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

Stock Code: 2386

中国石化
SINOPEC

# ENGINEERING A BETTER WORLD

2019 INTERIM 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 interim report and are hereby jointly and severally liable for the authenticity, accuracy and completeness of the content hereof. The Directors, Ms. SUN Lili and Mr. ZHOU Yingguan could not attend the Fifth Meeting of the Third Session of the Board (the "Meeting") due to official duties. The Director, Ms. SUN Lili authorised the other Director, Mr. LU Dong; and the Director, Mr. ZHOU Yingguan authorised the other Director, Mr. XIANG Wenwu to attend the Meeting, and to vote on their behalves. Mr. YU Baocai (Chairman of the Board), Mr. XIANG Wenwu (Director and President), Mr. JIA Yiqun (Chief Financial Officer and Company Secretary) and Mr. WANG Yi (Head of the Finance Department) warrant the authenticity and completeness of the financial statements contained in this interim report.

The interim financial statements for the six months ended 30 June 2019 (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 interim report contains forward-looking statements. All statements (other than statements of historical facts) that address business activities, events or developments that the Group 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 and uncertainties not within the control of the Group. The forward-looking statements referred to herein as at 16 August 2019 are made by the Group and, unless otherwise required by the relevant regulatory authorities, the Group undertakes no obligation or responsibility to update these statements.


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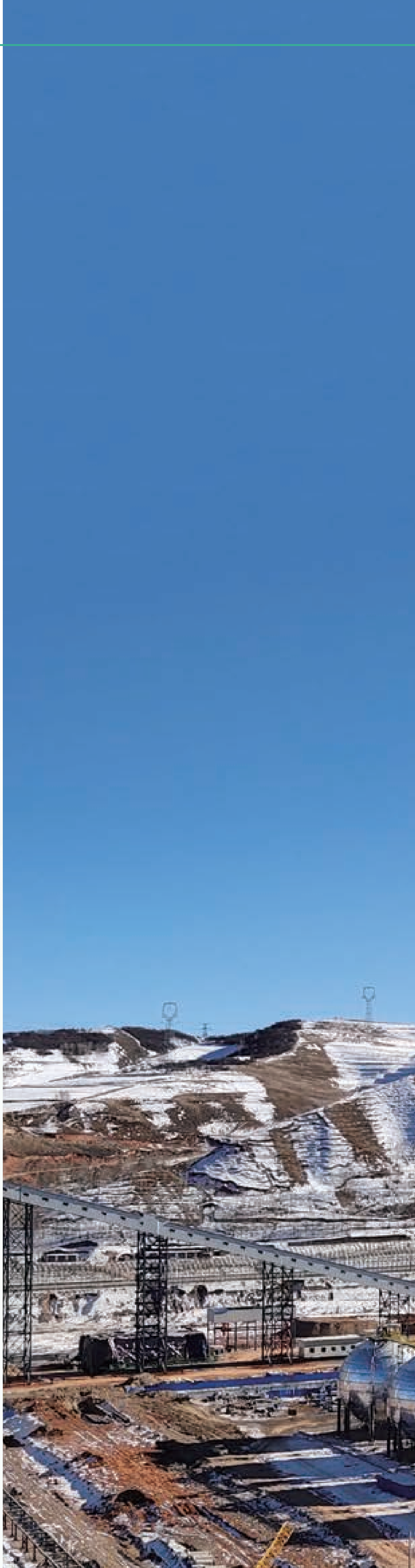
# COMPANY PROFILE

The Group is a leading energy and chemical engineering company in the PRC with strong international competitiveness. The Group can provide domestic and overseas clients with integrated solutions for petroleum refining, petrochemical 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 (engineering, procurement and construction) contracting, as well as design, procurement, construction and installation, lifting and transportation of large equipment, pre-commissioning, start-up and other industry chain services.

After more than 60 years of continuous development, the Group currently has one academician of the Chinese Academy of Sciences, two academicians of the Chinese Academy of Engineering and nearly 10,000 high-end professionals with extensive project management and execution experience, and directly 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 of 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 good industrial influence and social reputation.

In the future, the Group will continue to focus on development strategies which are "energy and petrochemical-oriented, innovation-driven, globalisation-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.

### ENGLISH ABBREVIATION

SINOPEC SEG

### LEGAL REPRESENTATIVE

Mr. YU Baocai

### AUTHORISED REPRESENTATIVES

Mr. XIANG Wenwu

Mr. JIA Yiqun

### COMPANY SECRETARY

Mr. JIA Yiqun

### REGISTERED ADDRESS

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

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### WEBSITES ON WHICH THIS INTERIM 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 INTERIM 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

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Chaoyang District
Beijing, the PRC

# 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 30 June 2019 | As at 31 December 2018 | Changes from the end of 2018 (%) |
|---|---|---|---|
| Total assets | 70,563,950 | 70,872,740 | (0.4) |
| Consolidated equity attributable to equity holders of the Company | 26,745,901 | 25,978,646 | 3.0 |
| Net assets per share of equity holders of the Company (RMB) | 6.04 | 5.87 | 3.0 |

Unit: RMB'000

| Items | Six-month periods ended 30 June | | Changes over the same period of 2018 (%) |
|---|---|---|---|
| | 2019 | 2018 | |
| Revenue | 22,682,018 | 18,335,880 | 23.7 |
| Gross profit | 2,371,953 | 1,921,486 | 23.4 |
| Operating profit | 1,101,143 | 997,847 | 10.4 |
| Profit before taxation | 1,513,464 | 1,335,904 | 13.3 |
| Profit attributable to equity holders of the Company | 1,198,685 | 1,107,565 | 8.2 |
| Basic earnings per share (RMB) | 0.27 | 0.25 | 8.2 |
| Net cash flow used in operating activities | (4,964,239) | (1,032,823) | 380.6 |
| Net cash flow used in operating activities per share (RMB) | (1.12) | (0.23) | 380.6 |

| Items | Six-month periods ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| Gross profit margin (%) | 10.5 | 10.5 |
| Net profit margin (%) | 5.3 | 6.0 |
| Return on assets (%) | 1.7 | 1.8 |
| Return on equity (%) | 4.5 | 4.3 |
| Return on invested capital (%) | 4.5 | 4.3 |

| Items | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Asset-liability ratio (%) | 62.1 | 63.3 |

# 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 2018 | | Increase/Decrease during the Reporting Period (+, -) | | | As at 30 June 2019 | |
|---|---|---|---|---|---|---|---|
| | 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 1,015 shareholders of the Company. 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] | — | 2,967,200,000 | — | 67.01 | 100.00 |
| HKSCC NOMINEES LIMITED | +11,939 | — | 1,458,415,839 | 32.94 | 99.84 |
| WONG CHUI CHUNG | — | — | 295,000 | 0.01 | 0.02 |
| CHAN LAI KUEN SELINA | — | — | 195,500 | 0.00 | 0.01 |
| WONG CHUI CHUNG | — | — | 195,500 | 0.00 | 0.01 |
| CHOI LAI MING | — | — | 130,000 | 0.00 | 0.01 |
| LUK LAN | — | — | 60,000 | 0.00 | 0.00 |
| PANG KWOK WAI | — | — | 60,000 | 0.00 | 0.00 |
| CHENG PAT TAN LINDA | — | — | 59,000 | 0.00 | 0.00 |
| DUN YUK SIM | — | — | 23,000 | 0.00 | 0.00 |
| Statement on the connected relationship or acting in concert among or between the aforementioned shareholders | The Company is not aware of any connection or acting in concert among or between the aforementioned top ten shareholders | | | | |

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

According to the filing notice submitted through the Disclosure of Interests Online (DION) System, 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) (excluding 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 (%) (7) | Percentage in the total share capital of the Company (%) (8) |
|---|---|---|---|---|---|
| **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 | 187,036,100(L)<br>5,568,945(S)<br>133,218,549(P) | 12.80(L)<br>0.38(S)<br>9.11(P) | 4.22(L)<br>0.12(S)<br>3.00(P) |
| **Prudential plc** (3) | H Share | Interests of controlled corporation | 103,023,700(L) | 7.05(L) | 2.32(L) |
| **Pandanus Associates Inc.** (4) | H Share | Interests of controlled corporation | 101,764,884(L) | 6.97(L) | 2.29(L) |
| **BlackRock, Inc.** (5) | H Share | Interests of controlled corporation | 73,114,115(L) | 5.01(L) | 1.65(L) |
| **Citigroup Inc.** (6) | H Share | Trustee/Interests of controlled corporation | 73,079,740(L)<br>153,500(S)<br>72,346,719(P) | 5.00(L)<br>0.01(S)<br>4.95(P) | 1.65(L)<br>0.00(S)<br>1.63(P) |

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

Notes:

(1) China Petrochemical Corporation ("Sinopec Group") directly and/or 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 13 May 2019 and filed by JPMorgan Chase & Co. with the Hong Kong Stock Exchange.

(3) The information is based on the Corporate Substantial Shareholders Notice dated 5 June 2019 and filed by Prudential plc with the Hong Kong Stock Exchange.

(4) The information is based on the Corporate Substantial Shareholders Notice dated 21 June 2019 and filed by Pandanus Associates Inc. with the Hong Kong Stock Exchange.

(5) The information is based on the Corporate Substantial Shareholders Notice dated 15 January 2019 and filed by BlackRock, Inc. with the Hong Kong Stock Exchange.

(6) The information is based on the Corporate Substantial Shareholders Notice dated 26 June 2019 and filed by Citigroup Inc. with the Hong Kong Stock Exchange.

(7) It is calculated on the basis that the Company has issued 2,967,200,000 Domestic Shares or 1,460,800,000 H Shares.

(8) It is calculated on the basis that the Company has issued 4,428,000,000 shares in total.

# BUSINESS REVIEW AND PROSPECTS

In the first half of 2019, the international and domestic situations were intricate and complicated. The Chinese economy persisted in promoting high-quality development, adhered to supply reforms with emphasis on structural type of improvements, intensified reform and opening up, and continued to maintain economic operations at a reasonable range, which sustained the overall stable, steady and progressive development. The Group has achieved hard-earned business performance by aggressively expanding domestic and overseas markets, strengthening management and command of projects, and improving the elaborate management. During the Reporting Period, the Group recognised a revenue of RMB22.682 billion, representing an increase of 23.7% on a period-on-period basis, and profits attributable to the Company's equity holders of RMB1.199 billion, representing an increase of 8.2% on a period-on-period basis.

In the first half of 2019, taking the opportunities of successive commencements or steady construction progresses of certain projects from the "Seven Major National Petrochemical Industry Bases" and Sinopec Group's "Four World-class Refining and Chemical Bases", the Group seized potential market prospects and exerted its competitive advantages to maintain its market shares. In respect of project implementation, by making overall planning and optimising resources allocation, the Group managed to control costs of subcontracting and procurement, ensuring ongoing projects to be carried out smoothly while the safety, quality and progress are fully under control. During the Reporting Period, the total value of new contracts entered into by the Group was RMB33.220 billion, representing a decrease of 6.4% on a period-on-period basis. As at the end of the Reporting Period, the backlog of the Group was RMB105.473 billion, representing an increase of 11.1% as compared to the end of 2018.

In the second half of 2019, the world economy is still going to be full of challenges. Chinese economy will face more uncertainties, and the trend of international oil prices will remain variable. On the basis of consolidating its conventionally competitive businesses of oil refining and petrochemical engineering, the Group will continue to work on the integrated solutions on industries including natural gas, new coal chemicals, environmental protection and energy saving, establishing an innovative system with technology innovation as the core, as well as further deepening the integration and existing synergies, formalising internal transactions and optimising resources allocation. At the mean time, the Group will closely monitor the market opportunities of the countries along the "Belt and Road", and continue to improve the overall profitability and risk resistance capability of overseas businesses.

# 1 Business Review

## (1) Market Environment

In the first half of 2019, facing the complicated external environment, Chinese economy continued to develop steadily and progressively in general, and the domestic GDP growth rate reached 6.3%. The major macroeconomic indicators remained within a reasonable range, and the economic structure was constantly optimised and adjusted. In the first half of 2019, influenced by the expected slowdown on the global economic growth and the intensification of trade frictions, international oil prices were weakened for a period. Brent international crude oil futures reached its lowest point at US$59.45 per barrel, while the geopolitical crisis also led to an increase in the amplitude of international oil prices.

In the first half of 2019, the growth of macro demand was inadequate, and the domestic petroleum and chemical engineering industries were operated under pressure. The focus of industry investment and R&D switched to new chemical materials, high-end specialised chemicals, biochemical industry, new coal chemicals industry as well as safety, energy saving and environmental protection fields. Industry transformation brought in opportunities and challenges. The optimisation and upgrading of the traditional petroleum refining industry, the transformation of the chemical industry to "basic + high-end" and the construction of natural gas infrastructure will provide new market opportunities. The Chinese government continues to support the clean utilisation of coal, and certain new coal chemicals projects were carried forward persistantly. Reforms in the oil and gas industry and state-owned enterprises have been further implemented, and the reform of the operation mechanism of oil and gas pipeline networks has been accelerated. The Catalogue of Industries Encouraging Foreign Investment (2019 Version) has been published by the Chinese government, which has greatly increased the number of fields where foreign investment are encouraged. A new competition pattern among state-owned enterprises, private enterprises and foreign enterprises in the overall oil and gas industry chain has gradually taken shape. Bio-natural gas has been listed as the national energy development strategy, and hydrogen has been written into the Government Work Report for the first time. The Chinese government has further focused on the three major defense battles of blue sky, fresh water and clean land, increased national budget of financial investment, and supported the fight against pollution. The environmental protection industry has maintained a relatively high growth rate.

In the first half of 2019, new market opportunities have emerged in Oman and other countries, and Saudi Arabia and Kuwait have maintained sustainable development. ASEAN region was politically stable and the economic situation was good. Industrial investments in Malaysia, Philippines, Indonesia and other countries have increased rapidly, and their respective economy has maintained a high growth rate. The Group has closely followed several projects in ASEAN region. In addition, as China and Russia entered into the "New Age of Comprehensive Strategic Cooperative Partnership Relationship", the potential of cooperation between the two countries and the countries in the relevant regions was further released. With the opportunity of Sinopec Group's investment in Russian energy enterprises, the Group has intensified its market development efforts in Russia and Central Asia to consolidate and expand its market shares therein.

### (2) Operation Overview

During the Reporting Period, the Group's total revenue and net profits attributable to the equity holders of the Company were RMB22.682 billion and RMB1.199 billion, respectively. As at the end of the Reporting Period, the Group's backlog was RMB105.473 billion. The value of new contracts entered into by the Group during the Reporting Period was RMB33.220 billion.

The business of the Group is mainly consisted of four segments: (1) engineering, consulting and licensing; (2) 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:

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB '000) | (%) | (RMB '000) | (%) | (%) |
| Engineering, consulting and licensing | 1,147,922 | 4.6 | 1,402,857 | 7.1 | (18.2) |
| EPC Contracting | 13,852,329 | 55.6 | 10,185,271 | 51.5 | 36.0 |
| Construction | 9,589,987 | 38.5 | 7,874,211 | 39.8 | 21.8 |
| Equipment manufacturing | 318,010 | 1.3 | 307,259 | 1.6 | 3.5 |
| Subtotal | 24,908,248 | 100.0 | 19,769,598 | 100.0 | 26.0 |
| Total (after inter-segment elimination) (1) | 22,682,018 | N/A | 18,335,880 | N/A | 23.7 |

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 engineering construction and equipment manufacturing segments.

During the Reporting Period, the total revenue of the Group was RMB22.682 billion, representing an increase of 23.7% on a period-on-period basis. This increase was mainly because several large EPC Contracting projects, such as Zhongke Refining and Chemical Complex Project, Kuwait Oil Refining Project and Sinochem Quanzhou Ethylene Project, had entered peak executive phase during the Reporting Period.

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

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB '000) | (%) | (RMB '000) | (%) | (%) |
| Oil refining | 7,854,494 | 34.6 | 6,931,713 | 37.8 | 13.3 |
| Petrochemicals | 10,913,276 | 48.1 | 5,202,464 | 28.4 | 109.8 |
| New coal chemicals | 2,509,314 | 11.1 | 4,159,805 | 22.7 | (39.7) |
| Other industries | 1,404,934 | 6.2 | 2,041,898 | 11.1 | (31.2) |
| Subtotal | 22,682,018 | 100.0 | 18,335,880 | 100.0 | 23.7 |

The Group derived its revenue mainly from services provided to clients in the oil refining, petrochemical, new coal chemicals and other industries. During the Reporting Period, large EPC Contracting projects, such as Zhongke Refining and Chemical Complex Project, Kuwait Oil Refining Project and Sinochem Quanzhou Ethylene Project, have entered peak execution phase. Also, revenue generated from the petrochemical and oil refining industries has grown rapidly period-on-period, among them, revenue generated from the petrochemical industry was RMB10.913 billion, representing an increase of 109.8% on a period-on-period basis; and revenue generated from the oil refining industry was RMB7.854 billion, representing an increase of 13.3% on a period-on-period basis. This increase during the Reporting Period was partially offset due to the completion of Zhong'An Joint Coalification Complex Project, Zhongtian Hechuang Project, Malaysia RAPID Automatic Stereoscopic Warehouse and other projects in new coal chemicals industry and other industries. Hence, revenue generated from the new coal chemicals industry was RMB2.509 billion, representing a decrease of 39.7% on a period-on-period basis; and revenue generated from other industries was RMB1.405 billion, representing a decrease of 31.2% on a period-on-period basis.

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

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB '000) | (%) | (RMB '000) | (%) | (%) |
| PRC | 16,754,294 | 73.9 | 12,101,546 | 66.0 | 38.4 |
| Overseas | 5,927,724 | 26.1 | 6,234,334 | 34.0 | (4.9) |
| Subtotal | 22,682,018 | 100.0 | 18,335,880 | 100.0 | 23.7 |

During the Reporting Period, the revenue of the Group generated in the PRC was RMB16.754 billion, representing an increase of 38.4% on a period-on-period basis. This increase was mainly because several large EPC Contracting projects, such as Zhongke Refining and Chemical Complex Project and Sinochem Quanzhou Ethylene Project, have entered peak execution phase. The revenue of the Group generated overseas was RMB5.928 billion, remaining broadly stable on a period-on-period basis.

As at the end of the Reporting Period, the backlog of the Group amounted to RMB105.473 billion, representing an increase of 11.1% as compared with that as at 31 December 2018, and 2.2 times of the total revenue of RMB47.019 billion in 2018. During the Reporting Period, the value of new contracts amounted to RMB33.220 billion, representing a decrease of 6.4% on a period-on-period basis.

During the Reporting Period, representative domestic projects signed by the Group include: Fujian Gulei Refining and Petrochemical Integrated Project, Sinopec Tianjin Oil Products Upgrading Project, Sinochem Quanzhou Refinery Revamping and Expansion Project and Shaanxi Yanchang Coal and Oil Resources Comprehensive Utilisation Project. Representative overseas projects signed by the Group include: Oman DUQM Refinery P2 Construction Project, Saudi Aramco Overhaul and Renovation Project and BASF USA Pipeline Prefabrication Project.

During the Reporting Period, the capital expenditure of the Group amounted to approximately RMB145 million, which was mainly used for the production base matching and improvement, construction equipment renewal, information system improvement, software and hardware acquisition, and contract energy management services.

## (3) Business Highlights

### Successful implementation of major projects

Zhongke Refining and Chemical Complex Project: Please refer to the announcements dated 18 January 2018 and 19 March 2018 published by the Company for further details. As at the end of the Reporting Period, the project was at the final detailed design phase. Civil construction, equipment acquisition and steel structure installation were fully implemented. The general progress has exceeded 60%.

Fujian Gulei Refining and Petrochemical Integrated Project: Please refer to the announcement dated 15 April 2019 published by the Company for further details. As at the end of the Reporting Period, the project was at startup phase. The general progress was approximately 10%.

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 general progress of this project was approximately 20%.

Zhong'An Joint Coalification Complex Project: Please refer to the announcement dated 24 November 2014 published by the Company for further details. As at the end of the Reporting Period, except for sewage and waste alkali units, the rest of the project was at the mechanical completion stage.

Sinochem Quanzhou Ethylene 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 general progress of this project had exceeded 60%.

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 general progress of this project had exceeded 90%. The project is scheduled to complete all contractual work by the end of this year.

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 had been completed and delivered to the owner.

Saudi Arabia SABIC GAS Phase-9 Air Separation Project: Please refer to the announcement dated 17 April 2018 published by the Company for further details. As at the end of the Reporting Period, the general progress of this project was approximately 40%, among which, the design progress exceeded 80%, the procurement progress exceeded 60%, and the construction progress was approximately 20%. The overall progress, cost, quality and safety were under control.

### Continuous enhancement of project assurance capability

During the Reporting Period, leveraging the organisational support, the Group has established a number of coordination groups for key projects based on their respective characteristics and construction needs. The Group gave a full play to the overall synergy and collectivisation advantages, established a project grading management mechanism, published a list of key projects of the Group on a regular basis, comprehensively monitored the progress of key projects, ensured advanced planning and overall coordination of the key projects, implemented process assurance, and integrated and optimised internal resources, so as to warrant the quality and safety of the projects. The Group tightened its project monitoring system and established a triple warning mechanism to promote project efficiency and progress, which corrected errors in a timely manner and guaranteed smooth projects execution.

The Group has set up and put into use a subcontracting management information platform, which improved the level of informationisation on subcontracting management. The Group has introduced the management rules and regulations for strategic subcontractors, intensified the cultivation of strategic subcontractors, further optimised subcontractor resources, maintained the long-term cooperation enthusiasm and viscosity of high-quality subcontractors; meanwhile, the Group deepened the subcontracting management, strengthened supervision, and ensured the implementation of the subcontracting management system, so as to ensure smooth projects execution.

The Group closely monitored and analysed the implementation of settlement plans, thoroughly analysed issues in project settlement and inventory management, carried out corresponding actions and measures to strengthen process management during the execution, and timely confirmed the progress and contractual adjustments.

### Significant results in market development

During the Reporting Period, the Group seized the opportunity of market recovery, made full use of its overall advantages throughout the industry, business and technology chains, and proactively expanded its presence in the market. During the Reporting Period, the value of new contracts entered into by the Group was RMB33.220 billion, accounting for approximately 60.4% of the annual target, representing a decrease of 6.4% on a period-on-period basis; among them, the value of newly signed domestic contracts amounted to RMB31.043 billion, representing a decrease of 3.7% on a period-on-period basis, and the value of newly signed overseas contracts amounted to approximately RMB2.177 billion, representing a decrease of 32.9% on a period-on-period basis.

In the PRC markets, during the Reporting Period, the Group entered into new contracts for a number of large projects, such as Fujian Gulei Refining and Petrochemical Integrated Project with a total contract value of approximately RMB12.513 billion; Sinopec Tianjin Oil Products Upgrading Project with a total contract value of approximately RMB2.601 billion; Sinochem Quanzhou Refinery Revamping and Expansion Project with a total contract value of approximately RMB1.913 billion; and Shaanxi Yanchang Coal and Oil Resources Comprehensive Utilisation Project with a total contract value of approximately RMB1.570 billion. In overseas markets, during the Reporting Period, the Group entered into new contracts for a number of projects, such as Oman DUQM Refinery P2 Construction Project with a total contract value of approximately RMB376 million; Saudi Aramco Overhaul and Renovation Project with a total contract value of approximately RMB376 million; and BASF USA Pipeline Prefabrication Project with a total contract value of approximately RMB826 million.

In addition to the above projects, the Group has also kept track of some petroleum refining, petrochemical engineering, new coal chemicals, environmental protection and energy saving projects, which are expected to be signed in the future.

### Continuous promotion of innovation and technological advancement

#### All engineering technology R&D activities have been steadily advanced

The Group carried out various research and development activities with a focus on its main businesses. During the Reporting Period, technological innovation work was closely centered on the demand of petrochemical engineering market needs, and a number of technological research and development activities that around the market product demands were steadily advanced: equipment with the second generation of highly efficient environmental friendly aromatic hydrocarbon technology has been constructed and mechanical completed, and was currently at the production preparation stage; the development of low-cost ethane cracking gas to styrene technology progressed smoothly, and was expected to complete the basic engineering design of the plant in the second half of the year; process package preparation work of the key technologies for hydrogenation of crude oil to produce low-carbon olefins and BTX has been completed.

A number of energy saving and emission reduction technologies have entered the stage of project implementation: zero-discharge treatment technology for high-salt wastewater of the coal chemical project has completed design and been at the stage of construction; integration and development of catalytic cracking technology for heavy oil with high residue and low emission has completed design and been at the stage of construction; and the technology development of VOC removal process for gas-phase polypropylene products was expected to complete all design work by the end of this year. The development of energy saving and emission reduction technology fully reflects the long-term and future-oriented vision of the Company.

Major progresses has been made in key scientific research projects

Significant technological breakthroughs have been made in the treatment of coal chemical wastewater in large-scale biological fluidised bed. The construction and operation of the industrial sewage treatment plant applying such technology overturned the traditional sewage biochemical treatment model and succeeded in the revolutionary sewage treatment process in airtight plant. Compared with the traditional technology, this technology has the characteristics of less floor area, lower operation costs and less investment demand. It can reduce the discharge of waste gas by 80% and the excess sludge by over 40%, which is at the advanced level internationally.

Luoyang Technological Research and Development Center of the Group continuously exerted its own advantages, promoted key technological innovations and efficiency, and constantly strengthened the cooperation with other engineering companies. Leveraging the strength of the Group's subsidiaries in the field of sewage treatment engineering, Luoyang Technological Research and Development Center made collaborative innovation and key breakthroughs, successfully industrialised the large-scale biological fluidised bed sewage treatment technology in Hubei Province, and passed the technical appraisal organised by authoritative organizations. The successful industrialisation of this environmental protection technology marked a historic breakthrough in achieving the high efficiency, installation, sealing and intelligence of sewage treatment in China.

Increasing number of patent applications

During the Reporting Period, the Group completed 310 new patent applications, among which, 198 are invention patents applications, accounting for 63.9%. The Group also had 165 new licensed patents, 80 of which were invention patents.

Continued to achieve numerous fruitful results in technological innovation

During the Reporting Period, the Group received a total of 41 scientific advancement awards in scientific innovation and engineering construction fields at the provincial and above level. Among these awards, there was 1 national science and technology advancement award; 25 provincial and ministerial scientific advancement awards; 1 provincial and ministerial invention award; 1 national excellent design award, 3 high quality projects awards; and 10 provincial and ministerial high quality projects awards.

## Environmental protection and energy saving businesses were constantly expanding

During the Reporting Period, the Group signed energy saving and environmental protection contracts with an aggregated value of RMB996 million, including Ji'nan 1.2 Million Tons Coking Plant Environmental Protection Comprehensive Treatment Project, Qingdao Refining and Chemical Company Delayed Coking Plant Airtight Decoking Project, Fujian Zhangzhou Gulei Refining and Petrochemical Integrated Project Sewage Treatment Plant Project, Tianjin Branch Catalytic Cracking Unit Flue Gas Desulfurisation Project, and Gaoqiao SBR Tail Gas VOCs Treatment Proejct.

In the field of energy saving, the Group has actively promoted the progress of 40 existing contract energy management projects of Sinopec Group, and signed contracts for 14 projects, with the remaining projects being at the stage of contract negotiation, feasibility reports compilation or plan drafting. The Group was actively organising and implementing communications on energy saving technology and enriching energy saving technological resources; actively exploring new market areas such as LNG cold energy utilisation outside the Group, waste gas power generation from landfills, energy saving in chemical industry parks and intelligent energy stations.

In the field of environmental protection, the Group has actively cooperated with international large-scale water companies to explore build-operate-transfer (BOT) model of large-scale industrial sewage projects; in soil remediation, established cooperation with relevant governmental departments of Sichuan and Shaanxi Provinces, carried out industrial pollution site remediation cooperation, and communicated with some polluting enterprises to explore the follow-up site remediation.

In the field of new coal chemicals industry, the Group has actively cooperated with advanced technology at home and abroad, carried out technological cooperation and market development of coal direct liquefaction, new coal-based ethylene glycol, coal-based diesel alternative fuels, and carried out pre-project services. In the field of new energy, the Group has cooperated in exploring market areas such as fuel ethanol, $CO_2$ utilisation and low-cost hydrogen production, and carried out the preliminary work of the demonstration projects.

### Intensified enterprise reform

In accordance with the vision of "building a world-class engineering company" and the "integrated operation and collectivisation management and control" development model, the Group comprehensively promoted resource optimisation and restructuring of enterprises.

The Group continued to tap the advantages of integration and promoted the optimisation and integration of internal resources. During the Reporting Period, the Information Center of SINOPEC Engineering (Group) Co., Ltd. was set up to further promote the development of digitalisation and intellectualisation, enhance the application level of integration of "two modernisations" and accelerate the improvement of the integration capability in building the world-class factories.

### Preliminary achievement in digital engineering application

During the Reporting Period, the Group continued to steadily promote the construction of digital factories, furthered the application of engineering design and production line in overseas projects, such as Kuwait Oil Refining Project. The Group promoted the intelligent P&ID application for key projects, such as Zhongke Refining and Chemical Complex Project and Sinopec-SABIC Project. It also improved the digital delivery platform, the independent innovation in professional 3D design for equipment and structures, the integrated application of standardised design, electronic archiving, digitalised publishing and reform in the modes of digitalised, networked and intelligent engineering design, all of which promoted the engineering service capability and level, and provided powerful support for the construction of intelligent factories.

### Continued to promote safe production

During the Reporting Period, the Group always adhered to the core value of QHSSE (Quality, Health, Safety, Security, Environment) which insisted on "safety development, quality first, environmental protection priority and people-oriented". The Group positioned the QHSSE management system as the main thread, and focused on the construction of a long-term mechanism and aimed to implement the accountability system comprehensively. The Group strived to thoroughly identify security risks and major latent risks, strengthened its risk control and cemented its "three foundation" management. The Group also constantly improved its QHSSE management by organising multi-level training, deepening the design of intrinsic safety management, enhancing supervision and inspection, intensively carrying out measures such as quality and safety improvement activities, and fully promoting the quality and safety standardisation and intrinsic safety capabilities. In line with its management philosophy of "all staffs, all process, all dimension and all time", the Group kept improving its QHSSE management of overseas projects, so as to ensure successful implementation.

As at the end of the Reporting Period, the Group achieved the goal of no reporting accidents in safety, quality, environment, occupational health or overseas public security for on-going projects as a result of all employees' dedication and strict management. As a result, an aggregate of 138.1 million labour safe hours were realised during the Reporting Period.

## 2 Business Prospects

Looking forward to the second half of 2019, it is expected that the global industrial production will slow down and trade tensions will persist, and there are still uncertain factors affecting the recovery of the world economy. The external environment of Chinese economic operation is still complicated, uncertain factors are increasing, and the economy is under greater downward pressure. International oil price is still full of change. The global industrial investment will continue to grow, and certain projects from the "Seven Major National Petrochemical Industry Bases" and Sinopec Group's "Four World-class Refining and Chemical Bases" continue to advance. It is also expected that the production and operation of Chinese refining and chemical engineering industry will be constantly improved, while resource competition will be more intense, and engineering companies will still face great cost control pressure. In the second half of 2019, the Group will seize the opportunity, exert the advantages of collectivisation, integration and large scale, optimise the resources allocation and integrated management, persistently enhance core competition advantage and propel sustainable and healthy development.

Regarding market development, the Group will continue to promote the overall development of key markets; give full play to its advantages in the fields of refining and chemical integration, comprehensive utilisation of light hydrocarbons, new coal chemicals industry and natural gas LNG; promote the development of strategic clients and large-scale projects; strengthen the early tracking and full-cycle services of large-scale projects, and consolidate and enhance market share; speed up the business in new energy, new materials, energy saving and environmental protection and other new areas of business; increase the growth of energy saving business and the scale of soil remediation business; seize the market opportunities of renewable energy, carbon and hydrogen resources; promote the construction of relevant demonstration devices, and establish market competition advantages; intensify the cooperation relationship with global outstanding technicians, suppliers and engineering companies; explore new business models; and promote the overall development of key areas and key projects. In the field of overseas market development, the Group will continue to expand its market development efforts leveraging the "Belt and Road" initiatives; focus on Bangladesh Refining Project; strive to make breakthroughs in South Asia and Africa; continue to maintain its existing advantages in the traditional markets such as the Middle East, Central Asia and Russia; deepen the market and expand business areas; and strive to achieve new breakthroughs of Kuwait Substation Project. In addition, the Group plans to complete the compilation of the "Manual for Estimating Bidding Quotations for International Projects".

Regarding project management, the Group will strengthen the overall coordination and key monitoring of major domestic projects, strengthen project process control, timely resolve the issues during the project implementation, reduce project operation risks, ensure the smooth implementation of key projects, propel effectiveness-oriented project management mode in the condition of assurance of safety, quality and progress, and coordinate and optimise the resources allocation while maximising the Company's interests. In the overseas market, the Group will continue to enhance the Company's infrastructure on project management. The Group will start the construction of project management execution platform, and improve the price database of Middle East and Central Asia markets; organise communication and summarisation activities on overseas projects to share project execution experience; carry out special research on international project risk management and control to comprehensively improve the risk management level of overseas projects; improve the operation capability and management level of overseas projects in all directions and all dimensions.

Regarding technology R&D, the Group will continue to follow the philosophy of "Ten Technologies and Ten Billions of Output Value", focusing on following the technological developments in the fields of clean energy, energy saving, environmental protection and new materials, and centering on green environmental protection and process strengthening technologies, as well as direct chemical production from crude oil, cheap hydrogen sources, $CO_2$ utilisation, natural gas chemical industry and other fields. The Group will strength the domestic and overseas cooperation, enhance technical support for market development and various construction-in-progress projects, fully realise the technology integration advantages of the Group, continuously improve the quality of engineering services through technological innovation, and increase the competitiveness of the Group in domestic and overseas markets.

# 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 interim report. Parts of the financial data below, unless otherwise stated, are extracted from the Group’s audited financial statements prepared according to IFRS.

# 1 Consolidated Results of Operations

**The following table sets forth the consolidated statement of profit or loss and comprehensive income of the Group for the indicated periods:**

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB'000) | (%) | (RMB'000) | (%) | (%) |
| Revenue | 22,682,018 | 100.0 | 18,335,880 | 100.0 | 23.7 |
| Cost of sales | (20,310,065) | (89.5) | (16,414,394) | (89.5) | 23.7 |
| Gross profit | 2,371,953 | 10.5 | 1,921,486 | 10.5 | 23.4 |
| Other income | 118,758 | 0.5 | 135,723 | 0.7 | (12.5) |
| Selling and marketing expenses | (50,250) | (0.2) | (44,658) | (0.2) | 12.5 |
| Administrative expenses | (606,920) | (2.7) | (471,455) | (2.6) | 28.7 |
| Research and development costs | (746,721) | (3.3) | (452,868) | (2.5) | 64.9 |
| Other operating income | 11,440 | 0.1 | 64,691 | 0.4 | (82.3) |
| Other gains/(losses) - net | 2,883 | 0.0 | (155,072) | (0.8) | — |
| Operating profit | 1,101,143 | 4.9 | 997,847 | 5.4 | 10.4 |
| Finance income | 450,638 | 2.0 | 368,009 | 2.0 | 22.5 |
| Finance expenses | (54,561) | (0.2) | (51,758) | (0.3) | 5.4 |
| Finance income - net | 396,077 | 1.7 | 316,251 | 1.7 | 25.2 |
| Share of losses of joint arrangements | (111) | (0.0) | (215) | (0.0) | (48.4) |
| Share of profits of associates | 16,355 | 0.1 | 22,021 | 0.1 | (25.7) |
| Profit before taxation | 1,513,464 | 6.7 | 1,335,904 | 7.3 | 13.3 |
| Income tax expense | (314,710) | (1.4) | (228,194) | (1.2) | 37.9 |
| Profit for the period | 1,198,754 | 5.3 | 1,107,710 | 6.0 | 8.2 |
| Gains/(losses) on revaluation of retirement benefit plans obligations, net of income tax effect | 122 | 0.0 | (90,690) | (0.5) | — |
| Exchange differences arising on translation of foreign operations | 117,849 | 0.5 | (29,680) | (0.2) | — |
| Total comprehensive income for the period | 1,316,725 | 5.8 | 987,340 | 5.4 | 33.4 |

### (1) Revenue

The revenue of the Group increased by 23.7% from RMB18.336 billion for the six months ended 30 June 2018 to RMB22.682 billion for the six months ended 30 June 2019, which was mainly due to several large EPC Contracting projects of the Group, such as Zhongke Refining and Chemical Complex Project, Kuwait Oil Refining Project and Sinochem Quanzhou Ethylene Project, have entered into peak execution phase, and Gulei Refining and Petrochemical Integrated Project have entered into startup phase.

### (2) Cost of sales

The cost of sales of the Group increased by 23.7% from RMB16.414 billion for the six months ended 30 June 2018 to RMB20.310 billion for the six months ended 30 June 2019, which was mainly due to the corresponding increase of the cost of subcontracting, equipment and materials as the revenue increased.

### (3) Gross profit

The gross profit of the Group increased by 23.4% from RMB1.921 billion for the six months ended 30 June 2018 to RMB2.372 billion for the six months ended 30 June 2019. Gross profit margin was 10.5%, which remained stable as compared with that for the six months ended 30 June 2018.

### (4) Other income

The other income of the Group decreased by 12.5% from RMB136 million for the six months ended 30 June 2018 to RMB119 million for the six months ended 30 June 2019, which was mainly due to the decrease in exchange gains on a period-on-period basis.

### (5) Selling and marketing expenses

The selling and marketing expenses of the Group increased from RMB45 million for the six months ended 30 June 2018 to RMB50 million for the six months ended 30 June 2019.

### (6) Administrative expenses

The administrative expenses of the Group increased by 28.7% from RMB471 million for the six months ended 30 June 2018 to RMB607 million for the six months ended 30 June 2019, which was mainly due to the increase of employee benefits and depreciation expenses of right-of-use assets on a period-on-period basis.

### (7) Research and development costs

The research and development costs of the Group increased by 64.9% from RMB453 million for the six months ended 30 June 2018 to RMB747 million for the six months ended 30 June 2019, which was mainly due to the increased investment of new technology, new processes and construction automation by the Group.

### (8) Other operating income

The other operating income of the Group decreased by 82.3% from RMB65 million for the six months ended 30 June 2018 to RMB11 million for the six months ended 30 June 2019, which was mainly due to exchange losses during the Reporting Period.

### (9) Other gains/(losses) - net

The net other gains/(losses) of the Group increased from a net loss of RMB155 million for the six months ended 30 June 2018 to a net gain of RMB3 million for the six months ended 30 June 2019, which was mainly due to the losses from fair value change of exchange futures settlement in the same period of last year.

### (10) Operating profit

As a result of the reasons above, the operating profit of the Group increased by 10.4% from RMB998 million for the six months ended 30 June 2018 to RMB1,101 million for the six months ended 30 June 2019.

### (11) Finance income - net

The net finance income of the Group increased by 25.2% from RMB316 million for the six months ended 30 June 2018 to RMB396 million for the six months ended 30 June 2019, which was mainly due to the increase of interest income from growing deposit size and optimisation of deposit structure.

### (12) Income tax expense

The income tax expense of the Group increased by 37.9% from RMB228 million for the six months ended 30 June 2018 to RMB315 million for the six months ended 30 June 2019, which was mainly due to the increase in total profit. The effective income tax rate increased from 17.1% to 20.8% on a period-on-period basis. Change of effective income tax rate was mainly due to the profit fluctuation of several subsidiaries which are subject to different tax rates.

### (13) Profit for the period

As a result of the reasons above, the profit of the Group increased by 8.2% from RMB1.108 billion for the six months ended 30 June 2018 to RMB1.199 billion for the six months ended 30 June 2019.

### (14) Total comprehensive income for the period

As a result of the reasons above and the impact of other comprehensive income of the Group, the total comprehensive income for the period of the Group increased by 33.4% from RMB987 million for the six months ended 30 June 2018 to RMB1.317 billion for the six months ended 30 June 2019.

# 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 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Six-month periods ended 30 June | | Six-month periods ended 30 June | | Six-month periods ended 30 June | | Six-month periods ended 30 June | | Six-month periods ended 30 June | |
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| | (RMB'000) | | (RMB'000) | | (%) | | (RMB'000) | | (%) | |
| Engineering, consulting and licensing | 1,147,922 | 1,402,857 | 388,331 | 462,903 | 33.8 | 33.0 | 84,166 | 221,565 | 7.3 | 15.8 |
| EPC Contracting | 13,852,329 | 10,185,271 | 1,250,413 | 894,712 | 9.0 | 8.8 | 700,768 | 529,925 | 5.1 | 5.2 |
| Construction | 9,589,987 | 7,874,211 | 726,608 | 542,757 | 7.6 | 6.9 | 292,848 | 208,309 | 3.1 | 2.6 |
| Equipment manufacturing | 318,010 | 307,259 | 6,601 | 21,114 | 2.1 | 6.9 | (2,675) | 8,158 | (0.8) | 2.7 |
| Unallocated | N/A | N/A | N/A | N/A | N/A | N/A | 26,036 | 29,890 | N/A | N/A |
| Subtotal | 24,908,248 | 19,769,598 | 2,371,953 | 1,921,486 | N/A | N/A | 1,101,143 | 997,847 | N/A | N/A |
| Total after inter-segment elimination (3) | 22,682,018 | 18,335,880 | 2,371,953 | 1,921,486 | 10.5(1) | 10.5(1) | 1,101,143 | 997,847 | 4.9(2) | 5.4(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 is calculated based on the total operating profit 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 other 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 report.

## Engineering, Consulting and Licensing

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

| | Six-month periods ended 30 June | | | |
|---|---|---|---|---|
| | 2019 | | 2018 | |
| | Amount | Percentage of segment revenue | Amount | Percentage of segment revenue |
| | (RMB'000) | (%) | (RMB'000) | (%) |
| Revenue | 1,147,922 | 100.0 | 1,402,857 | 100.0 |
| Cost of sales | (759,591) | (66.2) | (939,954) | (67.0) |
| Gross profit | 388,331 | 33.8 | 462,903 | 33.0 |
| Selling and marketing expenses | (5,688) | (0.5) | (5,288) | (0.4) |
| Administrative expenses | (44,982) | (3.9) | (36,890) | (2.6) |
| Research and development costs | (294,531) | (25.7) | (197,665) | (14.1) |
| Other income and expenses | 41,036 | 3.6 | (1,495) | (0.1) |
| Operating profit | 84,166 | 7.3 | 221,565 | 15.8 |

### (1) Revenue

The revenue generated from the Group's Engineering, Consulting and Licensing segment decreased by 18.2% from RMB1.403 billion for the six months ended 30 June 2018 to RMB1.148 billion for the six months ended 30 June 2019, which was mainly due to the decrease in volume of engineering business.

### (2) Cost of sales

The cost of sales of the Group's Engineering, Consulting and Licensing segment decreased by 19.2% from RMB940 million for the six months ended 30 June 2018 to RMB760 million for the six months ended 30 June 2019, which was mainly due to the corresponding cost reduction with the reduction of business volume.

### (3) Gross profit

The gross profit of the Group's Engineering, Consulting and Licensing segment decreased by 16.1% from RMB463 million for the six months ended 30 June 2018 to RMB388 million for the six months ended 30 June 2019, which was mainly due to the decrease in volume of engineering business. The gross profit margin of the Group's Engineering, Consulting and Licensing segment was 33.8%, slightly increasing on a period-on-period basis.

### (4) Selling and marketing expenses

The selling and marketing expenses of the Group's Engineering, Consulting and Licensing segment increased from RMB5 million for the six months ended 30 June 2018 to RMB6 million for the six months ended 30 June 2019.

### (5) Administrative expenses

The administrative expenses of the Group's Engineering, Consulting and Licensing segment increased by 21.9% from RMB37 million for the six months ended 30 June 2018 to RMB45 million for the six months ended 30 June 2019, which was mainly due to the increase in employee benefits.

### (6) Research and development costs

The research and development costs of the Group's Engineering, Consulting and Licensing segment increased by 49.0% from RMB198 million for the six months ended 30 June 2018 to RMB295 million for the six months ended 30 June 2019, which was mainly due to the increased investment of new technology and new processes by the Group.

### (7) Operating profit

As a result of the reasons above, the operating profit of the Group's Engineering, Consulting and Licensing segment decreased by 62.0% from RMB222 million for the six months ended 30 June 2018 to RMB84 million for the six months ended 30 June 2019.

## EPC Contracting

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

| | Six-month periods ended 30 June | | | |
|---|---|---|---|---|
| | 2019 | | 2018 | |
| | Amount | Percentage of segment revenue | Amount | Percentage of segment revenue |
| | (RMB'000) | (%) | (RMB'000) | (%) |
| Revenue | 13,852,329 | 100.0 | 10,185,271 | 100.0 |
| Cost of sales | (12,601,916) | (91.0) | (9,290,559) | (91.2) |
| Gross profit | 1,250,413 | 9.0 | 894,712 | 8.8 |
| Selling and marketing expenses | (25,218) | (0.2) | (22,052) | (0.2) |
| Administrative expenses | (307,804) | (2.2) | (233,219) | (2.3) |
| Research and development costs | (264,183) | (1.9) | (141,216) | (1.4) |
| Other income and expenses | 47,560 | 0.3 | 31,701 | 0.3 |
| Operating profit | 700,768 | 5.1 | 529,925 | 5.2 |

### (1) Revenue

The revenue generated from the Group's EPC Contracting segment increased by 36.0% from RMB10.185 billion for the six months ended 30 June 2018 to RMB13.852 billion for the six months ended 30 June 2019, which was mainly due to several large EPC Contracting projects of the Group, such as Zhongke Refining and Chemical Complex Project, Kuwait Oil Refining Project and Sinochem Quanzhou Ethylene Project, have entered into peak execution phase, and Gulei Refining and Petrochemical Integrated Project has entered into startup phase.

### (2) Cost of sales

The cost of sales of the Group's EPC Contracting segment increased by 35.6% from RMB9.291 billion for the six months ended 30 June 2018 to RMB12.602 billion for the six months ended 30 June 2019, which was mainly due to the corresponding increase of equipment procurement and subcontracting costs with the increase of revenue.

### (3) Gross profit

The gross profit of the Group's EPC Contracting segment increased by 39.8% from RMB895 million for the six months ended 30 June 2018 to RMB1.250 billion for the six months ended 30 June 2019. The gross profit margin is 9.0%, remaining stable on a period-on-period basis.

### (4) Selling and marketing expenses

The selling and marketing expenses of the Group's EPC Contracting segment increased from RMB22 million for the six months ended 30 June 2018 to RMB25 million for the six months ended 30 June 2019.

### (5) Administrative expenses

The administrative expenses of the Group's EPC Contracting segment increased by 32.0% from RMB233 million for the six months ended 30 June 2018 to RMB308 million for the six months ended 30 June 2019, which was mainly due to the increase of employee benefits and depreciation expenses of right-of-use assets.

### (6) Research and development costs

The research and development costs of the Group's EPC Contracting segment increased by 87.1% from RMB141 million for the six months ended 30 June 2018 to RMB264 million for the six months ended 30 June 2019, which was mainly due to the increased investment of new technology and new processes by the Group.

### (7) Operating profit

As a result of the reasons above, the operating profit of the Group's EPC Contracting segment increased by 32.2% from RMB530 million for the six months ended 30 June 2018 to RMB701 million for the six months ended 30 June 2019.

## Construction

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

| | Six-month periods ended 30 June | | | |
|---|---|---|---|---|
| | 2019 | | 2018 | |
| | Amount | Percentage of segment revenue | Amount | Percentage of segment revenue |
| | (RMB'000) | (%) | (RMB'000) | (%) |
| Revenue | 9,589,987 | 100.0 | 7,874,211 | 100.0 |
| Cost of sales | (8,863,379) | (92.4) | (7,331,454) | (93.1) |
| Gross profit | 726,608 | 7.6 | 542,757 | 6.9 |
| Selling and marketing expenses | (17,773) | (0.2) | (15,614) | (0.2) |
| Administrative expenses | (246,977) | (2.6) | (195,318) | (2.5) |
| Research and development costs | (187,622) | (2.0) | (113,986) | (1.4) |
| Other income and expenses | 18,612 | 0.2 | (9,530) | (0.1) |
| Operating profit | 292,848 | 3.1 | 208,309 | 2.6 |

### (1) Revenue

The revenue generated from the Group's Construction segment increased by 21.8% from RMB7.874 billion for the six months ended 30 June 2018 to RMB9.590 billion for the six months ended 30 June 2019, which was mainly due to the increase in construction business volume.

### (2) Cost of sales

The cost of sales of the Group's Construction segment increased by 20.9% from RMB7.331 billion for the six months ended 30 June 2018 to RMB8.863 billion for the six months ended 30 June 2019, which was mainly due to the corresponding increase of cost with the increase of construction business volume.

### (3) Gross profit

The gross profit of the Group's Construction segment increased by 33.9% from RMB543 million for the six months ended 30 June 2018 to RMB727 million for the six months ended 30 June 2019, which was mainly due to the gross profit growth due to the increase of construction revenue. The gross profit margin increased from 6.9% in the same period of last year to 7.6%, mainly due to the settlement of certain completed projects.

### (4) Selling and marketing expenses

The selling and marketing expenses of the Group's Construction segment increased from RMB16 million for the six months ended 30 June 2018 to RMB18 million for the six months ended 30 June 2019.

### (5) Administrative expenses

The administrative expense of the Group's Construction segment increased by 26.4% from RMB195 million for the six months ended 30 June 2018 to RMB247 million for the six months ended 30 June 2019, which was mainly due to the increase of employee benefits and depreciation expenses of right-of-use assets.

### (6) Research and development costs

The research and development costs of the Group's Construction segment increased by 64.6% from RMB114 million for the six months ended 30 June 2018 to RMB188 million for the six months ended 30 June 2019, which was mainly due to the increased investment of new technology, new processes and construction automation by the Group.

### (7) Operating profit

As a result of the reasons above, the operating profit of the Construction segment of the Group increased by 40.6% from RMB208 million for the six months ended 30 June 2018 to RMB293 million for the six months ended 30 June 2019.

## Equipment Manufacturing

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

| | Six-month periods ended 30 June | | | |
|---|---|---|---|---|
| | 2019 | | 2018 | |
| | Amount | Percentage of segment revenue | Amount | Percentage of segment revenue |
| | (RMB'000) | (%) | (RMB'000) | (%) |
| Revenue | 318,010 | 100.0 | 307,259 | 100.0 |
| Cost of sales | (311,409) | (97.9) | (286,145) | (93.1) |
| Gross profit | 6,601 | 2.1 | 21,114 | 6.9 |
| Selling and marketing expenses | (1,571) | (0.5) | (1,704) | (0.6) |
| Administrative expenses | (7,157) | (2.3) | (6,028) | (2.0) |
| Research and development costs | (385) | (0.1) | — | — |
| Other income and expenses | (163) | (0.1) | (5,224) | (1.7) |
| Operating (loss)/profit | (2,675) | (0.8) | 8,158 | 2.7 |

### (1) Revenue

The revenue generated from the Group's Equipment Manufacturing segment was RMB318 million, remaining stable on a period-on-period basis.

### (2) Cost of sales

The cost of sales of the Group's Equipment Manufacturing segment increased by 8.8% from RMB286 million for the six months ended 30 June 2018 to RMB311 million for the six months ended 30 June 2019, which was mainly due to the rising prices of materials and labour.

### (3) Gross profit

The gross profit of the Group's Equipment Manufacturing segment decreased by 68.7% from RMB21 million for the six months ended 30 June 2018 to RMB7 million for the six months ended 30 June 2019, and the gross profit margin decreased from 6.9% for the six months ended 30 June 2018 to 2.1% for the six months ended 30 June 2019. These decreases were mainly due to the intensification of market competition and the decline of gross profit margin caused by the rising prices of materials and labour.

### (4) Selling and marketing expenses

The selling and marketing expenses of the Group's Equipment Manufacturing segment were RMB2 million, remaining stable on a period-on-period basis.

### (5) Administrative expenses

The administrative expenses of the Group's Equipment Manufacturing segment were RMB7 million, remaining stable on a period-on-period basis.

### (6) Research and development costs

The research and development costs of the Group's Equipment Manufacturing segment were RMB385,000.

### (7) Operating (loss)/profit

As a result of the reasons above, the operating loss of the Group's Equipment Manufacturing segment was RMB3 million.

# 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:

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB'000) | (%) | (RMB'000) | (%) | (%) |
| Oil refining | 7,854,494 | 34.6 | 6,931,713 | 37.8 | 13.3 |
| Petrochemicals | 10,913,276 | 48.1 | 5,202,464 | 28.4 | 109.8 |
| New coal chemicals | 2,509,314 | 11.1 | 4,159,805 | 22.7 | (39.7) |
| Other industries | 1,404,934 | 6.2 | 2,041,898 | 11.1 | (31.2) |
| Subtotal | 22,682,018 | 100.0 | 18,335,880 | 100.0 | 23.7 |

As illustrated by the above revenue generated from different industries, during the Reporting Period, since several large EPC Contracting projects of the Group, such as Zhongke Refining and Chemical Complex Project, Kuwait Oil Refining Project and Sinochem Quanzhou Ethylene Project, have entered into peak execution phase, revenue from the petrochemicals and oil refining industries has grown rapidly period-on-period, among them, revenue generated from the petrochemicals industry was RMB10.913 billion, representing an increase of 109.8% on a period-on-period basis; and revenue generated from the oil refining industry was RMB7.854 billion, representing an increase of 13.3% on a period-on-period basis. Revenue increase during the Reporting Period was partially offset due to the completion of Zhong'An Joint Coalification Complex Project, Zhongtian Hechuang Project and Malaysian RAPID Automatic Stereoscopic Warehouse and other projects in coal chemical industry and other industries. Hence, revenue generated from the new coal chemicals industry was RMB2.509 billion, representing a decrease of 39.7% on a period-on-period basis; and revenue generated from other industries was RMB1.405 billion, representing a decrease of 31.2% on a period-on-period basis.

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

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB'000) | (%) | (RMB'000) | (%) | (%) |
| PRC | 16,754,294 | 73.9 | 12,101,546 | 66.0 | 38.4 |
| Overseas | 5,927,724 | 26.1 | 6,234,334 | 34.0 | (4.9) |
| Subtotal | 22,682,018 | 100.0 | 18,335,880 | 100.0 | 23.7 |

During the Reporting Period, the revenue of the Group generated in the PRC was RMB16.754 billion, representing an increase of 38.4% on a period-on-period basis, mainly benefited from several domestic large EPC Contracting projects of the Group, such as Zhongke Refining and Chemical Complex Project and Sinochem Quanzhou Ethylene Project, have entered into peak execution phase. The revenue of the Group generated overseas was RMB5.928 billion, remaining stable on a period-on-period basis.

### 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:

| | Six-month periods ended 30 June | | | | |
|---|---|---|---|---|---|
| | 2019 | | 2018 | | |
| | Revenue | Percentage of total revenue | Revenue | Percentage of total revenue | Change |
| | (RMB'000) | (%) | (RMB'000) | (%) | (%) |
| Sinopec Group and its associates | 9,458,533 | 41.7 | 6,980,315 | 38.1 | 35.5 |
| Non-Sinopec Group and its associates | 13,223,485 | 58.3 | 11,355,565 | 61.9 | 16.4 |
| Subtotal | 22,682,018 | 100.0 | 18,335,880 | 100.0 | 23.7 |

During the Reporting Period, the revenue generated from Sinopec Group and its associates and the revenue generated from non-Sinopec Group and its associates increased significantly on a period-on-period basis. Among which, the revenue generated from Sinopec Group and its associates was RMB9.459 billion, representing an increase of 35.5% on a period-on-period basis; and the revenue generated from non-Sinopec Group and its associates was RMB13.223 billion, representing an increase of 16.4% on a period-on-period 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 calculated 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 30 June 2019 | As at 31 December 2018 | Change |
|---|---|---|---|
| | (RMB'000) | (RMB'000) | (%) |
| Engineering, consulting and licensing | 8,227,297 | 7,797,111 | 5.5 |
| EPC Contracting | 84,499,745 | 73,892,040 | 14.4 |
| Construction | 11,387,396 | 12,731,186 | (10.6) |
| Equipment manufacturing | 1,358,794 | 515,127 | 163.8 |
| Total | 105,473,232 | 94,935,464 | 11.1 |

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

| | As at 30 June 2019 | As at 31 December 2018 | Change |
|---|---|---|---|
| | (RMB'000) | (RMB'000) | (%) |
| Oil refining | 35,139,374 | 33,542,698 | 4.8 |
| Petrochemicals | 35,498,159 | 29,395,716 | 20.8 |
| New coal chemicals | 12,826,387 | 10,491,448 | 22.3 |
| Other industries | 22,009,312 | 21,505,602 | 2.3 |
| Total | 105,473,232 | 94,935,464 | 11.1 |

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

| | As at 30 June 2019 (RMB'000) | As at 31 December 2018 (RMB'000) | Change (%) |
|---|---|---|---|
| PRC | 86,009,510 | 71,720,786 | 19.9 |
| Overseas | 19,463,722 | 23,214,678 | (16.2) |
| Total | 105,473,232 | 94,935,464 | 11.1 |

**The following table sets forth the total value of backlog of the Group, which has been 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 30 June 2019 (RMB'000) | As at 31 December 2018 (RMB'000) | Change (%) |
|---|---|---|---|
| Sinopec Group and its associates | 58,100,165 | 46,294,473 | 25.5 |
| Non-Sinopec Group and its associates | 47,373,067 | 48,640,991 | (2.6) |
| Total | 105,473,232 | 94,935,464 | 11.1 |

As at the end of the Reporting Period, the Group's backlog was RMB105.473 billion, representing an increase of 11.1% from that as at 31 December 2018, and 2.2 times of the total revenue of RMB47.019 billion in 2018.

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

| | Six-month periods ended 30 June | | |
|---|---|---|---|
| | 2019 | 2018 | Change |
| | (RMB'000) | | (%) |
| Engineering, consulting and licensing | 1,382,037 | 2,027,886 | (31.8) |
| EPC Contracting | 24,460,035 | 27,485,278 | (11.0) |
| Construction | 6,390,278 | 5,511,131 | 16.0 |
| Equipment manufacturing | 987,437 | 459,523 | 114.9 |
| Total | 33,219,787 | 35,483,818 | (6.4) |

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

| | Six-month periods ended 30 June | | |
|---|---|---|---|
| | 2019 | 2018 | Change |
| | (RMB'000) | | (%) |
| Oil refining | 9,451,172 | 11,560,684 | (18.2) |
| Petrochemicals | 17,015,718 | 16,425,490 | 3.6 |
| New coal chemicals | 4,844,253 | 3,638,597 | 33.1 |
| Other industries | 1,908,644 | 3,859,047 | (50.5) |
| Total | 33,219,787 | 35,483,818 | (6.4) |

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

| | Six-month periods ended 30 June | | |
|---|---|---|---|
| | 2019 | 2018 | Change |
| | (RMB'000) | | (%) |
| PRC | 31,043,019 | 32,240,784 | (3.7) |
| Overseas | 2,176,768 | 3,243,034 | (32.9) |
| Total | 33,219,787 | 35,483,818 | (6.4) |

**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:**

| | Six-month periods ended 30 June | | |
|---|---|---|---|
| | 2019 | 2018 | Change |
| | (RMB'000) | | (%) |
| Sinopec Group and its associates | 21,264,226 | 25,729,283 | (17.4) |
| Non-Sinopec Group and its associates | 11,955,561 | 9,754,535 | 22.6 |
| Total | 33,219,787 | 35,483,818 | (6.4) |

During the Reporting Period, the value of the Group's new contracts was RMB33.220 billion, representing a decrease of 6.4% from RMB35.484 billion in the same period in 2018.

# 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 30 June 2019 | As at 31 December 2018 | Changes |
|---|---|---|---|
| Total assets | 70,563,950 | 70,872,740 | (308,790) |
| Current assets | 63,579,562 | 63,837,953 | (258,391) |
| Non-current assets | 6,984,388 | 7,034,787 | (50,399) |
| Total liabilities | 43,813,477 | 44,889,591 | (1,076,114) |
| Current liabilities | 40,837,306 | 41,998,840 | (1,161,534) |
| Non-current liabilities | 2,976,171 | 2,890,751 | 85,420 |
| Net assets | 26,750,473 | 25,983,149 | 767,324 |
| Consolidated equity attributable to equity holders of the Company | 26,745,901 | 25,978,646 | 767,255 |
| Share capital | 4,428,000 | 4,428,000 | — |
| Reserves | 22,317,901 | 21,550,646 | 767,255 |
| Non-controlling interests | 4,572 | 4,503 | 69 |

As at the end of the Reporting Period, the total assets of the Group were RMB70.564 billion, the total liabilities were RMB43.813 billion, and the equity attributable to the equity holders of the Company was RMB26.746 billion. The changes in the assets and liabilities as compared with those as at the end of 2018 and the main reasons are as follows:

As at the end of the Reporting Period, the total assets were RMB70.564 billion, decreased by RMB309 million as compared with that as at the end of 2018. In particular, the current assets were RMB63.580 billion, decreased by RMB258 million as compared with that as at the end of 2018; the non-current assets were RMB6.984 billion, decreased by RMB50 million as compared with that as at the end of 2018.

As at the end of the Reporting Period, the total liabilities were RMB43.813 billion, decreased by RMB1.076 billion as compared with that as at the end of 2018. In particular, the current liabilities were RMB40.837 billion, decreased by RMB1.162 billion as compared with that as at the end of 2018, which was mainly due to the decrease in payables. The non-current liabilities were RMB2.976 billion, increased by RMB85 million as compared with that as at the end of 2018, which was mainly due to the increase of payment of lease liabilities.

The total equity attributable to equity holders of the Company was RMB26.746 billion, increased by RMB767 million as compared with that as at the end of 2018, which was mainly due to the increase in the retained earnings.

## (2) Cash Flows

During the Reporting Period, the net decrease in cash and cash equivalents was RMB10.300 billion and net cash used in operating activities was RMB4.964 billion. The following table sets forth the main items and their changes in the Group's consolidated statement of cash flows for the six months ended 30 June 2019 and 2018.

Units: RMB'000

| Major items of cash flows | Six-month periods ended 30 June | |
|---|---|---|
| | **2019** | 2018 |
| **Net cash used in operating activities** | **(4,964,239)** | (1,032,823) |
| **Net cash (used in)/generated from investing activities** | **(5,283,423)** | 470,865 |
| **Net cash (used in)/generated from financing activities** | **(52,155)** | 127,235 |
| **Net decrease in cash and cash equivalents** | **(10,299,817)** | (434,723) |

During the Reporting Period, the profit before taxation was RMB1.513 billion, and the profit was RMB1.519 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 RMB333 million; exchange loss amounted to RMB186 million, net interest income and expenditure was RMB396 million, reversal of provision for ECL was RMB98 million. Increased cash outflow of operational receivables and payables was RMB6.265 billion, were mainly shown in: trade and other receivables balance was increased, causing the cash outflow from operating activities of RMB3.336 billion; contract assets were increased, causing the cash outflow from operating activities of RMB862 million; increased inventory balance, causing the cash outflow from operating activities of RMB231 million; decreased trade and other payables balance, causing the cash outflow from operating activities of RMB1.274 billion; and contract liabilities were decreased, causing cash outflow from operating activities of RMB555 million.

After adjusting non-cash items, receivables and payables for the profit before taxation, and deducting the outflow of paid income tax of RMB318 million in cash, adding inflow of interest income of RMB100 million in cash, the net cash used in operating activities was RMB4.964 billion.

Net cash used in investing activities was RMB5.283 billion, which was mainly due to the increase in fixed deposits and the borrowings to the holding company.

Net cash used in financing activities was RMB52 million, which was mainly due to the interest expenditure and payment of lease liabilities.

The Group has adequate working capital. The Group will continue to strengthen the settlement of trade debts and control the use of working capital in operating activities; the Group will also continue to effectively manage the investment risk, expand the scale of investment and increase the return on investment.

## (3) Summary of Financial Ratios

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

| Main financial ratios | Six-month periods ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| Net profit margin (%) | 5.3 | 6.0 |
| Return on assets (%) [(1)] | 1.7 | 1.8 |
| Return on equity (%) [(2)] | 4.5 | 4.3 |
| Return on invested capital (%) [(3)] | 4.5 | 4.3 |

| Main financial ratios | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Gearing ratio (%) [(4)] | 2.2 | 1.5 |
| Net debt to equity ratio (%) [(5)] | Net cash | Net cash |
| Current ratio (%) [(6)] | 1.6 | 1.5 |
| Quick ratio (%) [(7)] | 1.5 | 1.5 |

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

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

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

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

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

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

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

### Return on assets

During the Reporting Period, the Group's return on assets decreased to 1.7% from 1.8% in the same period of the previous year, remaining stable on a period-on-period basis.

### Return on equity

The Group's return on equity increased to 4.5% from 4.3% for the same period in 2018, 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 4.5% from 4.3% for the same period in 2018 for the same reasons as the increase in return on equity.

### Gearing ratio

The Group's gearing ratio increased to 2.2% from 1.5% at the end of 2018, mainly due to the increase in lease liabilities at the end of the Reporting Period.

### Net debt to equity ratio

The Group maintained positive net cash as at 30 June 2019 and as at 31 December 2018.

### Current ratio

The Group's current ratio was 1.6, remaining stable on a period-on-period basis.

### Quick ratio

The Group's quick ratio was 1.5, remaining stable on a period-on-period basis.

## 6 Foreign exchange risk

The Group continued to operate some engineering business overseas and formed foreign currency-denominated receivables, payables and cash balances. In addition, the Company raised funds denominated in foreign currencies by issuing H Shares. During the Reporting Period, foreign currencies held by the Group were primarily U.S. dollars. In the future, changes in foreign exchange rates may affect the quotation of the Group's services and expenditure on the purchase of materials in foreign currency. Fluctuations in foreign exchange rates may influence the Group's results of operations and financial position. During the Reporting Period, the Group did not engage in relevant hedging activities regarding foreign exchange fluctuations.

# SIGNIFICANT EVENTS

# 1 Corporate governance

During the Reporting Period, the Company complied with all code provisions in the Corporate Governance Code set out in Appendix 14 to the Hong Kong Listing Rules and did not conduct any acts which deviated from such code provisions.

# 2 H Share Appreciation Rights Scheme

## The Exercise Price and Its Adjustment of the Initial Grant under the H Share Appreciation Rights

For details of H Share Appreciation Rights Scheme of the Company, please refer to the announcements of the Company entitled "The Proposed Initial Terms of H Share Appreciation Rights Scheme" dated 21 August 2017, the "Announcement in Relation to the Approval of the Proposed Initial Terms of H Share Appreciation Rights Scheme by the SASAC" dated 12 December 2017, the "Announcement of Resolutions Passed at the Second Extraordinary General Meeting for the year 2017 (the "2017 EGM")" dated 20 December 2017, the "Grant of H Share Appreciation Rights" dated 20 December 2017 and the circular of the 2017 EGM dated 3 November 2017.

On 20 December 2017, the Company granted 13,143,000 units H share 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 20 December 2017) to 89 incentive recipients, accounting for approximately 0.5% of the total number of contracted employees as at 20 December 2017) (the "Initial Grant"), 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 RMB0.100 per share (inclusive of applicable tax). As reviewed and approved at the 2018 annual general meeting convened on 8 May 2019, the final cash dividend of RMB0.124 per share (inclusive of applicable tax) was paid by the Company. As at the date of this interim report, the distribution of the final dividends of 2017, interim dividends of 2018 and final dividends of 2018 has been completed. According to Article 28 of "The H Share Appreciation Rights Scheme and the Initial Grant" (the "H Share Appreciation Rights Scheme") in Appendix 1 to the circular of the second extraordinary general meeting for the year 2017 published on 3 November 2017, the Company may adjust the exercise price of the share appreciation rights in the event of distribution of dividends, and the exercise price after adjustment will be equal to the exercise price before adjustment minus the amount of dividends distributed per share. Thus, the exercise price of each H share appreciation right under the Initial Grant will be adjusted to HKD5.931 per share.

### Unfulfillment of the Conditions to the First Effective Phase of the Initial Grant under the H Share Appreciation Rights Scheme

For details of unfulfillment of the conditions to the first effective phase of the Initial Grant under the H Share Appreciation Rights Scheme, please refer to the announcement of the Company dated 30 July 2019.

The H share appreciation rights initially granted by the Company on 20 December 2017 will enter into the first effective phase on 21 December 2019. According to the H Share Appreciation Rights Scheme, "the year before the first effective phase coming into effect" as specified in the conditions of the Initial Grant means the year of 2018. According to the audit report prepared by Grant Thornton China (Special General Partnership), the PRC auditor of the Company, the ROE of the Company for the year of 2018 was 10.08%, the growth rate of revenue for the year of 2018 compared with that for the year of 2016 was 19.41%, and the EVA for the year of 2018 was approximately RMB2.385 billion. However, both the ROE for the year of 2018 and the growth rate of revenue for the year of 2018 compared with that of the year of 2016 are lower than 75 percentile of the respective indicators of benchmark companies. Thus, the conditions to effect the H share appreciation rights in the first effective phase of the Initial Grant were not fulfilled.

According to the authorisation granted to the Board under the 2017 EGM, the Company has considered and approved the "Proposal in Relation to the Unfulfillment of The Conditions to the First Effective Phase of the Initial Grant under the H Share Appreciation Rights Scheme" in the forth meeting of the third session of the Board convened on 30 July 2019. The Board approved that a total of 4,337,190 units (representing 33% of the H share appreciation rights under the Initial Grant) of H share appreciation rights in the first effective phase of the Initial Grant shall be nullified. This nullification will not affect the remaining number of H share appreciation rights of 8,805,810 units to be effective upon the second effective phase and the third effective phase under the Initial Grant.

During the Reporting Period, save as the above adjustment to the exercise price and the unfulfillment of the conditions to the first effective phase of the Initial Grant under the H Share Appreciation Rights Scheme, there is no other cases that involve the number of units and the exercise price of the H share appreciation rights. For details of the Company's H share appreciation rights scheme, please refer to Note 39 of the consolidated financial statements in this interim report.

## 3 The dividend distribution plan for the six-month period ended 30 June 2019

The fifth meeting of the third session of the Board approved the dividend distribution plan for the six months ended 30 June 2019. An interim cash dividend of RMB0.108 (inclusive of applicable taxes) per share would be distributed based on 4,428,000,000 shares, being the total share capital of the Company (including 1,460,800,000 H shares and 2,967,200,000 domestic shares) as at 30 June 2019. Since shareholders of the Company have authorised the Board to decide the interim profit distribution plan of 2019 by ordinary resolution in 2018 annual general meeting held on 8 May 2019, it is unnecessary to submit the above dividend distribution plan to the general meeting of shareholders for review and approval.

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 Renminbi to Hong Kong dollars as announced by the People's Bank of China during the week prior to the date of declaration of the dividend by the Board (i.e. Friday, 16 August 2019). The mean of the exchange rates of Renminbi to Hong Kong dollars as announced by the People's Bank of China during the five business days prior to the date of declaration of the Interim Dividend by the Board (i.e. Friday, 16 August 2019) is RMB0.89626 to HKD1.00. Accordingly, the Interim Dividend will be HKD0.1205 per H share (inclusive of applicable taxes).

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 will 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 have an agreed tax rate of 10% for the cash dividends given 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 information 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 obtaining 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 an agreed tax rate of 20% with the PRC, or which have not entered into any tax agreement with the PRC, or otherwise, the Company shall withhold and pay the individual income tax at a rate of 20%.

For investors investing in the H Shares of the Company listed on the Hong Kong Stock Exchange through the Shanghai Stock Exchange and Shenzhen Stock Exchange (including enterprises and individuals) (the "Southbound Trading"), 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.

# 4 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 in relation to the Financial Services Framework Agreement in the Company's circular to its shareholders published on 10 September 2013, 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 Continuing Connected Transactions and the 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.

## The Group's Connected Transactions

During the Reporting Period, the aggregate value of the connected transactions entered into by the Group was RMB11.852 billion. In particular, the expenses amounted to RMB1.986 billion and the revenue amounted to RMB9.866 billion (including RMB9.503 billion from the sale of products and services and RMB363 million from interest income), thus satisfying the exemption requirements specified by the Hong Kong Stock Exchange.

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 RMB1.961 billion, which was within the annual cap. The engineering and construction services (engineering consulting, technology licensing, engineering design, EPC Contracting, construction and equipment manufacturing, etc.) provided by the Group to Sinopec Group amounted to RMB9.432 billion, which was within the annual cap.

During the Reporting Period, the 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 RMB1 million, which was within the annual cap. The maximum daily balance of deposits and interest income was RMB7.038 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 RMB70 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 RMB21 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 RMB1 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 RMB3 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 43 of the consolidated financial statements prepared in accordance with the IFRS in this interim report.

## 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 satisfied:

  i The transactions were entered into on normal commercial terms;

  ii If there were not sufficient comparable transactions to judge 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 Shareholders of the Company as a whole.

# 5 Material Litigation or Arbitration Events

The Company is currently involved in legal proceedings 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 in the evidence exchange and cross-examination phase.

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

# 6 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.

# 7 Repurchase, Sale and Redemption of Shares

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

# 8 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 interim report.

# 9 Use of IPO Proceeds

During the Reporting Period, the Group's total amount of proceeds used was RMB450 million, mainly for new long-term equity investment. For details of use of proceeds, please refer to the Company's prospectus published on 23 May 2013, the announcement entitled "Adjustment in Use of Proceeds from the Global Offering" published on 13 December 2013 and the announcement entitled "Adjustment in the Allocations of the Use of Proceeds from the Global Offering" published on 26 October 2018. During the Reporting Period, there was no material change to the use of IPO proceeds. As at the end of the Reporting Period, the Group's total amount of proceeds used was RMB4.367 billion, and by the end of the Reporting Period, the net amount of funds raised amounted to approximately HKD7.219 billion.

# 10 Asset Transactions and Significant Investments

During the Reporting Period, the Group had not conducted any material asset transactions other than those conducted in the ordinary and usual course of business, nor did the Group make any significant investments.

As at the end of the Reporting Period, the Group has no future plans for significant investments or acquisitions of capital assets. Nonetheless, if any potential investment opportunity arises in the future, the Group will perform feasibility studies and prepare implementation plans to consider whether it is beneficial to the Group and the shareholders of the Company as a whole.

# 11 Insolvency and Restructuring

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

## 12 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.

## 13 Significant Acquisitions and Disposal

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

## 14 Financial Derivatives for Hedging Purposes

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

During the Reporting Period, the Group did not carry out financial derivatives trading business.

## 15 Pledged Assets

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

## 16 Debt

The Group had USD56 million (approximately RMB385 million) loans at fixed interest rates to the fellow subsidiaries as at the end of the Reporting Period.

## 17 Contingent Liabilities

For details of contingent liabilities of the Group, please refer to Notes 34 and 42 to the financial statements contained in this report.

## 18 Review of Interim Report

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

The Audit Committee is consisted 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.

# 19 Employees and Remuneration Policy

As at the end of the Reporting Period, the Group had a total of 17,571 employees.

The following list is a categorisation of employee details in different business sectors as at 30 June 2019.

| | As at 30 June 2019 | |
|---|---|---|
| | Number of Employees | Percentage of the Total Employees (%) |
| Engineering and Technical Personnel | 12,023 | 68.4 |
| Management Personnel | 2,333 | 13.3 |
| Production Personnel | 3,215 | 18.3 |
| Total | 17,571 | 100.0 |

The following list is a categorisation of employee details in accordance with education level as at 30 June 2019.

| | As at 30 June 2019 | |
|---|---|---|
| | Number of Employees | Percentage of the Total Employees (%) |
| Master Degree | 2,051 | 11.7 |
| Bachelor Degree | 8,093 | 46.0 |
| Tertiary Qualification | 3,091 | 17.6 |
| Others | 4,336 | 24.7 |
| Total | 17,571 | 100.0 |

During the Reporting Period, the Group maintained good labour relations. The remuneration of the Group's employees mainly consists of salary, discretionary bonuses and contributions to the compulsory social security funds. In accordance with the laws of the PRC, the Group participates in different retirement pension related programmes for the Group's 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 six months ended 30 June 2019 and the six months ended 30 June 2018, the employment costs of the Group were approximately RMB2.342 billion and RMB2.312 billion, respectively.

The Group provides on-the-job training and development opportunities to promote the career development of employees. During the Reporting Period, the Group adhered to the principle of "full staff coverage, prominent focus, and classified guidance" around the production and operation objectives of the Company, and carried out various training activities in a planned way, covering training topics of development in the field of engineering construction, technological innovation and management upgrading, so as to promote the career development of employees in various positions.

# 20 Other Important Matters

During the Reporting Period, none of the Company, the Board and the Directors was subject to any administrative means or sanctions through circular by Hong Kong Securities and Futures Commission or publicly condemned by the Hong Kong Stock Exchange.

# DIRECTORS, SUPERVISORS AND OTHER MEMBERS OF SENIOR MANAGEMENT

As at 30 June 2019, members of the Company's Board of Directors and the Supervisory Committee and other members of the senior management are as follows:

## 1 Directors

### Profile of the Directors of the Third Session of the Board

| Name | Gender | Age | Position in the Company | Term of Office as Director |
|---|---|---|---|---|
| YU Baocai | Male | 54 | Chairman of the Board and Non-executive Director | October 2018 - October 2021 |
| LU Dong | Male | 56 | Vice Chairman of the Board and Executive Director | October 2018 - October 2021 |
| XIANG Wenwu | Male | 53 | 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 | 72 | 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 |

## 2 Supervisors

### Profile of the Supervisors of the Third Session of the Supervisory Committee

| Name | Gender | Age | Position in the Company | Term of Office as Supervisor |
|---|---|---|---|---|
| ZHU Fei | Male | 54 | Chairman of Supervisory Committee | October 2018 - October 2021 |
| WANG Guoliang | Male | 59 | Supervisor | October 2018 - October 2021 |
| YE Wenbang | Male | 56 | Supervisor | October 2018 - October 2021 |
| WU Jibo | Male | 51 | Supervisor | October 2018 - October 2021 |
| XU Yijun | Male | 55 | Employee Representative Supervisor | October 2018 - October 2021 |
| JIANG Dejun | Male | 54 | Employee Representative Supervisor | October 2018 - October 2021 |
| WU Zhongxian | Male | 56 | Employee Representative Supervisor | October 2018 - October 2021 |

# 3 Other Members of the Senior Management

## Profile of other members of the Senior Management

| Name | Gender | Age | Position in the Company | Date of Taking Office |
|---|---|---|---|---|
| XIANG Wenwu | Male | 53 | President and Executive Director | January 2018 |
| GUAN Qingjie | Male | 60 | Chairman of Staff Union | August 2012 |
| QI Guosheng | Male | 58 | Vice President | November 2014 |
| WANG Guohua | Male | 50 | Vice President | April 2019 |
| JIA Yiqun | Male | 51 | Chief Financial Officer<br>Company Secretary | August 2012<br>July 2019 |
| WANG Yi | Male | 48 | Vice President | July 2019 |

## Appointment and Resignation of other Senior Management during and after the Reporting Period

In consideration of his age, Mr. XIAO Gang resigned as the Vice President of the Company, with effect from 11 February 2019; Mr. SUN Xiaobo resigned as the Vice President of the Company, with effect from 8 April 2019. As approved by the third meeting of the Third Session of the Board on 8 April 2019, Mr. WANG Guohua was appointed as the Vice President of the Company; as approved by the fourth meeting of the Third Session of the Board on 30 July 2019, Mr. WANG Yi was appointed as the Vice President of the Company.

Due to work adjustment, Mr. SANG Jinghua resigned as the Vice President, Secretary to the Board and Company Secretary, with effect from 16 May 2019. As approved by the fourth meeting of the Third Session of the Board on 30 July 2019, Mr. JIA Yiqun was appointed as the Company Secretary.

## Equity Interest of Directors, Supervisors and Members of the Senior Management of the Company

During the Reporting Period, to the best knowledge of the Directors, none of the Directors, Supervisors and members of the Senior Management of the Company and their respective associates had any interest or short positions in any shares or debentures of the Company or any associated corporations (within the meaning of Part XV of the SFO) which are 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 into the register referred to therein, or which are required, pursuant to the Model Code for Securities Transactions by Directors of Listed Companies (the “Model Code”) under Appendix 10 to the Hong Kong Listing Rules, to be notified to the Company and the Hong Kong Stock Exchange. After specific inquiries by the Company, all Directors and Supervisors confirmed that they complied with the standards of the Model Code during the Reporting Period.

# FINANCIAL STATEMENTS

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 interim financial statements of SINOPEC Engineering (Group) Co., Ltd. (the "Company") and its subsidiaries (together, the "Group") set out on pages 71 to 151, which comprise the consolidated statement of financial position as at 30 June 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the six-month period then ended, and notes to the consolidated interim financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated interim financial statements give a true and fair view of the consolidated financial position of the Group as at 30 June 2019, and of its consolidated financial performance and its consolidated cash flows for the six-month period then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board.

### 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 Interim 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 interim financial statements of the current period. These matters were addressed in the context of our audit of the consolidated interim 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**<br><br>*Refer to notes 5(a) and 6 to the consolidated interim financial statements and note 3.24 to the consolidated interim financial statements for the related accounting policies.*<br><br>The Group recognised revenue of RMB22,682,018,000 for the six-month period ended 30 June 2019.<br><br>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.<br><br>These transactions require individual consideration and involve management's estimates and judgment. 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:<br><br>– assessing and testing the related internal control of the management's accounting estimates and judgment of construction contracts;<br><br>– obtaining material construction contracts to review key contract terms and verify the total contract revenues;<br><br>– checking, on a sample basis, the principal terms set out in the relevant construction contracts and the implementation status;<br><br>– 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<br><br>– performing analytical review procedures on the gross margins of material construction contracts of the Group. |

## KEY AUDIT MATTERS (CONTINUED)

| Key Audit Matter | How our audit addressed the Key Audit Matter |
|---|---|
| **Provision for expected credit losses ("ECL") of trade receivables and contract assets**<br><br>*Refer to notes 5(c), 22 and 24(a) to the consolidated interim financial statements and note 3.9(c) to the consolidated interim financial statements for related accounting policy.*<br><br>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.<br><br>We have identified ECL assessment of trade receivables and contract assets as a key audit matter because their assessment 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 and contract assets included:<br><br>– reviewing and assessing the application of the Group's policy for calculating the ECL;<br><br>– evaluating techniques and methodology in the ECL model against the requirements of IFRS 9;<br><br>– assessing the reasonableness of management's loss allowance estimates by examining the information used by management to form such judgments, 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;<br><br>– evaluating the design, implementation and operating effectiveness of key internal controls which govern credit control, debt collection and estimation of ECL; and<br><br>– 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 interim report of the Company, but does not include the consolidated interim financial statements and our auditor's report thereon.

Our opinion on the consolidated interim 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 interim 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 interim 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 INTERIM FINANCIAL STATEMENTS

The directors are responsible for the preparation of the consolidated interim financial statements that give a true and fair view in accordance with IFRSs, and for such internal control as the directors determine is necessary to enable the preparation of consolidated interim financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated interim 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 INTERIM FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated interim 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 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 interim financial statements.

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 interim 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 interim 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 interim financial statements, including the disclosures, and whether the consolidated interim 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 interim financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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 interim 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

16 August 2019

Chan Tze Kit

Practising Certificate No.: P05707

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

| | Note | Six months ended 30 June | |
|---|---|---|---|
| | | 2019 | 2018 |
| | | RMB'000 | RMB'000 |
| Revenue | 6 | 22,682,018 | 18,335,880 |
| Cost of sales | | (20,310,065) | (16,414,394) |
| Gross profit | | 2,371,953 | 1,921,486 |
| Other income | 8 | 118,758 | 135,723 |
| Selling and marketing expenses | | (50,250) | (44,658) |
| Administrative expenses | | (606,920) | (471,455) |
| Research and development costs | | (746,721) | (452,868) |
| Other operating income | | 11,440 | 64,691 |
| Other gains/(losses) - net | 9 | 2,883 | (155,072) |
| Operating profit | | 1,101,143 | 997,847 |
| Finance income | 10 | 450,638 | 368,009 |
| Finance expenses | 10 | (54,561) | (51,758) |
| Finance income - net | | 396,077 | 316,251 |
| Share of loss of joint arrangements | 20(a) | (111) | (215) |
| Share of profit of associates | 20(b) | 16,355 | 22,021 |
| Profit before taxation | 11 | 1,513,464 | 1,335,904 |
| Income tax expense | 12 | (314,710) | (228,194) |
| Profit for the period | | 1,198,754 | 1,107,710 |

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

| | Note | Six months ended 30 June | |
|---|---|---|---|
| | | 2019 | 2018 |
| | | RMB'000 | RMB'000 |
| Other comprehensive income/(expense) for the period, net of tax | | | |
| Item that may be reclassified subsequently to profit or loss: | | | |
| Exchange differences arising on translation of foreign operations | | 117,849 | (29,680) |
| Item that will not be reclassified subsequently to profit or loss: | | | |
| Gains/(losses) on revaluation of retirement benefit plans obligations, net of income tax effect | | 122 | (90,690) |
| Other comprehensive income/(expense) for the period, net of tax | | 117,971 | (120,370) |
| Total comprehensive income for the period | | 1,316,725 | 987,340 |
| Profit attributable to: | | | |
| Equity holders of the Company | | 1,198,685 | 1,107,565 |
| Non-controlling interests | | 69 | 145 |
| Profit for the period | | 1,198,754 | 1,107,710 |
| Total comprehensive income attributable to: | | | |
| Equity holders of the Company | | 1,316,656 | 987,195 |
| Non-controlling interests | | 69 | 145 |
| Total comprehensive income for the period | | 1,316,725 | 987,340 |
| | | RMB | RMB |
| Earnings per share for profit attributable to equity holders of the Company during the period (expressed in RMB per share) | | | |
| – Basic and diluted | 13 | 0.27 | 0.25 |

Note
The Group has initially applied IFRS 16 at 1 January 2019, using the modified retrospective approach. Under this approach, comparative information is not restated. See note 3.1.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

| | Note | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|---|
| | | RMB'000 | RMB'000 |
| **ASSETS** | | | |
| **Non-current assets** | | | |
| Property, plant and equipment | 16 | 3,341,966 | 3,496,474 |
| Land use rights | 17 | — | 2,442,793 |
| Right-of-use assets | 18 | 2,628,789 | — |
| Intangible assets | 19 | 128,653 | 164,081 |
| Investment in joint arrangements | 20(a) | 1,755 | 1,866 |
| Investment in associates | 20(b) | 160,609 | 147,454 |
| Financial assets at fair value through other comprehensive income | 21 | — | 680 |
| Deferred income tax assets | 37 | 722,616 | 781,439 |
| **Total non-current assets** | | 6,984,388 | 7,034,787 |
| **Current assets** | | | |
| Inventories | 25 | 632,123 | 400,921 |
| Notes and trade receivables | 22 | 10,812,118 | 9,726,429 |
| Prepayments and other receivables | 23 | 7,179,681 | 4,967,162 |
| Contract assets | 24(a) | 12,630,703 | 11,573,904 |
| Loans due from the ultimate holding company | 26 | 19,000,000 | 18,000,000 |
| Restricted cash | 27 | 35,870 | 29,468 |
| Time deposits | 28 | 6,647,621 | 2,142,406 |
| Cash and cash equivalents | 29 | 6,641,446 | 16,997,663 |
| **Total current assets** | | 63,579,562 | 63,837,953 |
| **Total assets** | | 70,563,950 | 70,872,740 |

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

| | Note | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|---|
| | | RMB'000 | RMB'000 |
| **EQUITY** | | | |
| Share capital | 30 | 4,428,000 | 4,428,000 |
| Reserves | | 22,317,901 | 21,550,646 |
| Equity attributable to equity holders of the Company | | 26,745,901 | 25,978,646 |
| Non-controlling interests | | 4,572 | 4,503 |
| **Total equity** | | 26,750,473 | 25,983,149 |
| **LIABILITIES** | | | |
| **Non-current liabilities** | | | |
| Lease liabilities | 32 | 152,453 | — |
| Retirement and other supplemental benefit obligations | 33 | 2,559,001 | 2,636,815 |
| Provision for litigation claims | 34 | 264,485 | 253,936 |
| Deferred tax liabilities | 37 | 232 | — |
| **Total non-current liabilities** | | 2,976,171 | 2,890,751 |
| **Current liabilities** | | | |
| Notes and trade payables | 35 | 28,556,378 | 28,686,243 |
| Other payables | 36 | 1,752,411 | 2,758,139 |
| Dividend payables | | 549,072 | — |
| Contract liabilities | 24(b) | 9,413,189 | 9,968,594 |
| Lease liabilities | 32 | 55,220 | — |
| Loans due to a fellow subsidiary | 38 | 384,983 | 384,339 |
| Current income tax liabilities | | 126,053 | 201,525 |
| **Total current liabilities** | | 40,837,306 | 41,998,840 |
| **Total liabilities** | | 43,813,477 | 44,889,591 |
| **Total equity and liabilities** | | 70,563,950 | 70,872,740 |
| **Net current assets** | | 22,742,256 | 21,839,113 |
| **Total assets less current liabilities** | | 29,726,644 | 28,873,900 |

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

Note

The Group has initially applied IFRS 16 at 1 January 2019, using the modified retrospective approach. Under this approach, comparative information is not restated. See note 3.1.

# 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 30) | RMB'000 (Note 31(ii)) | RMB'000 (Note 31(i)) | RMB'000 (Note 31(iii)) | RMB'000 (Note 31(iv)) | RMB'000 | RMB'000 | RMB'000 | RMB'000 |
| At 1 January 2019 | 4,428,000 | 10,092,369 | 999,155 | 182,340 | (95,834) | 10,372,616 | 25,978,646 | 4,503 | 25,983,149 |
| Profit for the period | — | — | — | — | — | 1,198,685 | 1,198,685 | 69 | 1,198,754 |
| Other comprehensive income: | | | | | | | | | |
| Defined benefits obligation revaluation of actuarial gain and loss - gross | — | — | — | — | — | 148 | 148 | — | 148 |
| Defined benefits obligation revaluation of actuarial gain and loss - tax | — | — | — | — | — | (26) | (26) | — | (26) |
| Exchange differences arising on translation of foreign operations | — | — | — | — | 117,849 | — | 117,849 | — | 117,849 |
| Total comprehensive income | — | — | — | — | 117,849 | 1,198,807 | 1,316,656 | 69 | 1,316,725 |
| Transactions with owners: | | | | | | | | | |
| Final dividends for 2018 | — | — | — | — | — | (549,072) | (549,072) | — | (549,072) |
| Appropriation of specific reserve | — | — | — | 46,909 | — | (46,909) | — | — | — |
| Utilisation of specific reserve | — | — | — | (45,413) | — | 45,413 | — | — | — |
| Proceed from financial assets at fair value through other comprehensive income | — | — | — | — | — | (329) | (329) | — | (329) |
| Total transactions with owners | — | — | — | 1,496 | — | (550,897) | (549,401) | — | (549,401) |
| Balance at 30 June 2019 | 4,428,000 | 10,092,369 | 999,155 | 183,836 | 22,015 | 11,020,526 | 26,745,901 | 4,572 | 26,750,473 |

# 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 30) | RMB'000 (Note 31(ii)) | RMB'000 (Note 31(i)) | RMB'000 (Note 31(iii)) | RMB'000 (Note 31(iv)) | 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 period | — | — | — | — | — | 1,107,565 | 1,107,565 | 145 | 1,107,710 |
| Other comprehensive income: | | | | | | | | | |
| Defined benefits obligation revaluation of actuarial gain and loss - gross | — | — | — | — | — | (108,606) | (108,606) | — | (108,606) |
| Defined benefits obligation revaluation of actuarial gain and loss - tax | — | — | — | — | — | 17,916 | 17,916 | — | 17,916 |
| Exchange differences arising on translation of foreign operations | — | — | — | — | (29,680) | — | (29,680) | — | (29,680) |
| Total comprehensive income | — | — | — | — | (29,680) | 1,016,875 | 987,195 | 145 | 987,340 |
| Transactions with owners: | | | | | | | | | |
| Final dividends for 2017 | — | — | — | — | — | (637,632) | (637,632) | — | (637,632) |
| Appropriation of specific reserve | — | — | — | 30,958 | — | (30,958) | — | — | — |
| Utilisation of specific reserve | — | — | — | (27,912) | — | 27,912 | — | — | — |
| Total transactions with owners | — | — | — | 3,046 | — | (640,678) | (637,632) | — | (637,632) |
| Balance at 30 June 2018 | 4,428,000 | 10,092,369 | 872,994 | 167,439 | (75,768) | 10,451,368 | 25,936,402 | 4,311 | 25,940,713 |

Note

The Group has initially applied IFRS 16 at 1 January 2019, using the modified retrospective approach. Under this approach, comparative information is not restated. See note 3.1.

# CONSOLIDATED STATEMENT OF CASH FLOWS

| | Note | Six months ended 30 June | |
|---|---|---|---|
| | | 2019 | 2018 |
| | | RMB'000 | RMB'000 |
| Cash flows from operating activities | | | |
| Cash used in operations | 41 | (4,745,619) | (876,841) |
| Income tax paid | | (318,142) | (273,884) |
| Interest received | | 99,522 | 117,902 |
| Net cash used in operating activities | | (4,964,239) | (1,032,823) |
| Cash flows from investing activities | | | |
| Purchase of property, plant and equipment | | (80,465) | (44,049) |
| Purchase of intangible assets | | (1,360) | (3,213) |
| Settlement of acquisition of a subsidiary | | — | (44,100) |
| Interest income on the loans to the ultimate holding company | | 299,635 | 265,113 |
| Proceeds from disposal of property, plant and equipment | | 431 | 938 |
| Proceeds from disposal of financial assets at fair value through other comprehensive income | | 351 | 1,946 |
| Dividends received from joint arrangements | | 3,200 | — |
| Net (increase)/decrease in time deposits | | (4,505,215) | 1,294,230 |
| Loans to the ultimate holding company | | (8,000,000) | (5,000,000) |
| Loans repaid by the ultimate holding company | | 7,000,000 | 4,000,000 |
| Net cash (used in)/generated from investing activities | | (5,283,423) | 470,865 |
| Cash flows from financing activities | | | |
| Borrowings from a fellow subsidiary | | — | 130,684 |
| Interest paid | | (8,798) | (3,449) |
| Payments of lease liabilities | | (43,357) | — |
| Net cash (used in)/generated from financing activities | | (52,155) | 127,235 |
| Net increase in cash and cash equivalents | | (10,299,817) | (434,723) |
| Cash and cash equivalents at beginning of period | | 16,997,663 | 11,660,660 |
| Exchange (losses)/gains on cash and cash equivalents | | (56,400) | 123,431 |
| Cash and cash equivalents at end of period | 29 | 6,641,446 | 11,349,368 |

# NOTES TO THE CONSOLIDATED INTERIM FINANCIAL STATEMENTS

## 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 interim financial statements are presented in Renminbi ("RMB"), unless otherwise stated.

The consolidated interim financial statements have been approved for issue by the Board of Directors on 16 August 2019.

## 2. Basis of Preparation

The consolidated interim financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board (the "IASB"). The consolidated interim financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules").

The consolidated interim 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 interim 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 interim financial statements are disclosed in Note 5.

# 3. Summary of Significant Accounting Policies

The principal accounting policies applied in the preparation of the consolidated interim 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 interim financial statements for the accounting period beginning on or after 1 January 2019:

| | |
|---|---|
| IFRS 16 | Leases |
| Amendments to IFRS 9 | Prepayment Features with Negative Compensation |
| Amendments to IAS 19 | Plan Amendment, Curtailment or Settlement |
| Amendments to IAS 28 | Long-term Interests in Associates and Joint Ventures |
| IFRIC – Int 23 | Uncertainty over Income Tax Treatments |
| Amendments to IFRSs | Annual Improvements to IFRSs 2015-2017 Cycle |

Other than the impact of the adoption of IFRS 16 as noted below, the adoption of the new and amended IFRSs had no material impact on how the results and financial position for the current and prior periods have been prepared and presented.

**IFRS 16 "Leases"**

IFRS 16 "Leases" replaces IAS 17 "Leases" along with three Interpretations IFRIC – Int 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"). IFRS 16 has been applied using the modified retrospective approach, has therefore recognised the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019. Prior periods have not been restated.

For contracts in place at the date of initial application, the Group has elected to apply the definition of a lease from IAS 17 and IFRIC – Int 4 and has not applied IFRS 16 to arrangements that were previously not identified as lease under IAS 17 and IFRIC – Int 4. The Group has already recognised the land use rights for leasehold land where the Group is a lessee. The application of IFRS 16 does not have impact on these assets except for the whole balance is now presented as "land use rights" under non-current assets.

The Group has elected not to include initial direct costs in the measurement of the right-of-use asset for operating leases in existence at the date of initial application of IFRS 16, being 1 January 2019. At this date, the Group has also elected to measure the right-of-use assets at an amount equal to the lease liability adjusted for any prepaid or accrued lease payments that existed at the date of transition.

Instead of performing an impairment review on the right-of-use assets at the date of initial application, the Group has relied on its historic assessment as to whether leases were onerous immediately before the date of initial application of IFRS 16.

On transition, for leases previously accounted for as operating leases with a remaining lease term of less than 12 months, the Group has applied the practical expedient not to recognise right-of-use assets but to account for the lease expense on a straight-line basis over the remaining lease term.

When measuring lease liabilities for leases that were classified as operating leases, the Group discounted lease payments using its incremental borrowing rate. The weighted average rate applied is 4.81%.

The Group has benefited from the use of hindsight for determining lease term when considering options to extend and terminate leases.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.1 New and amended IFRS (Continued)

### IFRS 16 "Leases" (Continued)

The following is a reconciliation of total operating lease commitments (Note 32) as at 31 December 2018 to the lease liabilities recognised as at 1 January 2019:

| | As at 1 January 2019 |
|---|---|
| | RMB'000 |
| Total operating lease commitments disclosed as at 31 December 2018 | 279,298 |
| Less: Commitments relating to leases exempt from capitalisation | |
| Leases with remaining lease term of less than 12 months | (66,451) |
| Less: Total future interest expenses | (27,454) |
| Total lease liabilities recognised under IFRS 16 as at 1 January 2019 | 185,393 |

The following table summarises the impact of transition to IFRS 16 on the Group's consolidated statement of financial position as at 1 January 2019:

| | Carrying amount as at 31 December 2018 | Remeasurement | Reclassification | IFRS 16 carrying amount as at 1 January 2019 |
|---|---|---|---|---|
| | RMB'000 | RMB'000 | RMB'000 | RMB'000 |
| Line items in the consolidated statement of financial position impacted by the adoption of IFRS 16: | | | | |
| Right-of-use assets | — | 187,437 | 2,442,793 | 2,630,230 |
| Land use rights | 2,442,793 | — | (2,442,793) | — |
| Non-current assets | 7,034,787 | 187,437 | — | 7,222,224 |
| Prepayment and other receivables | 4,967,162 | (2,044) | — | 4,965,118 |
| Current asset | 63,837,953 | (2,044) | — | 63,835,909 |
| Lease liabilities (current portion) | — | 51,299 | — | 51,299 |
| Current liabilities | 41,998,840 | 51,299 | — | 42,050,139 |
| Lease liabilities (non-current portion) | — | 134,094 | — | 134,094 |
| Non-current liabilities | 2,890,751 | 134,094 | — | 3,024,845 |
| Total equity | 25,983,149 | — | — | 25,983,149 |

# 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 30 June 2019 which are relevant to the Group but the Group has not early adopted are set out below:

| | |
|---|---|
| IFRS 17 | Insurance Contracts[2] |
| Amendments to IAS 1 and IAS 8 | Definition of Material[1] |
| Amendments to IFRS 3 | Definition of a Business[4] |
| Amendments to IFRS 10 and IAS 28 | Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[3] |

[1] Accounting periods beginning on or after 1 January 2020
[2] Accounting periods beginning on or after 1 January 2021
[3] Effective date not yet been determined
[4] Effective for business combinations and asset acquisition for which the acquisition date is on or after the beginning of the first annual period beginning on or after 1 January 2020

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

## 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 harmonies 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.

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 interim financial statements. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.2 Consolidation (Continued)

**Subsidiaries (Continued)**

***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.

**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 associate 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. Summary of Significant Accounting Policies (Continued)

## 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.

## 3.4 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 gains/(losses) - net" and "other operating income".

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. Summary of Significant Accounting Policies (Continued)

## 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.

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 gains/(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 period in which they are incurred.

## 3.6 Land use rights

### Policy applicable before 1 January 2019

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.

The Group has already reallocated land use rights to right-of-use assets at the date of initial application of IFRS 16, being 1 January 2019. See note 3.28.

## 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 administrative 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 administrative 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

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.

***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.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.9 Financial instruments (Continued)

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

***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.

***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.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.9 Financial instruments (Continued)

### (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.

***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.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.9 Financial instruments (Continued)

### (c) Impairment of financial assets (Continued)

***Measurement of ECL (Continued)***

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 measured 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.

***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.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.9 Financial instruments (Continued)

### (c) Impairment of financial assets (Continued)

*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, dividend payables, lease liabilities 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.

### (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.

## 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.

## 3.11 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. Summary of Significant Accounting Policies (Continued)

## 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.

## 3.17 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.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.17 Employee benefits (Continued)

### Pension obligations (Continued)

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.

## 3.18 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 completed.

# 3. Summary of Significant Accounting Policies (Continued)

## 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 interim 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.

***Value-added taxation ("VAT")***

Sales of goods and provision of engineering, consulting and licensing services of the Group are subjected to VAT. VAT payable is determined by applying 13% 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.

Taxable revenue from construction services is subject to VAT at the rate of 9% after offsetting deductible input VAT of the period from 1 May 2019. Certain revenue resulting from providing construction services was taxed by using applicable simple tax method, paying VAT at 3%.

# 3. Summary of Significant Accounting Policies (Continued)

## 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 interim 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 interim 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 purchase of assets 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.

## 3.23 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. Summary of Significant Accounting Policies (Continued)

## 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.

### 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.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.24 Revenue recognition (Continued)

**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 an 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.

## 3.27 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. Summary of Significant Accounting Policies (Continued)

## 3.28 Leases

### (a) The Group as a lessee

***Applicable from 1 January 2019***

For any new contracts entered into on or after 1 January 2019, the Group considers whether a contract is, or contains a lease. A lease is defined as 'a contract, or part of a contract, that conveys the right to use an identified asset (the underlying asset) for a period of time in exchange for consideration'. To apply this definition, the Group assesses whether the contract meets three key evaluations which are whether:

- the contracts contain an identified asset, which is either explicitly identified in the contract or implicitly specified by being identified at the time the asset is made available to the Group;
- the Group has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use, considering its rights within the defined scope of the contract; and
- the Group has the right to direct the use of the identified asset throughout the period of use. The Group assess whether it has the right to direct 'how and for what purpose' the asset is used throughout the period of use.

*Measurement and recognition of leases as a lessee*

At lease commencement date, the Group recognises a right-of-use asset and a lease liability on the condensed consolidated statement of financial position. The right-of-use asset is measured at cost, which is made up of the initial measurement of the lease liability, any initial direct costs incurred by the Group, an estimate of any costs to dismantle and remove the underlying asset at the end of the lease, and any lease payments made in advance of the lease commencement date (net of any lease incentives received).

The Group depreciates the right-of-use assets on a straight-line basis from the lease commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term unless the Group is reasonably certain to obtain ownership at the end of the lease term. The Group also assesses the right-of-use asset for impairment when such indicator exists.

At the commencement date, the Group measures the lease liability at the present value of the lease payments unpaid at that date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable payments based on an index or rate, and amounts expected to be payable under a residual value guarantee. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payment of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate.

Subsequent to initial measurement, the liability will be reduced for lease payments made and increased for interest cost on the lease liability. It is remeasured to reflect any reassessment or lease modification, or if there are changes in in-substance fixed payments. The variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs.

When the lease is remeasured, the corresponding adjustment is reflected in the right-of-use asset, or profit and loss if the right-of-use asset is already reduced to zero.

The Group has elected to account for short-term leases using the practical expedients. Instead of recognising a right-of-use asset and lease liability, the payments in relation to these leases are recognised as an expense in profit or loss on a straight-line basis over the lease term. Short-term leases are leases with a lease term of 12 month or less.

On the condensed consolidated statement of financial position, right-of-use assets that do not meet the definition of investment property have been included in property, plant and equipment, the same line as it presents the underlying assets of the same nature that it owns.

# 3. Summary of Significant Accounting Policies (Continued)

## 3.28 Leases (Continued)

### (a) The Group as a lessee (Continued)

***Applicable before 1 January 2019***

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

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

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

*Operating leases*

Where the Group has the right to use of assets held under operating leases, payments made under the leases are charged to profit or loss on a straight line basis over the lease terms except where an alternative basis is more representative of the time pattern of benefits to be derived from the leased assets. Lease incentives received are recognised in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

### (b) The Group as a lessor

As a lessor, the Group classifies its leases as either operating or finance leases.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of the underlying asset, and classified as an operating lease if it does not.

The Group also earns rental income from operating leases. Rental income is recognised on a straight-line basis over the term of the lease.

# 3. Summary of Significant Accounting Policies (Continued)

## 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:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Financial assets | | |
| *Financial assets at amortised cost* | | |
| Notes, trade and other receivables | 11,862,057 | 10,864,411 |
| Restricted cash | 35,870 | 29,468 |
| Time deposits | 6,647,621 | 2,142,406 |
| Cash and cash equivalents | 6,641,446 | 16,997,663 |
| Loans due from the ultimate holding company | 19,000,000 | 18,000,000 |
| | 44,186,994 | 48,033,948 |
| *Financial assets at FVTOCI (non-recycling)* | | |
| Unlisted equity investments | — | 680 |
| Total financial assets | 44,186,994 | 48,034,628 |
| Financial liabilities | | |
| *Financial liabilities measured at amortised cost* | | |
| Notes, trade and other payables | 30,240,098 | 30,765,919 |
| Dividend payables | 549,072 | — |
| Loans due to a fellow subsidiary | 384,983 | 384,339 |
| Lease liabilities | 207,673 | — |
| Total financial liabilities | 31,381,826 | 31,150,258 |

# 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 30 June 2019 and 31 December 2018.

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 30 June 2019 | USD | Others |
|---|---|---|
| | RMB'000 | RMB'000 |
| Restricted cash, time deposits and cash and cash equivalents | 3,730,457 | 2,242,506 |
| Notes, trade and other receivables | 613,268 | 1,029,897 |
| Notes, trade and other payables | (778,863) | (3,692,895) |
| Loans due to a fellow subsidiary | (384,983) | — |
| Lease liabilities | (1,435) | — |
| Net exposure in RMB | 3,178,444 | (420,492) |

| 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) |

# 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 30 June 2019 and 31 December 2018 would have changed the equity and net profit by the amounts shown below:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Decrease in equity and net profit | | |
| – USD | (119,192) | (269,118) |

A 5% weakening of RMB as at 30 June 2019 and 31 December 2018 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, notes, trade and other receivables and contract assets.

In order to minimise credit risk, the Group has developed and maintained the Group's credit risk grading 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 measured 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 (Continued)

***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 30 June 2019** | | | | | | | |
| Notes, trade and other payables | N/A | 30,240,098 | — | — | — | 30,240,098 | 30,240,098 |
| Dividend payables | N/A | 549,072 | — | — | — | 549,072 | 549,072 |
| Loans due to a fellow subsidiary | 4.16% | 387,434 | — | — | — | 387,434 | 384,983 |
| Lease liabilities | 4.81% | 61,069 | 131,035 | 46,377 | — | 238,481 | 207,673 |
| Borrowings and other liabilities | | 31,237,673 | 131,035 | 46,377 | — | 31,415,085 | 31,381,826 |

| | 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 payables | 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 |

# 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, other payables, dividend payables, lease liabilities and loans due to a fellow subsidiary, 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.

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Total borrowings and other liabilities | 31,381,826 | 31,150,258 |
| Less: Restricted cash, time deposits and cash and cash equivalents | (13,324,937) | (19,169,537) |
| Net debt | 18,056,889 | 11,980,721 |
| Total equity (excluding non-controlling interests) | 26,745,901 | 25,978,646 |
| Total capital | 44,802,790 | 37,959,367 |
| Gearing ratio | 40% | 32% |

## 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).

### 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 as at 30 June 2019.

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 30 June 2019 Level 3 |
|---|---|
| Description | RMB'000 |
| Financial assets at FVTOCI | |
| – Unlisted equity securities | — |

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 2019 |
|---|---|
| | RMB'000 |
| At 1 January | 680 |
| Disposal | (680) |
| At 30 June | — |

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 six months ended 30 June 2019 (31 December 2018: 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 30 June 2019 the contract assets (Note 24(a)) and contract liabilities (Note 24(b)) are RMB12,630,703,000 and RMB9,413,189,000 respectively (31 December 2018: RMB11,573,904,000 and RMB9,968,594,000).

## (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 16). 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 30 June 2019, the net carrying amount of property, plant and equipment is RMB3,341,966,000 (31 December 2018: RMB3,496,474,000).

## (c) Provision for ECL of trade receivables and contract assets

The Group determines the provision for ECL on trade receivables (Note 22) and contract assets (Note 24(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 30 June 2019, the provision for impairment on trade receivables and contract assets are RMB1,260,089,000 (31 December 2018: RMB1,313,283,000) and RMB116,516,000 (31 December 2018: RMB164,750,000) respectively.

## (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 30 June 2019, deferred tax assets recognised in the consolidated statement of financial position is RMB722,616,000 (31 December 2018: RMB781,439,000).

# 5. Critical Accounting Estimates and Judgments (Continued)

## (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 30 June 2019, the net liabilities of retirement benefit plan obligations (Note 33(b)) is RMB2,559,001,000 (31 December 2018: RMB2,636,815,000).

## (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 30 June 2019, provision for litigation claims (Note 34) is RMB264,485,000 (31 December 2018: RMB253,936,000).

# 6. Revenue

The Group's revenue is set out below:

| | Six months ended 30 June | |
|---|---|---|
| | **2019** | 2018 |
| | **RMB'000** | RMB'000 |
| **Engineering, consulting and licensing** | **951,852** | 1,402,857 |
| **EPC Contracting** | **13,852,329** | 10,185,271 |
| **Construction** | **7,734,067** | 6,457,422 |
| **Equipment manufacturing** | **143,770** | 290,330 |
| | **22,682,018** | 18,335,880 |

## Remaining performance obligations

As at 30 June 2019, amount of remaining performance obligations is RMB105,473,232,000 (2018: RMB108,175,882,000), which is expected to be completed in the coming 60 months (2018: 60 months).

# 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.

# 7. Segment Information (Continued)

Segment assets consist primarily of property, plant and equipment, land use rights, rights of use assets, 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 current income tax liabilities and deferred income tax liabilities.

Capital expenditure comprises additions to property, plant and equipment (Note 16), land use rights (Note 17), right-of-use assets (Note 18), intangible assets (Note 19) and other non-current assets, including additions resulting from acquisitions through business combinations.

The segment information provided to the Senior Management for the reportable segments is as follow:

**(i) As at and for the six months ended 30 June 2019:**

The segment results for the period ended 30 June 2019 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 | 951,852 | 13,852,329 | 7,734,067 | 143,770 | — | — | 22,682,018 |
| Inter-segment revenue | 196,070 | — | 1,855,920 | 174,240 | — | (2,226,230) | — |
| Segment revenue | 1,147,922 | 13,852,329 | 9,589,987 | 318,010 | — | (2,226,230) | 22,682,018 |
| Segment result | 84,166 | 700,768 | 292,848 | (2,675) | 26,036 | — | 1,101,143 |
| Finance income | | | | | | | 450,638 |
| Finance expenses | | | | | | | (54,561) |
| Share of loss of joint arrangements | (111) | — | — | — | — | — | (111) |
| Share of profit of associates | 5,248 | 9,992 | 1,115 | — | — | — | 16,355 |
| Profit before taxation | | | | | | | 1,513,464 |
| Income tax expense | | | | | | | (314,710) |
| Profit for the period | | | | | | | 1,198,754 |
| **Other segment items** | | | | | | | |
| Depreciation | 28,807 | 70,055 | 184,534 | 12,596 | — | — | 295,992 |
| Amortisation | 695 | 34,817 | 1,276 | — | — | — | 36,788 |
| Capital expenditures | | | | | | | |
| – Property, plant and equipment | 13,094 | 16,603 | 56,563 | 1,041 | — | — | 87,301 |
| – Right-of-use assets | 598 | 12,668 | 36,216 | 6,782 | — | — | 56,264 |
| – Intangible assets | — | 926 | 434 | — | — | — | 1,360 |
| Provision/(Reversal of provision) for ECL on trade and other receivables and contract assets, net | (15,384) | (73,972) | (8,682) | 308 | — | — | (97,730) |

# 7. Segment Information (Continued)

### (i) As at and for the six months ended 30 June 2019: (Continued)

The segment assets and liabilities as at 30 June 2019 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 | 3,903,739 | 26,531,981 | 18,153,952 | 1,034,767 | (4,869,515) | 44,754,924 |
| Investment in joint arrangements | 1,755 | — | — | — | — | 1,755 |
| Investment in associates | 71,253 | 71,961 | 17,395 | — | — | 160,609 |
| Other unallocated assets | | | | | | 25,646,662 |
| **Total assets** | | | | | | 70,563,950 |
| **Liabilities** | | | | | | |
| Segment liabilities | 3,087,194 | 27,997,630 | 17,047,680 | 426,336 | (4,745,595) | 43,813,245 |
| Other unallocated liabilities | | | | | | 232 |
| **Total liabilities** | | | | | | 43,813,477 |

# 7. Segment Information (Continued)

### (ii) As at 30 June 2018 and six months ended 30 June 2018:

The segment results for the period ended 30 June 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** | 1,402,857 | 10,185,271 | 6,457,422 | 290,330 | — | — | 18,335,880 |
| **Inter-segment revenue** | — | — | 1,416,789 | 16,929 | — | (1,433,718) | — |
| **Segment revenue** | 1,402,857 | 10,185,271 | 7,874,211 | 307,259 | — | (1,433,718) | 18,335,880 |
| **Segment result** | 221,565 | 529,925 | 208,309 | 8,158 | 29,890 | — | 997,847 |
| **Finance income** | | | | | | | 368,009 |
| **Finance expenses** | | | | | | | (51,758) |
| **Share of loss of joint arrangements** | (215) | — | — | — | — | — | (215) |
| **Share of profit of associates** | 9,268 | 10,694 | 2,059 | — | — | — | 22,021 |
| **Profit before taxation** | | | | | | | 1,335,904 |
| **Income tax expense** | | | | | | | (228,194) |
| **Profit for the period** | | | | | | | 1,107,710 |
| **Other segment items** | | | | | | | |
| **Depreciation** | 64,821 | 23,953 | 200,276 | 6,231 | — | — | 295,281 |
| **Amortisation** | 38,266 | 18,649 | 12,583 | 59 | — | — | 69,557 |
| **Capital expenditures** | | | | | | | |
| **– Property, plant and equipment** | 24,031 | 8,665 | 88,888 | 231 | — | — | 121,815 |
| **– Intangible assets** | 3,213 | — | — | — | — | — | 3,213 |
| **Loss on fair value change of derivative financial instrument** | — | 157,195 | — | — | — | — | 157,195 |
| **Provision/(Reversal of provision) for ECL on trade and other receivables, net** | 14,074 | (122,944) | 19,403 | 4,564 | — | — | (84,903) |

# 7. Segment Information (Continued)

**(ii) As at 30 June 2018 and six months ended 30 June 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)

**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, right-of-use assets, 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

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| The PRC | 16,754,294 | 12,101,546 |
| Malaysia | 222,749 | 421,297 |
| Kuwait | 2,938,500 | 3,384,551 |
| Saudi Arabia | 1,383,330 | 1,233,048 |
| Other countries | 1,383,145 | 1,195,438 |
| | 22,682,018 | 18,335,880 |

The customers accounted for more than 10% of the total revenue of the Group and revenue from them for the six months ended 30 June 2019 and 2018, the details are as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Fellow subsidiary and its subsidiaries | | |
| – Customer group A | 3,257,948 | 3,916,642 |
| – Customer group B | 2,967,725 | N/A (1) |

(1) Revenue from this customer in the prior period did not exceed 10% of the Group's revenue.

The revenue from the customers are derived from the segment of engineering, consulting and licensing, EPC contracting, construction and equipment manufacturing.

## Specified non-current assets

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| The PRC | 5,943,618 | 5,916,635 |
| Other countries | 318,154 | 336,033 |
| | 6,261,772 | 6,252,668 |

# 7. Segment Information (Continued)

## 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** | | | | | |
| **For the six months ended 30 June 2019** | | | | | |
| **– At a point in time** | **—** | **—** | **—** | **143,770** | **143,770** |
| **– Over time** | **951,852** | **13,852,329** | **7,734,067** | **—** | **22,538,248** |
| **Total revenue** | **951,852** | **13,852,329** | **7,734,067** | **143,770** | **22,682,018** |
| **For the six months ended 30 June 2018** | | | | | |
| **– At a point in time** | — | — | — | 290,330 | 290,330 |
| **– Over time** | 1,402,857 | 10,185,271 | 6,457,422 | — | 18,045,550 |
| **Total revenue** | 1,402,857 | 10,185,271 | 6,457,422 | 290,330 | 18,335,880 |
| **Sales by products** | | | | | |
| **For the six months ended 30 June 2019** | | | | | |
| **– Oil refining** | **176,945** | **5,167,156** | **2,416,816** | **93,577** | **7,854,494** |
| **– Petrochemicals** | **625,110** | **6,335,604** | **3,902,369** | **50,193** | **10,913,276** |
| **– New coal chemicals** | **49,365** | **2,083,169** | **376,780** | **—** | **2,509,314** |
| **– Other industries** | **100,432** | **266,400** | **1,038,102** | **—** | **1,404,934** |
| **Total revenue** | **951,852** | **13,852,329** | **7,734,067** | **143,770** | **22,682,018** |
| **For the six months ended 30 June 2018** | | | | | |
| **– Oil refining** | 638,128 | 4,326,946 | 1,817,730 | 148,909 | 6,931,713 |
| **– Petrochemicals** | 547,025 | 1,412,865 | 3,147,046 | 95,528 | 5,202,464 |
| **– New coal chemicals** | 65,256 | 3,616,970 | 431,686 | 45,893 | 4,159,805 |
| **– Other industries** | 152,448 | 828,490 | 1,060,960 | — | 2,041,898 |
| **Total revenue** | 1,402,857 | 10,185,271 | 6,457,422 | 290,330 | 18,335,880 |

# 8. Other Income

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Operating lease rental income on property, plant and equipment | 26,015 | 21,954 |
| Income/(expense) from write-back long outstanding payables | 5,551 | (2,243) |
| Government grants (Note) | 68,291 | 29,868 |
| Net foreign exchange gain | — | 58,850 |
| Others | 18,901 | 27,294 |
| | 118,758 | 135,723 |

Note:
Government grants mainly represent land subsidies, industry-specific subsidies and employee settlement subsidies.

# 9. Other Gains/(Losses) – Net

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Losses on disposal/write-off of property, plant and equipment | 2,883 | 2,247 |
| Loss on disposal of financial assets at FVTOCI | — | (124) |
| Loss on disposal of derivative financial liabilities | — | (157,195) |
| | 2,883 | (155,072) |

# 10. Finance Income and Finance Expenses

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Finance income | | |
| Interest income from the ultimate holding company | 299,635 | 250,107 |
| Interest income from the fellow subsidiaries | 63,367 | 36,339 |
| Bank interest income | 87,636 | 81,563 |
| | 450,638 | 368,009 |
| Finance expenses | | |
| Interest expenses to a fellow subsidiary on balances wholly repayable within 5 years | (8,798) | (3,449) |
| Interest expenses on retirement and other supplementary benefit obligation | (40,879) | (48,309) |
| Finance charges on lease liabilities | (4,884) | — |
| | (54,561) | (51,758) |
| | 396,077 | 316,251 |

# 11. Profit Before Taxation

Profit before taxation has been arrived at after charging/(crediting):

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Staff costs, including directors and supervisors emoluments (Note 15) | 2,341,870 | 2,312,151 |
| Retirement benefit plan contribution (including in the above mentioned staff costs) | 341,312 | 348,072 |
| Cost of goods sold | 6,905,598 | 3,930,364 |
| Subcontracting costs | 9,725,363 | 7,945,779 |
| Depreciation and amortisation | | |
| – Property, plant and equipment | 238,287 | 295,281 |
| – Right-of-use assets (note) | 57,705 | — |
| – Land use rights (note) | — | 30,614 |
| – Intangible assets | 36,788 | 38,943 |
| Operating lease rentals | | |
| – Property, plant and equipment (note) | — | 200,964 |
| – Short term leases and leases with leases term shorter than 12 months as at initial application of IFRS 16 (note) | 149,767 | — |
| Reversal of provision for ECL on trade and other receivables and contract assets, net | (97,730) | (84,903) |
| Rental income from property, plant and equipment after relevant expenses | 9,817 | (9,283) |
| Research and development costs | 746,721 | 452,868 |
| Gains on disposal/write-off of property, plant and equipment | (2,883) | (2,247) |
| Exchange losses/(gains), net | 62,002 | (58,850) |
| Loss on disposal of financial assets at FVTOCI | — | 124 |
| Fair value loss on derivative financial instrument | — | 157,195 |
| Cash-settled share-base (reversal)/payment | (5,244) | 8,087 |

Note:
IFRS 16 has been applied using the modified retrospective approach, has therefore recognised the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019. At this date, the Group has also elected to measure the right-of-use assets at an amount equal to the lease liability adjusted for any prepaid or accrued lease payments that existed at the date of transition. Prior periods have not been restated. See note 3.1.

## 12. Income Tax Expense

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| **Current tax** | | |
| PRC enterprise income tax | 113,270 | 180,718 |
| Overseas enterprise income tax | 89,925 | 31,823 |
| Under/(Over)-provision for income tax in prior years | 52,486 | (5,784) |
| | 255,681 | 206,757 |
| **Deferred tax** | | |
| Origination and reversal of temporary differences (Note 37) | 59,029 | 21,437 |
| **Income tax expense** | 314,710 | 228,194 |

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the six months ended 30 June 2019 and 2018 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 six months ended 30 June 2019 and 2018, 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:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Profit before taxation | 1,513,464 | 1,335,904 |
| Taxation calculated at the statutory tax rate | 378,366 | 333,976 |
| Income tax effects of: | | |
| Preferential income tax treatments of certain companies | (129,440) | (126,567) |
| Difference in overseas profits tax rates | (3,688) | 111 |
| Non-deductible expenses | 17,014 | 31,890 |
| Income not subject to tax | (2,437) | (3,270) |
| Unrecognised tax losses | 13,369 | 1,948 |
| Utilisation of previously unrecognised tax losses | (9,650) | (4,109) |
| Under/(Over)-provision for income tax in prior years | 52,486 | (5,785) |
| Others | (1,310) | — |
| Income tax expense | 314,710 | 228,194 |
| Effective income tax rate | 20.8% | 17.1% |

# 13. Earnings Per Share

## (a) Basic

The basic earnings per share for each of the six months ended 30 June 2019 and 2018 is calculated based on the profit attributable to the equity holders of the Company and the weighted average number of ordinary shares in issue.

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| Profit attributable to equity holders of the Company (RMB'000) | 1,198,685 | 1,107,565 |
| Weighted average number of ordinary shares in issue | 4,428,000,000 | 4,428,000,000 |
| Basic earnings per share (RMB) | 0.27 | 0.25 |

## (b) Diluted

As the Company had no dilutive shares for the each of the six months ended 30 June 2019 and 2018, dilutive earnings per share for the six months ended 30 June 2019 and 2018 are the same as basic earnings per share.

# 14. Dividends

Dividends represented dividends declared by the Company during each of six months ended 30 June 2019 and 2018.

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Proposed Interim dividends of RMB0.108 per ordinary share (2018: RMB0.1)(1) | 478,224 | 442,800 |

Note:

(1) Pursuant to a resolution passed at the board of Directors' meeting on 16 August 2019, the Directors authorised to declare the interim dividends for the six months ended 30 June 2019 of RMB0.108 (2018: RMB0.1) per share totaling RMB478,224,000 (2018: RMB442,800,000).

# 15. Employment Benefits

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Salaries, wages and bonuses | 1,469,909 | 1,424,055 |
| Retirement benefits(1) | 300,509 | 297,935 |
| Early retirement and supplemental pension benefit (Note 33(b)) | | |
| – interest cost | 40,879 | 48,308 |
| Immediate recognition of actuarial (gains)/losses | (76) | 1,829 |
| Housing fund(2) | 157,904 | 146,292 |
| Welfare, medical and other expenses | 377,989 | 385,645 |
| Cash-settled shared-based (reversal)/payment (Note 39) | (5,244) | 8,087 |
| | 2,341,870 | 2,312,151 |

Notes:

**(1) Retirement benefits**

The Group is required to make specific contributions to the state-managed retirement plan at a rate of 19% to 21% (2018: 19% to 25%) of the specified salaries of the PRC employees for the six months ended 30 June 2019. 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.

# 16. 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 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 |
| **Six months ended 30 June 2018** | | | | |
| Opening net book amount | 2,205,884 | 1,459,922 | 190,046 | 3,855,852 |
| Transfers | 32,545 | 10,540 | (43,085) | — |
| Additions | — | 33,432 | 88,383 | 121,815 |
| Depreciation | (72,912) | (222,369) | — | (295,281) |
| Disposals/write-off | (12,260) | (8,393) | — | (20,653) |
| Closing net book amount | 2,153,257 | 1,273,132 | 235,344 | 3,661,733 |
| **At 30 June 2018** | | | | |
| Cost | 3,582,676 | 4,484,180 | 235,344 | 8,302,200 |
| Accumulated depreciation and impairment | (1,429,419) | (3,211,048) | — | (4,640,467) |
| Net book amount | 2,153,257 | 1,273,132 | 235,344 | 3,661,733 |
| **At 1 January 2019** | | | | |
| 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 |
| **Six months ended 30 June 2019** | | | | |
| Opening net book amount | 2,010,029 | 1,184,911 | 301,534 | 3,496,474 |
| Transfers | — | 34,101 | (34,101) | — |
| Additions | — | 33,906 | 53,395 | 87,301 |
| Depreciation | (59,672) | (178,615) | — | (238,287) |
| Disposals/write-off | — | (3,522) | — | (3,522) |
| Closing net book amount | 1,950,357 | 1,070,781 | 320,828 | 3,341,966 |
| **At 30 June 2019** | | | | |
| Cost | 3,441,090 | 4,429,991 | 320,828 | 8,191,909 |
| Accumulated depreciation and impairment | (1,490,733) | (3,359,210) | — | (4,849,943) |
| Net book amount | 1,950,357 | 1,070,781 | 320,828 | 3,341,966 |

# 16. Property, Plant and Equipment (Continued)

Depreciation expense recognised is analysed as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Cost of sales | 227,725 | 254,153 |
| Selling and marketing expenses | 918 | 967 |
| Administrative expenses | 9,644 | 40,161 |
| | 238,287 | 295,281 |

# 17. Land Use Rights

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Beginning of the period | 2,442,993 | 2,580,781 |
| Amortisation | — | (30,614) |
| Reallocation (Note 18) | (2,442,993) | — |
| End of the period | — | 2,550,167 |

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.

IFRS 16 has been applied using the modified retrospective approach, has therefore recognised the cumulative effect of initial application as an adjustment to the opening balance at 1 January 2019. On that date, the Group has already reallocated land use rights to right-of-use assets. See note 18.

Amortisation recognised is analysed as follows:

| | Six months ended 30 June 2018 |
|---|---|
| | RMB'000 |
| Cost of sales | 19,334 |
| Administrative expenses | 11,280 |
| | 30,614 |

## 18. Right-of-Use Assets

The Group leases assets including buildings and other facilities, plants and machinery, transportation equipment and other equipment and lands. Information about leases for which the Group is a lessee is presented below:

| | Buildings and other facilities | Plant and machinery, transportation equipment and other equipment | Land use right | Total |
|---|---|---|---|---|
| | RMB'000 | RMB'000 | RMB'000 | RMB'000 |
| Balance at 1 January 2019, impact on initial application of IFRS 16 (note) | 179,730 | 7,707 | 2,442,793 | 2,630,230 |
| Additions | 53,887 | 2,377 | — | 56,264 |
| Depreciation for the period | (25,810) | (2,186) | (29,709) | (57,705) |
| Balance at 30 June 2019 | 207,807 | 7,898 | 2,413,084 | 2,628,789 |

Note:
IFRS 16 has been applied using the modified retrospective approach, has therefore recognised the cumulative effect of initial application as an adjustment to the opening balance at 1 January 2019.

Amortisation recognised is analysed as follows:

| | Six months ended 30 June 2019 |
|---|---|
| | RMB'000 |
| Cost of sales | 34,015 |
| Selling expenses | 145 |
| Administrative expenses | 23,545 |
| | 57,705 |

## 19. Intangible Assets

| | Patent | Computer software | Total |
|---|---|---|---|
| | RMB'000 | RMB'000 | RMB'000 |
| **At 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 |
| **Six months ended 30 June 2018** | | | |
| Opening net book amount | 154,201 | 69,239 | 223,440 |
| Additions | — | 3,213 | 3,213 |
| Amortisation | (26,490) | (12,453) | (38,943) |
| Closing net book amount | 127,711 | 59,999 | 187,710 |
| **At 30 June 2018** | | | |
| Cost | 479,882 | 355,003 | 834,885 |
| Accumulated amortisation | (352,171) | (295,004) | (647,175) |
| Net book amount | 127,711 | 59,999 | 187,710 |
| **At 1 January 2019** | | | |
| Cost | **479,882** | **369,372** | **849,254** |
| Accumulated amortisation | **(378,662)** | **(306,511)** | **(685,173)** |
| Net book amount | **101,220** | **62,861** | **164,081** |
| **Six months ended 30 June 2019** | | | |
| Opening net book amount | **101,220** | **62,861** | **164,081** |
| Additions | **—** | **1,360** | **1,360** |
| Amortisation | **(26,490)** | **(10,298)** | **(36,788)** |
| Closing net book amount | **74,730** | **53,923** | **128,653** |
| **At 30 June 2019** | | | |
| Cost | **479,882** | **370,732** | **850,614** |
| Accumulated amortisation | **(405,152)** | **(316,809)** | **(721,961)** |
| Net book amount | **74,730** | **53,923** | **128,653** |

Amortisation recognised is analysed as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Cost of sales | **26,413** | 26,892 |
| Selling and marketing expenses | **2** | 1 |
| Administrative expenses | **10,373** | 12,050 |
| | **36,788** | 38,943 |

# 20. Investment in Joint Arrangements, Associates and Subsidiaries

## (a) Investment in joint arrangements

| | Six months ended 30 June | |
|---|---|---|
| | **2019** | 2018 |
| | **RMB'000** | RMB'000 |
| **Joint ventures** | | |
| **Beginning of the period** | **1,866** | 3,221 |
| **Disposal**[(1)] | **—** | (1,309) |
| **Share of total comprehensive expense** | **(111)** | (215) |
| **End of the period** | **1,755** | 1,697 |

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 (2018: 3,000) | 50% | Technical development, sales of equipments/ The PRC |
| **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)**[(1)] | The PRC | — (2018: 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:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Current assets | 27,567 | 27,779 |
| Non-current assets | 1,424 | 1,497 |
| Total assets | 28,991 | 29,276 |
| Current liabilities | (25,481) | (25,544) |
| Total liabilities | (25,481) | (25,544) |
| Equity | 3,510 | 3,732 |
| Share of equity by the Group (50%) (2018: 50%) | 1,755 | 1,866 |

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Revenue | — | — |
| Loss and total comprehensive expense for the period | (221) | (431) |
| Share of total comprehensive expense (50%) (2018:50%) | (111) | (215) |

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.

# 20. Investment in Joint Arrangements, Associates and Subsidiaries (Continued)

## (b) Investment in associates

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Beginning of the period | 147,454 | 123,788 |
| Share of total comprehensive income | 16,355 | 22,021 |
| Dividend distribution | (3,200) | — |
| End of the period | 160,609 | 145,809 |

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 (2018: 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 (2018: 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 (2018: 5,500) | 36.36% | Powder engineering services/ The PRC |

The above associates are accounted for by using the equity method.

# 20. Investment in Joint Arrangements, Associates and Subsidiaries (Continued)

## (b) Investment in associates (Continued)

**(1) The Group's share of the results of China Petrochemical Technology Co., Ltd., its aggregated assets and liabilities, are as follows:**

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Current assets | 831,540 | 674,852 |
| Non-current assets | 36,496 | 38,892 |
| Total assets | 868,036 | 713,744 |
| Current liabilities | (518,298) | (397,093) |
| Non-current liabilities | (17) | (17) |
| Total liabilities | (518,315) | (397,110) |
| Equity attributable to equity holders | 323,661 | 290,574 |
| Non-controlling interests | 26,060 | 26,060 |
| | 349,721 | 316,634 |
| Share of equity by the Group (35%) (2018: 35%) | 113,281 | 101,701 |

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Revenue | 230,120 | 274,047 |
| Profit and total comprehensive income for the period attributable to equity holders | 33,087 | 36,782 |
| Share of total comprehensive income (35%) (2018: 35%) | 11,580 | 12,874 |

For the six months ended 30 June 2019, China Petrochemical Technology Co., Ltd. did not declare dividends (2018: Nil).

# 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:**

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Current assets | 78,976 | 86,158 |
| Non-current assets | 57,509 | 47,212 |
| Total assets | 136,485 | 133,370 |
| Current liabilities | (78,502) | (71,105) |
| Total liabilities | (78,502) | (71,105) |
| Equity | 57,983 | 62,265 |
| Share of equity by the Group (40%) (2018: 40%) | 23,193 | 24,906 |

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Revenue | 67,971 | 66,809 |
| Profit and total comprehensive income for the period | 3,717 | 6,864 |
| Share of total comprehensive income (40%) (2018: 40%) | 1,487 | 2,746 |

For the six months ended 30 June 2019, Huizhou Tianxin Petrochemical Engineering Co., Ltd declare dividends RMB3,200,000 (2018: Nil).

# 20. Investment in Joint Arrangements, Associates and Subsidiaries (Continued)

## (b) Investment in associates (Continued)

**(3) The Group's share of the results of Shanghai KSD Bulk Solids Engineering Co., Ltd., its aggregated assets and liabilities, are as follows:**

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Current assets | 139,351 | 132,972 |
| Non-current assets | 1,607 | 1,648 |
| Total assets | 140,958 | 134,620 |
| Current liabilities | (74,576) | (77,281) |
| Non-current liabilities | (4) | (4) |
| Total liabilities | (74,580) | (77,285) |
| Equity | 66,378 | 57,335 |
| Share of equity by the Group (36.36%) (2018: 36.36%) | 24,135 | 20,847 |

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Revenue | 42,309 | 33,886 |
| Profit and total comprehensive income for the period | 9,043 | 17,605 |
| Share of total comprehensive income (36.36%) (2018: 36.36%) | 3,288 | 6,401 |

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. Financial Assets At Fair Value Through Other Comprehensive Income

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Beginning of the period | 680 | 680 |
| Disposal | (680) | — |
| At the end of the period | — | 680 |

Financial assets at FVTOCI include the following:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Unlisted securities | | |
| Equity securities – PRC | — | 680 |

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.

Financial assets at FVTOCI are denominated in RMB.

## 22. Notes and Trade Receivables

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Trade receivables | | |
| Fellow subsidiaries | 3,605,351 | 2,293,202 |
| Joint ventures of fellow subsidiaries | 1,102,634 | 662,743 |
| Associates of fellow subsidiaries | 125,671 | 215,846 |
| Joint ventures | — | 2,589 |
| Associates | 871 | 871 |
| Third parties | 6,093,369 | 5,638,274 |
| | 10,927,896 | 8,813,525 |
| Less: ECL allowance for impairment | (1,260,089) | (1,313,283) |
| Trade receivables – net | 9,667,807 | 7,500,242 |
| Notes receivables | 1,144,311 | 2,226,187 |
| Notes and trade receivables – net | 10,812,118 | 9,726,429 |

The carrying amounts of the Group's notes and trade receivables as at 30 June 2019 and 31 December 2018 approximate their fair values.

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.

## 22. Notes and Trade Receivables (Continued)

Ageing analysis of notes and trade receivables, net of ECL allowance, by invoice date is as follows:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Within 1 year | 9,748,915 | 8,621,584 |
| Between 1 and 2 years | 760,966 | 703,028 |
| Between 2 and 3 years | 203,547 | 264,769 |
| Between 3 and 4 years | 42,281 | 52,663 |
| Between 4 and 5 years | 37,453 | 46,326 |
| Over 5 years | 18,956 | 38,059 |
| | 10,812,118 | 9,726,429 |

The movements of ECL allowance on trade receivables are as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| At the beginning of the period | 1,313,283 | 1,171,218 |
| ECL allowance | 151,703 | 208,011 |
| Receivables written off as uncollectible | (1,257) | — |
| Reversal | (203,640) | (301,335) |
| At the end of the period | 1,260,089 | 1,077,894 |

The carrying amounts of the Group's notes and trade receivables are denominated in the following currencies:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| RMB | 9,222,856 | 8,437,325 |
| USD | 603,050 | 490,435 |
| SAR | 382,134 | 540,037 |
| Others | 604,078 | 258,632 |
| | 10,812,118 | 9,726,429 |

# 23. Prepayments and Other Receivables

| | As at 30 June 2019 RMB'000 | As at 31 December 2018 RMB'000 |
|---|---|---|
| **Prepayments** | | |
| Prepayments for construction and materials: | | |
| – Fellow subsidiaries | 1,500,250 | 1,012,061 |
| – Associates | 8,685 | 8,685 |
| – Associates of fellow subsidiaries | 1,323 | 1,902 |
| – Joint ventures of fellow subsidiaries | 385 | 385 |
| Prepayments for construction | 785,515 | 466,260 |
| Prepayments for materials and equipment | 2,793,718 | 1,679,947 |
| Prepayments for labour costs | 373,140 | 220,594 |
| Prepayments for rent | — | 2,044 |
| Others | 161,841 | 58,624 |
| | 5,624,857 | 3,450,502 |
| **Other receivables** | | |
| Amounts due from ultimate holding company(1) | 1,445 | — |
| Amounts due from fellow subsidiaries(1) | 182,131 | 223,156 |
| Amounts due from joint ventures of fellow subsidiaries(1) | 208,650 | 191,606 |
| Amounts due from associates of fellow subsidiaries(1) | 263,092 | 473,386 |
| Dividends receivable | 20,400 | 17,200 |
| Interests receivable | 85,924 | 34,443 |
| Petty cash funds | 25,131 | 15,651 |
| Other guarantee deposits and deposits | 133,045 | 122,337 |
| Payment in advance | 131,041 | 85,879 |
| Maintenance funds | 80,370 | 77,093 |
| Value-added tax credit | 362,796 | 234,136 |
| Prepaid income tax | 50,135 | 61,295 |
| Value-added tax to be certified | 11,584 | 6,154 |
| Land disposal | 36,515 | 36,515 |
| Others | 83,575 | 55,788 |
| | 1,675,834 | 1,634,639 |
| Less: ECL allowance for impairment | (121,010) | (117,979) |
| Prepayments and other receivables – net | 7,179,681 | 4,967,162 |

(1) The amounts due from related parties are unsecured, interest free and repayable on demand.

The carrying amounts of the Group's prepayments and other receivables as at 30 June 2019 and 31 December 2018 approximate their fair values.

# 23. Prepayments and Other Receivables (Continued)

The movements of ECL allowance on other receivables are as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| At the beginning of the period | 117,979 | 310,751 |
| ECL allowance | 10,961 | 124,194 |
| Reversal | (7,930) | (158,311) |
| At the end of the period | 121,010 | 276,634 |

# 24. Contract assets and Contract Liabilities

## (a) Contract assets

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Contract assets arising from construction contracts | 12,630,703 | 11,573,904 |

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 RMB641,817,000 (2018: RMB605,747,000), all of which relates to retentions.

The movements of ECL allowance on contract assets are as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| At the beginning of the period | 164,750 | 110,571 |
| ECL allowance | 16,529 | 53,064 |
| Reversal | (64,763) | (10,526) |
| At the end of the period | 116,516 | 153,109 |

## (b) Contract liabilities

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Contract liabilities arising from construction contracts | 9,413,189 | 9,968,594 |

Notes:
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 2019 is RMB9,968,594,000, in which RMB8,265,308,000 was recognised as revenue during the period.

# 24. Contract assets and Contract Liabilities (Continued)

## (b) Contract liabilities (Continued)

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 30 June 2019, 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 RMB105,473,232,000, 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.

# 25. Inventories

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Raw materials | 320,712 | 182,882 |
| Turnover materials | 220,778 | 188,759 |
| Goods in transit | 90,633 | 29,280 |
| | 632,123 | 400,921 |

As at 30 June 2019 and 31 December 2018, no provision for impairment on inventories of the Group has been made.

For the six months ended 30 June 2019 and 30 June 2018, the cost of inventories recognised as expense and included in cost of sales amounted to RMB6,905,598,000 and RMB3,930,364,000 respectively.

# 26. 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:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Loans due from the ultimate holding company | 3.60% | 3.00% - 3.60% |

# 27. Restricted Cash

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Restricted cash | | |
| – RMB | 35,870 | 29,375 |
| – AED | — | 93 |
| | 35,870 | 29,468 |

Restricted cash mainly represented bank deposits for guarantees and deposit for farmers' salaries.

As at 30 June 2019 and 31 December 2018, 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.

## 28. Time Deposits

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Time deposits with initial term over three months: | | |
| Time deposits in banks | 5,285,893 | 575,225 |
| Time deposits in fellow subsidiaries | 1,361,728 | 1,567,181 |
| | 6,647,621 | 2,142,406 |

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Denominated in: | | |
| – RMB | 5,834,750 | 771,050 |
| – USD | 763,092 | 1,173,607 |
| – MYR | 49,779 | 197,749 |
| | 6,647,621 | 2,142,406 |

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 (2018: half year to three years), are approximately 2.10% to 4.30% as at 30 June 2019 (2018: 1.30% to 4.30%).

The maximum exposure to credit risk approximates to carrying amounts of the Group's time deposits at the end of the respective reporting periods.

## 29. Cash and Cash Equivalents

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Cash at bank and in hand | | |
| – less than three months time deposits | 1,961,120 | 5,925,938 |
| – cash deposits | 1,796,648 | 3,360,173 |
| | 3,757,768 | 9,286,111 |
| Deposits in fellow subsidiaries | | |
| – less than three months time deposits | 1,165,714 | 571,942 |
| – cash deposits | 1,717,964 | 7,139,610 |
| | 2,883,678 | 7,711,552 |
| | 6,641,446 | 16,997,663 |

# 29. Cash and Cash Equivalents (Continued)

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| **Denominated in:** | | |
| – RMB | 1,481,354 | 8,262,906 |
| – USD | 2,967,365 | 6,911,596 |
| – SAR | 375,470 | 263,643 |
| – EUR | 503,524 | 464,491 |
| – KZT | 3,358 | 2,267 |
| – KWD | 984,013 | 779,203 |
| – THB | 47,121 | 48,716 |
| – MYR | 251,583 | 208,736 |
| – Others | 27,658 | 56,105 |
| | 6,641,446 | 16,997,663 |

The fellow subsidiaries are Sinopec Finance Co., Ltd. and Sinopec Century Bright Capital Investment Limited.

As at 30 June 2019 and 31 December 2018, 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 (2018: one to three months), are approximately 2.50% to 2.70% as at 30 June 2019 (2018: 1.50% to 2.79%).

The maximum exposure to credit risk approximates the carrying amounts of cash and cash equivalents at the end of the respective reporting periods.

# 30. Share Capital

| | As at 30 June 2019 | | As at 31 December 2018 | |
|---|---|---|---|---|
| | Number of shares | Share capital | Number of shares | Share capital |
| | | RMB'000 | | 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).

# 31. Reserves

## (i) 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.

# 31. Reserves (Continued)

## (ii) 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.

## (iii) 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.

## (iv) 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.

# 32. Lease Liabilities

| | As at 30 June 2019 |
|---|---|
| | RMB'000 |
| Total minimum lease payments: | |
| Due within one year | 61,069 |
| Due in the second to fifth years | 131,035 |
| Due after the fifth year | 46,377 |
| | 238,481 |
| Future finance charges on leases liabilities | (30,808) |
| Present value of leases liabilities | 207,673 |
| Present value of minimum lease payments: | |
| Due within one year | 55,220 |
| Due in the second to fifth years | 121,320 |
| Due after the fifth year | 31,133 |
| | 207,673 |
| Less: | |
| Portion due within one year included under current liabilities | (55,220) |
| Portion due after one year included under non-current liabilities | 152,453 |

During the six months ended 30 June 2019, the Group entered into a number of lease agreements for usage of buildings, plant and machinery, transportation equipment and other equipment for 1 to 20 years (2018: 1 to 20 years). The Group makes fixed payments and additional variable payments depends on the usage of the buildings, plant and machinery, transportation equipment and other equipment during the contract period. On lease commencement, the Group recognised right-of-use assets included in property, plant equipment and lease liabilities amounting to RMB29,480,000.

During the six months ended 30 June 2019, the total cash outflows for the leases are RMB43,357,000.

# 33. Retirement and Other Supplemental Benefit Obligations

## (a) State-managed retirement plan

For the six months ended 30 June 2019, 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 21%, (2018: 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 15(1)).

The total costs charged to the consolidated statement of comprehensive income during the six months ended 30 June 2019 and 31 December 2018 are as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Contributions to state-managed retirement plan | 300,509 | 297,935 |

## (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 30 June 2019 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):

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Retirement with honors benefit plan | 3.00% | 3.00% |
| Retirement benefit plan | 3.25% | 3.25% |
| Early retirement benefit plan | 3.00% | 3.00% |

### (ii) Benefit growth rates (per annum):

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Retirement with honors benefit plan | 2.60% | 2.60% |
| Retirement benefit plan | 2.60% | 2.60% |
| Early retirement benefit plan | 1.80% | 1.80% |

# 33. Retirement and Other Supplemental Benefit Obligations (Continued)

## (b) Group employee retirement benefit plans (Continued)

**(iii) Duration:**

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Retirement with honors benefit plan | 8.0 years | 8.0 years |
| Retirement benefit plan | 15.0 years | 15.0 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 30 June 2019 Increase/(decrease) in retirement benefit plan obligation | | As at 31 December 2018 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 | (58,939) | 61,729 | (60,314) | 63,165 |
| Benefit growth rates | 61,481 | (59,450) | 62,910 | (60,838) |

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 six months ended 30 June 2018 | | | | |
| Net interest expenses | 1,330 | 44,145 | 2,833 | 48,308 |
| Immediate recognition of actuarial losses | — | — | 1,829 | 1,829 |
| Benefit cost recognised in profit or loss | 1,330 | 44,145 | 4,662 | 50,137 |
| Revaluation of net benefit obligation liabilities | | | | |
| Actuarial revaluation of economic assumptions change | 791 | 107,914 | — | 108,705 |
| Actuarial revaluation of other assumptions change | (36) | (63) | — | (99) |
| Benefit cost recognised in other comprehensive income | 755 | 107,851 | — | 108,606 |
| Total benefit cost recognised in the consolidated statement of comprehensive income | 2,085 | 151,996 | 4,662 | 158,743 |
| For the six months ended 30 June 2019 | | | | |
| Net interest expenses | **1,019** | **37,564** | **2,296** | **40,879** |
| Immediate recognition of actuarial losses | **—** | **—** | **(76)** | **(76)** |
| Benefit cost recognised in profit or loss | **1,019** | **37,564** | **2,220** | **40,803** |
| Revaluation of net benefit obligation liabilities | | | | |
| Actuarial revaluation of economic assumptions change | **—** | **—** | **—** | **—** |
| Actuarial revaluation of other assumptions change | **(30)** | **(118)** | **—** | **(148)** |
| Benefit cost recognised in other comprehensive income | **(30)** | **(118)** | **—** | **(148)** |
| Total benefit cost recognised in the consolidated statement of comprehensive income | **989** | **37,446** | **2,220** | **40,655** |

The Group's benefit plans do not include incumbent employees. No current service cost of each benefit plan incurred during each financial period. 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:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Net liabilities of retirement benefit plan obligation | **2,559,001** | 2,636,815 |

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 2018 | 76,441 | 2,286,502 | 173,672 | 2,536,615 |
| Net interest expenses | 1,330 | 44,145 | 2,833 | 48,308 |
| Immediate recognition of actuarial losses | — | — | 1,829 | 1,829 |
| Revaluation gain/(loss): | | | | |
| Actuarial revaluation of economic assumptions change | 791 | 107,914 | — | 108,705 |
| Actuarial revaluation of other assumptions change | (36) | (63) | — | (99) |
| Direct benefit paid by the Group | (7,422) | (82,386) | (27,946) | (117,754) |
| At 30 June 2018 | 71,104 | 2,356,112 | 150,388 | 2,577,604 |
| At 1 January 2019 | **72,992** | **2,389,169** | **174,654** | **2,636,815** |
| Net interest expenses | **1,019** | **37,564** | **2,296** | **40,879** |
| Immediate recognition of actuarial losses | — | — | **(76)** | **(76)** |
| Revaluation gain/(loss): | | | | |
| Actuarial revaluation of economic assumptions change | — | — | — | — |
| Actuarial revaluation of other assumptions change | **(30)** | **(118)** | — | **(148)** |
| Direct benefit paid by the Group | **(7,029)** | **(84,792)** | **(26,648)** | **(118,469)** |
| At 30 June 2019 | **66,952** | **2,341,823** | **150,226** | **2,559,001** |

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

| | 2019 | 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Beginning of the period | 253,936 | 262,925 |
| Exchange difference | 10,630 | (8,272) |
| Payment (Note) | (81) | (717) |
| End of the period | 264,485 | 253,936 |

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.

As at 30 June 2019 and 31 December 2018, no additional provision for litigation claims is provided.

# 35. Notes and Trade Payables

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Trade payables | | |
| Fellow subsidiaries | 1,072,681 | 792,785 |
| Joint ventures of fellow subsidiaries | 84,941 | 1,270 |
| Associates | 44,384 | 44,550 |
| Third parties | 26,447,248 | 26,436,579 |
| | 27,649,254 | 27,275,184 |
| Notes payables | 907,124 | 1,411,059 |
| Notes and trade payables | 28,556,378 | 28,686,243 |

The carrying amounts of the Group's notes and trade payables as at 30 June 2019 and 31 December 2018 approximate their fair values.

Ageing analysis of notes and trade payables based on invoice date is as follows:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Within 1 year | 24,482,066 | 22,388,561 |
| Between 1 and 2 years | 1,744,267 | 3,223,581 |
| Between 2 and 3 years | 888,763 | 1,501,701 |
| Over 3 years | 1,441,282 | 1,572,400 |
| | 28,556,378 | 28,686,243 |

# 35. Notes and Trade Payables (Continued)

The carrying amounts of notes and trade payables are denominated in the following currencies:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| RMB | 25,543,010 | 25,537,361 |
| USD | 778,863 | 646,640 |
| EUR | 4,886 | 3,033 |
| KZT | 11,135 | 22,495 |
| SAR | 1,255,197 | 1,300,283 |
| Others | 963,287 | 1,176,431 |
| | 28,556,378 | 28,686,243 |

# 36. Other Payables

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Salaries payables | 169,685 | 268,235 |
| Other taxation payables | 59,306 | 665,698 |
| Output value-added tax to be recognised | 9,385 | 12,765 |
| Payable of separation and transfer of "Water/electricity/gas supply and property management"(2) | 176,096 | 285,385 |
| Deposits and guarantee deposits payables | 196,571 | 164,757 |
| Advanced payables | 611,882 | 523,114 |
| Rent, property management and maintenance payables | 129,640 | 126,355 |
| Contracts payables | 39,068 | 90,227 |
| Amounts due to ultimate holding company(1) | 100 | 100 |
| Amounts due to fellow subsidiaries(1) | 93,575 | 329,641 |
| Amounts due to joint ventures(1) | 71 | 71 |
| Amounts due to joint ventures of fellow subsidiaries(1) | 7,977 | 8,305 |
| Amounts due to associates of fellow subsidiaries(1) | 888 | — |
| Others | 258,167 | 283,486 |
| Total other payables | 1,752,411 | 2,758,139 |

Notes:
(1) Amounts due to related parties are unsecured, interest free and repayable on demand.
(2) 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) 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 expense amounting to RMB632,376,000.

The carrying amounts of the Group's other payables as at 30 June 2019 and 31 December 2018 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:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Deferred income tax assets | 722,616 | 781,439 |
| Deferred income tax liabilities | (232) | — |
| Deferred taxation | 722,384 | 781,439 |

The gross movement on the deferred income tax account is as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| At the beginning of the period | 781,439 | 750,967 |
| Credited to equity for defined benefit obligations revaluation of actuarial gain or loss | (26) | 17,916 |
| Tax credited to profit for the period (Note 12) | (59,029) | (21,437) |
| At the end of the period | 722,384 | 747,446 |

The movement in deferred income tax assets during the years ended 30 June 2019 and 2018, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

### Deferred income tax liabilities

| | 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 2018 | 36,497 | 426,836 | 255,799 | 31,835 | 750,967 |
| Credited/(Charged) to: | | | | | |
| Profit for the period | — | (21,704) | (9,182) | 9,449 | (21,437) |
| Equity | — | 17,916 | — | — | 17,916 |
| At 30 June 2018 | 36,497 | 423,048 | 246,617 | 41,284 | 747,446 |
| At 1 January 2019 | 12,127 | 458,888 | 270,811 | 39,613 | 781,439 |
| Credited/(Charged) to: | | | | | |
| Profit for the period | (3,065) | (39,491) | (17,906) | 1,665 | (58,797) |
| Equity | — | (26) | — | — | (26) |
| At 30 June 2019 | 9,062 | 419,371 | 252,905 | 41,278 | 722,616 |

# 37. Current and Deferred Taxation (Continued)

## Deferred income tax liabilities (Continued)

| | Due to the application of IFRS 16 generate deferred tax liabilities |
|---|---|
| | RMB'000 |
| At 1 January 2019 | — |
| (Credited)/Charged to: | |
| Profit for the period | (232) |
| Equity | — |
| At 30 June 2019 | (232) |

## 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:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Tax losses for which no deferred income tax asset was recognised | 648,736 | 597,104 |

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 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| Loans due to a fellow subsidiary | 4.11% - 4.62% | 3.29% - 4.62% |

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 30 June 2019, the details of the H share appreciation rights were as follows:

| Date of grant | Exercise price HKD | Vesting period | Exercisable period | Number of underlying H share appreciation rights | | |
|---|---|---|---|---|---|---|
| | | | | Outstanding At 1 January 2019 | Lapse during the period | Outstanding At 30 June 2019 |
| **Directors** | | | | | | |
| **20 December 2017** | 6.35 | 20 December 2017 to 19 December 2027 | 20 December 2020 to 20 December 2023 | 80,000 | (26,400) | 53,600 |
| **Employees** | | | | | | |
| **20 December 2017** | 6.35 | 20 December 2017 to 19 December 2027 | 20 December 2020 to 20 December 2023 | 13,063,000 | (4,310,790) | 8,752,210 |
| | | | | 13,143,000 | (4,337,190)(1) | 8,805,810 |

(i) The conditions to effect the H share appreciation rights in the First Effective Phase of 4,337,190 units (representing 33% of the H share appreciation rights) were not fulfilled . Therefore, those H share appreciation rights have be lapsed.

The total fair value of share options as at 30 June 2019 has been valued using Black-Scholes valuation model.

The significant inputs into the model were as follows:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| **Exercise price (i)** | **HKD5.93** | HKD6.06 |
| **Expected volatility** | **33.93%** | 33.93% |
| **Maturity (years)** | **5 years** | 5.5 years |
| **Risk-free interest rate** | **1.444%** | 1.886% |
| **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$5.93 per share.

At 30 June 2019, the Group has recorded liabilities of RMB6,200,000, which RMB5,244,000 was included in accrued charges.

# 40. Commitments

## (a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding as at 30 June 2019 and 31 December 2018 not provided for in the consolidated interim financial statements are as follows:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Contracted but not provided for | | |
| – Property, plant and equipment | 9,884 | 21,243 |

## (b) Operating leasing commitments

At the reporting date, the lease commitments for short-term leases (2018: total future minimum lease payments payable by the Group under non-cancellable operating leases) are as follows:

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| Less than 1 year | 44,438 | 117,396 |
| 1 year to 5 years | — | 129,906 |
| Over 5 years | — | 31,996 |
| Total | 44,438 | 279,298 |

As at 30 June 2019, the Group leases a number of residential properties, offices and equipment with a lease period of 6 to 12 months, which are qualified to be accounted for under short-term lease exemption under IFRS 16.

As at 31 December 2018, the Group leases a number of residential properties, office and equipment under operating leases. The leases run for an initial period of one to eight years, with an option to renew the lease and renegotiate the terms at the expiry date or at dates as mutually agreed between the Group and respective landlords/lessors. None of the leases include contingent rentals.

# 41. Cash Generated from Operations

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Profit before taxation | 1,513,464 | 1,335,904 |
| Adjustments for: | | |
| Reversal of provision for ECL on trade and other receivables and contract assets, net | (97,730) | (84,903) |
| Depreciation of property, plant and equipment | 238,287 | 295,281 |
| Depreciation of right-of-use assets | 57,705 | — |
| Amortisation of land use rights | — | 30,614 |
| Amortisation of intangible assets | 36,788 | 38,943 |
| Net losses on disposal/write-off of property, plant and equipment | (2,883) | (2,247) |
| Losses on separation and transfer of property, plant and equipment and land use right | — | 124 |
| Interest income | (450,638) | (368,009) |
| Interest expense | 54,561 | 51,758 |
| Net foreign exchange losses/(gains) | 186,109 | (156,486) |
| Loss on disposal of derivative financial liabilities | — | 157,195 |
| Share of loss of joint arrangements | 111 | 215 |
| Share of profit of associates | (16,355) | (22,021) |
| Cash flows from operating activities before changes in working capital | 1,519,419 | 1,276,368 |
| Changes in working capital: | | |
| – Inventories | (231,202) | (97,089) |
| – Contract assets | (861,872) | (454,886) |
| – Contract liabilities | (555,405) | 1,777,385 |
| – Notes, trade and other receivables | (3,336,091) | (1,942,880) |
| – Notes, trade and other payables | (1,274,066) | (1,436,966) |
| – Restricted cash | (6,402) | 1,227 |
| Cash used in operations | (4,745,619) | (876,841) |

# 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 judgments 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 six months ended 30 June 2019 and 2018 and balances as at 30 June 2019 and 31 December 2018.

The transactions with related parties are carried out on pricing and settlement terms agreed with counter parties in the ordinary course of business.

# 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:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Construction and services provided to | | |
| – Ultimate holding company | — | 3,887 |
| – Joint ventures of fellow subsidiaries | 1,931,730 | 2,614,272 |
| – Associates of fellow subsidiaries | 283,469 | 122,673 |
| – Fellow subsidiaries | 7,212,021 | 4,186,653 |
| – Associates | 4,324 | 915 |
| | 9,431,544 | 6,928,400 |
| Construction and services received from | | |
| – Ultimate holding company | 9,777 | 10,437 |
| – Joint ventures of fellow subsidiaries | 2,069 | 258 |
| – Associates of fellow subsidiaries | 2,144 | 5 |
| – Fellow subsidiaries | 1,946,839 | 546,000 |
| – Associates | 156 | 34 |
| | 1,960,985 | 556,734 |
| Technology research and development provided to | | |
| – Ultimate holding company | 4,887 | — |
| – Fellow subsidiaries | 65,523 | 79,826 |
| | 70,410 | 79,826 |
| Interest income on loans | | |
| – Ultimate holding company | 299,635 | 250,107 |
| Interest expense on borrowings | | |
| – Fellow subsidiaries | 8,798 | 3,449 |
| Expenses in relation to settlement and other financial services | | |
| – Fellow subsidiaries | 1,308 | 663 |
| Deposit interest income from fellow subsidiaries | 63,367 | 36,339 |

# 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 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | RMB'000 | RMB'000 |
| **Deposits and time deposits placed in fellow subsidiaries** | **4,245,406** | 9,278,733 |

| | As at 30 June 2019 | As at 31 December 2018 |
|---|---|---|
| | 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 Rules Governing the Listing of Securities on the Hong Kong Stock Exchange.

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 26 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:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| | RMB'000 | RMB'000 |
| Fee | 533 | 270 |
| Basic salaries, other allowances and benefits-in-kind | 2,818 | 2,727 |
| Discretionary bonus (i) | 10,005 | 5,487 |
| Contributions to pension plans | 637 | 599 |
| Cash-settled share-based payment | — | 1,157 |
| | 13,993 | 10,240 |

(i) The Group determines and pays discretionary bonus based on the actual financial results and performance of employee.

# 44. Reconciliations of Liabilities Arising from Financing Activities

The changes in the Group's liabilities arising from financing activities can be classified as follows:

| | Six months ended 30 June | |
|---|---|---|
| | 2019 | 2018 |
| Loans due to a fellow subsidiary | RMB'000 | RMB'000 |
| At 1 January | 384,339 | 431,257 |
| *Cash-flow:* | | |
| – Proceeds | | |
| *Non-cash:* | — | 130,684 |
| – Exchange adjustments | | |
| | 644 | 7,087 |
| At 30 June | 384,983 | 569,028 |

# 45. Particulars of Principal Subsidiaries

As at 30 June 2019, 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司) | Malaysia/Limited liability company | 5,157 (MYR360,700) | 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 (THB3,300,000) | — | 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 August 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 of the Company:

a) The original interim report signed by the Chairman of the Board and the President;

b) The original audited financial report and consolidated financial report for the six months ended 30 June 2019 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

16 August 2019

This interim 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.

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