the Group participates in different retirement pension related programmes for our employees, including the programmes organised by the provincial and municipal governments of the PRC and other complementary retirement pension related plans. Bonuses are usually determined in accordance with the overall performance of the Group's business. For the years ended 31 December 2017 and 31 December 2018, the employment costs of the Group were approximately RMB5.373 billion and RMB5.911 billion, respectively. The details of H Shares appreciation rights scheme adopted by the Group are seen in the section "SIGNIFICANT EVENTS - 1. H Shares appreciation rights scheme" of this annual report.

8 Employee Training Programmes

During the Reporting Period, over 10 key special trainings have been organised by the Group. Throughout the year, a total of 37.3 thousand attendees attended the trainings inside and outside the Group, of which there were 4.3 thousand attendees who are operation management staff, 28.1 thousand attendees who are engineering and technical staff, and 5.8 thousand attendees who are operational staff.

FINANCIAL STATEMENTS


树企业形象
精益求精铸优质工程 团结协作树五建品牌
缔造精品 缔造卓越
中国一重 制造

Grant Thornton
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Independent Auditor's Report

To the Shareholders of SINOPEC Engineering (Group) Co., Ltd.

(Established in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of SINOPEC Engineering (Group) Co., Ltd. (the "Company") and its subsidiaries (together, the "Group") set out on pages 137 to 227, 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 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 International Standards on Auditing ("ISAs"). 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 International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (the "IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

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

Key audit matters identified in our audit are summarised as follow:

Key Audit Matter	How our audit addressed the Key Audit Matter
Revenue recognition of construction contracts *Refer to notes 5(a) and 6 to the consolidated financial statements and note 3.24 to the consolidated financial statements for the related accounting policies.* The Group recognised revenue of RMB47,019,024,000 for the year ended 31 December 2018. When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognised progressively over time using the output method, based on direct measurement of the value of contract work performed, provided that the value of contract work performed can be measured reliably. The value of contract work performed is measured based on direct measurements of surveys of work performed. Variations in contract work are recognised as contract revenue to the extent that the modification has been approved by the parties to the contracts and it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. When the outcome of the contract cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered. These transactions require individual consideration and involve management's estimates and judgement. We have identified the revenue recognition related to construction contracts as a key audit matter.	Our procedures in relation to the revenue recognition of construction contracts included: – assessing and testing the related internal control of the management's accounting estimates and judgment of construction contracts; – obtaining material construction contracts to review key contract terms and verify the total contract revenues; – checking, on a sample basis, the principal terms set out in the relevant construction contracts and the implementation status; – testing, on a sample basis, the amount and timing of the construction contract revenue recognised having regard to the percentage of work performed to date as a percentage of total contract value; and – performing analytical review procedures on the gross margins of material construction contracts of the Group.

Provision for expected credit losses ("ECL") of trade receivables and contract assets	
Refer to notes 5(c), 22 and 25(a) to the consolidated financial statements and note 3.9(c) to the consolidated financial statements for related accounting policy. ECL for trade receivables and contract assets are based on management's estimate of the lifetime ECL to be incurred, which is estimated by taking into account the credit loss experience, ageing of overdue trade receivables, customers' repayment history and customers' financial position and an assessment of both the current and forecast general economic conditions, all of which involve a significant degree of management judgment. We have identified ECL assessment of trade receivables as a key audit matter because the assessing ECL of trade receivables and contract assets is a subjective area as it requires the management's judgment and uses of estimates.	Our procedures in relation to management's ECL assessment on trade receivables included: – reviewing and assessing the application of the Group's policy for calculating the ECL; – evaluating techniques and methodology in the ECL model against the requirements of IFRS 9; – assessing the reasonableness of management's loss allowance estimates by examining the information used by management to form such judgements, including testing the accuracy of the historical default data, evaluating whether the historical loss rates are appropriately adjusted based on current economic conditions and forward-looking information and examining the actual losses recorded during the current financial year and assessing whether there was an indication of management bias when recognising loss allowances; – evaluating the design, implementation and operating effectiveness of key internal controls which govern credit control, debt collection and estimation of ECL; and – discussing with management the estimates of the recoverable amounts for those significant trade receivables over 180 days after the reporting period, including customers' payment history 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.

OTHER INFORMATION

The directors are responsible for the other information. The other information comprises all the information in the 2018 annual report of the Company, but does not include the consolidated financial statements and our auditor's report thereon.

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

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS 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 and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

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

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue the auditor's report that includes our opinion. We report our opinion 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 annual report.

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

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

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

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to 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.

Grant Thornton Hong Kong Limited

Certified Public Accountants

Level 12

28 Hennessy Road

Wanchai

Hong Kong

8 March 2019

Shaw Chi Kit

Practising Certificate No.: P04834

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2018

	Notes	2018	2017
		RMB'000	RMB'000
Revenue	6	47,019,024	36,208,723
Cost of sales		(41,823,450)	(32,182,551)
Gross profit		5,195,574	4,026,172
Other income	8	559,214	184,718
Selling and marketing expenses		(123,546)	(114,836)
Administrative expenses		(1,298,652)	(1,181,032)
Research and development costs		(1,675,692)	(1,002,907)
Other operating expenses		(36,812)	(797,788)
Other losses - net	9	(1,184,552)	(2,060)
Operating profit		1,435,534	1,112,267
Finance income	10	780,375	600,926
Finance expenses	10	(118,014)	(90,432)
Finance income - net		662,361	510,494
Share of loss of joint arrangements	20(a)	(46)	(1,372)
Share of profit of associates	20(b)	23,666	13,712
Profit before taxation	11	2,121,515	1,635,101
Income tax expense	12	(441,706)	(504,869)
Profit for the year		1,679,809	1,130,232

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME (Continued)

For the year ended 31 December 2018

	Notes	2018 RMB'000	2017 RMB'000
Other comprehensive income for the year, net of tax			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		**(49,746)**	(119,110)
Item that will not be reclassified subsequently to profit or loss:			
Losses on revaluation of retirement benefit plans obligations, net of income tax effect		**(157,487)**	(12,984)
Other comprehensive expense for the year, net of tax		**(207,233)**	(132,094)
Total comprehensive income for the year		**1,472,576**	998,138
Profit attributable to:			
Equity holders of the Company		**1,679,472**	1,129,974
Non-controlling interests		**337**	258
Profit for the year		**1,679,809**	1,130,232
Total comprehensive income attributable to:			
Equity holders of the Company		**1,472,239**	997,880
Non-controlling interests		**337**	258
Total comprehensive income for the year		**1,472,576**	998,138

		RMB	RMB
Earnings per share for profit attributable to equity holders of the Company during the year (expressed in RMB per share)			
– Basic and diluted	13	**0.38**	0.26

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2018

	Notes	2018	2017
		RMB'000	RMB'000
ASSETS			
Non-current assets			
Property, plant and equipment	17	3,496,474	3,855,852
Land use rights	18	2,442,793	2,580,781
Intangible assets	19	164,081	223,440
Investment in joint arrangements	20(a)	1,866	3,221
Investment in associates	20(b)	147,454	123,788
Financial assets at fair value through other comprehensive income	21	680	—
Available-for-sale financial assets	21	—	2,750
Deferred income tax assets	37	781,439	750,967
Total non-current assets		7,034,787	7,540,799
Current assets			
Inventories	26	400,921	582,257
Notes and trade receivables	22	9,726,429	9,676,444
Prepayments and other receivables	23	4,820,469	3,970,334
Amounts due from customers for contract work	24	—	6,053,340
Contract assets	25(a)	11,720,597	—
Loans due from the ultimate holding company	27	18,000,000	15,500,000
Restricted cash	28	29,468	16,087
Time deposits	29	2,142,406	4,405,700
Cash and cash equivalents	30	16,997,663	11,660,660
Total current assets		63,837,953	51,864,822
Total assets		70,872,740	59,405,621

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Continued)

As at 31 December 2018

	Notes	2018 RMB'000	2017 RMB'000
EQUITY			
Share capital	31	4,428,000	4,428,000
Reserves		21,550,646	21,158,839
Equity attributable to equity holders of the Company		25,978,646	25,586,839
Non-controlling interests		4,503	4,166
Total equity		25,983,149	25,591,005
LIABILITIES			
Non-current liabilities			
Retirement and other supplemental benefit obligations	33	2,636,815	2,536,615
Provision for litigation claims	34	253,936	262,925
Total non-current liabilities		2,890,751	2,799,540
Current liabilities			
Notes and trade payables	35	28,686,243	14,020,233
Other payables	36	2,758,139	6,860,590
Amounts due to customers for contract work	24	—	9,493,684
Contract liabilities	25(b)	9,968,594	—
Loans due to a fellow subsidiary	38	384,339	431,257
Current income tax liabilities		201,525	209,312
Total current liabilities		41,998,840	31,015,076
Total liabilities		44,889,591	33,814,616
Total equity and liabilities		70,872,740	59,405,621
Net current assets		21,839,113	20,849,746
Total assets less current liabilities		28,873,900	28,390,545

Chairman of the Board: **YU Baocai** Director, President: **XIANG Wenwu** Chief Financial Officer: **JIA Yiqun**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to equity holders of the Company								
	Share capital	Capital reserve	Statutory surplus reserve	Specific reserve	Exchange translation reserve	Retained earnings	Total	Non-controlling interests	Total equity
	RMB'000 (Note 31)	RMB'000 (Note 32(v))	RMB'000 (Note 32(iv))	RMB'000 (Note 32(vi))	RMB'000 (Note 32(vii))	RMB'000	RMB'000	RMB'000	RMB'000
Balance at 1 January 2017	4,428,000	10,169,368	730,151	159,846	73,022	9,700,814	25,261,201	3,908	25,265,109
Profit for the year	—	—	—	—	—	1,129,974	1,129,974	258	1,130,232
Other comprehensive income:									
Defined benefits obligation revaluation of actuarial gain and loss - gross	—	—	—	—	—	(10,864)	(10,864)	—	(10,864)
Defined benefits obligation revaluation of actuarial gain and loss - tax	—	—	—	—	—	(2,120)	(2,120)	—	(2,120)
Exchange differences arising on translation of foreign operations	—	—	—	—	(119,110)	—	(119,110)	—	(119,110)
Total comprehensive income	—	—	—	—	(119,110)	1,116,990	997,880	258	998,138
Transactions with owners:									
Final dividends for 2016	—	—	—	—	—	(345,384)	(345,384)	—	(345,384)
Interim dividends for 2017 (Note 14)	—	—	—	—	—	(247,968)	(247,968)	—	(247,968)
Acquisition of Sinopec Energy-Saving Company (Note 44)	—	(76,999)	—	—	—	—	(76,999)	—	(76,999)
Dividends paid to a former shareholder of Sinopec Energy-Saving Company	—	—	—	—	—	(1,891)	(1,891)	—	(1,891)
Appropriation of specific reserve	—	—	—	63,780	—	(63,780)	—	—	—
Utilisation of specific reserve	—	—	—	(59,233)	—	59,233	—	—	—
Transfer to statutory surplus reserve	—	—	142,843	—	—	(142,843)	—	—	—
Total transactions with owners	—	(76,999)	142,843	4,547	—	(742,633)	(672,242)	—	(672,242)
Balance at 31 December 2017	4,428,000	10,092,369	872,994	164,393	(46,088)	10,075,171	25,586,839	4,166	25,591,005

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
(Continued)

	Attributable to equity holders of the Company								
	Share capital	Capital reserve	Statutory surplus reserve	Specific reserve	Exchange translation reserve	Retained earnings	Total	Non-controlling interests	Total equity
	RMB'000 (Note 31)	RMB'000 (Note 32(v))	RMB'000 (Note 32(iv))	RMB'000 (Note 32(vi))	RMB'000 (Note 32(vii))	RMB'000	RMB'000	RMB'000	RMB'000
Balance at 1 January 2018	4,428,000	10,092,369	872,994	164,393	(46,088)	10,075,171	25,586,839	4,166	25,591,005
Profit for the year	—	—	—	—	—	1,679,472	1,679,472	337	1,679,809
Other comprehensive income:									
Defined benefits obligation revaluation of actuarial gain and loss - gross	—	—	—	—	—	(190,589)	(190,589)	—	(190,589)
Defined benefits obligation revaluation of actuarial gain and loss - tax	—	—	—	—	—	33,102	33,102	—	33,102
Exchange differences arising on translation of foreign operations	—	—	—	—	(49,746)	—	(49,746)	—	(49,746)
Total comprehensive income	—	—	—	—	(49,746)	1,521,985	1,472,239	337	1,472,576
Transactions with owners:									
Final dividends for 2017 (Note 14)	—	—	—	—	—	(637,632)	(637,632)	—	(637,632)
Interim dividends for 2018 (Note 14)	—	—	—	—	—	(442,800)	(442,800)	—	(442,800)
Appropriation of specific reserve	—	—	—	107,995	—	(107,995)	—	—	—
Utilisation of specific reserve	—	—	—	(90,048)	—	90,048	—	—	—
Transfer to statutory surplus reserve	—	—	126,161	—	—	(126,161)	—	—	—
Total transactions with owners	—	—	126,161	17,947	—	(1,224,540)	(1,080,432)	—	(1,080,432)
Balance at 31 December 2018	4,428,000	10,092,369	999,155	182,340	(95,834)	10,372,616	25,978,646	4,503	25,983,149

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2018

	Notes	2018 RMB'000	2017 RMB'000
Cash flows from operating activities			
Cash generated from operations	41	6,428,833	4,689,116
Income tax paid		(587,985)	(584,192)
Interest received		263,344	135,584
Net cash generated from operating activities		6,104,192	4,240,508
Cash flows from investing activities			
Purchase of property, plant and equipment		(229,282)	(456,737)
Purchase of intangible assets		(17,582)	(30,163)
Settlement of acquisition of a subsidiary		(44,100)	(45,900)
Interest income on the loans to the ultimate holding company		517,031	502,325
Proceeds from disposal of property, plant and equipment		1,870	33,251
Settlement of derivative financial liabilities		(46,160)	—
Proceeds from disposal of financial assets at fair value through other comprehensive income		1,946	—
Dividends received from joint arrangements		—	10,600
Net decrease/(increase) in time deposits		2,340,231	(2,414,633)
Loans to the ultimate holding company		(22,000,000)	(15,500,000)
Loans repaid by the ultimate holding company		19,500,000	14,100,000
Net cash generated from/(used in) investing activities		23,954	(3,801,257)
Cash flows from financing activities			
Borrowings from a fellow subsidiary		513,123	835,625
Repayments of borrowings from a fellow subsidiary		(590,510)	(404,368)
Interest paid		(21,397)	(15,076)
Dividends paid		(1,080,432)	(595,243)
Net cash used in financing activities		(1,179,216)	(179,062)
Net increase in cash and cash equivalents		4,948,930	260,189
Cash and cash equivalents at beginning of year		11,660,660	11,900,020
Exchange gains/(losses) on cash and cash equivalents		388,073	(499,549)
Cash and cash equivalents at end of year	30	16,997,663	11,660,660

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2018

1. Principal Activities, Organisation and Reorganisation

1.1 Principal activities

SINOPEC Engineering (Group) Co., Ltd. (中石化煉化工程(集團)股份有限公司, the "Company") and its subsidiaries (together, the "Group") is principally engaged locally and overseas in (1) engineering, consulting and licensing, (2) EPC Contracting, (3) construction and (4) equipment manufacturing in respect of oil refining, petrochemical engineering, storage and transportation.

1.2 Organisation and reorganisation

The Company was established as a company with limited liability under the name of Sinopec Engineering Co., Ltd (中國石化集團煉化工程有限公司) in the People's Republic of China (the "PRC") on 24 July 2007 under the Company Law of the PRC. The address of the Company's registered office is No. 8 Building, Shenggujiayuan, Shenggu Middled Road, Chaoyang District, Beijing, the PRC.

The directors of the Company (the "Directors") regard China Petrochemical Corporation (中國石油化工集團公司, "Sinopec Group") as being the ultimate holding company of the Group, which is owned and controlled by the State-owned Assets Supervision and Administration Commission of the State Council of the PRC.

Pursuant to a reorganisation of engineering, consulting and licensing, EPC Contracting, construction and equipment manufacturing in respect of oil refining, petrochemical engineering, storage and transportation of Sinopec Group in preparation for the primary listing (the "Listing") of the Company's shares on the Main Board of The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") ("the Reorganisation"), Sinopec Group transferred the equity interests of its refining and engineering entities to the Company and the Company became the holding company of the subsidiaries now comprising the Group. Subsequent to the above reorganisation transactions which were completed in April 2012, the Company was transformed into a joint stock company with limited liability and renamed as SINOPEC Engineering (Group) Co., Ltd. (中石化煉化工程(集團)股份有限公司) on 28 August 2012.

The Company has completed its listing on the Main Board of the Hong Kong Stock Exchange on 23 May 2013.

These consolidated financial statements are presented in Renminbi ("RMB"), unless otherwise stated.

The consolidated financial statements for the year ended 31 December 2018 have been approved for issue by the Board of Directors on 8 March 2019.

2. Basis of Preparation

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board (the "IASB"). The consolidated financial statements also comply with the applicable disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Hong Kong Listing Rules.

The consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of financial assets at fair value through other comprehensive income, which are carried at fair value.

The preparation of consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the accounting policies of the Group. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 5.

3. Summary of Significant Accounting Policies

The principal accounting policies applied in the preparation of the consolidated financial statements are set out below.

3.1 New and amended IFRS

The IASB has issued a number of new and amended IFRS. The Group has applied for the first time of the following new and amended IFRS issued by IASB, which are relevant to the Group's operations and effective for the Group's consolidated financial statements for the accounting period beginning on or after 1 January 2018:

Amendments to IFRS 1	As part of the Annual Improvements to IFRSs 2014-2016 Cycle
Amendments to IFRS 2	Classification and Measurement of Share-based Payment Transactions
Amendments to IFRS 4	Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts
IFRS 9	Financial Instruments
IFRS 15	Revenue from Contracts with Customers
Amendments to IFRS 15	Classifications to IFRS 15 Revenue from Contracts with Customers
Amendments to IAS 28	As part of the Annual Improvements to IFRSs 2014-2016 Cycle
Amendments to IAS 40	Transfers of Investment Property
IFRIC 22	Foreign Currency Transactions and Advance Consideration

Other than as noted below, the adoption of the new and amended IFRS had no material impact on how the results and financial position for the current and prior periods have been prepared and presented.

IFRS 9 Financial Instruments

IFRS 9 replaces IAS 39 "Financial Instruments: Recognition and Measurement". It makes major changes to the previous guidance on the classification and measurement of financial assets and introduces an "ECL model" for the impairment of financial assets.

When adopting IFRS 9, the Group has applied the standard retrospectively to items that existed at 1 January 2018 in accordance with the transition requirement and also applied transitional relief and opted not to restate prior periods. Differences arising from the adoption of IFRS 9 in relation to classification, measurement, and impairment are recognised in retained earnings.

3. Summary of Significant Accounting Policies (Continued)

3.1 New and amended IFRS (Continued)

IFRS 9 Financial Instruments (Continued)

The adoption of IFRS 9 has impacted the following areas:

Classification and measurement of financial assets

Trade receivables arising from contracts with customers are initially measured in accordance with IFRS 15.

All recognised financial assets that are within the scope of IFRS 9 are subsequently measured at amortised cost or fair value, including unquoted equity investments measured at cost less impairment under IAS 39.

Debt instruments that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets designated as at fair value through other comprehensive income

At the date of initial application/initial recognition, the Group may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at fair value through other comprehensive income ("FVTOCI").

Investments in equity instruments at FVTOCI are initial measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income; and are not subject to impairment assessment. The cumulative gain or loss accumulated in fair value through other comprehensive income reserve will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established in accordance with IFRS 9, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

The Group elected to present in other comprehensive income for the fair value changes of all equity investments previously classified as available-for-sale financial assets under IAS 39. The investments are not held for trading and not expected to be sold in the foreseeable future. At the date of initial application of IFRS 9, RMB2,750,000 were reclassified from available-for sale financial assets to financial assets at FVTOCI.

There is no effect resulting from this reclassification on the Group's equity as both IAS 39 and IFRS 9 require any changes in the fair value of the non-trading unlisted equity securities to be recognised as other comprehensive income/(expense) in equity.

The reclassifications made to balances recognised in the consolidated statement of financial position at the date of initial application (1 January 2018) are summarised as follows:

Consolidation financial position (extract)	Carrying amount as at 31 December 2017 under IAS39 RMB'000	Reclassification RMB'000	Carrying amount as at 1 January 2018 under IFRS 9 RMB'000
Non-current assets			
Financial assets at FVTOCI	—	2,750	2,750
Available-for-sale financial assets	2,750	(2,750)	—
Total	2,750	—	2,750

3. Summary of Significant Accounting Policies (Continued)

3.1 New and amended IFRS (Continued)

IFRS 9 Financial Instruments (Continued)

Impairment of financial assets

IFRS 9 replaces the "incurred loss" model in IAS 39 with the ECL model. The ECL model requires an ongoing measurement of credit risk associated with a financial asset and therefore recognises ECL 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 (including restricted cash, time deposits, cash and cash equivalents, loans due from the ultimate holding company, notes and trade receivables and other receivables);

– contract assets as defined in IFRS 15; and

– financial guarantee contracts issued.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for trade receivable and contract assets. The ECL on these assets are assessed collectively using a provision matrix with appropriate groupings based on debtors' aging.

For all other instruments, the Group measures the loss allowance equal to 12-month ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

The credit losses calculated pursuant to the new requirements are not significantly different from the amount recognised under the current practices. Therefore, the Group considered no adjustment is necessary upon the initial adoption of the standard.

Classification and measurement of financial liabilities

There have been no changes to the classification or measurement of financial liabilities as a result of the application of IFRS 9.

IFRS 15 Revenue from contracts with customers

IFRS 15 "Revenue from contracts with customers" replaces the previous revenue standards IAS 18 "Revenue", IAS 11 "Construction Contracts", and several revenue-related Interpretations.

IFRS 15 provides a single model for accounting for revenue arising from contracts with customers, focusing on the identification and satisfaction of performance obligations. The standard specifies that revenue is to be recognised when control over the goods or services is transferred to the customer, moving from the transfer of risk and rewards.

IFRS 15 requires entities to exercise judgment, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires extensive disclosures.

The Group has elected to use the cumulative effect transition method, with the cumulative effect of initial application recognised as an adjustment to the opening balance of retained earnings at 1 January 2018. Therefore, comparative information has not been restated and continues to be reported under IAS 11 and IAS 18.

3. Summary of Significant Accounting Policies (Continued)

3.1 New and amended IFRS (Continued)

IFRS 15 Revenue from contracts with customers (Continued)

The impact from the adoption of IFRS 15 to the Group is described below:

Timing of revenue recognition

The Group's principal activities mainly consist of the construction contracting business and contracts for services business.

IFRS 15 identifies three (3) situations where control of the promised goods or services is regarded as being transferred over time:

(1) When the customer simultaneously receives and consumes the benefits provided by the entity's performance, as the entity performs;

(2) 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;

(3) 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 Group 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 expected impact arising from the adoption of IFRS 15 on the Group are summarised as follows:

(a) Construction contracts

Revenue from construction contracts is recognised based on the percentage of completion method. The Group has determined that there is no material impact on the Group's financial statements when IFRS 15 is adopted in accounting for the Group's revenue from the construction-type contracts not yet completed as at 1 January 2018. This is because the current accounting treatments of such contracts are largely consistent with the requirements of IFRS 15.

(b) Contracts for services

Revenue from the rendering of services is recognised based on the percentage of completion of the transaction. The Group has determined that there is no material impact on the Group's financial statements when IFRS 15 is adopted in accounting for the Group's revenue from the services contracts not yet completed as at 1 January 2018. This is because the current accounting treatments of such contracts are largely consistent with the requirements of IFRS 15.

3. Summary of Significant Accounting Policies (Continued)

3.1 New and amended IFRS (Continued)

IFRS 15 Revenue from contracts with customers (Continued)

Presentation of contract assets and liabilities

Previously, contract balances relating to construction contracts in progress were presented in the consolidated statement of financial position under “trade and other receivables” or “trade and other payables” respectively.

Under IFRS 15, a receivable is recognised only if the Group has an unconditional right to consideration. If the Group recognises the related revenue (Note 3.24) 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.

To follow the terminology used under IFRS 15, the Group has made the following adjustments at 1 January 2018:

(1) “Retention deposits” under “Prepayments and other receivables” (Note 23) amounting to RMB1,823,187,000 has been reclassified as “Contract assets” (Note 25(a));

(2) “Amounts due from customers for contract work” under “Contract work-in-progress” (Note 24) amounting to RMB6,053,340,000 has been reclassified as “Contract assets” (Note 25(a));

(3) “Amounts due to customers for contract work” under “Contract work-in-progress” (Note 24) amounting to RMB9,493,684,000 has been reclassified as “Contract liabilities” (Note 25(b)); and

(4) “Contract deposits advance” under “Other payables” (Note 36) amounting to RMB5,651,915,000 has been reclassified as “Contract liabilities” (Note 25(b)).

The impact on the Group’s financial position by the application of IFRS 15 as compared to IAS 18 and IAS 11 that was previously in effect before the adoption of IFRS 15 is as follows:

Consolidation financial position (extract)	Carrying amounts at 31 December 2017 under IASs 18 and 11	Reclassification	Carrying amounts at 1 January 2018 under IFRS 15
	RMB’000	RMB’000	RMB’000
Current assets			
Prepayments and other receivables	3,970,334	(1,823,187)	2,147,147
Amount due from customers for contract work	6,053,340	(6,053,340)	—
Contract assets	—	7,876,527	7,876,527
Current liabilities			
Amount due to customers for contract work	9,493,684	(9,493,684)	—
Other payables	6,860,590	(5,651,915)	1,208,675
Contract liabilities	—	15,145,599	15,145,599

3. Summary of Significant Accounting Policies (Continued)

3.1 New and amended IFRS (Continued)

The new and amended accounting standards issued but not yet effective for the accounting period ended 31 December 2018 which are relevant to the Group but the Group has not early adopted are set out below:

IFRS 16	Leases[1]
IFRS 17	Insurance Contracts[3]
Amendments to IAS 1 and IAS 8	Definition of Material[2]
Amendments to IFRS 3	Definition of a Business[2]
Amendments to IFRS 9	Prepayment Features with Negative Compensation[1]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[4]
Amendments to IFRS 19	Plan Amendment, Curtailment or Settlement[1]
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures[1]
IFRIC 23	Uncertainty over Income Tax Treatments[1]
Amendments to IFRSs	Annual Improvements to IFRSs 2015-2017 Cycle[1]

[1] Accounting periods beginning on or after 1 January 2019
[2] Accounting periods beginning on or after 1 January 2020
[3] Accounting periods beginning on or after 1 January 2021
[4] Effective date not yet been determined

The directors of the Company anticipate that, except as described below, the application of other new and amended IFRSs will have no material impact on the results and the financial position of the Group.

IFRS 16 Leases

IFRS 16 replaces IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC- 15 Operating Leases - Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognise assets and liabilities for most leases. The standard includes two elective recognition exemptions for lessees – leases of low-value assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in IAS 40. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense accrued on the outstanding balance of lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the outstanding balance of lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. IFRS 16 also requires lessees and lessors to make more extensive disclosures than under IAS 17.

Lessor accounting under IFRS 16 is substantially unchanged from the accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between operating leases and finance leases.

IFRS 16 is effective for annual periods beginning on or after 1 January 2019. As allowed by IFRS 16, the Group plans to use the practical expedient to grandfather the previous assessment of which existing arrangements are, or contain, leases. The Group will therefore apply the new definition of a lease in IFRS 16 only to contracts that are entered into on or after the date of initial application. In addition, the Group plans to elect the practical expedient for not applying the new accounting model to short-term leases and leases of low-value assets.

3. Summary of Significant Accounting Policies (Continued)

3.1 New and amended IFRS (Continued)

IFRS 16 Leases (Continued)

The Group plans to elect to use the modified retrospective approach for the adoption of IFRS 16 and will recognise the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019 and will not restate the comparative information. As disclosed in Note 40(b), at 31 December 2018 the Group's future minimum lease payments under non-cancellable operating leases amounted to RMB192,592,000 for residential properties, office and equipment, a portion of which is payable between 1 and 5 years after the reporting date.

Other than the recognition of lease liabilities and right-of-use assets, the Group expects that the transition adjustments to be made upon the initial adoption of IFRS 16 will not be material.

Other than the recognition of lease liabilities and right-of-use assets, the Group expects that the transition adjustments to be made upon the initial adoption of IFRS 16 will not be material. However, the expected changes in accounting policies as described above could have a material impact on the Group's financial statement from 2019 onwards.

3.2 Consolidation

Subsidiaries

Subsidiaries are entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that the Group ceases control.

Merger accounting for common control combinations

The transfer/acquisition of equity interests in subsidiaries which are regarded as common control combinations are accounted for in a manner similar to a uniting of interests. Assets and liabilities are transferred at book value, adjusted only to harmonise accounting policies, and no goodwill arises. Any difference between the consideration given and the aggregate book value of the assets and liabilities acquired (as of the date of the transaction) is included in equity. The financial statements incorporate the acquired entity's results as if both entities (acquirer and acquiree) had always been combined. Consequently, the financial statements reflect both entities' full year's results, even though the business combinations may have occurred part of the way throughout the year. In addition, the corresponding amounts for the previous year also reflect the combined results of both entities, even though the transaction did not occur until the current year.

Acquisition method of accounting for non-common control combinations

The acquisition method of accounting is used to account for business combinations other than common control combinations by the Group. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interests in the acquiree either at fair value or at the non-controlling interests' proportionate share of the acquiree's net assets.

3. Summary of Significant Accounting Policies (Continued)

3.2 Consolidation (Continued)

Subsidiaries (Continued)

Acquisition method of accounting for non-common control combinations (Continued)

In the statement of financial position of the Company, investments in subsidiaries are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

The excess of the consideration transferred the amount of any non-controlling interests in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of bargain purchase, the difference is recognised directly in the consolidated statement of profit or loss and other comprehensive income.

Inter-group transactions, balances and unrealised gains and losses on transactions between group companies are eliminated in preparing the consolidated financial statements. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Transactions with non-controlling interests

The Group treats transactions with non-controlling interests as transactions with equity holders of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Group ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying value for the purposes of subsequent accounting for the retained interest as an associate, joint arrangement or financial asset as the fair value on initial recognition for subsequent accounting under IFRS 9 "Financial Instruments". In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss or transferred directly to retained earnings.

Joint Arrangements

A joint arrangement is an arrangement which operates under a contractual arrangement between the Group and other parties, where the contractual arrangement establishes the Group and other parties have joint control of the arrangement.

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Assets, liabilities, revenue and expenses of a joint operation are apportioned between the joint operators in accordance with the agreement.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. The Group recognises its interest in a joint venture using the equity method. The equity method is detailed in accounting policies of interests in associates as below. The unrealised gains and losses will be eliminated in accordance with the Group's share of the interests in a joint venture if the Group enters into transactions with the joint venture.

3. Summary of Significant Accounting Policies (Continued)

3.2 Consolidation (Continued)

Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting and are initially recognised at cost. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment loss (Note 3.8).

The Group's shares of its associates' post-acquisition profits or losses is recognised in the profit or loss and its share of post acquisition movements in other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amounts of the investments. When the Group's share of losses in an associate equals or exceeds its interest in that associate (which includes any other unsecured receivables that, in substance, form part of the Group's net investment in the associate), the Group does not recognise further losses, unless the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interests in the associates. Where unrealised losses on assets sales between the Group and its associate are reversed on equity accounting, the underlying asset is also tested for impairment from the Group's prospective. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

The Group discontinues the use of equity method from the date when it ceases to have significant influence over an associate. If the retained interest in that former asssociate is a financial asset, the retained interest is measured at fair value, which is regarded as its fair value on initial recognition as a financial asset in accordance with IFRS 9. The difference between (i) the fair value of any retained interest and any proceeds from disposing of a part interest in the associate; and (ii) the carrying amount of the investment at the date the equity method was discontinued, is recognised in the profit or loss. In addition, the Group accounts for all amounts previously recognised in other comprehensive income in relation to that associate on the same basis as would have been required if the associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in other comprehensive income by the investee would be reclassified to profit or loss on the disposal of the related assets or liabilities, the entity reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) when the equity method is discontinued.

3.3 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the executive directors and certain senior management (including chief financial officer) (together referred to as the "Senior Management") that makes strategic decisions.

3. Summary of Significant Accounting Policies (Continued)

3.4 Foreign currency translation

Functional currency and presentation currency

Items included in the individual financial statements of each of the entities within the Group are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Renminbi ("RMB"), which is the Group's functional currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the reporting date retranslation of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents and all other foreign exchange gains and losses are presented in the consolidated statement of profit or loss and other comprehensive income within "other income" and "other operating expenses".

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated (i.e. only translated using the exchange rates at the transaction date).

Group companies

The results and financial position of all the group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(a) assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;

(b) income and expenses for each statement of profit or loss and other comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and

(c) all resulting exchange differences are recognised in other comprehensive income and accumulated separately in the exchange translation reserve.

3.5 Property, plant and equipment

Property, plant and equipment, except for construction-in-progress ("CIP"), are stated at historical cost less accumulated depreciation and accumulated impairment loss. Historical cost includes expenditures that are directly attributable to the acquisition of the items, including the purchase price, import duties, non-refundable purchase taxes and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

3. Summary of Significant Accounting Policies (Continued)

3.5 Property, plant and equipment (Continued)

Depreciation is calculated using the straight-line method to allocate their costs to their residual values over their estimated useful lives, as follows:

Buildings and other facilities	12 - 40 years
Plant and machinery, transportation equipment and other equipment	4 - 30 years

CIP represents buildings and plant under construction and is stated at cost less accumulated impairment loss. Cost includes costs of construction of buildings, cost of plant and other direct costs. No depreciation is made on CIP until such time as the relevant assets are completed and ready for intended use. When the assets concerned are brought into use, the costs are transferred to the relevant asset categories and depreciated in accordance with the policy as stated above.

The estimates of assets' residual values, useful lives and depreciation method are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 3.8).

Gains or losses on disposals are determined by comparing the proceeds on disposal with the carrying amount and are included within "other losses - net" in the consolidated statement of profit or loss and other comprehensive income.

Subsequent costs are included in the asset's carrying amount or recognised as separate assets, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the consolidated statement of profit or loss and other comprehensive income during the financial year in which they are incurred.

3.6 Land use rights

Land use rights represent upfront prepayments made for the land use rights which are stated at cost less accumulated amortisation and any accumulated impairment losses. Amortisation are recognised in the consolidated statement of profit or loss and other comprehensive income on a straight-line basis over the terms of the leases. Whenever there is impairment, the impairment is recognised in the consolidated statement of profit or loss and other comprehensive income.

3.7 Intangible assets

Computer software

Acquired computer software are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. After initial recognition, intangible assets with finite useful lives are carried at cost less accumulated amortisation and any accumulated impairment losses. These costs are amortised over their estimated useful lives of 5 years, and recorded in "depreciation and amortisation" within other operating expenses in the consolidated statement of profit or loss and other comprehensive income.

Patent and proprietary technologies

Patents and proprietary technologies are initially recorded at cost. After initial recognition, intangible assets with finite useful lives are carried at cost less accumulated amortisation and any accumulated impairment losses. These intangibles assets are amortised on a straight-line basis over their estimated useful lives of 8 to 10 years, and recorded in "depreciation and amortisation" within other operating expenses in the consolidated statement of profit or loss and other comprehensive income.

Amortisation methods and useful lives on computer software, patent and proprietary technologies are reviewed and adjusted if appropriates at each reporting period.

3. Summary of Significant Accounting Policies (Continued)

3.8 Impairment of non-financial assets

Assets that have an indefinite useful life, for example goodwill, are not subject to amortisation and are tested annually for impairment. Property, plant and equipment, land use rights and intangible assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment if there has been a favourable change in the estimates used to determine the asset's recoverable amount and only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised at each reporting date.

3.9 Financial instruments

Policy applicable from 1 January 2018

Financial assets and financial liabilities are recognised in the consolidated statements of financial position when the Group becomes a party to the contractual provision of the financial instrument. Financial assets and financial liabilities are initially measured at fair value.

A financial asset or financial liability (unless it is a trade receivable without a significant financing component) is initially measured at fair value plus, for an item not at fair value through profit or loss ("FVTPL"), transaction costs that are directly attributable to its acquisition or issue. Transaction costs of financial assets carried at FVTPL are expensed in the consolidated statement of profit or loss and other comprehensive income. A trade receivable without a significant financing component is initially measured at the transaction price.

(a) Classification and measurement of financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income ("FVTOCI") – debt investment; FVTOCI – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition, except if and in the period the Group changes its business model for managing financial assets.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

(i) the asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and

(ii) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortised cost or FVTOCI as described above are measured at FVTPL. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVTOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

3. Summary of Significant Accounting Policies (Continued)

3.9 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(a) Classification and measurement of financial assets (Continued)

Financial assets: Business model assessment

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

Financial assets: Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, "principal" is defined as the fair value of the financial asset on initial recognition. "Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:

(i) contingent events that would change the amount or timing of cash flows;

(ii) terms that may adjust the contractual coupon rate, including variable rate features;

(iii) prepayment and extension features; and

(iv) terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a significant discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

3. Summary of Significant Accounting Policies (Continued)

3.9 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(a) Classification and measurement of financial assets (Continued)

Financial assets: Subsequent measurement and gains and losses

Financial assets at amortised cost

Notes and trade receivables, other receivables, loans due from the ultimate holding company, restricted cash, time deposits and cash and cash equivalents are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in the profit or loss. Any gain or loss on derecognition is recognised in the profit or loss.

Financial assets at FVTOCI

They are measured at fair value with gains and losses arising from changes in fair value recognised in OCI and accumulated in the fair value reserve (non-recycling); and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will continue to be held in the fair value reserve (non-recycling).

Dividends on these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established in accordance with IFRS 9, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

(b) Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognised on its consolidated statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In such cases, the transferred assets are not derecognised.

(c) Impairment of financial assets

The Group recognises loss allowances for ECL on financial assets measured at amortised cost.

The Group measures loss allowances at an amount equal to lifetime ECL. For trade receivables and contract assets, the Group applies the simplified approach to providing for ECL prescribed by IFRS 9, which requires the use of the lifetime expected losses provision for all trade receivables. The Group determines the ECL on these items by using a provision matrix, estimated based on historical credit losses experience based on the past due status of the debtors, adjusted as appropriate to reflect current conditions and estimates of future economic conditions.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Lifetime ECL are the ECL that result from all possible default events over the expected life of a financial instrument.

12-month ECL are the portion of ECL that results from default events on a financial instrument that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

In all cases, the maximum period considered when estimating ECL is the maximum contractual period over which the Group is exposed to credit risk.

3. Summary of Significant Accounting Policies (Continued)

3.9 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(c) Impairment of financial assets (Continued)

Measurement of ECL

The Group assesses on a forward-looking basis the ECL associated with its debt instruments carried at amortised cost. ECL are a probability-weighted estimation of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the financial assets.

The Group has the following types of assets that are subject to IFRS 9's new ECL model:

- notes and trade receivables
- contract assets
- cash and cash equivalents
- restricted cash
- time deposits
- loans due from the ultimate holding company
- other receivables

While cash and cash equivalents, restricted cash, time deposits, loans due from the ultimate holding company and other receivables are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

For trade receivables and contract assets with no significant financing component, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the assets. The provision matrix is determined based on historical observed default rates over the expected life of the trade receivables and contract assets with similar credit risk characteristics and is adjusted for forward-looking estimates. At every reporting date the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

Impairment on other financial assets at amortised cost are measured as either 12-month ECL or lifetime ECL, depending on whether there has been a significant increase in credit risk since initial recognition. If a significant increase in credit risk of a receivable has occurred since initial recognition, then impairment is measured as lifetime ECL.

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

The Group assesses on in particular, the following information is taken into account when assessing whether credit risk has increased significantly:

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

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the reversal of the previously recognised impairment loss is recognised in profit or loss.

3. Summary of Significant Accounting Policies (Continued)

3.9 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(c) Impairment of financial assets (Continued)

Credit-impaired financial assets

At each reporting date, the Group assesses on a forward-looking basis whether financial assets carried at amortised cost are credit-impaired. A financial asset is "credit-impaired" when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

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

(i) significant financial difficulty of the borrower or issuer;

(ii) a breach of contract such as a default or past due event;

(iii) the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;

(iv) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or

(v) the disappearance of an active market for a security because of financial difficulties.

The Group recognises an impairment loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade and other receivables and contract assets where the corresponding adjustment is recognised through a loss allowance account.

Write-off

The gross carrying amount of a financial 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. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due, taking into account legal advice where appropriate.

A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

(d) Classification and measurement of financial liabilities

The Group's financial liabilities include notes and trade payables, other payables and loans due to a fellow subsidiary. Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in the profit or loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method, in the case of loans and borrowings, net of directly attributable transaction costs. Interest expense and foreign exchange gains and losses are recognised in the profit or loss. Any gain or loss on derecognition is also recognised in the profit or loss.

3. Summary of Significant Accounting Policies (Continued)

3.9 Financial instruments (Continued)

Policy applicable from 1 January 2018 (Continued)

(e) Derecognition of financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire.

The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different. In this case, a new financial liability based on the modified terms is recognised at fair value. The difference between the carrying amount of the financial liability extinguished and the new financial liability with modified terms is recognised in the profit or loss.

(f) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the consolidated statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

Income and expenses are presented on a net basis only when permitted under IFRS, or for gains and losses arising from a group of similar transactions.

Policy applicable before 1 January 2018

Classification

The Group classifies its financial assets in the following categories: loans and receivables and available-for-sale financial assets. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

(i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the end of the reporting period, which are classified as non-current assets. The Group's loans and receivables primarily include "Notes and trade receivables", "Other receivables", "Loans due from the ultimate holding company", "Restricted cash", "Time deposits" and "Cash and cash equivalents" in the consolidated statement of financial position.

(ii) Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless the investment matures or management intends to dispose of it within 12 months after the end of the reporting period.

3. Summary of Significant Accounting Policies (Continued)

3.9 Financial instruments (Continued)

Policy applicable before 1 January 2018 (Continued)

Recognition and measurement

Regular purchases and sales of financial assets are recognised on trade-date - the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Available-for-sale financial assets are subsequently carried at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

For available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, they are measured at cost less any identified impairment losses at the end of each reporting period subsequent to initial recognition. An impairment loss is recognised in the consolidated statement of comprehensive income when there is objective evidence that the asset is impaired. Such impairment losses will not reverse in subsequent periods.

Changes in the fair value of available-for-sale investments are recognised in other comprehensive income. When available-for-sale investments are sold or impaired, the accumulated fair value adjustments recognised in equity are included in the consolidated statement of profit or loss and other comprehensive income. Dividends on available-for-sale equity instruments are recognised in the consolidated statement of profit or loss and other comprehensive income when the right of the Group to receive payments is established. Interest on available-for-sale securities calculated using the effective interest method is recognised in the consolidated statement of comprehensive income as part of other income. Dividends on available-for-sale equity instruments are recognised in the consolidated statement of profit or loss and other comprehensive income as part of other income when the Group's right to receive payments is established.

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity securities classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered as an indicator that the securities are impaired. If any such evidence exists for available-for-sale investments, the cumulative loss — measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investments previously recognised in the consolidated statement of profit or loss and other comprehensive income — is removed from equity and recognised in the consolidated statement of profit or loss and other comprehensive income. Impairment losses recognised in the consolidated statement of comprehensive income on equity instruments are not reversed through the consolidated statement of comprehensive income. Impairment loss on the available-for-sale investment is measured as the difference between the carrying amount of the investment and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of trade and other receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation and default or delinquency in payments are considered indicators that the receivable is impaired. The amount of the provision is the difference between the carrying amount of the asset and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amounts of the assets are reduced through the use of allowance accounts, and the amount of the provision is recognised in the consolidated statement of comprehensive income. When a receivable is uncollectible, it is written off against the allowance account for receivables. Subsequent recoveries of amounts previously written off are credited in the consolidated statement of comprehensive income.

Offsetting financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statements of consolidated financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the financial asset and settle the financial liability simultaneously. The legal enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

3.10 Derivative financial instruments

Derivative financial instruments are recognised at fair value at the end of each reporting period with gain or loss on remeasurement to fair value is recognised immediately in profit or loss, except where the derivatives qualify for hedged accounting under IFRS 9.

3. Summary of Significant Accounting Policies (Continued)

3.11 Inventories

Inventories are stated at the lower of cost and net realisable value. Inventories are expensed to relevant operating expenses when used, sold or capitalised to property, plant and equipment when installed, as appropriate, using moving weighted average method. The cost of finished goods and work-in-progress comprises design costs, raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). It excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less selling expenses.

3.12 Cash and cash equivalents

Cash and cash equivalents includes cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less.

3.13 Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

3.14 Share-based payment transactions

Cash-settled share-based payment transactions

The Group operates a cash-settled H share appreciation rights plan. The related cost of services received from the employees and the liability to pay for such services are measured at fair value of the liability. Fair value is established at the grant date and re-measured at each reporting date until the liability settled. The fair value of the liability at each reporting date is expensed on a straight-line basis over the vesting period, based on the Group's estimate of the cash-settled share appreciation rights that will eventually vest. At the end of each reporting period, the Group revises its estimation of the number of the cash-settled share appreciation rights expected to vest. The impact of the revision and remeasurement, if any, is recognised in profit or loss such that the cumulative expense reflects the revised estimation. After the vesting date, changes in fair value of the liability is recognised in profit or loss until the liability is settled.

3.15 Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognised in the consolidated statement of profit or loss and other comprehensive income over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has contractual or an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

3.16 Payables

Payables primarily include notes and trade payables and other payables, and are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

3. Summary of Significant Accounting Policies (Continued)

3.17 Employee benefits

Pension obligations

The full-time employees of the Group in the PRC are covered by various government-sponsored pension plans under which the employees are entitled to a monthly pension based on certain formulas. The relevant government agencies are responsible for the pension liability to these retired employees. The Group contributes on a monthly basis to these pension plans. Under these plans, the Group has no obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred.

The Group also provides supplementary pension subsidies to certain employees in the PRC. Such supplementary pension subsidies are considered to be defined benefit plans as the Group is obligated to provide post-employment benefits to these employees. The liability recognised in the consolidated statement of financial position in respect of these defined benefit plans is the present value of the defined benefit obligation at the end of the reporting period, together with adjustments for unrecognised actuarial gains or losses and past service costs. The defined benefit obligation is calculated annually by independent qualified actuaries using the projected unit credit method. Net interests are recognised to the profit or loss and are calculated by the discount rate, which is determined by reference to the market yields of the high-quality government bonds at the end of the reporting period, multiplied the net defined benefit liabilities or assets at each of the beginning of the reporting period. The differences between the actual return on plan assets and with the passage of time in the plan assets are recognised in other comprehensive income.

The Group has various defined contribution plans in accordance with the local conditions and practices in the municipalities and provinces in which they operate. Defined contribution plans are pension and/or other social benefit plans under which the Group pay fixed contributions into a separate entity (a fund) and will have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees benefits relating to employee service in the current and prior periods. The contributions are recognised as labour costs when they are due.

Other post-employment obligations

Some of the companies comprising the Group provide post-retirement medical benefits to their retired employees. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. These obligations are valued annually by independent qualified actuaries.

Termination and early retirement benefits

Termination and early retirement benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination and early retirement benefits when it is demonstrably committed to either: (i) terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or (ii) providing termination benefits as a result of an offer made to encourage voluntary redundancy. The specific terms vary among the terminated and early retired employees depending on various factors including position, length of service and district of the employee concerned. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

Housing benefits

The Group contributes to the state-prescribed housing fund. Such costs are charged to the consolidated statement of profit or loss and other comprehensive income as incurred. Apart from those described above, the Group does not have other legal or constructive obligations over such benefits.

Bonus entitlements

The expected cost of bonus payments is recognised as a liability when the Group has a present contractual or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made. Liabilities for bonus are expected to be settled within twelve months and are measured at the amounts expected to be paid when they are settled.

3. Summary of Significant Accounting Policies (Continued)

3.18 Borrowing costs

Borrowing costs incurred, net of any investment income earned on the temporary investment of the specific borrowings, for the acquisition, construction or production of any qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use. A qualifying asset is an asset which necessarily takes a substantial period of time to get ready for its intended use or sale. Other borrowing costs are expensed when incurred.

Borrowing costs are capitalised as part of the cost of a qualifying asset 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 being undertaken. Capitalisation of borrowing costs ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

3.19 Taxation

Current and deferred income tax

The tax expense for the year comprises current and deferred income tax. Income tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the income tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax rates and tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax liabilities are not recognised if they arise from the initial recognition of goodwill; deferred income tax is not accounted for if it arises from the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Changes in deferred tax assets or liabilities are recognised in profit or loss, or in other comprehensive income or directly in equity if they relate to items that are charged or credited to other comprehensive income or directly in equity.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, joint arrangements and associates, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and deferred income tax liabilities are offset when meeting all the conditions below:

- The Group has the legally enforceable right to settle current income tax assets and current income tax liabilities; and
- The deferred income tax assets and liabilities relate to income tax levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

3. Summary of Significant Accounting Policies (Continued)

3.19 Taxation (Continued)

Value-added taxation ("VAT") and business tax

Sales of goods and provision of engineering, consulting and licensing services of the Group are subjected to VAT. VAT payable is determined by applying 16% or 6% on the taxable revenue arising from sales of goods and provision of engineering, consulting and licensing service in certain regions after offsetting deductible input VAT of the period.

Revenue resulting from providing construction services was subject to business tax at 3% of gross service income before 1 May 2016. Taxable revenue from construction services is subject to VAT at the rate of 10% after offsetting deductible input VAT of the period from 1 May 2016. Certain revenue resulting from providing construction services was taxed by using applicable simple tax method, paying VAT at 3%.

3.20 Contingent liabilities and contingent assets

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. It can also be a present obligation arising from past events that is not recognised because it is not probable that an outflow of economic resources will be required or the amount of the obligation cannot be measured reliably.

A contingent liability is not recognised but is disclosed in the consolidated financial statements unless the probability of outflow of resources embodying economic benefits is remote. When a change in the probability of an outflow occurs so that the outflow is probable, it will then be recognised as a provision.

A contingent asset is not recognised in the consolidated financial statements unless virtually certain but disclosed when an inflow of economic benefits is probable.

3.21 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

All provisions are reviewed at each reporting date and adjusted to reflect the current best estimate.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

3.22 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the consolidated statement of profit or loss and other comprehensive income over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to income is presented in gross under "other income" in the consolidated statement of profit or loss and other comprehensive income.

3. Summary of Significant Accounting Policies (Continued)

3.23 Contract assets and contract liabilities

The contract asset is the Group's right to consideration in the exchange for services that the Group has transferred to customer. The contract assets transferred to trade receivables when receipt of the consideration is conditional only on the passage of time.

The Group expects that contract assets have the same risk characteristics as trade receivables. The ECL assessment of contract assets in accordance with the accounting policy set out in Note 3.9.

The contract liabilities above are due to the non-refundable advance payment made by customers. Such liabilities fluctuated as a result of the terms of different projects. A contract liability is the Group's obligation to render to services to a customer for which the Group has received consideration from the customer. A contract liability is recognised by the Group when the customer pays consideration but before the Group recognised 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.

3.24 Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the construction contracts and sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value-added tax, returns, rebates and discounts and after eliminating sales within the Group.

To determine whether to recognise revenue, the Group follows a 5-step process:

1. Identifying the contract with a customer
2. Identifying the performance obligations
3. Determining the transaction price
4. Allocating the transaction price to the performance obligations
5. Recognising revenue when/as performance obligation(s) are satisfied

In all cases, the total transaction price for a contract is allocated amongst the various performance obligations based on their relative stand-alone selling prices. The transaction price for a contract excludes any amounts collected on behalf of third parties.

Revenue is recognised either at a point in time or over time, when (or as) the Group satisfies performance obligations by transferring the promised goods or services to its customers.

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.

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

Revenue from construction and service contracts

When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognised progressively over time using the output method, based on direct measurement of the value of contract work performed, provided that the value of contract work performed can be measured reliably. The value of contract work performed is measured based on direct measurements of surveys of work performed. Variations in contract work are recognised as contract revenue to the extent that the modification has been approved by the parties to the contracts and it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.

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

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

3. Summary of Significant Accounting Policies (Continued)

3.24 Revenue recognition (Continued)

Services rendered

Revenue for services rendered mainly includes technological development, engineering, consultation and supervision is recognised at a point in time when services are rendered.

Sales of products

Revenue from sales of products is recognised when i) control of the products has transferred, being when the products are delivered to the customers and there is no unfulfilled obligation that could affect the customer's acceptance of the products; and ii) collectability of the related receivables is reasonably assured. No contract liability and right to the returned goods are recognised as insignificant amount of returns are expected based on previous experience.

Dividend income

Dividend income is recognised when the right to receive payment is established.

Interest income

Interest income is recognised on a time-proportion basis using the effective interest method. When a loan and receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income. Interest income on impaired loan and receivables is recognised using the original effective interest rate.

3.25 Research and development

Research expenditure is recognised as an expense as incurred. Costs incurred on development projects (relating to the design and testing of new or improved products) are recognised as intangible assets when the following criteria are fulfilled:

(i) it is technically feasible to complete the intangible asset so that it will be available for use or sale;

(ii) management intends to complete the intangible asset and use or sell it;

(iii) the Group's ability to use or sell the intangible asset is demonstrated;

(iv) it can be demonstrated how the intangible asset will generate probable future economic benefits;

(v) adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and

(vi) the expenditure attributable to the intangible asset during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Capitalised development costs are recorded as intangible assets and amortised from the point at which the asset is ready for use on a straight-line basis over its useful life.

3.26 Dividend distribution

Dividend distribution to the Company's equity holders is recognised as a liability in the consolidated financial statements in the year in which the dividends are approved by the Company's equity holders or directors, where appropriate.

3. Summary of Significant Accounting Policies (Continued)

3.27 Financial guarantee contracts

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of

- The amount determined in accordance with the ECL model under IFRS 9 "Financial Instruments"; and
- The amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of IFRS 15 Revenue from Contracts with Customers.

The fair value of financial guarantees is determined based on the present value of the difference in cash flows between the contractual payments required under the debt instruments and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

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 on initial recognition of any deferred income.

3.28 Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Rental payments under operating leases are charged to the consolidated statement of profit or loss and other comprehensive income on a straight-line basis over the term of the relevant lease except where an alternative basis is more representative of the time pattern of benefits to be derived from the leased assets. Benefits received and receivable as an incentive to enter into an operating lease are recognised as a reduction of rental expense over the lease term on a straight-line basis.

3.29 Related parties

For the purposes of these consolidated financial statements, a party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and 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 of a parent of the Group.

(b) the party is an entity and if any of the following conditions applies:

- (i) the entity and the Group are members of the same group;
- (ii) one entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member);
- (iii) the entity and the Group are joint ventures of the same third party;
- (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
- (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
- (vi) the entity is controlled or jointly controlled by a person identified in (a);
- (vii) a person identified in (a) (i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and
- (viii) the entity, or any member of a group of which it is a part, provided key management personnel services to the Group or to the parent of the Group.

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.

4. Financial and Capital Risks Management

The Group works out general principles for overall risk management, including management of financial risks, as well as management policies covering specific areas. In considering the importance of risks, the Group identifies and evaluates risks at head office and individual subsidiary level, and requires analysis and proper communication for the information collected periodically.

4.1 Financial risk management

The activities of the Group expose them to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The overall risk management program of the Group focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on financial performance of the Group.

The carrying amounts presented in the consolidated statement of financial position relate to the following categories of financial assets and financial liabilities:

	2018	2017
	RMB'000	RMB'000
Financial assets		
Financial assets at amortised cost		
Notes, trade and other receivables	10,794,811	—
Restricted cash	29,468	—
Time deposits	2,142,406	—
Cash and cash equivalents	16,997,663	—
Loans due from the ultimate holding company	18,000,000	—
	47,964,348	—
Financial assets at FVTOCI (non-recycling)		
Unlisted equity investments	680	—
Available-for-sale financial assets		
Unlisted equity investments	—	2,750
Loans and receivables		
Notes, trade and other receivables	—	11,789,327
Restricted cash	—	16,087
Time deposits	—	4,405,700
Cash and cash equivalents	—	11,660,660
Loans due from the ultimate holding company	—	15,500,000
	—	43,371,774
Total financial assets	47,965,028	43,374,524
Financial liabilities		
Financial liabilities measured at amortised cost		
Notes, trade and other payables	30,765,919	15,022,903
Loans due to a fellow subsidiary	384,339	431,257
Total financial liabilities	31,150,258	15,454,160

4. Financial and Capital Risks Management (Continued)

4.1 Financial risk management (Continued)

(a) Market risk

Foreign exchange risk

The functional currency of the entities within the Group is RMB and most of the transactions are settled in RMB.

The Group carries out operations outside the PRC where transactions are usually denominated in the United States Dollars ("USD") which are translated into RMB at the prevailing exchange rates on the dates of the transactions.

The Group is exposed to currency risk primarily through provision of engineering contracting services which give rise to notes, trade and other receivables, notes, trade and other payables, restricted cash, time deposits and cash and cash equivalents that are denominated in a foreign currency, i.e. a currency other than the functional currency of the operations to which the transactions relate. The currency that gives rise to this risk is primarily in USD as at 31 December 2018 and 2017.

On the other hand, RMB is not a freely convertible currency and the PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future. Changes in the foreign exchange control system may prevent the Group from satisfying sufficient foreign currency demands.

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets or liabilities denominated in a currency other than RMB to which they relate.

At 31 December 2018	USD	Others
	RMB'000	RMB'000
Restricted cash, time deposits and cash and cash equivalents	8,085,203	2,021,003
Notes, trade and other receivables	499,818	830,599
Notes, trade and other payables	(1,024,200)	(2,854,787)
Loans due to a fellow subsidiary	(384,339)	—
Net exposure in RMB	7,176,482	(3,185)

At 31 December 2017	USD	Others
	RMB'000	RMB'000
Restricted cash, time deposits and cash and cash equivalents	10,285,747	1,430,099
Note, trade and other receivables	384,025	1,062,132
Note, trade and other payables	(243,700)	(1,499,945)
Loans due to a fellow subsidiary	(431,257)	—
Net exposure in RMB	9,994,815	992,286

4. Financial and Capital Risks Management (Continued)

4.1 Financial risk management (Continued)

(a) Market risk (Continued)

Foreign exchange risk (Continued)

A 5% strengthening of RMB against the USD as at 31 December 2018 and 2017 would have changed the equity and net profit by the amounts shown below:

	2018	2017
	RMB'000	RMB'000
Decrease in equity and net profit		
– USD	(269,118)	(374,806)

A 5% weakening of RMB as at 31 December 2018 and 2017 would have had the equal but opposite effect on the above currency to the amounts shown above, on the basis that all other variables remain constant.

The stated changes represent management's assessment of reasonably possible changes in foreign exchange rates over the period until the end of the next annual reporting period. The analysis is performed on the same basis at the relevant period.

Interest rate risk

The Group's ordinary income and operating cash flows are substantially independent of changes in market interest rates. The interests arise from the loans between the Group and the fellow subsidiaries and ultimate holding company and time deposits are mainly based on fixed interest rate.

Price risk

The Group is not exposed to equity securities price risk because the Group's equity securities investments are classified as financial assets at FVTOCI which are stated at fair value.

(b) Credit risk

Credit risk refers to the risk that the counterparty to a financial instrument would fail to discharge its obligation under the terms of the financial instrument and cause a financial loss to the Group. The Group's exposure to credit risk mainly arises from restricted cash, time deposit, cash and cash equivalent, note, trade and other receivables and contract assets.

In order to minimise credit risk, the Group has developed and maintains the Group's credit risk gradings to categorise exposures according to their degree of risk of default. The credit rating information is based on the Group's own trading records to rate its major customers and other debtors. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties.

For financial assets at amortised cost and contract assets, the exposures to credit risk are monitored such that any outstanding debtors are reviewed and followed up on an ongoing basis. In the opinion of the Directors, the Group has no significant concentration of credit risk arising from its ordinary course of business due to its large customer base. The Group does not hold any collateral from its debtors.

4. Financial and Capital Risks Management (Continued)

4.1 Financial risk management (Continued)

(b) Credit risk

Impairment assessment under ECL model

The Group's current credit risk grading framework comprises the following categories:

Category	Description	Basis for recognising ECL
Performing	The counterparty has a low risk of default and does not have any past-due amounts	12-month ECL
Doubtful	There has been a significant increase in credit risk since initial recognition	Lifetime ECL – not credit-impaired
In default	There is evidence indicating the asset is credit-impaired	Lifetime ECL – credit-impaired
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery	Amount is written off

Trade receivables and contract assets

As set out in Note 3.9, the Group assesses ECL under IFRS 9 on trade receivables and contract assets based on provision matrix, the expected loss rates are based on the payment profile for sales in the past 5 years as well as the corresponding historical credit losses during that period. The historical rates are adjusted to reflect current and forwarding looking macroeconomic factors affecting the customer's ability to settle the amount outstanding. At each reporting date, the historical default rates are updated and changes in the forward-looking estimates are analysed.

Based on the Group's assessment of historical credit loss experience of the existing debtors and all available forward looking information, for trade receivables and contract assets, the Group used estimated loss rates based on aging for classes with different credit risk characteristics and exposures.

Other receivables

The Group measures the loss allowance equal to 12-month ECL of other receivables. For those balances expected to have significant increase in credit risk since initial recognition, the Group apply lifetime ECL based on aging for classes with different credit risk characteristics and exposures.

Restricted cash, time deposits and cash and cash equivalents

Restricted cash, time deposits and cash and cash equivalents are placed at financial institutions that have sound credit ratings assigned by international credit-rating agencies and the Group considers the credit risk to be insignificant.

Loans due from the ultimate holding company

The 12-month ECL calculated by the Group is not significant and there has been no significant increase in credit risk since initial recognition.

4. Financial and Capital Risks Management (Continued)

4.1 Financial risk management (Continued)

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and the availability of funding from an adequate amount of committed credit facilities. Due to the dynamic nature of the underlying business, the Group aims to maintain flexibility in funding by keeping committed credit lines available.

Management monitors the cash flow forecasts of the Group in meeting its liabilities.

The table below analyses the Group's non-derivative financial liabilities that will be settled on a net basis into relevant maturity groupings based on the remaining period from the end of the reporting period to the contractual maturity dates. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances, as the impact of discounting is not significant.

	Weighted average effective interest rate	Within 1 year	1-2 years	2-5 years	Over 5 years	Total undiscounted cash flows	Carrying amount
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2018							
Notes, trade and other liabilities	**N/A**	**30,765,919**	**—**	**—**	**—**	**30,765,919**	**30,765,919**
Loans due to a fellow subsidiary	**4.20%**	**387,705**	**—**	**—**	**—**	**387,705**	**384,339**
Borrowings and other liabilities		**31,153,624**	**—**	**—**	**—**	**31,153,624**	**31,150,258**

	Weighted average effective interest rate	Within 1 year	1-2 years	2-5 years	Over 5 years	Total undiscounted cash flows	Carrying amount
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2017							
Notes, trade and other liabilities	N/A	15,022,903	—	—	—	15,022,903	15,022,903
Loans due to a fellow subsidiary	3.32%	443,109	—	—	—	443,109	431,257
Borrowings and other liabilities		15,466,012	—	—	—	15,466,012	15,454,160

4. Financial and Capital Risks Management (Continued)

4.2 Capital risk management

The objectives of the Group when managing capital are to safeguard the ability of the Group in continuing as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, issue new shares or sell assets to reduce debts.

The Group monitors their capital structure on the basis of gearing ratio. This ratio is calculated as net debt divided by total capital. Net debts are calculated as the total borrowings and other liabilities (including notes and trade payables and other payables (excluding contract deposits advance), as shown in the consolidated statement of financial position) less restricted cash, time deposits and cash and cash equivalents. Total capital is calculated as equity, as shown in the consolidated statement of financial position, plus net debts less non-controlling interests.

	2018	2017
	RMB'000	RMB'000
Total borrowings and other liabilities	31,150,258	15,454,160
Less: Restricted cash, time deposits and cash and cash equivalents	(19,169,537)	(16,082,447)
Net debt	11,980,721	(628,287)
Total equity (excluding non-controlling interests)	25,978,646	25,586,839
Total capital	37,959,367	24,958,552
Gearing ratio	32%	N/A

4.3 Fair value measurement of financial instruments

Fair value measurements

The Group discloses fair value measurements of financial instruments by level of the following fair value measurement hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly (level 2).
- Inputs for the asset or liability that are not based on observable market data (i.e. unobservable inputs) (level 3).

4. Financial and Capital Risks Management (Continued)

4.3 Fair value measurement of financial instruments (Continued)

Fair value disclosures

The carrying amounts of the Group's financial assets and liabilities including restricted cash, time deposits, cash and cash equivalents, trade and other receivables and trade and other payables approximate their fair values due to their short maturities. Financial assets at FVTOCI are measured at fair value at 31 December 2018.

The financial assets measured at fair value in the consolidated statement of financial position on a recurring basis are grouped into the fair value hierarchy as follows:

	As at 31 December 2018 Level 3
Description	RMB'000
Financial assets at FVTOCI	
– Unlisted equity securities	680

The reconciliation of the carrying amounts of the Group's financial instruments classified within Level 3 of the fair value hierarchy is as follows:

	Financial assets at FVTOCI At 31 December 2018
	RMB'000
At 1 January	—
Adjustment on initial application of IFRS 9 (Note 3.1)	2,750
Disposal	(2,070)
At 31 December	680

The fair value of the unlisted equity securities is measured using valuation techniques with reference to the net asset value. The Directors believe that the change in fair value (which is included in other comprehensive income) derived from the valuation technique is reasonable and is the most appropriate value at the end of the reporting period.

There have been no transfers into or out of Level 3 during the year ended 31 December 2018 (2017: Nil).

5. Critical Accounting Estimates and Judgments

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes accounting estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal to the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(a) Construction contracts

Revenue from individual contracts is recognised according to progress of the project. The determination of the progress of the construction service involves judgments. The Group recognises revenue based on progress forwards complete satisfaction of performance obligation, which is measured based on direct measurements of the value of units delivered or surveys of work performed. The customers will provide final statement when the whole project is completed and may have adjustments on accumulated confirmation according to the actual engineering quantity till the day of completion. Based on historical experience with similar projects, the difference is immaterial. In addition, when determining the transaction price, the Group consider factors such as whether there is any financing component. The Group considers whether the payment schedule is commensurate with the Group's performance and whether the delayed payment is for finance purpose. The Group does not consider the arrangement with customers have significant financing component. The Group has, therefore, recognised revenue on progress confirmation over the period during which the services are rendered and transferred to customers. As at 31 December 2018, the contract assets (Note 25(a)) and contract liabilities (Note 25(b)) are RMB11,720,597,000 and RMB9,968,594,000 respectively (31 December 2017: N/A).

(b) Useful lives of property, plant and equipment

The Group determines the estimated useful lives and related depreciation charges for the Group's property, plant and equipment (Note 17). This estimate is based on projected wear and tear incurred during the useful life of property, plant and equipment. This could change significantly as a result of technical renovations and competitor actions in response to severe industry cycles. Management will increase the depreciation charge where useful lives or residual values vary with previously estimated, or it will write-off or write-down technically obsolete or non-strategic assets that have been abandoned or sold. As at 31 December 2018, the net carrying amount of property, plant and equipment is RMB3,496,474,000 (31 December 2017: RMB3,855,852,000).

(c) Provision for ECL of trade receivables and contract assets

Before the adoption of IFRS 9, the Group determines the provision for ECL on trade receivables (Note 22) and contract assets (Note 25(a)). This estimate is based on the credit history of the customers and the current market condition. Management reassesses the adequacy of provision on a regular basis by reviewing the individual account based on past credit history and any prior knowledge of debtor insolvency or other credit risk which might not be easily accessible public information and market volatility might bear a significant impact which might not be easily ascertained. As at 31 December 2018, the provision for impairment on trade receivables and contract assets are RMB1,313,283,000 (2017: RMB 1,171,218,000) and RMB 18,056,000 000 (2017: N/A) respectively.

Since the initial adoption of IFRS 9, the Group makes allowances on trade receivables and contract assets based on assumptions about risk of default and expected loss rates. The Group uses judgment in making these assumptions and selecting the inputs to the ECL calculation, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period as set out in Note 22.

5. Critical Accounting Estimates and Judgments (Continued)

(d) Current taxation and deferred taxation

The Group pays income tax in various regions. There are various uncertainties on the ultimate income tax treatments for many transactions and events arising from normal operating activities and overall assets transfers. The Group has to make critical accounting judgments when calculating income tax expense in different regions. In the event that the finalised amounts recognised for such tax events are different from those originally recorded, this could result in material adjustments to income tax expense and deferred income tax.

The estimates of deferred income tax assets (Note 37) require estimates over future taxable profit and corresponding applicable income tax rates of respective years. The change in future income tax rates and timing would affect income tax expense or benefit, as well as deferred income tax balance. The realisation of deferred income tax assets also depends on the realisation of sufficient profitability (taxable profit) of the Group. Deviation of future profitability from the estimate could result in material adjustments to the carrying amount of deferred income tax assets. Deferred tax assets relating to certain temporary differences and tax losses are recognised as management considers it is probable that future taxable profit will be available against which the temporary differences or tax losses can be utilised. Where the expectation is different from the original estimate, such differences will impact the recognition of deferred tax assets and taxation in the years in which such estimates are changed. As at 31 December 2018, deferred tax assets recognised in the consolidated statement of financial position is RMB781,439,000 (2017: RMB750,967,000).

(e) Pension obligations

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for provisions include the discount rate. Any changes in these assumptions will impact the carrying amount of pension obligations. The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of corporate securities which have maturity approximating to the terms of the related pension liability. Other key assumptions for pension obligations are based on current market conditions. As at 31 December 2018, the net liabilities of retirement benefit plan obligations (Note 33(b)) is RMB2,636,815,000 (2017: RMB2,536,615,000).

(f) Provision for litigation claims

The Group are from time to time involved in legal proceedings arising in the ordinary course of our business (Note 34). If the management believes that the legal proceedings may result claims for compensation to third parties against the Group, the best estimate of provision for litigation claims will be recognised. If the management believes that the legal proceedings may be more likely not to result claims for compensation to third parties against the Group, no provision will be recognised under any potential litigation claims. Except to the extent that the situations and uncertainties involved, that will be disclosed as contingent liabilities. To access the outcome of legal proceedings and any potential amount of litigation claims, significant judgment is required. As at 31 December 2018, provision for litigation claims (Note 34) is RMB253,936,000 (2017: RMB262,925,000).

6. Revenue

The Group's revenue is set out below:

	2018 RMB'000	2017 RMB'000
Engineering, consulting and licensing	2,924,408	2,843,657
EPC Contracting	29,135,814	21,056,256
Construction	14,401,934	11,899,210
Equipment manufacturing	556,868	409,600
	47,019,024	36,208,723

7. Segment Information

Management has determined the operating segments based on the reports reviewed by the Senior Management that are used to make strategic decisions.

The Senior Management considers the business from a product and service perspective, which mainly includes four reportable operating segments:

(i) Engineering, consulting and licensing – providing design, consulting, research and development, feasibility studies, compliance certification services to oil refining and chemical etc industries;

(ii) EPC Contracting – providing integrated engineering, procurement, construction, maintenance and project management services to oil refining and chemical etc industries;

(iii) Construction – providing infrastructure for oil refining and chemical etc industries, oil and gas storage, pipelines transportation, construction, renovation, expansion, repair and maintenance services and large equipment lifting and transportation services in construction projects; and

(iv) Equipment manufacturing – providing design, development, manufacture and sales of oil refining equipment and spare parts for facilities including oil refining and chemical facilities.

Inter-segment sales were conducted at prices no less than cost and with terms mutually agreed among those business segments. Operating expenses of a functional unit are allocated to the relevant segment which is the predominant user of the services provided by the unit. Operating expenses of other shared services which cannot be allocated to a specific segment and corporate expenses are included as unallocated costs.

Segment assets consist primarily of property, plant and equipment, land use rights, construction in progress, intangible assets, investment in joint arrangements and investment in associates, other non-current assets, inventories, notes and trade receivables, prepayments and other receivables, restricted cash and cash and cash equivalents. Unallocated assets comprise items such as some of the time deposits, loans due from the ultimate holding company, deferred income tax assets and other unallocated assets.

Segment liabilities comprise operating liabilities and borrowings. Unallocated liabilities comprise items such as deferred income tax liabilities.

Capital expenditure comprises additions to property, plant and equipment (Note 17), land use rights (Note 18), intangible assets (Note 19) and other non-current assets, including additions resulting from acquisitions through business combinations.

7. Segment Information (Continued)

The segment information provided to the Senior Management for the reportable segments is as follow:

(i) As at and for the year ended 31 December 2018:

The segment results for the year ended 31 December 2018 are as follows:

	Engineering, consulting and licensing	EPC Contracting	Construction	Equipment manufacturing	Unallocated	Elimination	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Segment revenue and results							
Revenue from external customers	2,924,408	29,135,814	14,401,934	556,868	—	—	47,019,024
Inter-segment revenue	—	—	3,718,930	73,730	—	(3,792,660)	—
Segment revenue	2,924,408	29,135,814	18,120,864	630,598	—	(3,792,660)	47,019,024
Segment result	39,245	1,548,272	(249,979)	23,145	74,851	—	1,435,534
Finance income							780,375
Finance expenses							(118,014)
Share of loss of joint arrangements	(46)	—	—	—	—	—	(46)
Share of profit of associates	8,874	11,410	3,382	—	—	—	23,666
Profit before taxation							2,121,515
Income tax expense							(441,706)
Profit for the year							1,679,809
Other segment items							
Depreciation	37,170	139,706	387,004	12,423	—	—	576,303
Amortisation	3,123	108,794	23,790	1,065	—	—	136,772
Capital expenditures							
– Property, plant and equipment	70,743	130,625	178,566	4,065	—	—	383,999
– Intangible assets	—	15,074	2,508	—	—	—	17,582
Provision/(Reversal of provision) for ECL on trade and other receivables, net	28,091	60,440	(92,872)	380	—	—	(3,961)

7. Segment Information (Continued)

(i) As at and for the year ended 31 December 2018: (Continued)

The segment assets and liabilities as at 31 December 2018 are as follows:

	Engineering, consulting and licensing	EPC contracting	Construction	Equipment manufacturing	Elimination	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Assets						
Segment assets	7,211,251	28,861,168	19,594,180	1,041,922	(5,674,852)	51,033,669
Investment in joint arrangements	1,866	—	—	—	—	1,866
Investment in associates	67,135	61,639	18,680	—	—	147,454
Other unallocated assets						19,689,751
Total assets						70,872,740
Liabilities						
Segment liabilities	4,062,965	28,900,887	16,865,098	735,495	(5,674,854)	44,889,591
Other unallocated liabilities						—
Total liabilities						44,889,591

7. Segment Information (Continued)

(ii) As at and for the year ended 31 December 2017:

The segment results for the year ended 31 December 2017 are as follows:

	Engineering, consulting and licensing	EPC Contracting	Construction	Equipment manufacturing	Unallocated	Elimination	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Segment revenue and results							
Revenue from external customers	2,843,657	21,056,256	11,899,210	409,600	—	—	36,208,723
Inter-segment revenue	—	—	2,702,189	124,057	—	(2,826,246)	—
Segment revenue	2,843,657	21,056,256	14,601,399	533,657	—	(2,826,246)	36,208,723
Segment result	139,576	1,228,491	(291,206)	14,693	20,713	—	1,112,267
Finance income							600,926
Finance expenses							(90,432)
Share of loss of joint arrangements	(1,372)	—	—	—	—	—	(1,372)
Share of profit of associates	3,826	7,489	2,397	—	—	—	13,712
Profit before taxation							1,635,101
Income tax expense							(504,869)
Profit for the year							1,130,232
Other segment items							
Depreciation	92,867	80,360	420,384	13,199	—	—	606,810
Amortisation	69,292	43,402	25,193	1,794	—	—	139,681
Capital expenditures							
– Property, plant and equipment	65,657	61,603	327,552	1,925	—	—	456,737
– Intangible assets	4,083	21,627	4,453	—	—	—	30,163
Provision/(Reversal of provision) for impairment on trade and other receivables, net	(696)	11,672	86,188	(1,161)	—	—	96,003

7. Segment Information (Continued)

(ii) As at and for the year ended 31 December 2017: (Continued)

The segment assets and liabilities as at 31 December 2017 are as follows:

	Engineering, consulting and licensing	EPC contracting	Construction	Equipment manufacturing	Elimination	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Assets						
Segment assets	6,311,409	22,191,356	15,217,033	943,927	(3,960,017)	40,703,708
Investment in joint arrangements	3,221	—	—	—	—	3,221
Investment in associates	108,490	—	15,298	—	—	123,788
Other unallocated assets						18,574,904
Total assets						59,405,621
Liabilities						
Segment liabilities	3,726,552	18,495,889	15,027,305	524,887	(3,960,017)	33,814,616
Other unallocated liabilities						—
Total liabilities						33,814,616

Analysis of information by geographical regions:

The following table lists out the information about geographical regions. The geographical regions of the sales to external customers are based on the locations where the services are rendered or the places where the goods are delivered. The specific non-current assets include property, plant and equipment, land use rights, intangible assets, investment in joint arrangements and investment in associates, which the geographical regions are based on the places where the assets are located for property, plant and equipment and land use rights, the places where they are allocated to for intangible assets and the places where the business are conducted for joint arrangements and associates.

Revenue

	2018	2017
	RMB'000	RMB'000
The PRC	**36,932,325**	21,946,224
Malaysia	**612,458**	4,412,290
Kuwait	**4,742,814**	4,031,916
Saudi Arabia	**2,331,551**	3,048,730
Other countries	**2,399,876**	2,769,563
	47,019,024	36,208,723

The customers accounted for more than 10% of the total revenue of the Group and revenue from them for the years ended 31 December 2018 and 2017, the details are as follows:

	2018	2017
	RMB'000	RMB'000
A fellow subsidiary and its subsidiaries	**17,011,814**	7,606,166

The revenue from the customers are derived from the segment of engineering, consulting and licensing, EPC contracting, construction and equipment manufacturing.

7. Segment Information (Continued)

Specified non-current assets

	2018	2017
	RMB'000	RMB'000
The PRC	5,916,635	6,246,415
Other countries	336,033	540,667
	6,252,668	6,787,082

Disaggregation of revenue from contracts with customer

The Group derives revenue from the transfer of goods and service at a point in time and over time in the following customers' segment for Engineering, consulting and licensing, EPC contracting, Construction and Equipment manufacturing segments:

	Engineering, consulting and licensing	EPC contracting	Construction	Equipment manufacturing	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Timing of revenue recognition					
– At a point in time	—	—	—	556,868	556,868
– Over time	2,924,408	29,135,814	14,401,934	—	46,462,156
Total revenue	2,924,408	29,135,814	14,401,934	556,868	47,019,024
Sales by products					
– Oil refining	1,063,394	11,661,811	4,720,783	303,103	17,749,091
– Petrochemicals	1,262,411	8,277,279	7,404,386	189,865	17,133,941
– New coal chemicals	239,328	7,632,677	905,766	63,856	8,841,627
– Energy-saving	42,857	51,990	62,361	—	157,208
– Other industries	316,418	1,512,057	1,308,638	44	3,137,157
Total revenue	2,924,408	29,135,814	14,401,934	556,868	47,019,024

8. Other Income

	2018	2017
	RMB'000	RMB'000
Operating lease rental income on property, plant and equipment	51,434	55,198
Income from write-back long outstanding payables	3,385	24,309
Government grants (Note)	69,481	80,906
Net foreign exchange gain	370,230	—
Others	64,684	24,305
	559,214	184,718

Note:
Government grants mainly represent industry-specific subsidies and employee settlement subsidies.

9. Other Losses - Net

	2018	2017
	RMB'000	RMB'000
Losses on disposal/write-off of property, plant and equipment	**(28,071)**	(2,060)
Loss on disposal of derivative financial liabilities	**(279,769)**	—
Loss on separation and transfer of "Water/electricity/gas supply and property management" (Note)	**(876,712)**	—
	(1,184,552)	(2,060)

Note:
Loss on separation and transfer of "Water/electricity/gas supply and property management" includes transfer of certain fixed assets (namely water/ electricity/gas supply and property management system) with carrying amounts of RMB188,823,000 (Notes 17 and 18) in employee living areas to local government and their designated entities at nil consideration pursuant to the notices from State Council and Ministry of Finance as set out in the Company's announcement dated 10 January 2019. The Group also incurred certain related maintenance and renovation expenses amounting to RMB632,376,000. Other maintenance and renovation expenses of approximately RMB178,532,000 was set off by related government subsidies of approximately RMB123,019,000.

10. Finance Income and Finance Expenses

	2018	2017
	RMB'000	RMB'000
Finance income		
Interest income from the ultimate holding company	**517,031**	440,926
Interest income from fellow subsidiaries	**80,275**	44,426
Bank interest income	**183,069**	115,574
	780,375	600,926
Finance expenses		
Interest expenses to a fellow subsidiary on balances wholly repayable within 5 years	**(21,397)**	(15,076)
Interest expenses on retirement and other supplementary benefit obligation	**(96,617)**	(75,356)
	(118,014)	(90,432)
	662,361	510,494

11. Profit before Taxation

Profit before taxation has been arrived at after charging/(crediting):

	2018 RMB'000	2017 RMB'000
Staff costs, including directors and supervisors emoluments (Note 16)	5,911,091	5,373,250
Retirement benefit plan contribution (including in the above mentioned staff costs)	758,036	703,367
Cost of goods sold	18,163,201	10,339,154
Subcontracting costs	16,473,821	12,281,668
Depreciation and amortisation		
– Property, plant and equipment	576,303	606,810
– Land use rights	59,831	61,364
– Intangible assets	76,941	78,317
Operating lease rentals		
– Property, plant and equipment	478,473	303,358
Provision for ECL/allowance, net	3,961	96,003
Rental income from property, plant and equipment after relevant expenses	(18,497)	(37,533)
Research and development costs	1,675,692	1,002,907
Losses on disposal/write-off of property, plant and equipment	28,071	2,060
Auditor's remuneration		
– Audit service	4,700	4,700
Exchange (gains)/losses, net	(370,230)	666,150
Cash-settled share-based payment	10,691	753
Loss on disposal of derivative financial liabilities	279,769	—

12. Income Tax Expense

	2018 RMB'000	2017 RMB'000
Current tax		
PRC enterprise income tax	376,647	344,656
Overseas enterprise income tax	87,834	113,373
(Over)/Under-provision for income tax in prior years	(25,405)	24,232
	439,076	482,261
Deferred tax		
Origination and reversal of temporary differences (Note 37)	2,630	22,608
Income tax expense	441,706	504,869

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the years ended 31 December 2018 and 2017 is 25%.

According to the normal statutory PRC corporate income tax and relevant rules, certain subsidiaries of the Company have been qualified as new high-tech enterprises which can enjoy 15% preferential tax rate in the related period, for the years ended 31 December 2018 and 2017, the majority of the members of the Group are subject to 15% income tax rate.

The tax of other countries is based on the nation's tax laws, where the relevant subsidiary of the Group operates in.

The difference between the actual income tax charge in the consolidated statement of profit or loss and other comprehensive income and the amounts which would result from applying the enacted tax rate to profit before income tax can be reconciled as follows:

	2018 RMB'000	2017 RMB'000
Profit before taxation	2,121,515	1,635,101
Taxation calculated at the statutory tax rate	530,379	408,775
Income tax effects of:		
Preferential income tax treatments of certain companies	(255,865)	(118,051)
Difference in overseas profits tax rates	(56,085)	(12,294)
Non-deductible expenses	291,137	218,797
Income not subject to tax	(52,736)	(25,517)
Unrecognised tax losses	10,281	13,327
Utilisation of previously unrecognised tax losses	—	(4,400)
(Over) /Under provision for income tax in prior years	(25,405)	24,232
Income tax expense	441,706	504,869
Effective income tax rate	20.8%	30.9%

13. Earnings Per Share

(a) Basic

The basic earnings per share for each of the years ended 31 December 2018 and 2017 is calculated based on the profit attributable to the equity holders of the Company and the weighted average number of ordinary shares in issue.

	2018	2017
Profit attributable to equity holders of the Company (RMB'000)	1,679,472	1,129,974
Weighted average number of ordinary shares in issue	4,428,000,000	4,428,000,000
Basic earnings per share (RMB)	0.38	0.26

(b) Diluted

As the Company had no dilutive shares for the each of the years ended 31 December 2018 and 2017, dilutive earnings per share for the years ended 31 December 2018 and 2017 are the same as basic earnings per share.

14. Dividends

Dividends represented dividends declared by the Company during each of years ended 31 December 2018 and 2017.

	2018	2017
	RMB'000	RMB'000
Interim dividends of RMB0.1 per ordinary share (2017: RMB0.056) (1)	442,800	247,968
Proposed final dividends of RMB0.124 per ordinary share (2017: RMB0.144) (2)	549,072	637,632

(1) Pursuant to a resolution passed at the board of Directors' meeting on 21 August 2018, the Directors authorised to declare the interim dividends for the year ended 31 December 2018 of RMB0.1 (2017: RMB0.056) per share totaling RMB442,800,000 (2017: RMB247,968,000). Interim dividends have been paid in October 2018.

(2) Pursuant to the board of Directors' meeting on 8 March 2019, the Directors recommended to declare the final dividends for the year ended 31 December 2018 of RMB0.124 per share totaling RMB549,072,000 (2017: RMB637,632,000). Such recommendation is to be approved by the shareholders at the Annual General Meeting. Dividends declared after the end of the reporting period are not recognised as a liability at the end of the reporting period.

15. Directors' and Supervisors' Emoluments and Five Highest Individuals' Emoluments

(a) Directors' and supervisors' emoluments

Details of directors and supervisors of the Company are as follows:

(i) For the year ended 31 December 2018

	Fee	Basic salaries, other allowances and benefits-in-kind	Discretionary bonus	Contributions to pension plans	Cash-settled share-based payment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Executive directors						
LU Dong	—	310	541	79	171	1,101
XIANG Wenwu	—	336	514	79	171	1,100
SUN Lili (1)	—	306	569	82	163	1,120
WU Derong (1) (4)	—	241	455	69	146	911
ZHOU Yingguan (6)	—	39	61	11	—	111
	—	1,232	2,140	320	651	4,343
Non-executive directors						
LING Yiqun (4)	—	—	—	—	—	—
LI Guoqing (4)	—	—	—	—	—	—
YU Baocai (5)	—	—	—	—	—	—
WU Wenxin (5)	—	—	—	—	—	—
	—	—	—	—	—	—
Independent non-executive directors						
HUI Chiu Chung, Stephen	183	—	—	—	—	183
JIN Yong	183	—	—	—	—	183
YE Zheng	183	—	—	—	—	183
	549	—	—	—	—	549
Supervisors						
ZHOU Yingguan (1) (6)	—	196	304	55	—	555
WANG Guoliang (1)	—	313	529	54	—	896
ZHU Fei (1)	—	280	442	79	—	801
JIANG Dejun (1)	—	285	300	74	—	659
XU Yijun (1)	—	269	449	50	—	768
WANG Cunting (1)	—	225	385	63	—	673
YE Wenbang (1)	—	241	455	69	130	895
WU Jibo (1)	—	184	421	64	122	791
WU Zhongxian (1)	—	223	406	63	—	692
	—	2,216	3,691	571	252	6,730
	549	3,448	5,831	891	903	11,622

15. Directors' and Supervisors' Emoluments and Five Highest Individuals' Emoluments (Continued)

(a) Directors' and supervisors' emoluments (Continued)

Details of directors and supervisors of the Company are as follows: (Continued)

(ii) For the year ended 31 December 2017

	Fee	Basic salaries, other allowances and benefits-in-kind	Discretionary bonus	Contributions to pension plans	Cash-settled share-based payment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Executive directors						
LU Dong	—	259	445	73	12	789
XIANG Wenwu	—	257	416	73	12	758
SUN Lili (1)	—	218	429	68	11	726
WU Derong (1)	—	193	379	68	10	650
YAN Shaochun (2)	—	—	—	—	—	—
	—	927	1,669	282	45	2,923
Non-executive directors						
LING Yiqun	—	—	—	—	—	—
LI Guoqing	—	—	—	—	—	—
	—	—	—	—	—	—
Independent non-executive directors						
HUI Chiu Chung, Stephen	180	—	—	—	—	180
JIN Yong	180	—	—	—	—	180
YE Zheng	180	—	—	—	—	180
	540	—	—	—	—	540
Supervisors						
ZHOU Yingguan (1)	—	186	337	58	—	581
WANG Guoliang (1)	—	251	424	120	—	795
ZHU Fei (1)	—	214	314	73	—	601
JIANG Dejun (1)	—	184	237	87	—	508
XU Yijun (1)	—	185	383	47	—	615
DENG Qunwei (3)	—	96	295	28	—	419
WANG Cunting (1)	—	171	119	58	—	348
	—	1,287	2,109	471	—	3,867
	540	2,214	3,778	753	45	7,330

15. Directors' and Supervisors' Emoluments and Five Highest Individuals' Emoluments (Continued)

(a) Directors' and supervisors' emoluments (Continued)

Details of directors and supervisors of the Company are as follows: (Continued)

Notes:
(1) These supervisors receive no emoluments for their services provided to the Company but they however receive emoluments from the Group for their services as directors and/or supervisors of a number of subsidiaries.
(2) Resigned on 21 February 2017.
(3) Resigned on 16 May 2017.
(4) Resigned on 26 October 2018.
(5) Appointed on 26 October 2018.
(6) Resigned as supervisor and appointed as executive director on 26 October 2018.

For the year ended 31 December 2018 and 2017, Mr. XIANG Wenwu was also the president of the Company and his emoluments disclosed above including his service as the president.

(b) Five highest paid individuals

The number of director or supervisor and non-director or supervisor included in the five highest paid individuals for the years ended 31 December 2018 and 2017 are set forth below:

	2018	2017
Director or supervisor	3	—
Non-director or supervisor	2	5
	5	5

The aggregate of the emoluments in respect of the remaining highest paid non-director or supervisor are as follows:

	2018	2017
	RMB'000	RMB'000
Basic salaries, other allowances and benefits-in-kind	347	976
Discretionary bonuses	1,601	2,999
Contributions to pensions plans	138	319
Cash-settled share-based payment	122	18
	2,208	4,312

The emoluments of the four (2017: five) highest paid individuals who are non-director or supervisor are within the following bands:

	2018	2017
HK$1,000,001 to HK$1,500,000	2	4
Nil to HK$1,000,000	—	1
	2	5

No emoluments were paid by the Group to any directors or the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office during the year (2017: nil).

16. Employment Benefits

	2018	2017
	RMB'000	RMB'000
Salaries, wages and bonuses	4,019,607	3,511,280
Retirement benefits [(1)]	617,947	584,470
Early retirement and supplemental pension benefit (Note33(b))		
– service cost	43,472	43,541
– interest cost	96,617	75,356
Immediate recognition of actuarial losses	7,255	6,076
Housing fund [(2)]	306,154	289,785
Welfare, medical and other expenses	809,348	861,989
Cash-settled shared-based payment	10,691	753
	5,911,091	5,373,250

Notes:

(1) **Retirement benefits**

The Group is required to make specific contributions to the state-managed retirement plan at a rate of 19% to 25% (2017: 19% to 25%) of the specified salaries of the PRC employees for the year ended 31 December 2018. The PRC government is responsible for the pension liability to the retired employees. The PRC employees of the Group are entitled to a monthly pension upon their retirements.

(2) **Housing fund**

In accordance with the PRC housing reform regulations, the Group is required to make contributions to the state-managed housing fund at rates of 12% of the specified salaries of the PRC employees. At the same time, the employees are required to make a contribution based on certain percentages. The employees are entitled to claim the entire sum of the fund under certain specified withdrawal circumstances. The Group has no further obligations for housing benefits beyond the contributions made above.

17. Property, Plant and Equipment

	Buildings and other facilities	Plant and machinery, transportation equipment and other equipment	Construction-in-progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017				
Cost	3,508,048	4,260,836	200,760	7,969,644
Accumulated depreciation and impairment	(1,237,282)	(2,731,903)	—	(3,969,185)
Net book amount	2,270,766	1,528,933	200,760	4,000,459
Year ended 31 December 2017				
Opening net book amount	2,270,766	1,528,933	200,760	4,000,459
Transfers	35,717	253,367	(289,084)	—
Transfers from land use rights	36,876	—	—	36,876
Additions	14,932	163,435	278,370	456,737
Depreciation	(131,903)	(474,907)	—	(606,810)
Disposals/write-off	(20,504)	(10,906)	—	(31,410)
Closing net book amount	2,205,884	1,459,922	190,046	3,855,852
At 31 December 2017 and 1 January 2018				
Cost	3,570,953	4,494,076	190,046	8,255,075
Accumulated depreciation and impairment	(1,365,069)	(3,034,154)	—	(4,399,223)
Net book amount	2,205,884	1,459,922	190,046	3,855,852
Year ended 31 December 2018				
Opening net book amount	2,205,884	1,459,922	190,046	3,855,852
Transfers	14,926	206,963	(221,889)	—
Additions	18,394	32,228	333,377	383,999
Depreciation	(128,933)	(447,370)	—	(576,303)
Disposals/write-off (note)	(100,242)	(66,832)	—	(167,074)
Closing net book amount	2,010,029	1,184,911	301,534	3,496,474
At 31 December 2018				
Cost	3,441,090	4,389,607	301,534	8,132,231
Accumulated depreciation and impairment	(1,431,061)	(3,204,696)	—	(4,635,757)
Net book amount	2,010,029	1,184,911	301,534	3,496,474

17. Property, Plant and Equipment (Continued)

Depreciation expense recognised is analysed as follows:

	2018 RMB'000	2017 RMB'000
Cost of sales	550,354	568,756
Selling and marketing expenses	1,915	1,977
Administrative expenses	24,034	36,077
	576,303	606,810

Note: Buildings and other facilities amounted to approximately RMB110,666,000 have been transferred under separation and transfer "Water/electricity/gas supply and property management".

18. Land Use Rights

	2018 RMB'000	2017 RMB'000
Beginning of the year	2,580,781	2,679,021
Amortisation	(59,831)	(61,364)
Disposal (Note)	(78,157)	—
Transfers	—	(36,876)
End of the year	2,442,793	2,580,781

Note: Land use right amounted to approximately RMB78,157,000 have been transferred under separation and transfer "Water/electricity/gas supply and property management".

Land use rights represent prepayments made by the Group for the land use rights located in the PRC which are held on leases between 20 years to 50 years.

Amortisation recognised is analysed as follows:

	2018 RMB'000	2017 RMB'000
Cost of sales	38,994	36,951
Selling and marketing expenses	—	3
Administrative expenses	20,837	24,410
	59,831	61,364

19. Intangible Assets

	Patent	Computer software	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2017			
Cost	479,882	321,627	801,509
Accumulated amortisation	(272,701)	(257,214)	(529,915)
Net book amount	207,181	64,413	271,594
Year ended 31 December 2017			
Opening net book amount	207,181	64,413	271,594
Additions	—	30,163	30,163
Amortisation	(52,980)	(25,337)	(78,317)
Closing net book amount	154,201	69,239	223,440
At 31 December 2017 and 1 January 2018			
Cost	479,882	351,790	831,672
Accumulated amortisation	(325,681)	(282,551)	(608,232)
Net book amount	154,201	69,239	223,440
Year ended 31 December 2018			
Opening net book amount	154,201	69,239	223,440
Additions	—	17,582	17,582
Amortisation	(52,981)	(23,960)	(76,941)
Closing net book amount	101,220	62,861	164,081
At 31 December 2018			
Cost	479,882	369,372	849,254
Accumulated amortisation	(378,662)	(306,511)	(685,173)
Net book amount	101,220	62,861	164,081

Amortisation recognised is analysed as follows:

	2018	2017
	RMB'000	RMB'000
Cost of sales	71,805	72,506
Selling and marketing expenses	3	3
Administrative expenses	5,133	5,808
	76,941	78,317

20. Investment in Joint Arrangements, Associates and Subsidiaries

(a) Investment in joint arrangements

	2018	2017
	RMB'000	RMB'000
Joint ventures		
Beginning of the year	3,221	4,593
Disposal (1)	(1,309)	—
Share of total comprehensive expense	(46)	(1,372)
End of the year	1,866	3,221

The Group's joint ventures, all of which are unlisted and established in a form of limited company, are as follows:

Name	Establishment/ Place of incorporation	Registered and fully paid capital	Indirect effective interest held	Principal activities and place of operations
		RMB'000		
Hainan Great Wall Machinery Engineering Co., Ltd. (海南長城機械工程有限公司)	The PRC	3,000 (2017: 3,000)	50%	Technical development, sales of equipment/ The PRC
Lanzhou Great Wall Touping Machinery Technology Development Co., Ltd. (1) (蘭州長城透平機械技術開發成套公司)	The PRC	— (2017: 3,000)	50%	Technical development, equipment manufacturing/ The PRC

The above joint ventures are accounted for by using the equity method.

(1) Lanzhou Great Wall Touping Machinery Technology Development Co., Ltd. (蘭州長城透平機械技術開發成套公司) deregistered on 16 March 2018.

20. Investment in Joint Arrangements, Associates and Subsidiaries (Continued)

(a) Investment in joint arrangements (Continued)

The Group's share of the results of its joint ventures (in aggregate for all individually insignificant joint venture), its aggregated assets and liabilities, are as follows:

	2018	2017
	RMB'000	RMB'000
Current assets	27,779	64,057
Non-current assets	1,497	2,597
Total assets	29,276	66,654
Current liabilities	(25,544)	(60,211)
Total liabilities	(25,544)	(60,211)
Equity	3,732	6,443
Share of equity by the Group (50%) (2017: 50%)	1,866	3,221

	2018	2017
	RMB'000	RMB'000
Revenue	419	41,565
Loss and total comprehensive income/(expense) for the year	(92)	(2,744)
Share of total comprehensive income/(expense) (50%) (2017:50%)	(46)	(1,372)

There are no material contingent liabilities and commitments relating to the Group's interests in the joint ventures and no material contingent liabilities and commitments of the joint ventures themselves.

(b) Investment in associates

	2018	2017
	RMB'000	RMB'000
Beginning of the year	123,788	137,876
Share of total comprehensive income	23,666	13,712
Dividend distribution	—	(27,800)
End of the year	147,454	123,788

20. Investment in Joint Arrangements, Associates and Subsidiaries (Continued)

(b) Investment in associates (Continued)

The Group's associates, all of which are unlisted and established in a form of limited company, are as follows:

Name	Establishment/ Place of incorporation	Registered and fully paid capital	Indirect effective interest held	Principal activities and place of operations
		RMB'000		
China Petrochemical Technology Co., Ltd. (中國石油化工科技開發有限公司) (1)	The PRC	50,000 (2017: 50,000)	35.00%	Technical development, technical service/ The PRC
Huizhou Tianxin Petrochemical Engineering Co., Ltd. (惠州天鑫石化工程有限公司) (2)	The PRC	15,000 (2017: 15,000)	40.00%	Construction contracting/ The PRC
Shanghai KSD Bulk Solids Engineering Co., Ltd.(上海金申德粉體工程有限公司) (3)	The PRC	5,500 (2017: 5,500)	36.36%	Powder engineering services/The PRC

The above associates are accounted for by using the equity method.

(1) The Group's share of the results of China Petrochemical Technology Co., Ltd., its aggregated assets and liabilities, are as follows:

	2018	2017
	RMB'000	RMB'000
Current assets	674,852	603,891
Non-current assets	38,892	30,379
Total assets	713,744	634,270
Current liabilities	(397,093)	(360,774)
Non-current liabilities	(17)	(16)
Total liabilities	(397,110)	(360,790)
Equity attributable to equity holders	290,574	256,424
Non-controlling interests	26,060	17,056
	316,634	273,480
Share of equity by the Group (35%) (2017: 35%)	101,701	89,748

	2018	2017
	RMB'000	RMB'000
Revenue	376,367	201,462
Profit and total comprehensive income for the year attributable to equity holders	34,149	21,860
Profit and total comprehensive income for the year attributable to non-controlling interest holders	9,005	3,581
Share of total comprehensive income (35%) (2017: 35%)	11,952	7,651

For the year ended 31 December 2018, China Petrochemical Technology Co., Ltd. did not declare dividends (2017: RMB7,000,000).

20. Investment in Joint Arrangements, Associates and Subsidiaries (Continued)

(b) Investment in associates (Continued)

(2) The Group's share of the results of Huizhou Tianxin Petrochemical Engineering Co., Ltd., its aggregated assets and liabilities, are as follows:

	2018	2017
	RMB'000	RMB'000
Current assets	86,158	87,719
Non-current assets	47,212	42,135
Total assets	133,370	129,854
Current liabilities	(71,105)	(78,862)
Total liabilities	(71,105)	(78,862)
Equity	62,265	50,992
Share of equity by the Group (40%) (2017: 40%)	24,906	20,397

	2018	2017
	RMB'000	RMB'000
Revenue	143,037	105,266
Profit and total comprehensive income for the year	11,275	7,992
Share of total comprehensive income (40%) (2017: 40%)	4,510	3,197

For the year ended 31 December 2018, Huizhou Tianxin Petrochemical Engineering Co., Ltd did not declare dividends (2017: RMB20,800,000).

(3) The Group's share of the results of Shanghai KSD Bulk Solids Engineering Co., Ltd., its aggregated assets and liabilities, are as follows:

	2018	2017
	RMB'000	RMB'000
Current assets	132,972	149,042
Non-current assets	1,648	715
Total assets	134,620	149,757
Current liabilities	(77,281)	(112,231)
Non-current liabilities	(4)	(4)
Total liabilities	(77,285)	(112,235)
Equity	57,335	37,522
Share of equity by the Group (36.36%) (2017: 36.36%)	20,847	13,643

	2018	2017
	RMB'000	RMB'000
Revenue	60,298	50,115
Profit and total comprehensive income for the year	19,813	7,877
Share of total comprehensive income (36.36%) (2017: 36.36%)	7,204	2,864

There are no material contingent liabilities and commitments relating to the Group's interests in the associates and no material contingent liabilities and commitments of the associates themselves.

21. Available-for-Sale Financial Assets/Financial Assets at Fair Value through Other Comprehensive Income

Available-for-sale financial assets were reclassified to financial assets at FVTOCI (non-recycling) upon the initial application of IFRS 9 at 1 January 2018, see Note 3 in details.

	2018 RMB'000	2017 RMB'000
Financial assets at FVOCI (non-recycling)	680	—
Available-for-sale financial assets	—	2,750
	680	2,750

Available-for-sale financial assets/financial assets at FVTOCI include the following:

	2018 RMB'000	2017 RMB'000
Unlisted securities		
Equity securities - PRC	680	2,750

The Group designated its investment in unlisted investment as FVTOCI (non-recycling), as the investment is held for strategic purpose.

Unlisted equity securities are valued at fair value based on their asset values. Please refer to Note 4.3 for further explanation.

All available-for-sale financial assets/financial assets at FVTOCI are denominated in RMB.

22. Notes and Trade Receivables

	2018 RMB'000	2017 RMB'000
Trade receivables		
Fellow subsidiaries	2,293,202	2,285,142
Joint ventures of fellow subsidiaries	662,743	629,559
Associates of fellow subsidiaries	215,846	1,161,406
Joint ventures	2,589	1,280
Associates	871	—
Third parties	5,638,274	5,755,232
	8,813,525	9,832,619
Less: ECL allowance/Provision for impairment	(1,313,283)	(1,171,218)
Trade receivables - net	7,500,242	8,661,401
Notes receivables	2,226,187	1,015,043
Notes and trade receivables - net	9,726,429	9,676,444

The carrying amounts of the Group's notes and trade receivables as at 31 December 2018 and 2017 approximate their fair values.

22. Notes and Trade Receivables (Continued)

All notes receivables of the Group are bank's acceptance bills and commercial's acceptance bills and usually collected within six months from the date of issue.

The Group usually provide customers with a credit term between 15 and 180 days. For the settlement of trade receivables from provision of services, the Group usually reaches an agreement on the term of each payment with the customer by taking into account of factors such as, among other things, the credit history of the customer, its liquidity position and the Group's working capital needs, which varies on a case-by-case basis that requires the judgment and experience of the management. The Group does not hold any collateral as security.

Ageing analysis of notes and trade receivables, net of ECL allowance, by invoice date is as follows:

	2018	2017
	RMB'000	RMB'000
Within 1 year	8,621,584	7,592,168
Between 1 and 2 years	703,028	1,336,029
Between 2 and 3 years	264,769	520,404
Between 3 and 4 years	52,663	180,232
Between 4 and 5 years	46,326	35,881
Over 5 years	38,059	11,730
	9,726,429	9,676,444

The movements of ECL allowance (2017: provision for impairment) on trade receivables are as follows:

	2018	2017
	RMB'000	RMB'000
Balance at the beginning of the year calculated under IAS 39 and IFRS 9	1,171,218	882,625
ECL allowance/Provisions	426,209	514,830
Receivables written off as uncollectible	(1,257)	(5,810)
Reversal	(282,887)	(220,427)
Balance at the end of the year	1,313,283	1,171,218

The carrying amounts of the Group's notes and trade receivables are denominated in the following currencies:

	2018	2017
	RMB'000	RMB'000
RMB	8,437,325	8,287,319
USD	490,435	372,691
SAR	540,037	1,006,002
Others	258,632	10,432
	9,726,429	9,676,444

23. Prepayments and other Receivables

	2018	2017
	RMB'000	RMB'000
Prepayments		
Prepayments for construction and materials:		
– Fellow subsidiaries	1,012,061	117,339
– Associates	8,685	2,422
– Associates of fellow subsidiaries	1,902	—
– Joint ventures of fellow subsidiaries	385	385
Prepayments for construction	466,260	426,949
Prepayments for materials and equipment	1,679,947	1,061,757
Prepayments for labour costs	220,594	90,916
Prepayments for rent	2,044	766
Others	58,624	31,352
	3,450,502	1,731,886
Other receivables		
Amounts due from fellow subsidiaries (1)	223,156	119,405
Amounts due from joint ventures of fellow subsidiaries (1)	191,606	22,588
Amounts due from associates of fellow subsidiaries (1)	473,386	21,014
Dividends receivable	17,200	17,200
Interests receivable	34,443	46,273
Petty cash funds	15,651	22,865
Retention deposits (2)	—	1,823,187
Other guarantee deposits and deposits	122,337	115,553
Payment in advance	85,879	156,984
Maintenance funds	77,093	79,024
Value-added tax credit	234,136	102,768
Prepaid income tax	61,295	8,089
Value-added tax to be certified	6,154	14,708
Others	92,303	110,112
	1,634,639	2,659,770
Less: ECL allowance/Provision for impairment	(264,672)	(421,322)
Prepayments and other receivables - net	4,820,469	3,970,334

(1) The amounts due from related parties are unsecured, interest free and repayable on demand.
(2) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018. Upon the adoption of IFRS 15, "Retention deposits" is included in "Contract assets" and disclosed in note 25(a).

The carrying amounts of the Group's prepayments and other receivables as at 31 December 2018 and 2017 approximate their fair values.

23. Prepayments and other Receivables (Continued)

The movements of ECL allowance (2017: provision for impairment) on other receivables are as follows:

	2018	2017
	RMB'000	RMB'000
Balance at the beginning of the year calculated under IAS 39 and IFRS 9	421,322	619,722
ECL allowance/Provisions	171,197	177,772
Reversal	(327,847)	(376,172)
Balance at the end of the year	264,672	421,322

24. Contract Work-In-Progress

	2018	2017
	RMB'000	RMB'000
Contract cost incurred plus recognised profit less recognised losses	—	181,125,877
Less: Progress billings	—	(184,566,221)
Contract work-in-progress	—	(3,440,344)
Representing:		
Amounts due from customers for contract work	—	6,053,340
Less: Provision for impairment	—	—
Net amounts due from customers for contract work (2)	—	6,053,340
Amounts due to customers for contract work (3)	—	(9,493,684)
	—	(3,440,344)

Notes:
(1) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018.
(2) Upon the adoption of IFRS 15, "Amounts due from customers for contract work" is included in "Contract assets" and disclosed in note 25(a).
(3) Upon the adoption of IFRS 15, "Amounts due to customers for contract work" is included in "Contract liabilities" and disclosed in note 25(b).

25. Contract Assets and Contract Liabilities

(a) Contract assets

	2018	2017
	RMB'000	RMB'000
Contract assets arising from construction contracts	11,720,597	—

Notes:
The Group has initially applied IFRS 9 and IFRS 15 using the cumulative effect transition method and adjusted the opening balances as at 1 January 2018.

Upon the adoption of IFRS 15:

(1) the retention deposits, for which the Group's entitlement to the consideration was conditional on achieving certain milestones or satisfactory completion of the retention period, were reclassified from "Prepayments and other receivables" to contract assets;

(2) amounts previously included as "Amounts due from customers for contract work" under "Contract Work-in-progress" were reclassified to contract assets; and

(3) the provision for lifetime ECL on contract assets is RMB18,056,000.

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

The Group's construction contracts include payment schedules which require progress payments over the construction period once certain specified milestones are reached. The Group requires customers to pay deposits, normally 10% of total contract sum, as part of its credit risk management policies. The Group also agrees to have 1 to 2 years retention period for, normally 5% of the contract value. This amount is included in contract assets until the end of retention period as the Group's entitlement to this final payment is conditional on the Group's satisfactory work.

The amount of contract assets that is expected to be recovered after more than one year is RMB605,747,000 (2017: RMB435,604,000), all of which relates to retentions.

(b) Contract liabilities

	2018	2017
	RMB'000	RMB'000
Contract liabilities arising from construction contracts	9,968,594	—

Notes:
The Group has initially applied IFRS 9 and IFRS 15 using the cumulative effect transition method and adjusted the opening balances as at 1 January 2018.

Upon the adoption of IFRS 15, amounts previously included as "Amounts due to customers for contract work" under "Contract Work-in-progress" were reclassified to contract liabilities.

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 balance of contract liabilities as at 1 January 2018 is RMB15,145,599,000, in which RMB13,056,878,000 was recognised as revenue during the year.

Unsatisfied performance obligation:

The group has signed construction contracts with a number of clients to provide construction services for a certain period of time in the future. These contracts normally constitute a single performance obligation as a whole. As at 31 December 2018, part of the construction projects of the Group was still in the process, and the total transaction price apportioned to the unsatisfied performance obligation was RMB94,935,000,000, the amount of which was related to the progress of the performance of each construction contract, and will be recognised as revenue in accordance with the percentage of work performed in the future.

26. Inventories

	2018 RMB'000	2017 RMB'000
Raw materials	182,882	352,410
Turnover materials	188,759	190,879
Goods in transit	29,280	38,968
	400,921	582,257

As at 31 December 2018 and 2017, no provision for impairment on inventories of the Group has been made.

For the years ended 31 December 2018 and 2017, the cost of inventories recognised as expense and included in cost of sales amounted to RMB18,163,201,000 and RMB10,339,154,000 respectively.

27. Loans Due from the Ultimate Holding Company

Loans due from the ultimate holding company are unsecured, repayable within one year and interest bearings as follows:

	2018	2017
Loans due from the ultimate holding company	3.00% - 3.60%	3.00% - 3.60%

28. Restricted Cash

	2018 RMB'000	2017 RMB'000
Restricted cash		
– RMB	29,375	15,228
– AED	93	89
– KZT	—	770
	29,468	16,087

Restricted cash mainly represented bank deposits for guarantees and deposit for farmers' salaries.

As at 31 December 2018 and 2017, the weighted average effective interest rates per annum on restricted cash with maturities ranging from one to twelve months was determined in accordance with the interest rate per annum of bank current account.

The maximum exposure to credit risk approximates to carrying amounts of the Group's restricted cash at the end of the respective reporting periods.

29. Time Deposits

	2018	2017
	RMB'000	RMB'000
Time deposits with initial term over three months:		
Time deposits in banks	575,225	3,063,855
Time deposits in fellow subsidiaries	1,567,181	1,341,845
	2,142,406	4,405,700

	2018	2017
	RMB'000	RMB'000
Denominated in:		
– RMB	771,050	400,920
– USD	1,173,607	3,844,070
– MYR	197,749	160,710
	2,142,406	4,405,700

The fellow subsidiaries are Sinopec Century Bright Capital Investment Limited and Sinopec Finance Co., Ltd..

The effective interest rates per annum on time deposits, with maturities of half year to three years (2017: half year to three years), are approximately 1.30 % to 4.30% as at 31 December 2018 (2017: 1.20% to 7.50%).

The maximum exposure to credit risk approximates to carrying amounts of the Group's time deposits at the end of the respective reporting periods.

30. Cash and Cash Equivalents

	2018	2017
	RMB'000	RMB'000 (Restated)
Cash at bank and in hand		
– less than three months time deposits	5,925,938	4,395,468
– cash deposits	3,360,173	3,009,067
	9,286,111	7,404,535
Deposits in fellow subsidiaries		
– less than three months time deposits	571,942	320,788
– cash deposits	7,139,610	3,935,337
	7,711,552	4,256,125
	16,997,663	11,660,660

30. Cash and Cash Equivalents (Continued)

	2018 RMB'000	2017 RMB'000
Denominated in:		
– RMB	**8,262,906**	3,790,742
– USD	**6,911,596**	6,441,677
– SAR	**263,643**	255,748
– EUR	**464,491**	238,388
– KZT	**2,267**	11,959
– THB	**48,716**	13,952
– MYR	**208,736**	484,735
– Others	**835,308**	423,459
	16,997,663	11,660,660

The fellow subsidiaries are Sinopec Finance Co., Ltd. and Sinopec Century Bright Capital Investment Limited.

As at 31 December 2018 and 2017, the weighted average effective interest rates per annum on cash at bank are determined in accordance with the interest rate per annum of bank current account.

The effective interest rates per annum on deposits less than three months, with maturities of one to three months (2017: one to three months), are approximately 1.50% to 2.79% as at 31 December 2018 (2017: 1.05% to 7.50%).

The maximum exposure to credit risk approximates the carrying amounts of cash and cash equivalents at the end of the respective reporting periods.

31. Share Capital

	2018		2017	
	Number of shares	Share capital RMB'000	Number of shares	Share capital RMB'000
Registered, issued and fully paid				
– Domestic shares of RMB1.00 each (1)	**2,967,200,000**	**2,967,200**	2,967,200,000	2,967,200
– H Shares of RMB1.00 each	**1,460,800,000**	**1,460,800**	1,460,800,000	1,460,800
	4,428,000,000	**4,428,000**	4,428,000,000	4,428,000

(1) The 2,967,200,000 domestic shares comprise as follows:
(a) 2,907,856,000 shares are held by Sinopec Group; and
(b) 59,344,000 shares are held by SAMC (a fellow subsidiary).

32. The Statement of Financial Position, the Statement of Changes in Equity and Reserves of the Company

(i) The statement of financial position of the Company

	2018	2017
	RMB'000	RMB'000
ASSETS		
Non-current assets		
Property, plant and equipment	280,426	263,014
Land use rights	55,755	57,466
Intangible assets	11,634	13,657
Investment in subsidiaries	7,363,731	7,322,515
Deferred income tax assets	13,775	39,278
Total non-current assets	7,725,321	7,695,930
Current assets		
Inventories	51,107	115,777
Trade receivables	114,392	325,306
Prepayments and other receivables	968,593	1,916,886
Amounts due from customers for contract work	—	484,945
Contract assets	785,275	—
Loans due from the ultimate holding company	18,000,000	15,500,000
Restricted cash	94	769
Time deposits	908,314	2,977,355
Cash and cash equivalents	13,333,801	7,635,361
Total current assets	34,161,576	28,956,399
Total assets	41,886,897	36,652,329

32. The Statement of Financial Position, the Statement of Changes in Equity and Reserves of the Company (Continued)

(i) The statement of financial position of the Company (Continued)

	2018 RMB'000	2017 RMB'000
EQUITY		
Share capital	4,428,000	4,428,000
Reserves	13,505,047	14,129,918
Total equity	17,933,047	18,557,918
LIABILITIES		
Non-current liabilities		
Retirement and other supplemental benefit obligations	595	510
Total non-current liabilities	595	510
Current liabilities		
Trade payables	1,223,968	717,470
Other payables	21,802,921	15,725,799
Amounts due to customers for contract work	—	1,131,572
Contract liabilities	449,609	—
Loans due to a fellow subsidiary	384,339	431,257
Current income tax liabilities	92,418	87,803
Total current liabilities	23,953,255	18,093,901
Total liabilities	23,953,850	18,094,411
Total equity and liabilities	41,886,897	36,652,329
Net current assets	10,208,321	10,862,498
Total assets less current liabilities	17,933,642	18,558,428

Approved and authorised for issue by the board of directors on 8 March 2018.

Chairman of the Board: **YU Baocai** Director, President: **XIANG Wenwu** Chief Financial Officer: **JIA Yiqun**

32. The Statement of Financial Position, the Statement of Changes in Equity and Reserves of the Company (Continued)

(ii) The statement of changes in equity of the Company

	Share capital	Capital reserve	Statutory surplus reserve	Retained earnings	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017	4,428,000	11,217,175	729,018	1,367,787	17,741,980
Profit for the year	—	—	—	1,428,690	1,428,690
Other comprehensive income:					
Defined benefits obligation revaluation of actuarial gain and loss - gross	—	—	—	(13,492)	(13,492)
Defined benefits obligation revaluation of actuarial gain and loss - tax	—	—	—	3,373	3,373
Total comprehensive income	—	—	—	1,418,571	1,418,571
Transactions with owners:					
2016 final dividend	—	—	—	(345,384)	(345,384)
2017 interim dividend (Note 14)	—	—	—	(247,968)	(247,968)
Transfer to statutory surplus reserve	—	—	142,869	(142,869)	—
Acquisition of Sinopec Energy-Saving Company	—	(9,281)	—	—	(9,281)
Total transactions with owners	—	(9,281)	142,869	(736,221)	(602,633)
At 31 December 2017 and 1 January 2018	4,428,000	11,207,894	871,887	2,050,137	18,557,918
Profit for the year	—	—	—	440,413	440,413
Other comprehensive income:					
Defined benefits obligation revaluation of actuarial gain and loss - gross	—	—	—	20,198	20,198
Defined benefits obligation revaluation of actuarial gain and loss - tax	—	—	—	(5,050)	(5,050)
Total comprehensive income	—	—	—	455,561	455,561
Transactions with owners:					
2017 final dividend (Note 14)	—	—	—	(637,632)	(637,632)
2018 interim dividend (Note 14)	—	—	—	(442,800)	(442,800)
Transfer to statutory surplus reserve	—	—	126,161	(126,161)	—
Total transactions with owners	—	—	126,161	(1,206,593)	(1,080,432)
At 31 December 2018	4,428,000	11,207,894	998,048	1,299,105	17,933,047

32. The Statement of Financial Position, the Statement of Changes in Equity and Reserves of the Company (Continued)

(iii) Distributable profits

The distributable profits of the Company are as follows:

	2018	2017
	RMB'000	RMB'000
Distributable profits	**1,299,105**	2,050,137

(iv) Statutory surplus reserve

In accordance with the relevant laws and regulations of the PRC and the articles of association of the Company, it is required to appropriate 10% of its net profit determined in accordance with China Accounting Standards for Enterprises issued by the Ministry of Finance of PRC, after offsetting any prior years' losses, to the statutory surplus reserve. When the balance of such a reserve reaches 50% of the respective companies registered capital, any further appropriation is optional. The reserve must be made before distribution of dividends to shareholders.

The statutory surplus reserve can be used to offset prior years' losses, if any, and may be converted into share capital by issuing new shares to shareholders in proportion to their existing shareholding or by increasing the par value of the shares currently held by them, provided that the remaining balance of the reserve after such an issue is not less than 25% of registered capital. The statutory surplus reserve is non-distributable.

(v) Capital reserve

Capital reserve arising from event-driven revaluation represented reserve recognised due to the revaluation arising from the Reorganisation, being the excess of fair value over carrying value net of the deferred tax liabilities. Apart from the above mentioned event-driven revaluation, capital reserve included transactions with holding company such as assets transferred from/to Sinopec Group and also the share premium account.

(vi) Specific reserve

Pursuant to certain regulations issued by the State Administration of Work Safety of the PRC, the Group is required to set aside an amount to a safety fund for its engineering and construction contracting business. The fund can be used for improvements of safety at the worksite, and is not available for distribution to shareholders. Upon incurring qualifying safety expenditures, an equivalent amount is transferred from safety fund to retained earnings.

(vii) Exchange translation reserve

Exchange translation reserve represents exchange differences arising on the translation of financial statements of foreign operations and is treated according to accounting policies Note 3.4.

33. Retirement and Other Supplemental Benefit Obligations

(a) State-managed retirement plan

For the year ended 31 December 2018, the Chinese employees of the Group participate in employee social security plans organised and administrated by the PRC government authority. The PRC companies are required to contribute from 19% to 25% (2017: 19% to 25%), depending on the applicable legal regulations, of salaries, wages and bonuses to the state-managed retirement plans. The obligation of these PRC companies with respect to the state-managed retirement plans is to make the specified contributions (Note 16(1)).

The total costs charged to the consolidated statement of comprehensive income during the years ended 31 December 2018 and 2017 are as follows:

	2018	2017
	RMB'000	RMB'000
Contributions to state-managed retirement plan	617,947	584,470

(b) Group employee retirement benefit plans

The Group has implemented a retirement benefit plan to employees in the PRC who were retired on or before 31 December 2012. Such supplementary pension subsidies are considered to be defined benefit plans as the Group is obligated to provide post-employment benefits to these employees.

According to the plans, such employees after retirement can enjoy retirement pension, welfare allowance, part of medical expenses claim, living expenses and insurance and housing fund and other benefits. The employees' lifetime is guaranteed by the plans.

The exposure to actuarial risks of the Group's retirement benefit plans include: discount rate risk, benefit growth rate risk.

The Group is not obligated to provide post-employment benefits to incumbent employees.

The most recent actuarial valuation as at 31 December 2018 was performed by an independent qualified actuarial firm: Towers Watson. The present value, related current service cost and past service cost of the Group's retirement benefit plan obligation are prepared by qualified actuary using the projected unit credit actuarial cost method.

(i) Discount rates adopted (per annum):

	2018	2017
Retirement with honors benefit plan	3.00%	3.75%
Retirement benefit plan	3.25%	4.00%
Early retirement benefit plan	3.00%	3.75%

(ii) Benefit growth rates (per annum):

	2018	2017
Retirement with honors benefit plan	2.60%	2.60%
Retirement benefit plan	2.60%	2.40%
Early retirement benefit plan	1.80%	1.70%

33. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

(iii) Duration:

	2018	2017
Retirement with honors benefit plan	8.0 years	8.0 years
Retirement benefit plan	15.0 years	16.0 years
Early retirement benefit plan	4.0 years	4.0 years

The below sensitivity analysis details how the Group's retirement benefit plan obligation as at the reporting date would have increased/(decreased) as a result of 0.25% reasonably possible increase or decrease assessed by management in each of the significant actuarial assumptions:

	As at 31 December 2018 Increase/(decrease) in retirement benefit plan obligation		As at 31 December 2017 Increase/(decrease) in retirement benefit plan obligation	
	Increase in assumption	Decrease in assumption	Increase in assumption	Decrease in assumption
	RMB'000	RMB'000	RMB'000	RMB'000
Discount rates	(60,314)	63,165	(55,608)	58,713
Benefit growth rates	62,910	(60,838)	57,933	(56,595)

The above sensitivity analysis is based on a change in an actuarial assumption while holding all other actuarial assumptions constant. Also, it is based on the assumption that changes in actuarial assumptions are not correlated.

(iv) Mortality: Average life expectancy of residents in the PRC.

(v) Benefit costs paid to the retirees are assumed to continue until the death of the retirees.

33. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

The total costs of retirement benefit plans in the consolidated statement of comprehensive income are as follows:

	Retirement with honors benefit plan	Retirement benefit plan	Early retirement benefit plan	Total
	RMB'000	RMB'000	RMB'000	RMB'000
For the year ended 31 December 2017				
Service cost:				
Past service cost	—	—	43,541	43,541
Net interest expenses	1,998	69,187	4,171	75,356
Immediate recognition of actuarial losses	—	—	6,076	6,076
Benefit cost recognised in profit or loss	1,998	69,187	53,788	124,973
Revaluation of net benefit obligation liabilities				
Actuarial revaluation of economic assumptions change	(4,029)	(319,079)	—	(323,108)
Actuarial revaluation of demographic assumptions change	8,895	313,618	—	322,513
Actuarial revaluation of other assumptions change	7,434	4,025	—	11,459
Benefit cost recognised in other comprehensive income	12,300	(1,436)	—	10,864
Total benefit cost recognised in the consolidated statement of comprehensive income	**14,298**	**67,751**	**53,788**	**135,837**
At 31 December 2018 and 1 January 2018				
Service cost:				
Past service cost	**—**	**—**	**43,472**	**43,472**
Net interest expenses	**2,661**	**88,290**	**5,666**	**96,617**
Immediate recognition of actuarial losses	**—**	**—**	**7,255**	**7,255**
Benefit cost recognised in profit or loss	**2,661**	**88,290**	**56,393**	**147,344**
Revaluation of net benefit obligation liabilities				
Actuarial revaluation of economic assumptions change	**2,518**	**209,676**	**—**	**212,194**
Actuarial revaluation of demographic assumptions change	**—**	**—**	**—**	**—**
Actuarial revaluation of other assumptions change	**5,308**	**(26,913)**	**—**	**(21,605)**
Benefit cost recognised in other comprehensive income	**7,826**	**182,763**	**—**	**190,589**
Total benefit cost recognised in the consolidated statement of comprehensive income	**10,487**	**271,053**	**56,393**	**337,933**

The Group's benefit plans do not include incumbent employees. No current service cost of each benefit plan incurred during each financial year. Meanwhile, the Group's benefit plans do not provide reserve of plan assets, therefore, there is no reserve of earnings from plan assets during each financial year.

Service cost and net interest expenses are recognised in employment benefits, part of the administrative expenses and finance expenses of the consolidated statement of comprehensive income. Revaluation of net liabilities of benefit obligation is recognised as other comprehensive income in the consolidated statement of profit or loss and other comprehensive income.

33. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

As at the end of each reporting period, no assets reserve is under the Group's benefit plans. The net liabilities of retirement benefit plan obligations are recognised in the consolidated statement of financial position as follows:

	2018	2017
	RMB'000	RMB'000
Net liabilities of retirement benefit plan obligation	2,636,815	2,536,615

The movement of retirement benefit plan obligation as follows:

	Retirement with honors benefit plan	Retirement benefit plan	Early retirement benefit plan	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017	78,666	2,385,419	173,399	2,637,484
Past service cost	—	—	43,541	43,541
Net interest expenses	1,998	69,187	4,171	75,356
Immediate recognition of actuarial losses	—	—	6,076	6,076
Revaluation gain/(loss):				
Actuarial revaluation of economic assumptions change	(4,029)	(319,079)	—	(323,108)
Actuarial revaluation of demographic assumptions change	8,895	313,618	—	322,513
Actuarial revaluation of other assumptions change	7,434	4,025	—	11,459
Direct benefit paid by the Group	(16,523)	(166,668)	(53,515)	(236,706)
At 31 December 2017 and 1 January 2018	76,441	2,286,502	173,672	2,536,615
Past service cost	—	—	43,472	43,472
Net interest expenses	2,661	88,290	5,666	96,617
Immediate recognition of actuarial losses	—	—	7,255	7,255
Revaluation gain/(loss):				
Actuarial revaluation of economic assumptions change	2,518	209,676	—	212,194
Actuarial revaluation of other assumptions change	5,308	(26,913)	—	(21,605)
Direct benefit paid by the Group	(13,936)	(168,386)	(55,411)	(237,733)
At 31 December 2018	72,992	2,389,169	174,654	2,636,815

The Group has no reserve of plan assets, no capital injection of plan assets is established and no future contribution is arranged.

34. Provision For Litigation Claims

	2018	2017
	RMB'000	RMB'000
Beginning of the year	262,925	261,754
Exchange difference	(8,272)	3,053
Payment (Note)	(717)	(1,882)
End of the year	253,936	262,925

The amounts represented the provision provided by a subsidiary of the Group for litigation.

The subsidiary of the Group has been sued during Year 2007 to Year 2009 due to a construction contract disputes and the case is ongoing process. The management of the Group has calculated all provision for the expected compensation incurred in accordance with the progress and solutions of the case.

For the years ended 31 December 2018 and 2017, no additional provision for litigation claims is provided.

Note: The arbitration case between Sinopec Ningbo Engineering Company Limited, a wholly-owned subsidiary of the Company, and INEOS USA LLC filed by INEOS USA LCC at the Arbitration Institute of the Stockholm Chamber of Commerce had reached a final settlement. INEOS USA LLC had withdrawn the arbitration.

35. Notes and Trade Payables

	2018	2017
	RMB'000	RMB'000
Trade payables		
Fellow subsidiaries	792,785	224,681
Associates of fellow subsidiaries	—	93
Joint ventures of fellow subsidiaries	1,270	264
Associates	44,550	3,540
Third parties	26,436,579	13,241,160
	27,275,184	13,469,738
Notes payables	1,411,059	550,495
Notes and trade payables	28,686,243	14,020,233

The carrying amounts of the Group's notes and trade payables as at 31 December 2018 and 2017 approximate their fair values.

Ageing analysis of notes and trade payables based on invoice date is as follows:

	2018	2017
	RMB'000	RMB'000
Within 1 year	22,388,561	8,475,498
Between 1 and 2 years	3,223,581	2,718,020
Between 2 and 3 years	1,501,701	1,470,005
Over 3 years	1,572,400	1,356,710
	28,686,243	14,020,233

35. Notes and Trade Payables (Continued)

The carrying amounts of notes and trade payables are denominated in the following currencies:

	2018	2017
	RMB'000	RMB'000
RMB	25,537,361	12,412,865
USD	646,640	185,463
EUR	3,033	13,265
KZT	22,495	24,279
SAR	1,300,283	1,226,420
Others	1,176,431	157,941
	28,686,243	14,020,233

36. Other Payables

	2018	2017
	RMB'000	RMB'000
Contract deposits advance (2):		
Fellow subsidiaries	—	570,790
Joint ventures of fellow subsidiaries	—	866,676
Associates of fellow subsidiaries	—	60,957
Third parties	—	4,153,492
Salaries payables	268,235	142,820
Other taxation payables	665,698	192,120
Output value-added tax to be recognised	12,765	13,885
Payable of separation and transfer of "Water/electricity/gas supply and property management"	285,385	—
Deposits and guarantee deposits payables	164,757	133,968
Advanced payables	523,114	262,211
Rent, property management and maintenance payables	126,355	74,141
Contracts payables	90,227	12,955
Amounts due to ultimate holding company (1)	100	—
Amounts due to fellow subsidiaries (1)	329,641	77,476
Amounts due to joint ventures (1)	71	71
Amounts due to joint ventures of fellow subsidiaries (1)	8,305	282
Amounts due to associates of fellow subsidiaries (1)	—	111
Others	283,486	298,635
Total other payables	2,758,139	6,860,590

(1) Amounts due to related parties are unsecured, interest free and repayable on demand.
(2) The Group has initially applied IFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018. Upon the adoption of IFRS 15, "Contract deposits advance" is included in "Contract liabilities" and disclosed in note 25(b).

The carrying amounts of the Group's other payables as at 31 December 2018 and 2017 approximate their fair values.

37. Current and Deferred Taxation

Deferred income tax assets and liabilities recognised:

The analysis of deferred income tax assets and liabilities is as follows:

	2018	2017
	RMB'000	RMB'000
Deferred income tax assets	781,439	750,967

The gross movement on the deferred income tax account is as follows:

	2018	2017
	RMB'000	RMB'000
Beginning of the year	750,967	775,695
Credited to equity for defined benefit obligations revaluation of actuarial gain or loss	33,102	(2,120)
Tax credited to profit for the year (Note 12)	(2,630)	(22,608)
End of the year	781,439	750,967

The movement in deferred income tax assets during the years ended 31 December 2018 and 2017, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred income tax assets

	Tax losses	Provision for retirement and other supplemental benefit obligation	Provision for impairment on assets	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2017	—	472,914	262,365	40,416	775,695
Credited/(Charged) to:					
Profit for the year	36,497	(43,958)	(6,566)	(8,581)	(22,608)
Equity	—	(2,120)	—	—	(2,120)
At 31 December 2017 and 1 January 2018	36,497	426,836	255,799	31,835	750,967
Credited/(Charged) to:					
Profit for the year	(24,370)	(1,050)	15,012	7,778	(2,630)
Equity	—	33,102	—	—	33,102
At 31 December 2018	12,127	458,888	270,811	39,613	781,439

37. Current and Deferred Taxation (Continued)

Deferred income tax assets not recognised

Deferred income tax assets are recognised for tax losses carried-forward to the extent that the realisation of the related income tax benefits through the future taxable profits is probable. In accordance with the PRC tax law applicable to those companies in their respective jurisdictions, tax losses may be carried forward against future taxable income. Deferred income tax assets not recognised in the Group is as follow:

	2018	2017
	RMB'000	RMB'000
Tax losses for which no deferred income tax asset was recognised	597,104	538,350

The Group did not recognise deferred income tax assets as the management believes it is not likely that such tax losses would be realised before they expire. The tax loss for which no deferred income tax assets recognised mentioned would be expired in five years.

38. Loans Due to A Fellow Subsidiary

Loans due to a fellow subsidiary are unsecured, repayable within one year and interest bearings as follows:

	As at 31 December 2018	As at 31 December 2017
Loans due to a fellow subsidiary	3.29% - 4.62%	2.73% - 3.63%

The fellow subsidiary is Sinopec Century Bright Capital Investment Limited.

39. Cash-Settled Share-Based Payment

Pursuant to the announcement in relation to the approval of the proposed initial terms of H share appreciation rights scheme by the State-owned Assets Supervision and Administration Commission of the State Council of the PRC (the "SASAC") on 12 December 2017 and the resolution passed at the second extraordinary general meeting for the year 2017 dated 20 December 2017, the proposed adoption of the H share appreciation rights scheme and the proposed initial grant have been approved at the second extraordinary general meeting.

According to the Company's H Share appreciation rights scheme, the Company granted 13,143,000 units of cash settled H share appreciation rights to a total of 89 incentive recipients on 20 December 2017. The H Share appreciation rights are valid for 10 years from the date of grant. Subject to a lock-up period of two years following the date of grant, H share appreciation rights should be exercised from the second anniversary of the date of grant in 3 years on equal proportion, subject to the following conditions:

Conditions based on the Group's performance:

Effective Phases	Performance Evaluation Targets
First Effective Phase	• the ROE of the financial year immediately before the year of the effective date shall not be lower than 10.0% and shall not be lower than 75 percentile of such growth rate of revenue of benchmark companies; • the growth rate of revenue of the financial year immediately before the effective date as compared with that of the financial year immediately before the grant shall not be lower than 14.2% and shall not be lower than 75 percentile of such growth rate of revenue of benchmark companies; • the EVA of the financial year immediately before the year of the effective date shall not be less than RMB2.099 billion.
Second Effective Phase	• the ROE of the financial year immediately before the year of the effective date shall not be lower than 10.0% and shall not be lower than 75 percentile of such growth rate of revenue of benchmark companies; • the growth rate of revenue of the financial year immediately before the effective date as compared with that of the financial year immediately before the grant shall not be lower than 21.6% and shall not be lower than 75 percentile of such growth rate of revenue of benchmark companies; • the EVA of the financial year immediately before the effective date shall not be less than RMB2.233 billion.
Third Effective Phase	• the ROE of the financial year immediately before the year of the effective date shall not be lower than 10.0% and shall not be lower than 75 percentile of such growth rate of revenue of benchmark companies; • the growth rate of revenue of the financial year immediately before the effective date as compared with that of the financial year immediately before the grant shall not be lower than 29.3% and shall not be lower than 75 percentile of such growth rate of revenue of benchmark companies; • the EVA of the financial year immediately before the effective date shall not be less than RMB2.373 billion.

39. Cash-Settled Share-Based Payment (Continued)

If the aforementioned conditions based on the Group's performance are satisfied, the H share appreciation rights granted to the incentive recipients shall become effective as determined based on the following:

- If the incentive recipient's performance evaluation rating for the previous year is "A", then 100% of the share appreciation rights in the relevant phase shall become effective;
- If the incentive recipient's performance evaluation rating for the previous year is "B", then 90% of the share appreciation rights in the relevant phase shall become effective;
- If the incentive recipient's performance evaluation rating for the previous year is "C", then 30% of the share appreciation rights in the relevant phase shall become effective;
- If the incentive recipient's performance evaluation rating for the previous year is "D", irrespective of whether the Company has satisfied the performance conditions or not, all the share appreciation rights in the relevant phase shall lapse; or
- If the incentive recipient does not satisfy the condition precedent set out above, then the share appreciation rights granted to such incentive recipient for the corresponding effective phase shall lapse.

As at 31 December 2018, the details of the H share appreciation rights were as follows:

Date of grant	Exercise price	Vesting period	Exercisable period	Number of underlying H share appreciation rights		
				Outstanding At 1 January 2018	Grant during the year	Outstanding At 31 December 2018
	HKD					
Directors						
20 December 2017	6.35	20 December 2017 to 19 December 2027	20 December 2020 to 20 December 2023	80,000	—	80,000
Employees						
20 December 2017	6.35	20 December 2017 to 19 December 2027	20 December 2020 to 20 December 2023	13,063,000	—	13,063,000
				13,143,000	—	13,143,000

The total fair value of share options as at 31 December 2018 has been valued using Black-Scholes valuation model.

39. Cash-Settled Share-Based Payment (Continued)

The significant inputs into the model were as follows:

	2018	2017
Exercise price (i)	HKD 6.06	HKD 6.35
Expected volatility	33.93%	32.29%
Maturity (years)	5.5 years	6.5 years
Risk-free interest rate	1.886%	1.655%
Expected dividend yield	0%	0%

(i) If the Company distributes dividend, the exercise price of the H share appreciation rights will be adjusted accordingly. The adjusted exercise price equals to the exercise price before adjustment minus dividend per share. Therefore, the exercise price of each H share appreciation right granted by the Company is adjusted to HK$6.06 per share.

At 31 December 2018, the Group has recorded liabilities of HK$11,444,000, which RMB10,691,000 was included in accrued charges.

40. Commitments

(a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding at 31 December 2018 and 2017 not provided for in the consolidated financial statements are as follows:

	2018	2017
	RMB'000	RMB'000
Contracted but not provided for		
– Property, plant and equipment	21,243	18,974

(b) Operating leasing commitments

The Group leases various residential properties, office and equipment under non-cancellable operating lease agreements. The leases run for an initial period of one to twenty years, with an option to renew the lease and renegotiate the terms at the expiry date or at dates mutually agreed between the Group and respective landlords/lessors. None of the leases include contingent rentals. The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	2018	2017
	RMB'000	RMB'000
Less than 1 year	48,240	44,598
1 year to 5 years	117,993	48,359
Over 5 years	26,359	30,105
Total	192,592	123,062

41. Cash Generated From Operations

	2018 RMB'000	2017 RMB'000
Profit before taxation	2,121,515	1,635,101
Adjustments for:		
Provision for ECL on trade and other receivables, net	3,961	96,003
Depreciation of property, plant and equipment	576,303	606,810
Amortisation of land use rights	59,831	61,364
Amortisation of intangible assets	76,941	78,317
Net losses on disposal/write-off of property, plant and equipment	28,071	2,060
Losses on seperation and transfer of property, plant and equipment and land use right	188,823	—
Loss on disposal of derivative financial liabilities	279,769	—
Interest income	(780,375)	(662,322)
Interest expense	118,014	90,432
Net foreign exchange (gains)/losses	(492,559)	612,009
Share of loss of joint arrangements	46	1,372
Share of profit of associates	(23,666)	(13,712)
Cash-settled share-based payment	10,691	753
Cash flows from operating activities before changes in working capital	2,167,489	2,508,187
Changes in working capital:		
– Inventories	181,336	614,280
– Contract work-in-progress	—	(939,707)
– Contract assets	(3,862,126)	—
– Contract liabilities	(5,177,005)	—
– Note, trade and other receivables	(2,707,779)	2,040,814
– Note, trade and other payables	15,840,423	465,441
– Restricted cash	(13,381)	101
Cash generated from operations	6,428,833	4,689,116

42. Contingencies

The Group has been named in a number of lawsuits and other legal proceedings arising in the ordinary course of business. Provisions have been made for the probable losses to the Group on those claims when management can reasonably estimate the outcome of the lawsuits based on management's judgements and the legal advice. No provision has been made for pending lawsuits when the outcome of the lawsuits cannot be reasonably estimated or management believes the outflow of resources is not probable.

It is not anticipated that any material liabilities will arise from the contingent liabilities other than those provided for (Note 34).

43. Significant Related Party Transactions and Balances

Related parties are those parties that have the ability to control the other party or exercise significant influence in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. The Group is subject to the control of the PRC government which also controls a significant portion of the productive assets and entities in the PRC (collectively known as the "state-owned enterprises").

In accordance with IAS 24 "Related party disclosures", other state-owned enterprises and their subsidiaries, directly or indirectly controlled by the PRC government are regarded as related parties of the Group ("other state-owned enterprises"). For the purpose of related party disclosures, the Group has in place procedures to identify the immediate ownership structure of its customers and suppliers to determine whether they are state-owned enterprises. Many state-owned enterprises have multi-layered corporate structure and the ownership structures change over time as a result of transfers and privatisation programs. Nevertheless, management believes that meaningful information relating to related party transaction has been adequately disclosed.

In addition to the related party information shown elsewhere in this report, the following is a summary of significant related party transactions entered into in the ordinary course of business between the Group and its related parties, including other state-owned enterprises, during the years ended 31 December 2018 and 2017 and balances as at 31 December 2018 and 2017.

The transactions with related parties are carried out on pricing and settlement terms agreed with counter parties in the ordinary course of business.

(a) Significant related party transactions and year end balances arising with the Sinopec Group, fellow subsidiaries, associates, joint ventures of fellow subsidiaries and associates of fellow subsidiaries:

	2018	2017
	RMB'000	RMB'000
Construction and services provided to		
– Ultimate holding company	4,128	3,979
– Joint ventures of fellow subsidiaries	6,092,757	2,823,151
– Associates of fellow subsidiaries	344,224	1,680,229
– Fellow subsidiaries	18,211,641	8,587,610
– Associates	74,890	68,980
	24,727,640	13,163,949
Construction and services received from		
– Ultimate holding company	28,508	36,737
– Joint ventures of fellow subsidiaries	3,418	902
– Associates of fellow subsidiaries	2,591	78
– Fellow subsidiaries	2,280,174	1,535,161
– Associates	756	9,168
	2,315,447	1,582,046
Technology research and development provided to		
– Ultimate holding company	4,208	—
– Fellow subsidiaries	177,644	35,353
	181,852	35,353
Interest income on loans		
– Ultimate holding company	517,031	440,926
Interest expense on borrowings		
– Fellow subsidiaries	21,397	15,076
Expenses in relation to settlement and other financial services		
– Fellow subsidiaries	3,394	1,027
Deposit interest income from fellow subsidiaries	80,275	44,426

43. Significant Related Party Transactions and Balances (Continued)

(a) Significant related party transactions and year end balances arising with the Sinopec Group, fellow subsidiaries, associates, joint ventures of fellow subsidiaries and associates of fellow subsidiaries: (Continued)

	As at 31 December 2018	As at 31 December 2017
	RMB'000	RMB'000
Deposits and time deposits placed in fellow subsidiaries	9,278,733	5,597,970

	As at 31 December 2018	As at 31 December 2017
	USD'000	USD'000
Guarantee received		
– Ultimate holding company	52,000	52,000

Besides, in respect of the Project RAPID (total contract value of approximately USD1.329 billion) between the Group and PETRONAS company, Sinopec Group provided guarantee to PETRONAS company. The Group provided counter guarantee to Sinopec Group.

The majority of these significant related party transactions with Sinopec Group and fellow subsidiaries also constitute continuing connected transactions as defined under Chapter 14A of the Hong Kong Listing Rules.

Apart from transactions with Sinopec Group, fellow subsidiaries, associates, joint ventures of fellow subsidiaries and associates of fellow subsidiaries, the Group has transactions with other state-owned enterprises including but not limited to the following:

– Sales and purchases of goods and services;

– Purchases of assets;

– Lease of assets; and

– Bank deposits and borrowings.

In the ordinary course of business, the Group sells goods and services to, and purchase goods and services from other state-owned enterprises based on terms as set out in the underlying agreements, market price or actual cost incurred, or as mutually agreed.

In the ordinary course of business, the Group places deposits mainly in state-owned financial institutions. The deposits are in accordance with terms as set out in the respective agreement, and the interest rates are set at prevailing market rates.

Apart from the disclosure of loans due from the ultimate holding company in Note 27 and loans due to a fellow subsidiary in Note 38, trade receivables, prepayments and other receivables are unsecured, interest free and repayable on demand.

43. Significant Related Party Transactions and Balances (Continued)

(b) Key management personnel remuneration

Key management includes directors, supervisors, and other key management personnel to the Board of Directors. The compensation paid or payable to key management for employee services is shown below:

	2018	2017
	RMB'000	RMB'000
Fee	549	540
Basic salaries, other allowances and benefits-in-kind	5,049	3,588
Discretionary bonus	8,505	6,052
Contributions to pension plans	1,365	1,191
Cash-settled share-based payment	1,781	105
	17,249	11,476

Key management, excluding directors and supervisors, whose remuneration fell within the following bands is as follows:

	2018	2017
	No. of individuals	No. of individuals
Nil to HK$ 1,000,000	8	6

44. Business Combination Under Common Control

On 18 August 2017, the Group entered into an equity transfer agreement with a fellow subsidiary of the Group, China Petrochemical Consulting Company Limited (previously named as Sinopec Consulting Co., Ltd.), (the "Agreement"). Pursuant to the Agreement, the Group agreed to purchase, and China Petrochemical Consulting Company Limited agreed to sell, the entire equity interest in Sinopec Energy-Saving Technology Service Co., Ltd. ("Sinopec Energy-Saving Company") for a cash consideration of RMB90,000,000, of which RMB45,900,000 has been paid in 2017 and the remaining consideration of RMB44,100,000 is included in the amounts due to fellow subsidiaries as at 31 December 2017 and it has been settled in January 2018. The acquisition was completed on 30 September 2017, and Sinopec Energy-Saving Company, which its principal activities are energy-saving technical service, contractual energy management and engineering research, has become a wholly owned subsidiary of the Group since then. As Sinopec Energy-Saving Company and the Group are ultimately controlled by Sinopec Group, the acquisition of Sinopec Energy-Saving Company was regarded as business combination under common control. The consolidated financial statements of the Group have been prepared using the merger basis of accounting as if the current group structure had been in existence throughout the periods presented.

45. Reconciliations of Liabilities Arising from Financing Activities

The changes in the Group's liabilities arising from financing activities can be classified as follows:

	2018	2017
Loans due to a fellow subsidiary	RMB'000	RMB'000
At 1 January	431,257	—
Cash-flow:		
– Repayments	(590,510)	(404,368)
– Proceeds	513,123	835,625
Non-cash:		
– Exchange adjustments	30,469	—
At 31 December	384,339	431,257

46. Particulars of Principal Subsidiaries

As at 31 December 2018, the Company has direct and indirect interests in the following principal subsidiaries:

Name	Establishment/ Place of incorporation and type of legal entity	Registered and fully paid capital	Effective interest held		Principal activities and place of operation
			Direct held	Indirect held	
		RMB'000			
SEI (中國石化工程建設有限公司)	The PRC/ Limited liability company	500,000	100%	—	Engineering contracting, engineering and consulting/The PRC
LPEC (中石化洛陽工程有限公司)	The PRC/ Limited liability company	500,000	100%	—	Engineering contracting, engineering and consulting/The PRC
SSEC (中石化上海工程有限公司)	The PRC/ Limited liability company	200,000	100%	—	Engineering contracting, engineering and consulting/The PRC
SNEC (中石化寧波工程有限公司)	The PRC/ Limited liability company	300,000	100%	—	Engineering contracting, design, equipment manufacturing/The PRC
SNEI (中石化南京工程有限公司)	The PRC/ Limited liability company	556,005	100%	—	Engineering contracting, design/The PRC
FCC (中石化第四建設有限公司)	The PRC/ Limited liability company	350,000	100%	—	Engineering contracting/ The PRC
SFCC (中石化第五建設有限公司)	The PRC/ Limited liability company	350,000	100%	—	Engineering contracting/ The PRC
TCC (中石化第十建設有限公司)	The PRC/ Limited liability company	350,000	100%	—	Engineering contracting/ The PRC
Sinopec Guangzhou Engineering Co., Ltd. (中石化廣州工程有限公司)	The PRC/ Limited liability company	50,000	100%	—	Engineering contracting/ The PRC
Ningbo Institute (中石化寧波技術研究院有限公司)	The PRC/ Limited liability company	10,000	100%	—	Technical services/ The PRC
Sinopec Heavy Lifting and Transportation Co., Ltd. (中石化重型起重運輸工程有限責任公司)	The PRC/ Limited liability company	500,000	100%	—	Engineering contracting technical service, equipment selling and leasing/The PRC
Sinopec Engineering Group Saudi Arabia Co., Ltd. (中石化煉化工程（集團）股份有限公司沙特公司))	Saudi Arabia/Limited liability company	3,356 (SAR18,000,000)	100%	—	Engineering contracting/Saudi Arabia
Sinopec Engineering Group America, L.L.C (中石化煉化工程（集團）股份有限公司美國公司)	United States/ Limited liability company	3,075(USD 500,000)	100%	—	Engineering contracting, engineering and consulting/United States
Sinopec Energy-Saving Technology Service Co., Ltd (中石化節能技術服務有限公司)	The PRC/ Limited liability company	50,000	100%	—	Technical service, contractual energy management and engineering research/The PRC
SINOPEC Engineering Group Malaysia SDN BHD (中石化煉化工程（集團）股份有限公司馬來西亞公)	Malaysia/Limited liability company	5,157 (MYR 360,700)	100%	—	Engineering contracting/ Malaysia
Sinopec Shanghai Pharmaceutical Industry Designing Institute Co., Ltd. (中石化上海醫藥工業設計研究院有限公司)	The PRC/Limited liability company	8,046	—	100%	Medicine, pesticide, chemical research/ The PRC
Shanghai Petrochemical Machine Manufacturing Co., Ltd. (上海石化機械製造有限公司)	The PRC/Limited liability company	133,640	—	100%	Petrochemical equipment manufacturing/ The RPC
Ningbo Tianyi Equipment Technology Co., Ltd. (寧波天翼裝備技術有限公司)	The PRC/Limited liability company	60,000	—	100%	Petrochemical equipment design, manufacturing and installation/The PRC
Ningbo Tianyi Petrochemical Heavy Equipment Manufacturing Co., Ltd. (寧波天翼石化重型設備製造有限公司)	The PRC/Limited liability company	60,000	—	97%	Petrochemical equipment manufacturing and installation/The PRC
SINOPEC Engineering Group (Thailand) Co., Ltd. (中石化煉化工程（集團）股份有限公司泰國公司)	Thailand/ Limited liability company	6,228 (THB 3,300,000)	—	100%	Engineering contracting/ Thailand

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, results in particulars of excessive length.

Documents for Inspection

The following documents will be available for inspection during normal business hours after 19 March 2019 (Monday) at the registered address of the Company upon request by the relevant regulatory authorities and shareholders in accordance with the laws and regulations of the PRC and the Articles of Association:

a) The original annual report signed by the Chairman of the Board and the President;

b) The original audited financial report and consolidated financial report for the twelve months ended 31 December 2018 prepared in accordance with IFRS and signed by the Chairman of the Board, the President, the Chief Financial Officer and the Head of the Finance Department; and

c) The original auditor's report in respect of the above financial report signed by Grant Thornton Hong Kong Limited.

By Order of the Board

YU Baocai

Chairman of the Board

Beijing, the PRC

8 March 2019

This annual report is printed in both Chinese and English languages. Should there be any discrepancy between the English language and the Chinese language, the Chinese language shall prevail.

中石化炼化工程(集团)股份有限公司
SINOPEC ENGINEERING (GROUP) CO., LTD.

中国石化
SINOPEC

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