

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

2020 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 Director, Mr. WU Wenxin, could not attend the Twelfth Meeting of the Third Session of the Board (the “Meeting”) due to official duties. The Director, Mr. WU Wenxin, authorised the Director, Mr. YU Renming, to attend the Meeting, and to vote on his behalf. Mr. YU Renming (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 2020 (the “Reporting Period”) of SINOPEC SEG and its subsidiaries (the “Group”), prepared in accordance with the International Financial Reporting Standards, were audited by BDO 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 Company expects or anticipates will or may occur in the future (including but not limited to projections, goals, estimates and business plans) are forward-looking statements. The future actual results or development trends may differ materially from those indicated by the forward-looking statements due to various factors. The forward-looking statements contained in this interim report were made by the Company as at 21 August 2020 and, unless otherwise required by the relevant regulatory authorities, the Company 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 and can provide domestic and overseas clients with overall solutions for petrol refining, chemical engineering, aromatics, coal chemicals, inorganic chemicals, pharmaceutical engineering, clean energy, storage and transportation facilities, environmental protection and energy saving, and other industry sectors. The Group can provide overall industry chain services 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, digital delivery and digital factory.

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

In the future, the Group will embrace the development positioning of “a service provider for the whole life cycle from project tracking to project operation”, continue to focus on the development strategies of “energy and petrochemical-oriented, innovation-driven, globalization-targeted and value-focused”, promote international expansion, differentiated evolution, digital transformation, smart upgrade, strengthen the exploration and development in the field of renewable energy and new materials, and create a new momentum in achieving the corporate vision of “building a world-leading engineering company”.

BASIC INFORMATION OF THE COMPANY

LEGAL NAME

中石化炼化工程(集团)股份有限公司

CHINESE ABBREVIATION

中石化炼化工程

ENGLISH NAME

SINOPEC ENGINEERING (GROUP) CO., LTD.

ENGLISH ABBREVIATION

SINOPEC SEG

LEGAL REPRESENTATIVE

Mr. YU Renming

AUTHORISED REPRESENTATIVES

Mr. XIANG Wenwu

Mr. JIA Yiqun

COMPANY SECRETARY

Mr. JIA Yiqun

REGISTERED ADDRESS

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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

Company Office (Office of the Board)

SINOPEC ENGINEERING (GROUP) CO., LTD.

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

**PLACE OF LISTING OF SHARES,
STOCK NAME AND STOCK CODE**

H Shares: 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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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 2020	As at 31 December 2019	Changes from the end of 2019 (%)
Total assets	67,497,829	67,873,748	(0.6)
Equity attributable to equity holders of the Company	27,549,243	27,265,976	1.0
Net assets per share of equity holders of the Company (RMB)	6.22	6.16	1.0

Unit: RMB' 000

Items	Six-month periods ended 30 June		Changes over the same period of 2019 (%)
	2020	2019	
Revenue	23,797,156	22,682,018	4.9
Gross profit	2,191,775	2,371,953	(7.6)
Operating profit	1,150,453	1,101,143	4.5
Profit before taxation	1,562,823	1,513,464	3.3
Profit attributable to equity holders of the Company	1,260,191	1,198,685	5.1
Basic earnings per share (RMB)	0.28	0.27	5.1
Net cash flow used in operating activities	(1,962,757)	(4,964,239)	(60.5)
Net cash flow used in operating activities per share (RMB)	(0.44)	(1.12)	(60.5)

Items	Six-month periods ended 30 June	
	2020	2019
Gross profit margin (%)	9.2	10.5
Net profit margin (%)	5.3	5.3
Return on assets (%)	1.9	1.7
Return on equity (%)	4.6	4.5
Return on invested capital (%)	4.7	4.5

Item	As at 30 June 2020	As at 31 December 2019
Asset-liability ratio (%)	59.2	59.8





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 2019		Increase/Decrease during the Reporting Period (+, -)			As at 30 June 2020	
	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 991 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**”) according to the information publicly available to the Company and to the knowledge of the Directors.

(1) Shareholdings of the top ten shareholders

Unit: Share

Name of Shareholders	Increase/Decrease during the Reporting Period (+, -)	Number of Domestic Shares held as at the end of the Reporting Period	Number of H Shares held as at the end of the Reporting Period	Percentage as at the end of the Reporting Period	
				In total share capital (%)	In relevant class of shares (%)
China Petrochemical Corporation ⁽¹⁾	0	2,967,200,000	–	67.01	100.00
HKSCC NOMINEES LIMITED	-21,215,550	–	1,435,224,289	32.41	98.25
TANG KEUNG LAM	+20,000,000	–	20,000,000	0.45	1.37
ZHANG SAIYU	+1,100,000	–	3,100,000	0.07	0.21
WONG CHUI CHUNG	0	–	295,000	0.01	0.02
CHAN LAI KUEN SELINA	0	–	195,500	0.00	0.01
WONG CHUI CHUNG	0	–	195,500	0.00	0.01
CHOI LAI MING	0	–	130,000	0.00	0.01
HUI MO CHEE	+120,000	–	120,000	0.00	0.01
PANG KWOK WAI	0	–	60,000	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

In accordance with the filing notice submitted through Disclosure of Interests Online System, save as the information disclosed below, as at the end of the Reporting Period, to the knowledge of the Board, no person(s) (other than 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 Divisions 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 the Company:

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 (%) ⁽⁸⁾	Percentage in the total share capital of the Company (%) ⁽⁹⁾
China Petrochemical Corporation ⁽¹⁾	Domestic Share	Beneficial owner/Interests of controlled corporation	2,967,200,000(L)	100.00(L)	67.01(L)
Prudential plc ⁽²⁾	H Share	Interests of controlled corporation	146,385,000 (L)	10.02 (L)	3.31 (L)
BlackRock, Inc. ⁽³⁾	H Share	Interests of controlled corporation	133,124,187 (L)	9.11 (L)	3.01 (L)
JPMorgan Chase & Co. ⁽⁴⁾	H Share	Interests of controlled corporation/ Investment manager/Persons having a security interest in shares/ Approved lending agent	127,519,679 (L)	8.72 (L)	2.88 (L)
			7,877,536 (S)	0.53 (S)	0.18 (S)
			81,766,481 (P)	5.59 (P)	1.85 (P)
Pandanus Associate Inc. ⁽⁵⁾	H Share	Interests of controlled corporation	116,640,353 (L)	7.98 (L)	2.63 (L)
Pandanus Partners L.P. ⁽⁶⁾	H Share	Interests of controlled corporation	116,640,353 (L)	7.98 (L)	2.63 (L)
FIL Limited ⁽⁵⁾	H Share	Interests of controlled corporation	116,640,353 (L)	7.98 (L)	2.63 (L)
Brown Brothers Harriman & Co. ⁽⁶⁾	H Share	Agent	102,321,779 (L)	7.00 (L)	2.31 (L)
			102,321,779 (P)	7.00 (P)	2.31 (P)
Eastspring Investments ⁽⁷⁾	H Share	Beneficial owner	88,261,500 (L)	6.04 (L)	1.99 (L)

Notes: (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 27 March 2020 and filed by Prudential plc with the Hong Kong Stock Exchange.
- (3) The information is based on the Corporate Substantial Shareholders Notice dated 2 July 2020 and filed by BlackRock, Inc. with the Hong Kong Stock Exchange.
- (4) The information is based on the Corporate Substantial Shareholders Notice dated 30 April 2020 and filed by JPMorgan Chase & Co. with the Hong Kong Stock Exchange.
- (5) The information is based on the Corporate Substantial Shareholders Notices dated 4 May 2020 and filed by Pandanus Associates Inc., Pandanus Partners L.P. and FIL Limited with the Hong Kong Stock Exchange. According to these notices, Pandanus Associates Inc. holds 100% interest in Pandanus Partners L.P. and Pandanus Partners L.P. holds 36.86% interest in FIL Limited.
- (6) The information is based on the Corporate Substantial Shareholders Notice dated 7 April 2020 and filed by Brown Brothers Harriman & Co. with the Hong Kong Stock Exchange.
- (7) The information is based on the Corporate Substantial Shareholders Notice dated 17 June 2020 and filed by Eastspring Investments with the Hong Kong Stock Exchange.
- (8) It is calculated on the basis that the Company has issued 2,967,200,000 Domestic Shares and 1,460,800,000 H Shares.
- (9) 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 2020, the pandemic COVID-19 spread all over the world. The international oil price plummeted, the financial market fluctuated, the energy consumption dropped, and the global economy suffered heavy losses. Confronted with this unprecedented difficult situation and the complicated and ever-changing domestic and international environment, the Group braved all the difficulties and actively carried out the “one hundred day campaign to address the tough challenges and to improve performance”, focusing on epidemic prevention and control and on business operation, organizing work resumption, strengthening project process control and improving the level of intensive management. The Group worked hard to overcome the adverse effects caused by the epidemic and achieved hard-won business performance. All the projects were implemented smoothly, with safety, quality and progress well controlled. During the Reporting Period, the Group recognized a revenue of RMB23.797 billion, an increase of 4.9% compared with the same period of last year (hereinafter referred to as “period-on-period”), and the profits attributable to equity holders of the Company were RMB1.260 billion, with a period-on-period increase of 5.1%.

During the Reporting Period, the value of new contracts entered into by the Group was RMB36.638 billion, representing an increase of 10.3% on a period-on-period basis. In the first half of 2020, the Group seized the opportunity of alleviated epidemic situation in China, closely followed the transition of the domestic petrochemical industry and grasped the market opportunities of steady advancement of the “seven major national petrochemical industry bases” and the “four world-class refining and petrochemical bases of Sinopec Group”. Given full play to its competitive advantages, the Group maintained a stable development of domestic market. During the Reporting Period, the value of new domestic contracts entered into by the Group was RMB30.094 billion, representing a decrease of 3.1% on a period-on-period basis. Meanwhile, thanks to long-term hard work in overseas markets such as in the Middle East, Russia and Central Asia, the Group achieved a breakthrough in overseas market. During the Reporting Period, the value of newly signed overseas contracts amounted to approximately RMB6.544 billion, representing an increase of 200.6% on a period-on-period basis. As at the end of the Reporting Period, the Group’s backlog was RMB107.834 billion, representing an increase of 13.5% compared to that as at 31 December 2019.

The Group devoted itself to epidemic prevention and control and actively fulfilled its social responsibilities, greatly enhanced the brand image of the company. The Group built the first meltblown fabric production line for Sinopec in only 12 days, and built the world’s largest meltblown fabric production base in Sinopec Yanshan Petrochemical Company and Sinopec Yizheng Chemical Fiber Co., LTD. within 76 days, making a great contribution to the epidemic prevention and control. The Group donated approximately 460,000 pieces of epidemic prevention equipment to business partners in Italy, Spain, Kazakhstan, Saudi Arabia, Uzbekistan, Belgium and etc. to help to tide over these difficulties.

1 Business Review

(1) Market Environment

In the first half of 2020, under the unprecedented impact of the epidemic COVID-19, the global economy was trapped in a serious recession. Facing severe risks and challenges, China made overall plans to promote the prevention and control of the epidemic and economic development, achieved significant initial results. The main indicators declined first and then rose up, achieving a restorative growth, and the economic operation revived steadily.

In the first half of this year, the shrinking global production and operation activities and the oversupply in the crude oil market caused the global crude oil price plunged, within Brent international crude oil futures price once dropped below USD20/barrel. With a steady reduction of crude oil production in the short-or-medium-term, the imbalance between supply and demand has been partially improved, and the price of Brent crude oil futures has gradually recovered to roughly USD40/barrel.

With the demand for the global energy and petrochemical products declined, the Petrochemical Industry is facing severe challenges. Thanks to the strong resilience of domestic economy and the powerful support of national policy, the work resumption in various industries accelerated, and the energy and petrochemical industry chain recovered rapidly under the improved domestic epidemic situation. In the first half of this year, the construction of a number of large-scale refining and petrochemical projects was steadily pushed forward, the structure adjustment of refining and petrochemical industry was enhanced, the construction of crude oil storage facilities was accelerated, and the natural gas pipeline network and gas storage facilities were continued to lay out, showing a recovery of domestic market. However, at the same time, the epidemic COVID-19 has spread rapidly in overseas areas, causing greater difficulties in overseas market development and project implementation.

(2) Operation Overview

During the Reporting Period, the total revenue of the Group was RMB23.797 billion, representing an increase of 4.9% on a period-on-period basis, mainly due to the fact that large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Petrochemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project have contributed a lot to the revenue. Profit attributable to equity holders of the Company was RMB1.260 billion, representing an increase of 5.1% on a period-on-period basis. As at the end of the Reporting Period, the backlog of the Group amounted to RMB107.834 billion, representing an increase of 13.5% compared to that as at 31 December 2019, and was 2.06 times of the total revenue of RMB52.261 billion in 2019. During the Reporting Period, the value of new contracts amounted to RMB36.638 billion, representing an increase of 10.3% on a period-on-period basis.

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

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

	Six-month periods ended 30 June				Change
	2020		2019		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Engineering, consulting and licensing	1,230,173	4.6	1,147,922	4.6	7.2
EPC Contracting	15,528,332	58.3	13,852,329	55.6	12.1
Construction	9,612,750	36.1	9,589,987	38.5	0.2
Equipment manufacturing	264,320	1.0	318,010	1.3	(16.9)
Subtotal	26,635,575	100.0	24,908,248	100.0	6.9
Total (after inter-segment elimination) ⁽¹⁾	23,797,156	N/A	22,682,018	N/A	4.9

Note:

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

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				Change
	2020		2019		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Oil refining	5,524,808	23.2	7,854,494	34.6	(29.7)
Petrochemicals	14,428,401	60.6	10,913,276	48.1	32.2
New coal chemicals	2,204,020	9.3	2,509,314	11.1	(12.2)
Other industries	1,639,927	6.9	1,404,934	6.2	16.7
Total	23,797,156	100.0	22,682,018	100.0	4.9

The Group derived its revenue mainly from services provided to clients in oil refining, petrochemicals, new coal chemicals and other industries. During the Reporting Period, thanks to the revenue contribution from large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Petrochemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project, revenue generated from petrochemicals industry was RMB14.428 billion, representing an increase of 32.2% on a period-on-period basis; thanks to the contribution of crude oil storage facilities projects and natural gas pipeline network and gas storage facilities projects, revenue generated from other industries was RMB1.640 billion, representing an increase of 16.7% on a period-on-period basis; revenue generated from oil refining industry was RMB5.525 billion, representing a decrease of 29.7% on a period-on-period basis, which was affected by the settlement and completion of the projects such as Kuwait Oil Refining Project; revenue generated from new coal chemicals industry was RMB2.204 billion, representing a decrease of 12.2% on a period-on-period basis, which was affected by the settlement and completion of coal chemicals projects such as Zhong'An Joint Coalification Integration Project.

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				Change
	2020		2019		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
PRC	21,040,916	88.4	16,754,294	73.9	25.6
Overseas	2,756,240	11.6	5,927,724	26.1	(53.5)
Total	23,797,156	100.0	22,682,018	100.0	4.9

During the Reporting Period, thanks to the rapid control of the domestic epidemic, the Group's active work resumption, and the large revenue contribution from large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Petrochemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project, revenue of the Group generated in the PRC was RMB21.041 billion, representing an increase of 25.6% on a period-on-period basis, affected by the slowdown of progress in some overseas projects due to the spread of epidemic COVID-19 in the world and the settlement and completion of Kuwait Oil Refining Project, revenue generated from overseas was RMB2.756 billion, representing a decrease of 53.5% on a period-on-period basis.

During the Reporting Period, representative domestic projects that the Group entered into include Zhenhai Refining and Chemical Ethylene Expansion Project, Sinopec Tianjin Liquefied Natural Gas (LNG) Project Expansion Project (Phase II) Receiving Terminal Project, crude oil storage facilities projects in Guangdong, Tianjin and Xinjiang. Representative overseas projects entered into by the Group include Saudi Aramco Crude Oil Transportation Pump Station Upgrade Project, Russian Amur AGCC Polyolefin Project, Hengyi Brunei PMB Project Design Contract, etc.

During the Reporting Period, the Group's capital expenditure was approximately RMB190 million, mainly used for the contract energy management investment, production base construction, information system construction, construction machinery and engineering professional software purchase, etc..

(3) Business Highlights

Successful implementation of major projects

Fujian Gulei Refining and Petrochemical Integration 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 entered into construction peak period, with an overall progress exceeding 60%.

Zhongke Refining and Petrochemical Integration Project: please refer to the announcements dated 18 January 2018, 19 March 2018 and 17 April 2018 published by the Company for further details. As at the end of the Reporting Period, the project entered the full-scale start-up phase.

SINOPEC SABIC Polycarbonate Project: please refer to the announcement dated 11 June 2018 published by the Company for further details. As at the end of the Reporting Period, the project entered into construction peak period, with an overall progress of about 60%.

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 project was in the final stage, and the main units were at the mechanical completion stage.

Zhenhai Refining and Chemical Ethylene Expansion Project: please refer to the announcements dated 28 February 2020 and 16 April 2020 published by the Company for further details. As at the end of the Reporting Period, this project was in the stage of detailed design and civil construction, with an overall progress of about 10%.

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 project entered into construction peak period, with an overall progress exceeding 80%.

Continuous enhancement of project management and control

During the Reporting Period, the Group established a key project work coordination group to maintain close communication with the project owners and tighten the coordination of key projects; the Group intensified early planning, optimized management process, and enhanced in-process quality control; focusing on efficiency and progress, the Group implemented the “triple warning” for progress deviation, revenue deviation and budget deviation, rectified the deviation in a timely manner, and strengthened project process management and closed-loop management to ensure smooth implementation of all projects; optimising the design workflow and professional division interface, the Group strengthened standardized design, modular design, and modular construction to improve design and construction efficiency; the Group carried out project management trainings and contract management trainings, implementing the advanced management concepts and management processes of international projects.

During the Reporting Period, the Group further improved the subcontracting management system, strengthened the cultivation of strategic subcontractors, and dynamically evaluated the operational effectiveness of the QHSSE system of strategic subcontractors, optimized the allocation of subcontracting resources; the Group developed subcontracting resources and information sharing platform, realised integrated management of subcontractor resource pool and subcontractor assessment, reduced subcontracting management costs; the Group guaranteed the supply of materials for various projects, actively explored ways to improve procurement efficiency and cost reduction, improved standard procedures, document templates and management regulations of procurement further improved procurement management for domestic and overseas projects.

Forge ahead in market development

During the Reporting Period, fully grasped the market opportunities and made full use of its overall advantages in industry chain, service chain and technology chain, the Group vigorously expanded the market. During the Reporting Period, the value of new contracts entered into by the Group was RMB36.638 billion, representing an increase of 10.3% on a period-on-period basis; out of which, the value of newly signed domestic contracts amounted to RMB30.094 billion, representing a decrease of 3.1% on a period-on-period basis, and the value of newly signed overseas contracts amounted to approximately RMB6.544 billion, representing an increase of 200.6% on a period-on-period basis.

During the Reporting Period, the Group continued to develop market in the PRC and strive to explore new business in new fields and new areas. The Group entered into new contracts for a number of large projects in the PRC, such as Zhenhai Refining and Chemical Ethylene Expansion Project with a total contract value of approximately RMB10.565 billion; a series of crude oil storage facilities projects in Guangdong, Tianjin and Xinjiang with a total contract value of approximately RMB3.950 billion; Sinopec Tianjin Liquefied Natural Gas (LNG) Project Expansion Project (Phase II) Receiving Terminal Project with a total contract value of approximately RMB3.183 billion.

During the Reporting Period, the Group continuously strengthened the cooperation with international engineering companies and strengthened overseas outlets, improved the deployment in overseas markets. Thanks to the long-term hard work in key markets, the Group has made a breakthrough in overseas market. The major overseas projects newly signed include: Saudi Aramco Crude Oil Transportation Pump Station Upgrade Project with a total contract value of approximately USD386 million; Russian Amur AGCC Polyolefin Project with a total contract value of approximately USD256 million; and Hengyi Brunei PMB Project Design Contract with a total contract value of approximately USD47 million.

In addition to above projects, the Group followed up with several projects in oil refining, petrochemicals, new coal chemicals, environmental protection and energy saving fields, which are expected to enter into new contracts in the future.

Continuous promotion of technological innovation and technological advancement

During the Reporting Period, the Group has signed 158 new contracts for the scientific research programs, covering new energy sources, new materials, and energy saving and emission reduction technologies required for the development of petrochemical market.

During the Reporting Period, the Group's key R&D programs were steadily advanced. The project "Solid Superacid C5, C6 Isomerization Technology Development and Industrial Test" has gone through the plant start-up stage and is now under adjustment, entering the calibration preparation stage; the project "Research and Demonstration of Packaged Technologies for Safe and Reliable Large-flux Plasma Treatment of VOCs" has been completed and is expected to be delivered in the near future; the project "Integration and Development of High Slag Content and Low Emission Heavy Oil Catalytic Cracking Technology" has gone through the start-up for some units; and other key research projects have been advanced as scheduled and are under overall control.

During the Reporting Period, the Group completed 271 new patent applications, among which, 163 or 60.1% applications were invention patents applications. Besides, the Group completed 192 newly licensed patents, 66 of which were invention patents.

During the Reporting Period, the Group received a total of 20 scientific advancement awards in scientific innovation and engineering construction fields at the provincial and above level, among them, the project "Development and Application of Packaged Technologies for Ultra-low Sulfur Emission and Resource Utilization of Sulfide-bearing Waste Gas from Refining and Chemical Industry" won the second prize of National Science and Technology Progress Award in 2019, 14 projects won the annual Sinopec Science and Technology Progress Award, and 3 projects won quality engineering awards at different levels.

Businesses of environmental protection and energy saving constantly expanded

During the Reporting Period, the contracts signed by the Group concerning energy saving and environmental protection include Tianjin Petrochemical's renovation project of confined decoking for delayed coking unit, Qilu Petrochemical's renovation project of confined decoking for delayed coking unit, Anqing Petrochemical's project of waste residue landfill site restoration, Qilu Petrochemical's project of rectisol tail gas treatment, Baling Petrochemical Resin Department's public works No.1 station recycling water system energy saving transformation project, Jinan refining and chemical coking furnace outer wall energy saving transformation project, Maoming Petrochemical's energy management project under refinery CFB circulating water system optimization and coal-to-hydrogen circulating water system optimization contract, and so on.

In the field of energy saving, the Group actively promoted the progress of the existing contract energy management projects and carbon footprint evaluation services, undertook the energy saving research work such as the development of biological aviation kerosene life cycle model, the development of clean production technology and carbon footprint accounting technology in petroleum and petrochemical enterprises, and the application of mechanical vapor recompression (MVR) technology of multi effect evaporation process, and promoted photovoltaic power station construction projects in gas station and oil depot. In the field of soil restoration, the Group closely tracked the progress of site restoration work in Beihai Refinery, Xi'an Petrochemical, Baling Petrochemical, Anqing Petrochemical and other enterprises and the restoration projects of contaminated sites in Chongqing and Anhui, and organized domestic and foreign partners to jointly participate in tendering for KOC crude oil contaminated soil restoration project in Kuwait.

Deepen reform and explore new momentum

During the Reporting Period, according to the corporate vision of "building a world-leading engineering company" and the development model of "integrated operation and collectivized management", the Group has comprehensively promoted the optimisation and realignment, made greater efforts in the international expansion, differentiated evolution, digital transformation and smart upgrade, and strived to build the brand of "whole life cycle service provider from project tracking to project operation". The Group promoted reform in depth, coordinated the development of all business segments, formed the advantages of collectivization scale, exerted the integration synergy effect, improved and extended the business chain on the basis of consolidating the traditional and core business areas, and made the high-end business bigger and stronger. During the Reporting Period, the Group continued to improve the reform of information technology branches, and accelerated the construction of operation and management platform, project management platform, digital factory platform and intelligent application platform.

The application of digital engineering has achieved initial success

During the Reporting Period, the Group vigorously promoted digital transformation and smart upgrade. According to the "data + platform + application" model, the Group combed the "three-in-one" scenario of business flow, phased management process flow and production tool flow in the whole life cycle from project tracking to project operation, prepared the information and digital development planning framework of the 14th Five-Year Plan, and comprehensively scheme the overall plan of the Group's digital transformation. During the Reporting Period, the Group focused on the integration of industry and finance, deepened ERP application, promoted comprehensive budget management, and established and optimized an operation management platform; paying special attention to digital delivery the Group developed in-depth application of digital factory production line through an engineering cloud APP; focusing on smart factory services, the Group deepened the application of engineering master data, explored the integrated application of equipment domains, and participated in the construction of petrochemical intelligent cloud.

Continued to promote safe production

During the Reporting Period, in accordance with the strategy of “preventing imported cases from abroad and resurgence at home”, the Group resolutely takes the blocking action of epidemic prevention and control, decisively implements the core value of QHSSE (quality, health, safety, security and environment) of “safety development, quality first, environmental protection priority and people-oriented”, taking the effective operation of QHSSE management system as the main roadmap, taking the construction of long-term mechanism as the guideline, creating a normalization mechanism for epidemic prevention and control, fully implementing the entity responsibility, identifying safety risks and hazards, strengthening risk prevention and control, and consolidating the management of “grass-roots construction, basic work and basic skill building”. By organizing multi-level training, deepening the design of intrinsic safety management, strengthening video remote supervision and inspection, and carrying out quality and safety improvement activities, the Group fully promoted quality and safety standardization construction and intrinsic safety capacity building, and continuously improve QHSSE management level. In addition, the Group actively took precautions against overseas public safety risks arising from the epidemic, and ensured the stability of overseas project teams and project implementation.

As at the end of the Reporting Period, the Group achieved the goal of no reported accidents such as safety, quality, environment, occupational health, or overseas public safety of the projects being implemented. As a result, an aggregate of 131.59 million labour safe hours were realised during the Reporting Period.

2 Business Prospects

Looking forward to the second half of 2020, the global economy is still facing great challenges. The “long tail effect” of the epidemic and the trend of “anti-globalization” have a profound impact on global development. Financial market is subject to accumulated risks, and the uncertainty of international oil prices becomes prominent, resulting the market competition increasingly fierce. However, China’s economy still has great potential and momentum, and the fundamentals of long-term improvement have not changed. With continuous improvement of the epidemic situation, the demand recovery is expected to accelerate. The Group will stick to the long-term perspective, strive to find new chances amidst the crisis, create new leads in the changing situation, take initiatives in grasping the domestic and international market opportunities, and give full play to the advantages of collectivization, integration and scale to continuously enhance the core competitiveness of the enterprises and promote the sustainable development of the Group.

In the future, the development of the energy industry will adjust the pace with improved quality and efficiency, and the patten of refining and petrochemical industry will constantly change. Projects of the “seven major national petrochemical industry bases” and Sinopec Group’s “four world-class refining and petrochemical bases” will continue to move forward. Investments from private sector will remain active, and international energy giants such as Exxon Mobil, BASF and SABIC are poised to enter the Chinese market. Focusing on the development orientation of “Whole Life Cycle Service Provider from Project Tracking to Project Operation”, the Group will strengthen its traditional advantageous businesses in oil refining and petrochemical industries and continue to establish overall solutions for industries of natural gas, new coal chemicals, environmental protection and energy saving, and build an innovation system with technological innovation as the core, focusing on key points, optimizing resources, implementing the policies in a classified and targeted manner, and jointly promoting the development of various business segments. Meanwhile, the Group will continue to closely track the market opportunities in countries and regions along the “Belt and Road” and continuously improve the competitiveness of overseas business and increase the anti-risk ability.

In respect of the market development, for the second half of 2020, the Group will continue to promote the overall exploration of key markets, give full play to advantageous areas such as refining and petrochemical integration and comprehensive utilization of light hydrocarbons, new coal chemicals, natural gas and LNG, promote the development of strategic customers and large projects, strengthen engineering, consulting and licensing business, propel project tracking and full-cycle services, and increase market share; the Group will explore new businesses fields such as new energy, new materials, energy saving and environmental protection, promote the growth of energy saving business and soil restoration business and seize the market opportunities of renewable energy, carbon resources and hydrogen resources to promote the construction of related demonstration units, establishing market competitive advantages; the Group will extend the service chain of digital delivery, modular design and construction, high-end manufacturing, and new inspection and maintenance services; the Group will explore new business models in conjunction with digital transformation and promote the overall development of key areas and key projects; the Group will form a closer cooperative relationship with strategic partners such as global excellent technology licensors suppliers and engineering companies. In overseas market, the Group will strive to overcome the adverse effects of the epidemic COVID-19, continue to take the lead in “Belt and Road” initiative to make greater effort in market development of countries along the “Belt and Road”, maintain the existing advantages in traditional markets such as the Middle East, Central Asia and Russia, and deepen the market exploitation and expand business areas; the Group will strive to make breakthroughs in South Asia and Africa.

In respect of project management, for the second half of 2020, the prevention and control of domestic epidemic has become the new normal, the risk of overseas epidemic spread is still relatively high, and the uncertainty in overseas business operation is increasing. The Group will always adhere to prevention and control of epidemic situation on one hand and business operation on the other, further carry out the campaign to address the tough challenges and to improve performance, take effective measures to enhance profitability; the Group will strengthen the overall coordination and key monitoring of major domestic projects, prevent epidemic resurgence at home, and stress the early planning and assurance of implementation process of key projects; the Group will strengthen project process control, solve problems existing in the project implementation process in time, reduce project management risks, and ensure the smooth implementation of key projects; the Group will coordinate and optimize the resource allocation of the project under the conditions of ensuring safety, quality and controllable schedule, and take the maximization of the company's benefits as the guideline. As for overseas businesses, the Group will continue to do a good job in epidemic prevention and control based on the concept of “life first” and an attitude of being highly responsible for all overseas employees, and at the same time, strengthen humanistic care to ensure the life safety and mental health of overseas employees.

In respect of technology research and development, for the second half of 2020, while strengthening and optimizing traditional refining and chemical businesses, the Group will focus on technology development trends in the fields of new energy, new materials, and energy saving and environmental protection, and focus on technologies and applications in the fields of direct production of chemicals from crude oil, cheap hydrogen sources, CO₂ utilization and natural gas chemical industry. The Group will strengthen cooperation, give full play to the integration advantages of the Group in technology, improve the quality of engineering services through technological innovation, and enhance 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. The relevant financial data below, unless otherwise stated, are extracted from the Group's audited financial statements prepared according to the IFRS.





1 Consolidated Results of Operations

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

	Six-month periods ended 30 June				Change
	2020		2019		
	Amount	Percentage of total revenue	Amount	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Revenue	23,797,156	100.0	22,682,018	100.0	4.9
Cost of sales	(21,605,381)	(90.8)	(20,310,065)	(89.5)	6.4
Gross profit	2,191,775	9.2	2,371,953	10.5	(7.6)
Other income	210,475	0.9	118,758	0.5	77.2
Selling and marketing expenses	(50,426)	(0.2)	(50,250)	(0.2)	0.4
Administrative expenses	(494,146)	(2.1)	(606,920)	(2.7)	(18.6)
Research and development costs	(796,316)	(3.3)	(746,721)	(3.3)	6.6
Other operating income	89,177	0.4	11,440	0.1	679.5
Other (losses)/gains – net	(86)	(0.0)	2,883	0.0	–
Operating profit	1,150,453	4.8	1,101,143	4.9	4.5
Finance income	446,324	1.9	450,638	2.0	(1.0)
Finance expenses	(43,958)	(0.2)	(54,561)	(0.2)	(19.4)
Finance income – net	402,366	1.7	396,077	1.7	1.6
Share of profits/(losses) of joint arrangements	7	0.0	(111)	(0.0)	–
Share of profits of associates	9,997	0.0	16,355	0.1	(38.9)
Profit before taxation	1,562,823	6.6	1,513,464	6.7	3.3
Income tax expense	(302,470)	(1.3)	(314,710)	(1.4)	(3.9)
Profit for the period	1,260,353	5.3	1,198,754	5.3	5.1
(Losses)/Gains on revaluation of retirement benefit plans obligations, net of income tax effect	(45,491)	(0.2)	122	0.0	–
Exchange differences arising on translation of foreign operations	942	0.0	117,849	0.5	(99.2)
Total comprehensive income for the period	1,215,804	5.1	1,316,725	5.8	(7.7)

(1) Revenue

The revenue of the Group increased by 4.9% from RMB22.682 billion for the six months ended 30 June 2019 to RMB23.797 billion for the six months ended 30 June 2020, which was mainly due to the fact that large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Chemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project have contributed a lot to the revenue.

(2) Cost of sales

The cost of sales of the Group increased by 6.4% from RMB20.310 billion for the six months ended 30 June 2019 to RMB21.605 billion for the six months ended 30 June 2020, which was mainly due to (i) the increase in cost of equipment and materials as a result of entering into the peak period of equipment and materials procurement for large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project, and (ii) the increase in project execution cost and epidemic prevention cost as a result of the slowdown in progress or delay of some projects in light of the impact of the pandemic COVID-19.

(3) Gross profit

Due to the above reasons, the gross profit of the Group decreased by 7.6% from RMB2.372 billion for the six months ended 30 June 2019 to RMB2.192 billion for the six months ended 30 June 2020, and the gross profit margin decreased from 10.5% to 9.2% on a period-on-period basis.

(4) Other income

The other income of the Group increased by 77.2% from RMB119 million for the six months ended 30 June 2019 to RMB210 million for the six months ended 30 June 2020. The main reason is that an exchange gain of RMB61 million was recorded in the Reporting Period due to exchange rates fluctuation, while an exchange loss was recorded during the same period of last year.

(5) Selling and marketing expenses

The selling and marketing expenses of the Group were RMB50 million, which remained broadly stable on a period-on-period basis.

(6) Administrative expenses

The administrative expenses of the Group decreased by 18.6% from RMB607 million for the six months ended 30 June 2019 to RMB494 million for the six months ended 30 June 2020, which was mainly due to the decrease in expenses such as travel and office expenses on a period-on-period basis.

(7) Research and development costs

The research and development costs of the Group increased by 6.6% from RMB747 million for the six months ended 30 June 2019 to RMB796 million for the six months ended 30 June 2020, which was mainly due to the Group's increased R&D investment in new technologies, new processes and digitization.

(8) Other operating income

Other operating income of the Group increased by 679.5% from RMB11 million for the six months ended 30 June 2019 to RMB89 million for the six months ended 30 June 2020, which was mainly due to (i) the return of impairment allowance in the Reporting Period, and (ii) the exchange loss caused by the fluctuation of exchange rate in the same period of last year.

(9) Other (losses)/gains – net

The net other (losses)/gains of the Group were a loss of RMB85,800.

(10) Operating profit

Due to the above reasons, the operating profit of the Group increased by 4.5% from RMB1.101 billion for the six months ended 30 June 2019 to RMB1.150 billion for the six months ended 30 June 2020.

(11) Finance income – net

The net finance income of the Group was RMB402 million, which remained broadly stable on a period-on-period basis.

(12) Income tax expense

The Group's income tax expense was RMB302 million, which remained broadly stable on a period-on-period basis. The effective income tax rate decreased from 20.8% to 19.4% on a period-on-period basis. The change in the 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

Due to the above reasons, the profit of the Group increased by 5.1% from RMB1.199 billion for the six months ended 30 June 2019 to RMB1.260 billion for the six months ended 30 June 2020.

(14) Total comprehensive income for the period

As a combined result of the reasons above and the effect of other comprehensive income of the Group, the total comprehensive income of the Group decreased by 7.7% from RMB1.317 billion for the six months ended 30 June 2019 to RMB1.216 billion for the six months ended 30 June 2020.

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	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
	(RMB' 000)		(RMB' 000)		(%)		(RMB' 000)		(%)	
Engineering, consulting and licensing	1,230,173	1,147,922	396,096	388,331	32.2	33.8	72,846	84,166	5.9	7.3
EPC Contracting	15,528,332	13,852,329	1,140,707	1,250,413	7.3	9.0	797,595	700,768	5.1	5.1
Construction	9,612,750	9,589,987	641,681	726,608	6.7	7.6	253,027	292,848	2.6	3.1
Equipment manufacturing	264,320	318,010	13,291	6,601	5.0	2.1	4,677	(2,675)	1.8	(0.8)
Unallocated	N/A	N/A	N/A	N/A	N/A	N/A	22,308	26,036	N/A	N/A
Subtotal	26,635,575	24,908,248	2,191,775	2,371,953	N/A	N/A	1,150,453	1,101,143	N/A	N/A
Total after inter-segment elimination ⁽³⁾	23,797,156	22,682,018	2,191,775	2,371,953	9.2 ⁽¹⁾	10.5 ⁽¹⁾	1,150,453	1,101,143	4.8 ⁽²⁾	4.9 ⁽²⁾

Notes:

- (1) Total gross profit margin is calculated based on total gross profit divided by total revenue, and total revenue is the gross earnings generated after inter-segment elimination in all the business segments.
- (2) Total operating profit margin of the segment is calculated based on the total operating profit of the segment divided by total revenue, and total revenue is the gross earnings generated after inter-segment elimination in all the business segments.
- (3) Inter-segment elimination is mainly caused by the inter-segment sales made by the construction and equipment manufacturing segments to the EPC contracting segment. Other information on inter-segment sales is set out in Note 7 to the Financial Statements contained in this 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			
	2020		2019	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	1,230,173	100.0	1,147,922	100.0
Cost of sales	(834,077)	(67.8)	(759,591)	(66.2)
Gross profit	396,096	32.2	388,331	33.8
Selling and marketing expenses	(5,329)	(0.4)	(5,688)	(0.5)
Administrative expenses	(35,589)	(2.9)	(44,982)	(3.9)
Research and development costs	(304,122)	(24.7)	(294,531)	(25.7)
Other income and expenses	21,790	1.8	41,036	3.6
Operating profit	72,846	5.9	84,166	7.3

(1) Revenue

The revenue generated from the Group's engineering, consulting and licensing segment increased by 7.2% from RMB1.148 billion for the six months ended 30 June 2019 to RMB1.230 billion for the six months ended 30 June 2020, which was mainly due to the increase in engineering business volume.

(2) Cost of sales

The cost of sales of the Group's engineering, consulting and licensing segment increased by 9.8% from RMB760 million for the six months ended 30 June 2019 to RMB834 million for the six months ended 30 June 2020, which was mainly due to (i) the increase in cost along with the increase in business volume, and (ii) the increase in project execution cost and epidemic prevention cost as a result of the slowdown in progress of some projects in light of the impact of the pandemic COVID-19.

(3) Gross profit

Due to the above reasons, the gross profit of the Group's engineering, consulting and licensing segment increased by 2.0% from RMB388 million for the six months ended 30 June 2019 to RMB396 million for the six months ended 30 June 2020, and the gross profit margin was 32.2%, which slightly decreased 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 were RMB5 million, which remained broadly stable on a period-on-period basis.

(5) Administrative expenses

The administrative expenses of the Group's engineering, consulting and licensing segment decreased by 20.9% from RMB45 million for the six months ended 30 June 2019 to RMB36 million for the six months ended 30 June 2020, which was mainly due to the decrease in expenses such as travel and office expenses on a period-on-period basis.

(6) Research and development costs

The research and development costs of the Group's engineering, consulting and licensing segment increased by 3.3% from RMB295 million for the six months ended 30 June 2019 to RMB304 million for the six months ended 30 June 2020, which was mainly due to the increase in R&D investment in new technologies and new processes by the Group.

(7) Operating profit

Due to the above reasons, the operating profit of the Group's engineering, consulting and licensing segment decreased by 13.4% from RMB84 million for the six months ended 30 June 2019 to RMB73 million for the six months ended 30 June 2020.

EPC Contracting

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

	Six-month periods ended 30 June			
	2020		2019	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	15,528,332	100.0	13,852,329	100.0
Cost of sales	(14,387,625)	(92.7)	(12,601,916)	(91.0)
Gross profit	1,140,707	7.3	1,250,413	9.0
Selling and marketing expenses	(26,351)	(0.2)	(25,218)	(0.2)
Administrative expenses	(256,951)	(1.7)	(307,804)	(2.2)
Research and development costs	(296,708)	(1.9)	(264,183)	(1.9)
Other income and expenses	236,898	1.5	47,560	0.3
Operating profit	797,595	5.1	700,768	5.1

(1) Revenue

The revenue generated from the Group's EPC contracting segment increased by 12.1% from RMB13.852 billion for the six months ended 30 June 2019 to RMB15.528 billion for the six months ended 30 June 2020, which was mainly due to the fact that large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Chemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project have contributed a lot to the revenue.

(2) Cost of sales

The cost of sales of the Group's EPC contracting segment increased by 14.2% from RMB12.602 billion for the six months ended 30 June 2019 to RMB14.388 billion for the six months ended 30 June 2020, which was mainly due to (i) the increase in cost of equipment and materials as a result of entering into the peak period of equipment and materials procurement for large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project, and (ii) the increase in project execution cost and epidemic prevention cost as a result of the slowdown in progress or delay of some projects in light of the impact of pandemic COVID-19.

(3) Gross profit

Due to the above reasons, the gross profit of the Group's EPC contracting segment decreased by 8.8% from RMB1.250 billion for the six months ended 30 June 2019 to RMB1.141 billion for the six months ended 30 June 2020, and the gross profit margin decreased from 9.0% to 7.3% on a period-on-period basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's EPC contracting segment were RMB26 million, which remained broadly stable on a period-on-period basis.

(5) Administrative expenses

The administrative expenses of the Group's EPC contracting segment decreased by 16.5% from RMB308 million for the six months ended 30 June 2019 to RMB257 million for the six months ended 30 June 2020, which was mainly due to the decrease in expenses such as travel and office expenses on a period-on-period basis.

(6) Research and development costs

The research and development costs of the Group's EPC contracting segment increased by 12.3% from RMB264 million for the six months ended 30 June 2019 to RMB297 million for the six months ended 30 June 2020, which was mainly due to the increase in R&D investment in new technologies, new processes and digitization by the Group.

(7) Operating profit

Due to the above reasons, and return of impairment allowance and the contribution of exchange gain, the operating profit of the Group's EPC contracting segment increased by 13.8% from RMB701 million for the six months ended 30 June 2019 to RMB798 million for the six months ended 30 June 2020.

Construction

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

	Six-month periods ended 30 June			
	2020		2019	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	9,612,750	100.0	9,589,987	100.0
Cost of sales	(8,971,069)	(93.3)	(8,863,379)	(92.4)
Gross profit	641,681	6.7	726,608	7.6
Selling and marketing expenses	(17,199)	(0.2)	(17,773)	(0.2)
Administrative expenses	(195,125)	(2.0)	(246,977)	(2.6)
Research and development costs	(194,641)	(2.0)	(187,622)	(2.0)
Other income and expenses	18,311	0.2	18,612	0.2
Operating profit	253,027	2.6	292,848	3.1

(1) Revenue

The revenue generated from the Group's construction segment was RMB9.613 billion, which remained broadly stable on a period-on-period basis.

(2) Cost of sales

The cost of sales of the Group's construction segment increased by 1.2% from RMB8.863 billion for the six months ended 30 June 2019 to RMB8.971 billion for the six months ended 30 June 2020, which was mainly due to (i) the increase in subcontracting and material costs along with the increase in business volume, and (ii) the increase in project execution cost and epidemic prevention cost as a result of the slowdown in progress or delay of some projects in light of the impact of pandemic COVID-19.

(3) Gross profit

Due to the above reasons, the gross profit of the Group's construction segment decreased by 11.7% from RMB727 million for the six months ended 30 June 2019 to RMB642 million for the six months ended 30 June 2020, and the gross profit margin decreased from 7.6% to 6.7% on a period-on-period basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's construction segment were RMB17 million, which remained broadly stable on a period-on-period basis.

(5) Administrative expenses

The administrative expenses of the Group's construction segment decreased by 21.0% from RMB247 million for the six months ended 30 June 2019 to RMB195 million for the six months ended 30 June 2020, which was mainly due to the decrease in expenses such as travel and office expenses on a period-on-period basis.

(6) Research and development costs

The research and development costs of the Group's construction segment were RMB195 million, which remained broadly stable on a period-on-period basis.

(7) Operating profit

Due to the above reasons, the operating profit of the construction segment of the Group decreased by 13.6% from RMB293 million for the six months ended 30 June 2019 to RMB253 million for the six months ended 30 June 2020.

Equipment Manufacturing

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

	Six-month periods ended 30 June			
	2020		2019	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	264,320	100.0	318,010	100.0
Cost of sales	(251,029)	(95.0)	(311,409)	(97.9)
Gross profit	13,291	5.0	6,601	2.1
Selling and marketing expenses	(1,547)	(0.6)	(1,571)	(0.5)
Administrative expenses	(6,481)	(2.5)	(7,157)	(2.3)
Research and development costs	(845)	(0.3)	(385)	(0.1)
Other income and expenses	259	0.1	(163)	(0.1)
Operating profit/(losses)	4,677	1.8	(2,675)	(0.8)

(1) Revenue

The revenue generated from the Group's equipment manufacturing segment decreased by 16.9% from RMB318 million for the six months ended 30 June 2019 to RMB264 million for the six months ended 30 June 2020, which was mainly due to the decreased business volume in equipment manufacturing.

(2) Cost of sales

The cost of sales of the Group's equipment manufacturing segment decreased by 19.4% from RMB311 million for the six months ended 30 June 2019 to RMB251 million for the six months ended 30 June 2020, which was mainly due to the corresponding reduction of costs along with the decrease in business volume.

(3) Gross profit

The gross profit of the Group's equipment manufacturing segment increased by 101.3% from RMB7 million for the six months ended 30 June 2019 to RMB13 million for the six months ended 30 June 2020, and gross profit margin increased from 2.1% to 5.0% on a period-on-period basis, which was mainly due to the greater revenue contribution of some businesses with higher added value.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's equipment manufacturing segment were RMB2 million, which remained broadly stable on a period-on-period basis.

(5) Administrative expenses

The administrative expenses of the Group's equipment manufacturing segment were RMB6 million, which remained broadly 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 RMB845,000.

(7) Operating profit/(losses)

Due to the above reasons, the Group's equipment manufacturing segment changed from the operating losses of RMB3 million for the six months ended 30 June 2019 to the operating profit of RMB5 million for the six months ended 30 June 2020.

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				Change
	2020		2019		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Oil refining	5,524,808	23.2	7,854,494	34.6	(29.7)
Petrochemicals	14,428,401	60.6	10,913,276	48.1	32.2
New coal chemicals	2,204,020	9.3	2,509,314	11.1	(12.2)
Other industries	1,639,927	6.9	1,404,934	6.2	16.7
Total	23,797,156	100.0	22,682,018	100.0	4.9

During the Reporting Period, due to the fact that large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Chemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project have contributed a lot to the revenue, revenue generated from petrochemicals industry was RMB14.428 billion, representing an increase of 32.2% on a period-on-period basis; thanks to the contribution of crude oil storage facilities projects and natural gas pipeline network and gas storage facilities projects, revenue generated from other industries was RMB1.640 billion, representing an increase of 16.7% on a period-on-period basis; revenue generated from oil refining industry was RMB5.525 billion, representing a decrease of 29.7% on a period-on-period basis, which was affected by the settlement and completion of the projects such as Kuwait Oil Refining Project; revenue generated from new coal chemicals industry was RMB2.204 billion, representing a decrease of 12.2% on a period-on-period basis, which was affected by the settlement and completion of coal chemicals projects such as Zhong'An Joint Coalification Integration Project.

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

	Six-month periods ended 30 June				Change
	2020		2019		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
PRC	21,040,916	88.4	16,754,294	73.9	25.6
Overseas	2,756,240	11.6	5,927,724	26.1	(53.5)
Total	23,797,156	100.0	22,682,018	100.0	4.9

During the Reporting Period, thanks to the rapid control of the domestic epidemic, the Group's active work resumption, and the large revenue contribution from large EPC contracting projects such as Fujian Gulei Refining and Petrochemical Integration Project, Zhongke Refining and Chemical Integration Project, SINOPEC SABIC Polycarbonate Project and Sinochem Quanzhou Ethylene Project; revenue of the Group generated in the PRC was RMB21.041 billion, representing an increase of 25.6% on a period-on-period basis, affected by the slowdown in progress of some overseas projects due to the spread of epidemic COVID-19 in the world and the settlement and completion of Kuwait Oil Refining Project, revenue generated from overseas was RMB2.756 billion, representing a decrease of 53.5% 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				Change
	2020		2019		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Sinopec Group and its associates	13,723,631	57.7	9,458,533	41.7	45.1
Non-Sinopec Group and its associates	10,073,525	42.3	13,223,485	58.3	(23.8)
Total	23,797,156	100.0	22,682,018	100.0	4.9

During the Reporting Period, among the projects under construction, the revenue generated from Sinopec Group and its associates increased significantly on a period-on-period basis and amounted to RMB13.724 billion, representing an increase of 45.1% on a period-on-period basis; affected by the decline in revenue from overseas projects, the revenue generated from non-Sinopec Group and its associates was RMB10.074 billion, representing a decrease of 23.8% 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 2020	As at 31 December 2019	Change
	(RMB' 000)	(RMB' 000)	(%)
Engineering, consulting and licensing	9,970,939	8,192,663	21.7
EPC Contracting	80,905,791	72,662,664	11.3
Construction	16,262,262	13,653,862	19.1
Equipment manufacturing	695,435	484,371	43.6
Total	107,834,427	94,993,560	13.5

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

	As at 30 June 2020	As at 31 December 2019	Change
	(RMB' 000)	(RMB' 000)	(%)
Oil refining	31,462,516	28,201,648	11.6
Petrochemicals	28,721,369	28,285,500	1.5
New coal chemicals	11,511,535	13,394,670	(14.1)
Other industries	36,139,007	25,111,742	43.9
Total	107,834,427	94,993,560	13.5

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

	As at 30 June 2020	As at 31 December 2019	Change
	(RMB' 000)	(RMB' 000)	(%)
PRC	83,807,756	74,754,485	12.1
Overseas	24,026,671	20,239,075	18.7
Total	107,834,427	94,993,560	13.5

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

	As at 30 June 2020	As at 31 December 2019	Change
	(RMB' 000)	(RMB' 000)	(%)
Sinopec Group and its associates	60,414,836	49,789,049	21.3
Non-Sinopec Group and its associates	47,419,591	45,204,511	4.9
Total	107,834,427	94,993,560	13.5

As at the end of the Reporting Period, the Group's backlog was RMB107.834 billion, representing an increase of 13.5% compared to that as at 31 December 2019, and 2.06 times of the total revenue of RMB52.261 billion in 2019.

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

	Six-month periods ended 30 June		Change
	2020	2019	
	(RMB' 000)		
Engineering, consulting and licensing	2,988,407	1,382,037	116.2
EPC Contracting	23,771,460	24,460,035	(2.8)
Construction	9,509,700	6,390,278	48.8
Equipment manufacturing	368,456	987,437	(62.7)
Total	36,638,023	33,219,787	10.3

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

	Six-month periods ended 30 June		Change
	2020	2019	
	(RMB' 000)		
Oil refining	8,785,676	9,451,172	(7.0)
Petrochemicals	14,864,270	17,015,718	(12.6)
New coal chemicals	320,885	4,844,253	(93.4)
Other industries	12,667,192	1,908,644	563.7
Total	36,638,023	33,219,787	10.3

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

	Six-month periods ended 30 June		Change
	2020	2019	
	(RMB' 000)		
PRC	30,094,187	31,043,019	(3.1)
Overseas	6,543,836	2,176,768	200.6
Total	36,638,023	33,219,787	10.3

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		Change
	2020	2019	
	(RMB' 000)		
Sinopec Group and its associates	24,349,418	21,264,226	14.5
Non-Sinopec Group and its associates	12,288,605	11,955,561	2.8
Total	36,638,023	33,219,787	10.3

During the Reporting Period, the value of the Group's new contracts was RMB36.638 billion, representing an increase of 10.3% compared to RMB33.220 billion for the six months ended 30 June 2019.

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 2020	As at 31 December 2019	Changes
Total assets	67,497,829	67,873,748	(375,919)
Current assets	60,366,086	60,616,791	(250,705)
Non-current assets	7,131,743	7,256,957	(125,214)
Total liabilities	39,943,859	40,603,207	(659,348)
Current liabilities	37,166,424	37,791,658	(625,234)
Non-current liabilities	2,777,435	2,811,549	(34,114)
Net assets	27,553,970	27,270,541	283,429
Equity attributable to equity holders of the Company	27,549,243	27,265,976	283,267
Share capital	4,428,000	4,428,000	0
Reserves	23,121,243	22,837,976	283,267
Non-controlling interests	4,727	4,565	162

As at the end of the Reporting Period, the total assets of the Group were RMB67.498 billion, the total liabilities were RMB39.944 billion, and the equity attributable to the equity holders of the Company was RMB27.549 billion. The changes in the assets and liabilities as compared with those as at the end of 2019 and the main reasons are as follows:

As at the end of the Reporting Period, the total assets were RMB67.498 billion, decreased by RMB376 million as compared with that as at the end of 2019. In particular, the current assets were RMB60.366 billion, decreased by RMB251 million as compared with that as at the end of 2019, which was mainly due to an increase of RMB1.681 billion in prepayments and other receivables, an increase of RMB1.435 billion in contract assets, a decrease of RMB1.465 billion in cash and cash equivalents, a decrease of RMB1.380 billion in notes and trade receivables; non-current assets amounted to RMB7.132 billion, a decrease of RMB125 million as compared to that as at the end of 2019, which was mainly due to the depreciation and amortization of non-current assets.

As at the end of the Reporting Period, the total liabilities were RMB39.944 billion, decreased by RMB659 million as compared with that as at the end of 2019. In particular, the current liabilities were RMB37.166 billion, decreased by RMB625 million as compared with that as at the end of 2019, which was mainly due to an increase of RMB907 million in dividend payables, an increase of RMB371 million in notes and trade payables, and a decrease of RMB1.863 billion in contract liabilities; the non-current liabilities were RMB2.777 billion, decreased by RMB34 million as compared with that as at the end of 2019, which was mainly due to a decrease of RMB22 million in retirement and other supplementary benefit obligations.

The equity attributable to equity holders of the Company was RMB27.549 billion, increased by RMB283 million as compared with that as at the end of 2019, which was mainly due to the increase in retained earnings.

(2) Cash Flows

During the Reporting Period, the net decrease in cash and cash equivalents was RMB1.534 billion and net cash used in operating activities was RMB1.963 billion. The following table sets forth the main items and their changes in the Group's consolidated cash flow statements for the six months ended 30 June 2020 and 2019, respectively.

Units: RMB' 000

Major items of cash flows	Six-month periods ended 30 June	
	2020	2019
Net cash used in operating activities	(1,962,757)	(4,964,239)
Net cash generated from/(used in) investing activities	461,574	(5,283,423)
Net cash used in financing activities	(32,397)	(52,155)
Net decrease in cash and cash equivalents	(1,533,580)	(10,299,817)

During the Reporting Period, the profit before taxation was RMB1.563 billion, and the profit was RMB1.256 billion after adjusting the items in expenses that did not affect the cash flow in operating activities. Major non-cash expense items included: depreciation and amortisation of RMB306 million, exchange gain of RMB78 million, net interest income and expenditure of RMB402 million, reversal of impairment on trade receivables of RMB117 million. Receivables and payables in connection with operating activities increased the cash outflow of RMB3.202 billion, which was mainly shown in: the increase in trade and other receivables balance which caused the cash outflow from operating activities of RMB242 million; the increase in contract assets which caused the cash outflow from operating activities of RMB1.429 billion; the decrease in inventory balance which caused the cash inflow from operating activities of RMB170 million; the increase in trade and other payables balance which caused the cash inflow from operating activities of RMB159 million; the decrease in contract liabilities which caused cash outflow from operating activities of RMB1.863 billion.

After adjusting non-cash items, receivables and payables for the profit before taxation, deducting the income tax paid amounting to RMB219 million, and adding inflow of received interest by RMB201 million, the net cash used in operating activities was RMB1.963 billion.

Net cash generated from investing activities was RMB462 million, which was mainly due to the recovery of loans to the ultimate holding company.

Net cash used in financing activities was RMB32 million, which was mainly due to the rental expenses of the leased right-of-use assets.

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

(3) Summary of Financial Ratios

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

Main financial ratios	Six-month periods ended 30 June	
	2020	2019
Net profit margin (%)	5.3	5.3
Return on assets (%) ⁽¹⁾	1.9	1.7
Return on equity (%) ⁽²⁾	4.6	4.5
Return on invested capital (%) ⁽³⁾	4.7	4.5

Main financial ratios	As at 30 June 2020	
	As at 30 June 2020	As at 31 December 2019
Gearing ratio (%) ⁽⁴⁾	0.6	0.7
Net debt to equity ratio (%) ⁽⁵⁾	Net cash	Net cash
Current ratio (%) ⁽⁶⁾	1.6	1.6
Quick ratio (%) ⁽⁷⁾	1.6	1.6

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

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

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

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

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

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

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

Return on assets

During the Reporting Period, the Group's return on assets increased to 1.9% from 1.7% for the same period in 2019, mainly due to the increase in the profit during the Reporting Period and the decrease in the total assets at the end of the Reporting Period.

Return on equity

The Group's return on equity increased to 4.6% from 4.5% for the same period in 2019, mainly due to the increase in the profit during the Reporting Period.

Return on invested capital

The Group's return on invested capital increased to 4.7% from 4.5% for the same period in 2019 for the same reasons as the increase in return on equity.

Gearing ratio

The Group's gearing ratio decreased to 0.6% from 0.7% at the end of 2019, mainly due to the decrease in interest-bearing borrowings at the end of the Reporting Period.

Net debt to equity ratio

The Group maintained positive net cash as at 30 June 2020 and as at 31 December 2019.

Current ratio

The Group's current ratio was 1.6, which was basically the same as at the end of 2019.

Quick ratio

The Group's quick ratio was 1.6, which was basically the same as at the end of 2019.

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 Group 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, Euros and Kuwait dinars. In the future, changes in foreign exchange rates may affect the quotation of the Group's services and expenditure on the procurement 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 carry out hedging transactions related to foreign exchange fluctuations.

7 Employees and Remuneration Policy

As at the end of the Reporting Period, the Group had a total of 17,035 employees.

The following list is a categorization of employee details in different business sectors as at 30 June 2020.

	As at 30 June 2020	
	Number of Employees	Percentage of the Total Employees (%)
Engineering and Technical Personnel	11,586	68.0
Management Personnel	2,070	12.2
Production Personnel	3,379	19.8
Total	17,035	100.0

The following list is a categorization of employee details in accordance with education level as at 30 June 2020.

	As at 30 June 2020	
	Number of Employees	Percentage of the Total Employees (%)
Master Degree	2,512	14.7
Bachelor Degree	7,701	45.2
Tertiary Qualification	2,929	17.2
Others	3,893	22.9
Total	17,035	100.0

During the Reporting Period, the Group maintained good labour relations. The remuneration of our employees mainly consists of salary, discretionary bonuses and contributions to the compulsory social security funds. In accordance with the laws of the PRC, the Group participates in different retirement pension related programmes for our employees, including the programmes organized 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 2020 and the six months ended 30 June 2019, the employment costs of the Group were approximately RMB2.113 billion and RMB2.342 billion, respectively.

The Group provides on-the-job training and development opportunities to promote the career development for the employees. During the Reporting Period, the Group focused on the production and operation objectives, and, under the current requirements for prevention and control of epidemic COVID-19, carried out various online training activities as scheduled, covering topics of technological innovation and management improvement.



SIGNIFICANT EVENTS



1 Corporate Governance

During the Reporting Period, the Company complied with all code provisions in the Code on Corporate Governance Practices 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

For the details of H Shares appreciation rights scheme of the Company, please refer to the announcement of the Company entitled “The Proposed Initial Terms of H Share Appreciation Rights Scheme” dated 21 August 2017, the circular of the Company in relation to the second extraordinary general meeting for the year 2017 dated 3 November 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” dated 20 December 2017, the announcement entitled “Grant of H Share Appreciation Rights” dated 20 December 2017, the announcement entitled “Unfulfillment of the Conditions to the First Effective Phase of the Initial Grant Under the H Share Appreciation Rights Scheme” dated 30 July 2019, and the contents in relation to the unfulfillment of the conditions to the second effective phase of the Initial Grant under the H Share Appreciation Rights Scheme in the announcement dated 23 March 2020.

On 20 December 2017, the Company granted 13,143,000 units of H share appreciation rights (the “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 of the Company 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 presidents, vice presidents and chief financial officer) and the core management, technical and highly skilled personnel of the Company’s subsidiaries. The exercise price of each H Share Appreciation Right granted under the Initial Grant is HKD6.35 per share.

As reviewed and approved at the 2017 annual general meeting convened on 8 May 2018, the final cash dividend of RMB0.144 per share (inclusive of applicable tax) 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 of 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 reviewed and approved in the fifth meeting of the Third Session of the Board convened on 16 August 2019, the Company distributed 2019 interim cash dividend of RMB0.108 per share (inclusive of applicable tax). As reviewed and approved at the 2019 annual general meeting convened on 8 May 2020, the final cash dividend of RMB0.212 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, the interim dividends of 2018, the final dividends of 2018, the interim dividends of 2019 and the final dividends of 2019 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 I 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 H 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 HKD5.572 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 the 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 and the 2019 interim report of the Company.

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

For details of the unfulfillment of the conditions to the second effective phase of the Initial Grant under the H Share Appreciation Rights Scheme, please refer to the announcement of the Company dated 23 March 2020 and the 2019 annual report of the Company.

The nullification of H Share Appreciation Rights in the first and second effective phases will not affect the remaining number of H Share Appreciation Rights of 4,468,620 units to be effective upon the third effective phase under the Initial Grant.

According to Article 23 of Chapter 7 of the H Share Appreciation Rights Scheme, the conditions upon which the granted H Share Appreciation Rights become effective include conditions based on the Group's performance and conditions based on the performance of the relevant incentive recipients. The performance evaluation benchmarks on the Group for the third effective phase are as follows:

- (1) the ROE of the financial year immediately before 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
- (2) 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
- (3) the EVA of the financial year immediately before the effective date shall not be less than RMB2.373 billion

The Company will use the financials prepared in accordance with the China Accounting Standards for Business Enterprises and the net profit after deduction of non-recurring profit or loss for the purposes of computing the ROE, the growth rate of revenue and the EVA stated above. The benchmark companies shall be those with similar business, in similar markets, with similar scale as the Group and with relatively stable historical operating performance.

During the Reporting Period, save for the above adjustment to the exercise price and the unfulfillment of the conditions to the first and second effective phases of the Initial Grant under the H Share Appreciation Rights Scheme, there are no other matters in relation to the number of units and adjustment to the exercise price of the H Share Appreciation Rights. For details of the Company's H Share Appreciation Rights Scheme, please refer to Note 36 of the consolidated financial statements in this report.

3 The Dividend Distribution Plan for the Six-month Period ended 30 June 2020

The twelfth meeting of the third session of the Board approved the dividend distribution plan for the six months ended 30 June 2020. An interim cash dividend of RMB0.113 per share (inclusive of applicable taxes) would be distributed based on 4,428,000,000 shares (including 1,460,800,000 H shares and 2,967,200,000 domestic shares), being the total share capital of the Company as at 30 June 2020. Since shareholders of the Company have authorised the Board to decide the interim profit distribution plan of 2020 by an ordinary resolution in the 2019 annual general meeting held on 8 May 2020, it is unnecessary to submit the above dividend distribution plan to the general meeting of shareholders for review and approval.

The interim dividend will be paid on or before Friday, 30 October 2020 to all shareholders whose names appear on the register of members of the Company at the close of business on Monday, 21 September 2020. In order to qualify for the interim dividend, the H shareholders must lodge all share certificates accompanied by the transfer documents with Computershare Hong Kong Investor Services Ltd. (address: Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong) before 4:30 p.m. on Tuesday, 15 September 2020 for registration. For the purpose of ascertaining the shareholders who are qualified for the interim dividend, the register of members for H shares will be closed from Wednesday, 16 September 2020 to Monday, 21 September 2020 (both days inclusive).

The dividend will be denominated and declared in Renminbi. The holders of Domestic Shares will be paid in Renminbi and the holders of H Shares will be paid in Hong Kong dollars. The exchange rate for the dividend to be paid in Hong Kong dollars will be the mean of the exchange rates of 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 dividend by the Board (i.e. Friday, 21 August 2020). 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, 21 August 2020) is RMB0.89424 to HKD1.00. Accordingly, the interim dividend will be HKD0.1264 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, enterprise income tax shall be withheld from dividends payable to such shareholders. If holders of H Shares intend to change their shareholder status, please enquire about the relevant procedures with their agents or trustees. The Company will strictly comply with the law and 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 Monday, 21 September 2020.

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 under the relevant tax agreements with the PRC, 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 have an agreed tax rate of less than 10% under the relevant tax agreements with the PRC, 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 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 registrar of the Company. The Company will assist with the tax refund of the extra amount after obtaining the approval of the competent tax authority. Should the individual holders of H Shares be residents of the countries which have an agreed tax rate of over 10% but less than 20% under the relevant tax agreements with the PRC, 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% under the relevant tax agreements with the PRC, or which have not entered into any tax agreement with the PRC, or in any other circumstances, the Company shall withhold and pay the individual income tax at a rate of 20%.

For investors (including enterprises and individuals) investing in the H Shares of the Company listed on the Hong Kong Stock Exchange through the Shanghai Stock Exchange or Shenzhen Stock Exchange (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 depository and clearing system. The cash dividends for the investors of H Shares of Southbound Trading will be paid in Renminbi.

Pursuant to the relevant requirements under the “Notice on the Tax Policies Related to the Pilot Program of the Shanghai-Hong Kong Stock Connect” (Caishui [2014] No. 81) 《關於滬港通股票市場交易互聯互通機制試點關稅收政策的通知》(財稅[2014]81號)) and the “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 related 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 the General Services Framework Agreement, the Technology R&D Framework Agreement, the Financial Services Framework Agreement and Engineering and Construction Services Framework Agreement and the Annual Caps and Major Transactions and the Continuing Connected Transactions under the Financial Services Framework Agreement and the Engineering and Construction Services Framework Agreement” published on 21 August 2018 and the contents in relation to the Financial Services Framework Agreement and the Engineering Services Framework Agreement in the Company’s circular to its shareholders published on 19 September 2018.

The Group's Connected Transactions

During the Reporting Period, the aggregate value of the connected transactions entered into by the Group was RMB16.261 billion. In particular, the expenses amounted to RMB2.137 billion and the revenue amounted to RMB14.124 billion (including RMB13.783 billion from the sale of products and services and RMB341 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 of services and equipment leasing, technology licensing and other engineering-related services) provided by Sinopec Group to the Group amounted to RMB2.116 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 RMB13.691 billion, which was within the annual cap.

During the Reporting Period, the service fees in relation to the settlement and other financial services between the Group and Sinopec Finance Co., Ltd. and Sinopec Century Bright Capital Investment Limited were RMB1 million, which was within the annual cap. The maximum daily balance of deposits and interest income was RMB7.280 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 RMB86 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 RMB19 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 RMB6 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 RMB1 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 major related parties (including the connected transactions above) during the Reporting Period, please refer to Note 40 of the consolidated financial statements prepared in accordance with the IFRS in this 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 met:
 - i The transactions were entered into on normal commercial terms;
 - ii If there were not sufficient comparable transactions to decipher whether the transactions were on normal commercial terms, the transactions under the relevant agreements were entered into on terms no less favourable to the Company than terms available to or from independent third parties (as the case may be); or
 - iii If there were no appropriate assessments to determine whether the transactions met the conditions under (i) and (ii) above, the transactions were entered into on terms that were fair and reasonable to the shareholders of the Company; and
- (c) The transactions were conducted in accordance with the relevant agreements and the terms are fair and reasonable and in the interests of the shareholders of the Company as a whole.

5 Material Litigation or Arbitration Events

The Company is currently involved in claims which arose in connection with the collapse of a partially completed oil storage tank of the oil and gas storage tank project in Alberta, Canada on 24 April 2007, which resulted in the deaths of two workers and injuries of four others. The case has not progressed for a long time, and the Company has submitted an application for formal withdrawal to the court.

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

6 Other Material Contracts

Save as disclosed in this interim 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 used a total of RMB185 million net proceeds from the global offering, which was mainly used for newly added long-term equity investment amounted to RMB120 million, the purchase of large lifting and transport equipment and specialized construction equipment amounted to RMB36 million, the construction of engineering and technological research and development center, modular construction base and machinery manufacturing project amounted to RMB20 million, and the construction of information system amounted to RMB9 million. As at the end of the Reporting Period, the total amount of net proceeds from the global offering used by the Group amounted to RMB4.552 billion, and the remaining balance of the net proceeds from the global offering was approximately RMB6.606 billion (approximately RMB580 million of the remaining net proceeds for establishing an engineering and technological research and development center, modular construction base and machinery manufacturing projects; approximately RMB300 million of the remaining net proceeds for improving and developing overseas marketing networks; approximately RMB468 million of the remaining net proceeds for information technology development projects; approximately RMB364 million of the remaining net proceeds for purchasing large lifting and transport equipment and specialized construction equipment; approximately RMB1.035 billion of the remaining net proceeds for newly added long-term equity investment; and approximately RMB3.859 billion of the remaining net proceeds for mergers and acquisitions of engineering companies, purchase of patents and other proprietary technologies and other items). The expected timeline for the use of net proceeds will be subject to the business development of the Company. The use of proceeds from the global offering by the Company is in consistence with that previously disclosed in the announcement. For details of the use of proceeds, please refer to the announcements of the Company entitled “Adjustment in Use of Proceeds from the Global Offering” dated 13 December 2013 and “Adjustment in the Allocations of the Use of Proceeds from the Global Offering” dated 26 October 2018. During the Reporting Period, there was no material change to the use of proceeds from the global offering of the Group.

10 Assets Transactions and Major Investments

During the Reporting Period, the Group had not conducted any material assets transactions and major investments other than those conducted in the ordinary and usual course of business.

11 Insolvency and Restructuring

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

12 Material Trusteeship, Contracting and Lease

During the Reporting Period, the Group was not involved in any material trusteeship, contracting or lease of any asset of other companies, nor placing its assets to or under any other companies’ trusteeship, contracting or lease which were required to be disclosed.

13 Material Acquisitions and Disposal

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

14 Financial Derivatives for Hedging Purposes

On 20 March 2020, the tenth meeting of the Third Session of the Board considered and approved the resolution in relation to the 2020 annual business plan for financial derivatives. For details, please refer to the announcement of the Company dated 23 March 2020. During the Reporting Period, the Group did not use any financial derivative for hedging purposes.

15 Pledged Assets

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

16 Debt

The Group has no bank loans or other borrowings as at the end of the Reporting Period.

17 Contingent Liabilities

For details of the contingent liabilities of the Group, please refer to Note 39 to the financial statements contained in this report.

18 Review of Interim Report

The audit committee of the Company has reviewed this interim report. The audit committee did not have any disagreement concerning the financial statements in this interim report.

The audit committee is comprised of all independent non-executive Directors, namely, Mr. YE Zheng, Mr. HUI Chiu Chung, Stephen and Mr. JIN Yong. Among them, Mr. YE Zheng has the appropriate professional qualifications (including being a member of the Hong Kong Institute of Certified Public Accountants) and more than 24 years of experience in auditing, internal control and consultancy.

19 Significant Events Affecting the Group after the Reporting Period

From 30 June 2020 and up to the date of this interim report, there is no significant event that affected the Group after the Reporting Period.

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 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 2020, 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 ⁽¹⁾	Position in the Company	Term of Office as Director
YU Renming	Male	56	Chairman of the Board and Executive Director	February 2020 – October 2021
XIANG Wenwu	Male	54	Executive Director and President	October 2018 – October 2021
WU Wenxin	Male	56	Non-executive Director	October 2018 – October 2021
SUN Lili	Female	58	Executive Director	October 2018 – October 2021
ZHOU Yingguan	Male	51	Executive Director	October 2018 – October 2021
HUI Chiu Chung, Stephen	Male	73	Independent non-executive Director	October 2018 – October 2021
JIN Yong	Male	84	Independent non-executive Director	October 2018 – October 2021
YE Zheng	Male	55	Independent non-executive Director	October 2018 – October 2021

Note:

(1) The age of each of the Directors of the Third Session of the Board was that as at the end of the Reporting Period.

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

Name	Gender	Age ⁽¹⁾	Position in the Company	Term of office
YU Baocai	Male	55	Chairman of the Board and Non-executive Director	October 2018 – February 2020
LU Dong	Male	57	Vice Chairman of the Board and Executive Director	October 2018 – February 2020

Note:

(1) The age of each of the retired Directors was that as at the end of the Reporting Period.

2 Supervisors

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

Name	Gender	Age ⁽¹⁾	Position in the Company	Term of Office as Supervisor
ZHU Fei	Male	55	Chairman of the Supervisory Committee and Chairman of the Trade Union	October 2018 – October 2021
WANG Guoliang	Male	60	Supervisor	October 2018 – October 2021
YE Wenbang	Male	57	Supervisor	October 2018 – October 2021
WU Jibo	Male	52	Supervisor	October 2018 – October 2021
XU Yijun	Male	56	Employee Representative Supervisor	October 2018 – October 2021
JIANG Dejun	Male	55	Employee Representative Supervisor	October 2018 – October 2021
WU Zhongxian	Male	57	Employee Representative Supervisor	October 2018 – October 2021

Note:

(1) The age of each of the supervisors of the Third Session of the Supervisory Committee was that as at the end of the Reporting Period.

3 Other Members of the Senior Management

Profile of other members of the Senior Management

Name	Gender	Age ⁽¹⁾	Position in the Company	Date of Taking Office
XIANG Wenwu	Male	54	President	January 2017
QI Guosheng	Male	59	Vice President	November 2014
ZHU Fei	Male	55	Chairman of the Trade Union	November 2019
WANG Guohua	Male	51	Vice President	April 2019
JIA Yiqun	Male	52	Chief Financial Officer Company Secretary	August 2012 July 2019
WANG Yi	Male	49	Vice President	July 2019
ZHENG Lijun	Male	52	Vice President	November 2019

Note:

(1) The age of each of other senior management members was that as at the end of the Reporting Period.

4 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, underlying 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





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INDEPENDENT AUDITOR'S REPORT

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

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

OPINION

We have audited the consolidated financial statements of SINOPEC Engineering (Group) Co., Ltd. (the "Company") and its subsidiaries (together the "Group") set out on pages 71 to 139, which comprise the consolidated statement of financial position as at 30 June 2020, and 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 financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 30 June 2020, and its consolidated financial performance and its consolidated cash flows for the six-month period then ended in accordance with International Financial Reporting Standards ("IFRSs") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

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

Revenue recognition of construction contracts

(Refer to notes 3.23, 5(a) and 6 to the consolidated financial statements)

The Group recognised revenue of RMB23,797,156,000 for the six-month period ended 30 June 2020.

Revenue from construction contracts is recognised over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation, depending on the nature of the contract, is measured mainly by reference to the proportion of contract costs incurred for work performed to date to estimated total contract costs for each contract. Management estimates the total contract revenue and total contract costs at the inception of each contract. As the contract progresses, management regularly reviews and revises the estimates of contract revenue and contract costs if circumstances change, such as variations in contract work, claims and incentive payments. The increases or decreases in estimated total contract revenue or total contract costs resulted in the adjustments to the extent of progress toward completion and revenue recognised in the period in which the circumstances that give rise to the revision becomes known by management.

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 response:

Our procedures in relation to the revenue recognition of construction contracts included:

- assessing and testing the related internal control of the management's accounting estimates and judgment of construction contracts;
- obtaining material construction contracts to review key contract terms and verify the total contract revenues;
- checking, on a sample basis, the principal terms set out in the relevant construction contracts and the implementation status and testing on the accuracy of the calculation of percentage of completion and revenue and costs recognised during the period;
- testing, on a sample basis, the amount and timing of the construction contract cost recognised and performing cut-off testing procedures to check that cost had been recognised in the appropriate account period; and
- performing analytical review procedures on the gross margins of material construction contracts of the Group.

KEY AUDIT MATTERS (CONTINUED)

Provision for expected credit losses (“ECL”) of trade receivables and contract assets

(Refer to notes 3.8(c),20 and 22(a) to the consolidated financial statements)

ECL for trade receivables and contract assets are based on management's estimate of the lifetime ECL to be incurred, which is estimated by taking into account the credit loss experience, ageing of overdue trade receivables, customers' repayment history and customers' financial position and an assessment of both the current and forecast general economic conditions, all of which involve a significant degree of management judgment.

We have identified ECL assessment of trade receivables 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 response:

Our procedures in relation to management's ECL assessment on trade receivables and contract assets included:

- reviewing and assessing the application of the Group's policy for calculating the ECL;
- evaluating techniques and methodology in the ECL model against the requirements of IFRS 9;
- assessing the reasonableness of management's loss allowance estimates by examining the information used by management to form such judgments, including testing the accuracy of the historical default data, evaluating whether the expected credit loss rates are appropriately adjusted based on current economic conditions and forward-looking information and examining the actual losses recorded during the current financial year and assessing whether there was an indication of management bias when recognising loss allowances;
- evaluating the design, implementation and operating effectiveness of key internal controls which govern credit control, debt collection and estimation of ECL; and
- discussing with management the estimates of the recoverable amounts for those significant trade receivables over 180 days after the reporting period, including customers' payment history and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates.

OTHER INFORMATION

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

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

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

DIRECTORS' RESPONSIBILITIES FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

The directors are also responsible for overseeing the Group's financial reporting process. The Audit Committee assists the directors in discharging their responsibility in this regard.

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

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

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

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

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

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

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

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

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

OTHER MATTER

The consolidated financial statements of the Group for the year ended 31 December 2019, were audited by another auditor who expressed an unmodified opinion on those consolidated financial statements on 20 March 2020.

BDO Limited

Certified Public Accountants

Ng Wai Man

Practising Certificate number P05309

Hong Kong, 21 August 2020

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	Notes	Six months ended 30 June	
		2020	2019
		RMB' 000	RMB' 000
Revenue	6	23,797,156	22,682,018
Cost of sales		(21,605,381)	(20,310,065)
Gross profit		2,191,775	2,371,953
Other income	8	210,475	118,758
Selling and marketing expenses		(50,426)	(50,250)
Administrative expenses		(494,146)	(606,920)
Research and development costs		(796,316)	(746,721)
Other operating income		89,177	11,440
Other (losses)/gains – net	9	(86)	2,883
Operating profit		1,150,453	1,101,143
Finance income	10	446,324	450,638
Finance expenses	10	(43,958)	(54,561)
Finance income – net		402,366	396,077
Share of profit/(loss) of a joint arrangement	19(a)	7	(111)
Share of profit of associates	19(b)	9,997	16,355
Profit before taxation	11	1,562,823	1,513,464
Income tax expense	12	(302,470)	(314,710)
Profit for the period		1,260,353	1,198,754

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

	Notes	Six months ended 30 June	
		2020	2019
		RMB' 000	RMB' 000
Other comprehensive (expense)/income for the period, net of tax			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		942	117,849
Item that will not be reclassified subsequently to profit or loss:			
(Losses)/gains on revaluation of retirement benefit plans obligations, net of income tax effect		(45,491)	122
Other comprehensive (expense)/income for the period, net of tax		(44,549)	117,971
Total comprehensive income for the period		1,215,804	1,316,725
Profit attributable to:			
Equity holders of the Company		1,260,191	1,198,685
Non-controlling interests		162	69
Profit for the period		1,260,353	1,198,754
Total comprehensive income attributable to:			
Equity holders of the Company		1,215,642	1,316,656
Non-controlling interests		162	69
Total comprehensive income for the period		1,215,804	1,316,725
		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	0.28	0.27

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

FOR THE SIX MONTHS ENDED 30 JUNE 2020

	Notes	As at 30 June 2020	As at 31 December 2019
		RMB' 000	RMB' 000
ASSETS			
Non-current assets			
Property, plant and equipment	16	3,531,301	3,597,352
Right-of-use assets	17	2,496,540	2,523,770
Intangible assets	18	207,831	233,315
Investment in a joint arrangement	19(a)	2,523	2,516
Investment in associates	19(b)	178,310	161,952
Deferred income tax assets	35	715,238	738,052
Total non-current assets		7,131,743	7,256,957
Current assets			
Inventories	23	1,023,167	1,193,480
Notes and trade receivables	20	7,232,808	8,613,198
Prepayments and other receivables	21	8,345,514	6,664,671
Contract assets	22(a)	9,521,450	8,085,951
Loans due from the ultimate holding company	24	18,500,000	19,000,000
Restricted cash	25	34,677	38,087
Time deposits	26	7,238,206	7,086,066
Cash and cash equivalents	27	8,470,264	9,935,338
Total current assets		60,366,086	60,616,791
Total assets		67,497,829	67,873,748

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

	Notes	As at 30 June 2020	As at 31 December 2019
		RMB' 000	RMB' 000
EQUITY			
Share capital	28	4,428,000	4,428,000
Reserves		23,121,243	22,837,976
Equity attributable to equity holders of the Company		27,549,243	27,265,976
Non-controlling interests		4,727	4,565
Total equity		27,553,970	27,270,541
LIABILITIES			
Non-current liabilities			
Lease liabilities	30	120,825	125,678
Retirement and other supplemental benefit obligations	31	2,467,308	2,488,926
Provision for litigation claims	32	189,302	196,945
Total non-current liabilities		2,777,435	2,811,549
Current liabilities			
Notes and trade payables	33	22,485,472	22,114,039
Other payables	34	1,876,046	2,008,917
Dividend payables		907,027	—
Contract liabilities	22(b)	11,451,773	13,314,941
Lease liabilities	30	52,432	55,275
Current income tax liabilities		393,674	298,486
Total current liabilities		37,166,424	37,791,658
Total liabilities		39,943,859	40,603,207
Total equity and liabilities		67,497,829	67,873,748
Net current assets		23,199,662	22,825,133
Total assets less current liabilities		30,331,405	30,082,090

On behalf of the directors

YU Renming
Chairman of the Board

XIANG Wenwu
Director, President

JIA Yiqun
Chief Financial Officer

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to equity shareholders 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 (Note28)	RMB' 000 (Note29(ii))	RMB' 000 (Note29(i))	RMB' 000 (Note29(iii))	RMB' 000 (Note29(iv))	RMB' 000	RMB' 000	RMB' 000	RMB' 000
At 1 January 2020	4,428,000	10,092,369	1,357,583	191,889	14	11,196,121	27,265,976	4,565	27,270,541
Profit for the period	–	–	–	–	–	1,260,191	1,260,191	162	1,260,353
Other comprehensive income:									
Defined benefits obligation revaluation of actuarial gain and loss – gross	–	–	–	–	–	(54,931)	(54,931)	–	(54,931)
Defined benefits obligation revaluation of actuarial gain and loss – tax	–	–	–	–	–	9,440	9,440	–	9,440
Exchange differences arising on translation of foreign operations	–	–	–	–	942	–	942	–	942
Total comprehensive income	–	–	–	–	942	1,214,700	1,215,642	162	1,215,804
Transactions with owners:									
Final dividends for 2019	–	–	–	–	–	(938,736)	(938,736)	–	(938,736)
Appropriation of specific reserve	–	–	–	53,958	–	(53,958)	–	–	–
Utilisation of specific reserve	–	–	–	(48,722)	–	48,722	–	–	–
Others	–	6,361	–	–	–	–	6,361	–	6,361
Total transactions with owners	–	6,361	–	5,236	–	(943,972)	(932,375)	–	(932,375)
At 30 June 2020	4,428,000	10,098,730	1,357,583	197,125	956	11,466,849	27,549,243	4,727	27,553,970

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

	Attributable to equity shareholders 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 (Note28)	RMB' 000 (Note29(ii))	RMB' 000 (Note29(i))	RMB' 000 (Note29(iii))	RMB' 000 (Note29(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)
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 CASH FLOWS

FOR THE SIX MONTHS ENDED 30 JUNE 2020

	Notes	Six months ended 30 June	
		2020	2019
		RMB' 000	RMB' 000
Cash flows from operating activities			
Cash used in operations	38	(1,945,546)	(4,745,619)
Income tax paid		(218,704)	(318,142)
Interest received		201,493	99,522
Net cash used in operating activities		(1,962,757)	(4,964,239)
Cash flows from investing activities			
Purchase of property, plant and equipment		(187,951)	(80,465)
Purchase of intangible assets		(3,925)	(1,360)
Interest income on the loans to the ultimate holding company		304,654	299,635
Proceeds from disposal of property, plant and equipment		936	431
Proceeds from disposal of financial assets at fair value through other comprehensive income		—	351
Dividends received from an associate		—	3,200
Net increase in time deposits		(152,140)	(4,505,215)
Loans to the ultimate holding company		(5,500,000)	(8,000,000)
Loans repaid by the ultimate holding company		6,000,000	7,000,000
Net cash generated from/(used in) investing activities		461,574	(5,283,423)
Cash flows from financing activities			
Interest paid		(500)	(8,798)
Payments of lease liabilities		(31,897)	(43,357)
Net cash used in financing activities		(32,397)	(52,155)
Net decrease in cash and cash equivalents		(1,533,580)	(10,299,817)
Cash and cash equivalents at beginning of period		9,935,338	16,997,663
Exchange gains/(losses) on cash and cash equivalents		68,506	(56,400)
Cash and cash equivalents at end of period	27	8,470,264	6,641,446

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. General Information

1.1 Principal activities

SINOPEC Engineering (Group) Co., Ltd. (中石化炼化工程(集团)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 etc.

1.2 Organisation and reorganisation

The Company was established as a company with limited liability under the name of Sinopec Engineering Co., Ltd (中國石化集團炼化工程有限公司) 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 Middle Road, Chaoyang District, Beijing, the PRC.

The directors of the Company (the “Directors”) regard China Petrochemical Corporation (中國石油化工集團有限公司, “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. (中石化炼化工程(集团)股份有限公司) on 28 August 2012.

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

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

The consolidated financial statements have been approved for issue by the Board of Directors on 21 August 2020.

2. Basis of Preparation

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

The consolidated financial statements have been prepared under the historical cost basis except for certain financial instruments that are measured at fair values as explained in the accounting policies set out below.

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

3. Summary of Significant Accounting Policies

3.1 New and amended IFRS

The IASB has issued a number of new and amended IFRS. The Group has applied for the first time of the following new and amended IFRS issued by IASB, which are relevant to the Group's operations and effective for the Group's consolidated financial statements for the accounting period beginning on or after 1 January 2020:

Amendments to IFRS 3	Definition of a Business
Amendments to IAS 1 and IAS 8	Definition of Material
Amendments to IFRS 9, IAS 39 and IFRS 17	Interest Rate Benchmark Reform

Other than 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.

Amendments to IFRS 3 “Definition of a Business”

The amendments clarify that a business must include, as a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs, together with providing extensive guidance on what is meant by a “substantive process”.

Additionally, the amendments remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs, whilst narrowing the definition of “outputs” and a “business” to focus on returns from selling goods and services to customers, rather than on cost reductions.

An optional concentration test has also been added that permits a simplified assessment of whether an acquired set of activities and assets is not a business.

Amendments to IAS 1 and IAS 8 “Definition of Material”

The amendments clarify the definition and explanation of “material”, aligning the definition across all IFRS Standards and the Conceptual Framework, and incorporating supporting requirements in IAS 1 into the definition.

Amendments to IFRS 9, IAS 39 and IFRS 17 “Interest Rate Benchmark Reform”

The amendments modify some specific hedge accounting requirements to provide relief from potential effects of the uncertainties caused by interest rate benchmark reform. In addition, the amendments require companies to provide additional information to investors about their hedging relationships which are directly affected by these uncertainties.

The new and amended accounting standards issued but not yet effective for the accounting period ended 30 June 2020 which are relevant to the Group but the Group has not early adopted are set out below:

Amendment to IFRS 16	COVID-19 Related Rent Concessions ¹
IFRS 17	Insurance Contracts ²
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 June 2020

² Accounting periods beginning on or after 1 January 2021

³ Effective date not yet been determined

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.

3. Summary of Significant Accounting Policies (Continued)

3.2 Consolidation (Continued)

Subsidiaries (Continued)

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

Transactions with non-controlling interests

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

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

Joint Arrangement

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

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

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

3. Summary of Significant Accounting Policies (Continued)

3.2 Consolidation (Continued)

Associates

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

The Group's shares of its associates' post-acquisition profits or losses is recognised in the profit or loss and its share of post acquisition movements in other comprehensive income is recognised in 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 perspective. 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.

3.3 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 income and "other operating income/(expenses)".

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

3. Summary of Significant Accounting Policies (Continued)

3.4 Foreign currency translation (Continued)

Group companies

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

- (a) assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- (b) income and expenses for each statement of profit or loss and other comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- (c) all resulting exchange differences are recognised in other comprehensive income and accumulated separately in the exchange translation reserve.

3.5 Property, plant and equipment

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

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 3.7).

Gains or losses on disposals are determined by comparing the proceeds on disposal with the carrying amount and are included within "other (losses)/gains – 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. Summary of Significant Accounting Policies (Continued)

3.6 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 intangible 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 appropriate, at each reporting period.

3.7 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, intangible assets and interest in associate and joint venture 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). Corporate assets are allocated to individual cash-generating units, when a reasonable and consistent basis of allocation can be identified, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified. 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.

3.8 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.

3. Summary of Significant Accounting Policies (Continued)

3.8 Financial instruments (Continued)

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

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.

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)

3.8 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.

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.

3. Summary of Significant Accounting Policies (Continued)

3.8 Financial instruments (Continued)

(c) Impairment of financial assets (Continued)

Measurement of ECL (Continued)

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)

3.8 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 and lease liabilities. Financial liabilities (other than lease 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 (other than lease 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. Accounting policies of lease liabilities are set out in note 3.27.

(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.

3.9 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.

3.10 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.

3.11 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. Summary of Significant Accounting Policies (Continued)

3.12 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.

3.13 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 is 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.

3.14 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.

3.15 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.

3.16 Employee benefits

Pension obligations

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

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

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

3. Summary of Significant Accounting Policies (Continued)

3.16 Employee benefits (Continued)

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.

3.17 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.

3.18 Taxation

Current and deferred income tax

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

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

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

3. Summary of Significant Accounting Policies (Continued)

3.18 Taxation (Continued)

Current and deferred income tax (Continued)

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, a joint arrangement 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. Certain revenue resulting from providing construction services was taxed by using applicable simple tax method, paying VAT at 3%.

3.19 Contingent liabilities and contingent assets

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

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

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

3.20 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.

3.21 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. Summary of Significant Accounting Policies (Continued)

3.22 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 3.8.

A contract liability is recognised when the customer pays consideration before the Group recognises the related revenue. A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised.

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.

3.23 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; and
- (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

According to the nature of the contracts, the stage of contract completion is based on that the customer is able to control goods in progress during the Group's performance, revenue on construction contracts is recognised based on the Group's efforts or input to the satisfaction of the performance obligation over time. The input method recognises revenue based on the proportion of the actual costs incurred relative to the estimated total costs for satisfaction of the construction services. 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.

3. Summary of Significant Accounting Policies (Continued)

3.23 Revenue recognition (Continued)

Services rendered

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

Sales of products

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

Dividend income

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

Interest income

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

3.24 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.

3.25 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.

3.26 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)

3.27 Leases

(a) Definition of a lease and the Group as a lessee

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.

For contracts that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease and non-lease component on the basis of their relative stand-alone prices. However, for leases of properties in which the Group is a lessee, the Group elected not to separate non-lease components and will instead account for the lease and non-lease components as a single lease component.

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.

The Group remeasures lease liabilities whenever:

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

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

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.

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

3. Summary of Significant Accounting Policies (Continued)

3.27 Leases (Continued)

(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.

3.28 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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Financial assets		
<i>Financial assets at amortised cost</i>		
Notes, trade and other receivables	8,345,867	9,675,307
Restricted cash	34,677	38,087
Time deposits	7,238,206	7,086,066
Cash and cash equivalents	8,470,264	9,935,338
Loans due from the ultimate holding company	18,500,000	19,000,000
Total financial assets	42,589,014	45,734,798
Financial liabilities		
<i>Financial liabilities measured at amortised cost</i>		
Notes, trade and other payables	24,156,283	23,655,333
Dividend payables	907,027	—
Lease liabilities	173,257	180,953
Total financial liabilities	25,236,567	23,836,286

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 2020 and 31 December 2019.

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 2020	USD	Others
	RMB' 000	RMB' 000
Restricted cash, time deposits and cash and cash equivalents	3,288,808	1,520,878
Notes, trade and other receivables	78,714	702,814
Notes, trade and other payables	(417,813)	(1,837,269)
Lease liabilities	(815)	(24,349)
Net exposure in RMB	2,948,894	362,074

At 31 December 2019	USD	Others
	RMB' 000	RMB' 000
Restricted cash, time deposits and cash and cash equivalents	3,853,855	1,955,368
Notes, trade and other receivables	514,025	761,457
Notes, trade and other payables	(409,313)	(1,830,626)
Lease liabilities	(1,251)	(9,391)
Net exposure in RMB	3,957,316	876,808

A 5% strengthening of RMB against the USD as at 30 June 2020 and 31 December 2019 would have changed the equity and net profit by the amounts shown below:

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Decrease in equity and net profit		
– USD	(110,584)	(148,400)

A 5% weakening of RMB as at 30 June 2020 and 31 December 2019 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.

4. Financial and Capital Risks Management (Continued)

4.1 Financial risk management (Continued)

(a) Market risk (Continued)

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 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, contract assets and loans due from the ultimate holding company.

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.

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 3.8, 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.

4. Financial and Capital Risks Management (Continued)

4.1 Financial risk management (Continued)

(b) Credit risk (Continued)

Impairment assessment under ECL model (Continued)

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.

(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 2020							
Notes, trade and other payables	N/A	24,156,283	–	–	–	24,156,283	24,156,283
Dividend payable	N/A	907,027	–	–	–	907,027	907,027
Lease liabilities	4.83%	56,083	48,398	60,439	39,327	204,247	173,257
Total other liabilities		25,119,393	48,398	60,439	39,327	25,267,557	25,236,567

	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 2019							
Notes, trade and other payables	N/A	23,655,333	–	–	–	23,655,333	23,655,333
Lease liabilities	4.81%	63,275	105,705	38,432	–	207,412	180,953
Total other liabilities		23,718,608	105,705	38,432	–	23,862,745	23,836,286

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 other liabilities (including notes and trade payables, other payables, dividend payables and lease liabilities, 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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Total other liabilities	25,236,567	23,836,286
Less: Restricted cash, time deposits and cash and cash equivalents	(15,743,147)	(17,059,491)
Net debt	9,493,420	6,776,795
Total equity (excluding non-controlling interests)	27,549,243	27,265,976
Total capital	37,042,663	34,042,771
Gearing ratio	26%	20%

4.3 Fair value measurement of financial instruments

Fair value measurements

Apart from the below mentioned, the carrying amounts of the Group's financial assets and financial liabilities as re-elected in the consolidated statement of financial position approximate their respective fair values.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. 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).

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. According to the nature of contract, the Group recognises revenue by reference to the stage of completion of the contract activity at the end of the reporting period as measured by the proportion that the actual costs incurred relative to the estimated total costs for satisfaction of construction service. 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 2020 the contract assets (Note 22(a)) and contract liabilities (Note 22(b)) are RMB9,521,450,000 (31 December 2019: RMB8,085,951,000) and RMB11,451,773,000 (31 December 2019: RMB13,314,941,000) respectively.

(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 2020, the net carrying amount of property, plant and equipment is RMB3,531,301,000 (31 December 2019: RMB3,597,352,000).

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

The Group determines the provision for ECL on trade receivables (Note 20) and contract assets (Note 22(a)). This estimate is based on the credit history of the customers, the current market condition and forward-looking information. 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 2020, the provision for impairment on trade receivables and contract assets are RMB1,231,399,000 (31 December 2019: RMB1,346,804,000) and RMB186,671,000 (31 December 2019: RMB193,086,000) respectively.

(d) Deferred taxes

The estimates of deferred income tax assets (Note 35) 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 2020, deferred tax assets recognised in the consolidated statement of financial position is RMB715,238,000 (31 December 2019: RMB738,052,000).

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 2020, the net liabilities of retirement benefit plan obligations (Note 31(b)) is RMB2,467,308,000 (31 December 2019: RMB2,488,926,000).

(f) Provision for litigation claims

The Group are from time to time involved in legal proceedings arising in the ordinary course of our business. 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 2020, provision for litigation claims (Note 32) is RMB189,302,000 (31 December 2019: RMB196,945,000).

6. Revenue

The Group's revenue is set out below:

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Engineering, consulting and licensing	1,210,131	951,852
EPC Contracting	15,528,332	13,852,329
Construction	6,901,301	7,734,067
Equipment manufacturing	157,392	143,770
	23,797,156	22,682,018

Remaining performance obligations

As at 30 June 2020, amount of remaining performance obligations is RMB107,834,427,000 (2019: RMB105,473,232,000), which is expected to be completed in the coming 60 months (2019: 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 equipment and spare parts for facilities including oil refining and chemical facilities.

Inter-segment sales were conducted at prices no less than cost and with terms mutually agreed among those business segments. Operating expenses of a functional unit are allocated to the relevant segment which is the predominant user of the services provided by the unit. Operating expenses of other shared services which cannot be allocated to a specific segment and corporate expenses are included as unallocated costs.

Segment assets consist primarily of property, plant and equipment, rights of use assets, construction in progress, intangible assets, investment in a joint arrangement 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.

Capital expenditure comprises additions to property, plant and equipment (Note 16), right-of-use assets (Note 17), intangible assets (Note 18) and other non-current assets.

7. Segment Information (Continued)

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

(i) As at and for the six months ended 30 June 2020:

The segment results for the period ended 30 June 2020 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	1,210,131	15,528,332	6,901,301	157,392	–	–	23,797,156
Inter-segment revenue	20,042	–	2,711,449	106,928	–	(2,838,419)	–
Segment revenue	1,230,173	15,528,332	9,612,750	264,320	–	(2,838,419)	23,797,156
Segment results	72,846	797,595	253,027	4,677	22,308	–	1,150,453
Finance income							446,324
Finance expenses							(43,958)
Share of profit of a joint arrangement	7	–	–	–	–	–	7
Share of profit of associates	8,605	–	1,392	–	–	–	9,997
Profit before taxation							1,562,823
Income tax expense							(302,470)
Profit for the period							1,260,353
Other segment items							
Depreciation	42,164	75,872	149,127	9,294	–	–	276,457
Amortisation	8,027	19,837	1,545	–	–	–	29,409
Capital expenditures							
– Property, plant and equipment	31,917	4,262	114,156	–	–	–	150,335
– Right-of-use assets	3,436	26,921	5,553	–	–	–	35,910
– Intangible assets	–	3,147	778	–	–	–	3,925
Provision/(Reversal of provision) for ECL on trade and other receivables and contract assets, net	3,598	(135,563)	14,773	57	–	–	(117,135)

The segment assets and liabilities as at 30 June 2020 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	4,123,553	26,067,728	15,013,544	1,022,532	(4,094,647)	42,132,710
Investment in a joint arrangement	2,523	–	–	–	–	2,523
Investment in associates	154,496	–	23,814	–	–	178,310
Other unallocated assets						25,184,286
Total assets						67,497,829
Liabilities						
Segment liabilities	2,938,673	27,089,087	13,303,408	707,338	(4,094,647)	39,943,859
Total liabilities						39,943,859

7. Segment Information (Continued)

(ii) 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 results	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 a joint arrangement	(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)

The segment assets and liabilities as at 31 December 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	4,334,365	26,984,887	15,466,872	877,664	(5,291,173)	42,372,615
Investment in a joint arrangement	2,516	–	–	–	–	2,516
Investment in associates	139,531	–	22,421	–	–	161,952
Other unallocated assets						25,336,665
Total assets						67,873,748
Liabilities						
Segment liabilities	1,910,225	28,558,826	14,861,104	564,225	(5,291,173)	40,603,207
Total liabilities						40,603,207

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, right-of-use assets, intangible assets, investment in a joint arrangement 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 a joint arrangement and associates.

Revenue

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
The PRC	21,040,916	16,754,294
Malaysia	2,296	222,749
Kuwait	919,438	2,938,500
Saudi Arabia	1,539,108	1,383,330
Other countries	295,398	1,383,145
	23,797,156	22,682,018

Information about major customers

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 2020 and 2019, the details are as follows:

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Fellow subsidiary and its subsidiaries		
– Customer group A	3,530,215	3,257,948
– Customer group B	2,786,181	2,967,725

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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
The PRC	6,100,083	6,230,199
Other countries	316,422	288,706
	6,416,505	6,518,905

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:

	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 2020					
– At a point in time	–	–	–	157,392	157,392
– Over time	1,210,131	15,528,332	6,901,301	–	23,639,764
Total revenue	1,210,131	15,528,332	6,901,301	157,392	23,797,156
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 2020					
– Oil refining	466,668	3,279,544	1,773,122	5,474	5,524,808
– Petrochemicals	523,915	9,681,126	4,072,070	151,290	14,428,401
– New coal chemicals	26,983	1,904,991	271,418	628	2,204,020
– Other industries	192,565	662,671	784,691	–	1,639,927
Total revenue	1,210,131	15,528,332	6,901,301	157,392	23,797,156
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

8. Other Income

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Operating lease rental income on property, plant and equipment	29,454	26,015
Income from write back long outstanding payables	11,708	5,551
Government grants (note)	99,329	68,291
Net foreign exchange gain	61,089	–
Others	8,895	18,901
	210,475	118,758

Note:

Government grants mainly represent financial subsidies from “Water/electricity/gas supply and property management”, Talent Development Fund and job stabilisation subsidies.

9. Other (Losses)/Gains – Net

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
(Losses)/gains on disposal/write-off of property, plant and equipment	(86)	2,883

10. Finance Income and Finance Expenses

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Finance income		
Interest income from the ultimate holding company	304,654	299,635
Interest income from the fellow subsidiaries	35,700	63,367
Bank interest income	105,970	87,636
	446,324	450,638
Finance expenses		
Interest expenses to a fellow subsidiary on balances wholly repayable within 5 years	–	(8,798)
Interest expenses on retirement and other supplementary benefit obligation	(38,337)	(40,879)
Finance charges on lease liabilities	(4,070)	(4,884)
Other interest expenses	(1,551)	–
	(43,958)	(54,561)
	402,366	396,077

11. Profit Before Taxation

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

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Staff costs, including directors and supervisors emoluments (Note 15)	2,113,418	2,341,870
Retirement benefit plan contribution (including in the above mentioned staff costs)	298,194	341,312
Cost of goods sold	10,019,893	6,905,598
Subcontracting costs	7,346,945	9,725,363
Depreciation and amortisation		
– Property, plant and equipment	215,074	238,287
– Right of use assets	61,383	57,705
– Intangible assets	29,409	36,788
Operating lease rentals		
– Short term leases expenses	148,527	149,767
Reversal of provision for ECL on trade and other receivables and contract assets, net	(117,135)	(97,730)
Rental income from property, plant and equipment after relevant expenses	(17,916)	(9,817)
Research and development costs	796,316	746,721
Losses/(gains) on disposal/write-off of property, plant and equipment	86	(2,883)
Exchange (gains)/losses, net	(61,089)	62,002
Reversal of cash-settled share-based payment	(4,921)	(5,244)

12. Income Tax Expense

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Current tax		
PRC enterprise income tax	209,851	113,270
Overseas enterprise income tax	41,335	89,925
Under provision for income tax in prior years	19,030	52,486
	270,216	255,681
Deferred tax		
Origination and reversal of temporary differences (note 35)	32,254	59,029
Income tax expense	302,470	314,710

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the six months ended 30 June 2020 and 2019 is 25%.

According to the normal statutory PRC corporate income tax and relevant rules, for the six months ended 30 June 2020 and 2019, certain subsidiaries of the Company have been qualified as new high-tech enterprises which can enjoy 15% preferential tax rate in the related period, other members of the Group are subject to 25% 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	
	2020	2019
	RMB' 000	RMB' 000
Profit before tax	1,562,823	1,513,464
Taxation calculated at the statutory tax rate	390,706	378,366
Income tax effects of:		
Preferential income tax treatments of certain companies	(122,918)	(129,440)
Difference in overseas profits tax rates	(7,832)	(3,688)
Non-deductible expenses	12,887	17,014
Income not subject to tax	(1,490)	(2,437)
Unrecognised tax losses	12,046	13,369
Utilisation of previously unrecognised tax losses	(5,122)	(9,650)
Under provision for income tax in prior years	19,030	52,486
Others	5,163	(1,310)
Income tax expense	302,470	314,710
Effective income tax rate	19.4%	20.8%

13. Earnings Per Share

(a) Basic

The basic earnings per share for each of the six months ended 30 June 2020 and 2019 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	
	2020	2019
Profit attributable to equity holders of the Company (RMB' 000)	1,260,191	1,198,685
Weighted average number of ordinary shares in issue	4,428,000,000	4,428,000,000
Basic earnings per share (RMB)	0.28	0.27

(b) Diluted

As the Company had no dilutive shares for the each of the six months ended 30 June 2020 and 2019, dilutive earnings per share for the six months ended 30 June 2020 and 2019 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 2020 and 2019.

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Proposed Interim dividends of RMB0.113 per ordinary share (2019: RMB0.108) ⁽¹⁾	500,364	478,224

⁽¹⁾ Pursuant to a resolution passed at the board of Directors' meeting on 21 August 2020, the Directors authorised to declare the interim dividends for the six months ended 30 June 2020 of RMB0.113 (2019: RMB0.108) per share totaling RMB500,364,000 (2019: RMB478,224,000).

15. Employment Benefits

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Salaries, wages and bonuses	1,289,118	1,469,909
Retirement benefits ⁽¹⁾	258,882	300,509
Early retirement and supplemental pension benefit (Note 31(b))		
– interest cost	38,337	40,879
Immediate recognition of actuarial losses/(gains)	975	(76)
Housing fund ⁽²⁾	177,155	157,904
Welfare, medical and other expenses	353,872	377,989
Reversal of cash-settled shared-based payment (Note 36)	(4,921)	(5,244)
	2,113,418	2,341,870

Notes:

(1) Retirement benefits

The Group is required to make specific contributions to the state-managed retirement plan at a rate of 14% to 19% (2019: 19% to 21%) of the specified salaries of the PRC employees for the six months ended 30 June 2020. 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 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
At 1 January 2020				
Cost	3,450,076	4,630,885	518,989	8,599,950
Accumulated depreciation and impairment	(1,550,153)	(3,452,445)	–	(5,002,598)
Net book amount	1,899,923	1,178,440	518,989	3,597,352
Six months ended 30 June 2020				
Opening net book amount	1,899,923	1,178,440	518,989	3,597,352
Transfers	16,560	73,736	(90,296)	–
Additions	–	3,892	146,443	150,335
Depreciation	(59,136)	(155,938)	–	(215,074)
Disposals/write-off	(30)	(1,282)	–	(1,312)
Closing net book amount	1,857,317	1,098,848	575,136	3,531,301
At 30 June 2020				
Cost	3,465,623	4,655,198	575,136	8,695,957
Accumulated depreciation and impairment	(1,608,306)	(3,556,350)	–	(5,164,656)
Net book amount	1,857,317	1,098,848	575,136	3,531,301

Depreciation expense recognised is analysed as follows:

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Cost of sales	205,273	227,725
Selling and marketing expenses	116	918
Administrative expenses	9,685	9,644
	215,074	238,287

17. Right-of-Use Assets

The Group leases assets including buildings and other facilities, plant 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	179,730	7,707	–	187,437
Impact on initial application of IFRS 16 (note)	–	–	2,442,793	2,442,793
Additions	53,887	2,377	–	56,264
Depreciation	(25,810)	(2,186)	(29,709)	(57,705)
Balance at 30 June 2019	207,807	7,898	2,413,084	2,628,789
Balance at 1 January 2020	172,763	7,198	2,343,809	2,523,770
Additions	35,888	22	–	35,910
Depreciation	(28,552)	(3,629)	(29,202)	(61,383)
Modification	(1,757)	–	–	(1,757)
Balance at 30 June 2020	178,342	3,591	2,314,607	2,496,540

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.

Depreciation recognised is analysed as follows:

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Cost of sales	35,409	34,015
Selling and marketing expenses	–	145
Administrative expenses	25,974	23,545
	61,383	57,705

18. Intangible Assets

	Patent	Computer software	Total
	RMB' 000	RMB' 000	RMB' 000
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
At 1 January 2020			
Cost	479,882	513,356	993,238
Accumulated amortisation	(431,642)	(328,281)	(759,923)
Net book amount	48,240	185,075	233,315
Six months ended 30 June 2020			
Opening net book amount	48,240	185,075	233,315
Additions	–	3,925	3,925
Amortisation	(12,060)	(17,349)	(29,409)
Closing net book amount	36,180	171,651	207,831
At 30 June 2020			
Cost	479,882	517,281	997,163
Accumulated amortisation	(443,702)	(345,630)	(789,332)
Net book amount	36,180	171,651	207,831

Amortisation recognised is analysed as follows:

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Cost of sales	20,774	26,413
Selling and marketing expenses	–	2
Administrative expenses	8,635	10,373
	29,409	36,788

19. Investment in a Joint Arrangement and Associates

(a) Investment in a joint arrangement

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Joint venture		
Beginning of the period	2,516	1,866
Share of total comprehensive income/(expense)	7	(111)
End of the period	2,523	1,755

The Group's joint venture, is unlisted and established in a form of limited company, is 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 (2019: 3,000)	50%	Technical development, sales of equipment/The PRC

The above joint venture is accounted for by using the equity method.

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Current assets	19,003	19,409
Non-current assets	1,280	1,352
Total assets	20,283	20,761
Current liabilities	(15,238)	(15,728)
Total liabilities	(15,238)	(15,728)
Equity	5,045	5,033
Share of equity by the Group (50%) (2019: 50%)	2,523	2,516

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Revenue	–	–
Profit/(loss) and total comprehensive income/(expense) for the period	13	(221)
Share of total comprehensive income/(expense) (50%) (2019:50%)	7	(111)

There are no material contingent liabilities and commitments relating to the Group's interests in the joint venture and no material contingent liabilities and commitments of the joint venture itself.

19. Investment in a Joint Arrangement and Associates (Continued)

(b) Investment in associates

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Beginning of the period	161,952	147,454
Share of total comprehensive income	9,997	16,355
Dividend distribution	–	(3,200)
Others	6,361	–
End of the period	178,310	160,609

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 (2019: 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 (2019: 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 (2019: 5,500)	36.36%	Powder engineering services/ The PRC

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

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

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Current assets	1,027,124	897,634
Non-current assets	15,629	39,694
Total assets	1,042,753	937,328
Current liabilities	(670,184)	(600,419)
Non-current liabilities	(32)	(21)
Total liabilities	(670,216)	(600,440)
Equity attributable to equity holders	341,100	305,451
Non-controlling interests	31,437	31,437
	372,537	336,888
Share of equity by the Group (35%) (2019: 35%)	119,385	106,908

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Revenue	169,209	230,120
Profit and total comprehensive income for the period attributable to equity holders	17,477	33,087
Share of total comprehensive income (35%) (2019: 35%)	6,117	11,580

For the six months ended 30 June 2020, China Petrochemical Technology Co., Ltd. did not declare dividends (2019: Nil).

19. Investment in a Joint Arrangement and Associates (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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Current assets	101,537	97,678
Non-current assets	54,120	55,226
Total assets	155,657	152,904
Current liabilities	(76,279)	(78,165)
Total liabilities	(76,279)	(78,165)
Equity	79,378	74,739
Share of equity by the Group (40%) (2019: 40%)	31,751	29,895

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Revenue	75,219	67,971
Profit and total comprehensive income for the period	4,639	3,717
Share of total comprehensive income (40%) (2019: 40%)	1,855	1,487

For the six months ended 30 June 2020, Huizhou Tianxin Petrochemical Engineering Co., Ltd did not declare dividends (2019: RMB3,200,000).

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

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Current assets	135,402	136,485
Non-current assets	1,585	1,552
Total assets	136,987	138,037
Current liabilities	(62,248)	(68,866)
Non-current liabilities	(4)	(4)
Total liabilities	(62,252)	(68,870)
Equity	74,735	69,167
Share of equity by the Group (36.36%) (2019: 36.36%)	27,174	25,149

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Revenue	29,572	42,309
Profit and total comprehensive income for the period	5,568	9,043
Share of total comprehensive income (36.36%) (2019: 36.36%)	2,025	3,288

For the six months ended 30 June 2020, Shanghai KSD Bulk Solids Engineering Co., Ltd. did not declare dividends (2019: Nil).

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.

20. Notes and Trade Receivables

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Trade receivables		
Fellow subsidiaries	1,722,673	2,527,233
Joint ventures of fellow subsidiaries	1,013,066	721,605
Associates of fellow subsidiaries	146,813	134,362
Joint venture	1,309	1,309
Associates	14,282	27,978
Third parties	4,718,175	5,287,290
	7,616,318	8,699,777
Less: ECL allowance for impairment	(1,231,399)	(1,346,804)
Trade receivables – net	6,384,919	7,352,973
Notes receivables	847,889	1,260,225
Notes and trade receivables – net	7,232,808	8,613,198

The carrying amounts of the Group's notes and trade receivables as at 30 June 2020 and 31 December 2019 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.

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

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Within 1 year	5,718,172	7,219,493
Between 1 and 2 years	1,198,271	1,113,044
Between 2 and 3 years	200,035	157,823
Between 3 and 4 years	54,878	51,333
Between 4 and 5 years	21,673	20,946
Over 5 years	39,779	50,559
	7,232,808	8,613,198

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

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
At the beginning of the period	1,346,804	1,313,283
ECL allowance	174,384	151,703
Receivables written off as uncollectible	(75)	(1,257)
Reversal	(289,714)	(203,640)
At the end of the period	1,231,399	1,260,089

20. Notes and Trade Receivables (Continued)

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

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
RMB	6,535,363	7,429,090
USD	72,617	508,013
SAR	240,194	267,525
Others	384,634	408,570
	7,232,808	8,613,198

21. Prepayments and Other Receivables

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Prepayments		
Prepayments for fellow subsidiaries	1,756,677	1,178,566
Prepayments for joint ventures of fellow subsidiaries	385	543
Prepayments for construction	1,771,220	832,966
Prepayments for materials and equipment	2,772,312	2,680,834
Prepayments for labour costs	22,273	487,548
Prepayments for rent	3,151	1,946
Others	94,780	73,503
	6,420,798	5,255,906
Other receivables		
Amounts due from fellow subsidiaries ⁽¹⁾	49,939	54,160
Amounts due from joint ventures of fellow subsidiaries ⁽¹⁾	174,155	189,451
Amounts due from associates of fellow subsidiaries ⁽¹⁾	198,237	250,152
Dividends receivable	24,200	24,200
Interests receivable	228,913	169,091
Petty cash funds	14,880	10,362
Other guarantee deposits and deposits	120,326	120,184
Payment in advance	238,439	199,993
Maintenance funds	55,291	55,203
Value-added tax credit	634,266	253,011
Prepaid value-added tax	73,622	18,013
Prepaid income tax	89,562	59,424
Value-added tax to be certified	14,207	16,208
Land disposal	36,515	36,515
Others	105,895	81,908
	2,058,447	1,537,875
Less: ECL allowance for impairment	(133,731)	(129,110)
Prepayments and other receivables – net	8,345,514	6,664,671

(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 2020 and 31 December 2019 approximate their fair values.

21. Prepayments and Other Receivables (Continued)

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

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
At the beginning of the period	129,110	117,979
ECL allowance	12,907	10,961
Reversal	(8,286)	(7,930)
At the end of the period	133,731	121,010

22. Contract Assets and Contract Liabilities

(a) Contract assets

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Contract assets arising from construction contracts	9,521,450	8,085,951

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 RMB611,236,000 (2019: RMB585,816,000), all of which relates to retentions.

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

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
At the beginning of the period	193,086	164,750
ECL allowance	12,764	16,529
Reversal	(19,179)	(64,763)
At the end of the period	186,671	116,516

(b) Contract liabilities

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Contract liabilities arising from construction contracts	11,451,773	13,314,941

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 2020 is RMB13,314,941,000 (2019: RMB9,968,594,000), in which RMB8,526,469,000 (2019: RMB7,892,011,000) was recognised as revenue during the period.

22. 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 2020, 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 RMB107,834,427,000 (2019: RMB94,993,560,000), 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.

23. Inventories

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Raw materials	756,791	923,519
Turnover materials	213,832	231,855
Goods in transit	52,544	38,106
	1,023,167	1,193,480

As at 30 June 2020 and 31 December 2019, no provision for impairment on inventories of the Group has been made.

For the six months ended 30 June 2020 and 30 June 2019, the cost of inventories recognised as expense and included in cost of sales amounted to RMB10,019,893,000 and RMB6,905,598,000 respectively.

24. 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 2020	As at 31 December 2019
Loans due from the ultimate holding company	3.60%	3.60%

25. Restricted Cash

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Restricted cash		
– RMB	28,474	38,087
– USD	6,197	–
– Others	6	–
	34,677	38,087

Restricted cash mainly represented restricted funds frozen by the order of Justice, bank deposits for guarantees and deposit for farmers' salaries.

As at 30 June 2020 and 31 December 2019, 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.

26. Time Deposits

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Time deposits with initial term over three months:		
Time deposits in banks	5,668,552	5,576,785
Time deposits in fellow subsidiaries	1,569,654	1,509,281
	7,238,206	7,086,066

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Denominated in:		
– RMB	6,047,593	5,670,352
– USD	1,083,164	1,398,728
– MYR	107,449	16,986
	7,238,206	7,086,066

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

The effective interest rates per annum on time deposits, with maturities of three months to five years (2019: half year to three years), are approximately 0.45% to 4.13% as at 30 June 2020 (2019: 1.83% 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.

27. Cash and Cash Equivalents

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Cash at bank and in hand		
– less than three months time deposits	952,601	1,495,716
– cash deposits	2,231,058	2,133,032
	3,183,659	3,628,748
Deposits in fellow subsidiaries		
– less than three months time deposits	228,900	952,549
– cash deposits	5,057,705	5,354,041
	5,286,605	6,306,590
	8,470,264	9,935,338

27. Cash and Cash Equivalents (Continued)

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Denominated in:		
– RMB	4,857,394	5,541,829
– USD	2,199,447	2,455,127
– SAR	262,507	442,209
– EUR	472,150	573,511
– KZT	1,498	2,100
– KWD	535,710	705,060
– THB	13,719	50,860
– MYR	102,932	115,390
– Others	24,907	49,252
	8,470,264	9,935,338

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

As at 30 June 2020 and 31 December 2019, 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 seven days to three months (2019: one to three months), are approximately 0.66% to 2.70% as at 30 June 2020 (2019: 1.96% to 2.70%).

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

28. Share Capital

	As at 30 June 2020		As at 31 December 2019	
	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).

29. 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.

29. 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 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, the share premium account and also the fair value change arising from the financial assets designated as a fair value through other comprehensive income of associate.

(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.

30. Lease Liabilities

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Total minimum lease payments:		
Due within one year	56,083	63,275
Due in the second to fifth years	108,837	105,705
Due after the fifth year	39,327	38,432
	204,247	207,412
Future finance charges on leases liabilities	(30,990)	(26,459)
Present value of leases liabilities	173,257	180,953
Present value of minimum lease payments:		
Due within one year	52,432	55,275
Due in the second to fifth years	89,201	92,823
Due after the fifth year	31,624	32,855
	173,257	180,953
Less:		
Portion due within one year included under current liabilities	(52,432)	(55,275)
Portion due after one year included under non-current liabilities	120,825	125,678

During the six months ended 30 June 2020, the Group entered into a number of lease agreements for usage of residential properties, office and equipment for 1 to 20 years (2019: 1 to 20 years). The Group makes fixed payments depends on the usage during the contract period. On lease commencement, the Group recognised right-of-use assets included in property, plant equipment and lease liabilities amounting to RMB35,910,000 (2019: RMB29,480,000).

During the six months ended 30 June 2020, the total cash outflows for the leases are RMB31,897,000 (six months ended 30 June 2019: RMB43,357,000).

31. Retirement and Other Supplemental Benefit Obligations

(a) State-managed retirement plan

For the six months ended 30 June 2020, 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 14% to 19%, (2019: 19% to 21%) 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 2020 and 30 June 2019 are as follows:

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Contributions to state-managed retirement plan	258,882	300,509

(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 30 June 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 2020 was performed by an independent qualified actuarial firm: Towers Watson Management Consulting (Shenzhen) Co., Ltd. Beijing Branch. 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 2020	As at 31 December 2019
Retirement with honors benefit plan	2.50%	3.00%
Retirement benefit plan	3.00%	3.25%
Early retirement benefit plan	2.50%	2.75%

(ii) Benefit growth rates (per annum):

	As at 30 June 2020	As at 31 December 2019
Retirement with honors benefit plan	2.50%	2.50%
Retirement benefit plan	2.70%	2.70%
Early retirement benefit plan	1.80%	1.80%

(iii) Duration:

	As at 30 June 2020	As at 31 December 2019
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

31. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

(iii) Duration: (Continued)

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 2020 Increase/(decrease) in retirement benefit plan obligation		As at 31 December 2019 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	(55,505)	57,855	(55,590)	57,939
Benefit growth rates	58,031	(55,933)	58,115	(56,020)

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.

31. 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 2019				
Net interest expenses	1,019	37,564	2,296	40,879
Immediate recognition of actuarial gains	—	—	(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
For the six months ended 30 June 2020				
Net interest expenses	1,014	35,206	2,117	38,337
Immediate recognition of actuarial losses	—	—	975	975
Benefit cost recognised in profit or loss	1,014	35,206	3,092	39,312
Revaluation of net benefit obligation liabilities				
Actuarial revaluation of economic assumptions change	1,586	53,538	—	55,124
Actuarial revaluation of other assumptions change	(32)	(161)	—	(193)
Benefit cost recognised in other comprehensive income	1,554	53,377	—	54,931
Total benefit cost recognised in the consolidated statement of comprehensive income	2,568	88,583	3,092	94,243

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.

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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Net liabilities of retirement benefit plan obligation	2,467,308	2,488,926

31. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

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 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 gains	–	–	(76)	(76)
Revaluation loss/(gain):				
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
At 1 January 2020	72,587	2,240,564	175,775	2,488,926
Net interest expenses	1,014	35,206	2,117	38,337
Immediate recognition of actuarial losses	–	–	975	975
Revaluation loss/(gain):				
Actuarial revaluation of economic assumptions change	1,586	53,538	–	55,124
Actuarial revaluation of other assumptions change	(32)	(161)	–	(193)
Direct benefit paid by the Group	(7,150)	(83,904)	(24,807)	(115,861)
At 30 June 2020	68,005	2,245,243	154,060	2,467,308

The Group has no reserve of plan assets, no capital injection of plan assets is established and no future contribution is arranged.

32. Provision for Litigation Claims

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Beginning of the period	196,945	253,936
Reversal	–	(70,718)
Exchange difference	(6,024)	14,673
Payment	(1,619)	(946)
End of the period	189,302	196,945

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 2020 and 31 December 2019, no additional provision for litigation claims is provided.

33. Notes and Trade Payables

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Trade payables		
– Fellow subsidiaries	922,454	219,344
– Associates of fellow subsidiaries	–	2,256
– Joint ventures of fellow subsidiaries	1,322	1,196
– Associates	6,376	40
– Third parties	20,482,256	20,174,375
	21,412,408	20,397,211
Notes payables	1,073,064	1,716,828
Notes and trade payables	22,485,472	22,114,039

The carrying amounts of the Group's notes and trade payables as at 30 June 2020 and 31 December 2019 approximate their fair values.

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

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Within 1 year	19,175,667	18,773,812
Between 1 and 2 years	1,730,363	1,844,766
Between 2 and 3 years	759,814	572,916
Over 3 years	819,628	922,545
	22,485,472	22,114,039

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

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
RMB	20,839,277	20,226,099
USD	82,417	173,299
EUR	4,251	5,066
KZT	6,812	11,168
SAR	851,946	976,439
Others	700,769	721,968
	22,485,472	22,114,039

34. Other Payables

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Salaries payables	113,015	214,210
Other taxation payables	193,994	457,206
Output value-added tax to be recognised	11,241	10,417
Payable of separation and transfer of "Water/electricity/gas supply and property management"	161,085	127,495
Deposits and guarantee deposits payables	77,959	82,550
Advanced payables	813,305	499,986
Rent, property management and maintenance payables	73,080	120,332
Contracts payables	145,006	195,373
Amounts due to ultimate holding company ⁽¹⁾	233	—
Amounts due to fellow subsidiaries ⁽¹⁾	73,233	86,788
Amounts due to a joint venture ⁽¹⁾	71	71
Amounts due to joint ventures of fellow subsidiaries ⁽¹⁾	4,961	5,627
Amounts due to associates of fellow subsidiaries ⁽¹⁾	888	888
Others	207,975	207,974
Total other payables	1,876,046	2,008,917

(1) Amounts due to related parties are unsecured, interest free and repayable on demand.

The carrying amounts of the Group's other payables as at 30 June 2020 and 31 December 2019 approximate their fair values.

35. Deferred Income Tax Assets

Deferred income tax assets recognised:

The analysis of deferred income tax assets is as follows:

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Deferred income tax assets	715,238	738,052

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

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
At the beginning of the period	738,052	781,439
Credited to equity for defined benefit obligations revaluation of actuarial gain or loss	9,440	(26)
Tax credited to profit for the period (Note 12)	(32,254)	(59,029)
At the end of the period	715,238	722,384

35. Deferred Income Tax Assets (Continued)

The movement in deferred income tax assets during the periods ended 30 June 2020 and 2019, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred income tax assets

	Tax losses	Provision for Retirement and other supplemental benefit obligation	Provision for impairment on assets	Others	Total
	RMB' 000	RMB' 000	RMB' 000	RMB' 000	RMB' 000
At 1 January 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
At 1 January 2020	–	422,530	282,255	33,267	738,052
Credited/(Charged) to:					
Profit for the period	–	(11,733)	(17,275)	(3,246)	(32,254)
Equity	–	9,440	–	–	9,440
At 30 June 2020	–	420,237	264,980	30,021	715,238

Deferred income tax liabilities

	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)
At 1 January 2020	–
(Credited)/Charged to:	–
Profit for the period	–
Equity	–
At 30 June 2020	–

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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Tax losses for which no deferred income tax asset was recognised	1,283,561	1,299,180

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.

36. 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.

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.

36. Cash-Settled Share-Based Payment (Continued)

As at 30 June 2020, the details of the H share appreciation rights were as follows:

Date of grant				Number of underlying H share appreciation rights		
	Exercise price	Effective period	Exercisable period	Outstanding At 1 January 2020	Lapse during the period	Outstanding At 30 June 2020
	HKD					
Directors						
20 December 2017	6.35	20 December 2017 to 19 December 2027	20 December 2021 to 20 December 2024	27,200	–	27,200
Employees						
20 December 2017	6.35	20 December 2017 to 19 December 2027	20 December 2021 to 20 December 2024	4,441,420	–	4,441,420
				4,468,620	–	4,468,620

As at 31 December 2019, the conditions to effect the H share appreciation rights in the First and Second Effective Phase of 8,674,380 units (representing 66% of the H share appreciation rights) were not fulfilled. Therefore, those H share appreciation rights have been lapsed.

The total fair value of share options as at 30 June 2020 has been valued using Black-Scholes valuation model.

The significant inputs into the model were as follows:

	As at 30 June 2020	As at 31 December 2019
Exercise price ⁽ⁱ⁾	HKD5.57	HKD5.80
Expected volatility	43.91%	33.93%
Expected life (years)	3.5 years	4.5 years
Risk-free interest rate	0.550%	1.740%
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\$5.57 per share.

At 30 June 2020, the Group has recorded liabilities of RMB1,424,000 (2019: RMB6,344,000), which RMB4,921,000 (2019: RMB5,244,000) was reversed from the accrued charges during the period.

37. Commitments

(a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding as at 30 June 2020 and 31 December 2019 not provided for in the consolidated financial statements are as follows:

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Contracted but not provided for		
– Property, plant and equipment	14,988	3,628

37. Commitments (Continued)

(b) Operating leasing commitments

At the reporting date, the lease commitments for short-term leases are as follows:

	As at 30 June 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Less than 1 year	65,694	62,236

As at 30 June 2020 and 31 December 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.

38. Cash Generated from Operations

	Six months ended 30 June	
	2020	2019
	RMB' 000	RMB' 000
Profit before taxation	1,562,823	1,513,464
Adjustments for:		
Reversal of provision for ECL on trade and other receivables and contract assets, net	(117,135)	(97,730)
Reversal of cash-settled share-based payment	(4,921)	(5,244)
Depreciation of property, plant and equipment	215,074	238,287
Depreciation of right-of-use assets	61,383	57,705
Amortisation of intangible assets	29,409	36,788
Net losses/(gains) on disposal/write-off of property, plant and equipment	86	(2,883)
Interest income	(446,324)	(450,638)
Interest expense	43,958	54,561
Net foreign exchange (gains)/losses	(78,139)	186,109
Share of (profit)/loss of a joint arrangement	(7)	111
Share of profit of associates	(9,997)	(16,355)
Cash flows from operating activities before changes in working capital	1,256,210	1,514,175
Changes in working capital:		
– Inventories	170,313	(231,202)
– Contract assets	(1,429,084)	(861,872)
– Contract liabilities	(1,863,168)	(555,405)
– Notes, trade and other receivables	(242,129)	(3,336,091)
– Notes, trade and other payables	158,902	(1,268,822)
– Restricted cash	3,410	(6,402)
Cash used in operations	(1,945,546)	(4,745,619)

39. 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 32).

40. 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 2020 and 2019 and balances as at 30 June 2020 and 31 December 2019.

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

40. 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	
	2020	2019
	RMB' 000	RMB' 000
Construction and services provided to		
– Joint ventures of fellow subsidiaries	5,877,301	1,931,730
– Associates of fellow subsidiaries	57,279	283,469
– Fellow subsidiaries	7,648,556	7,212,021
– Associates	108,272	4,324
	13,691,408	9,431,544
Construction and services received from		
– Ultimate holding company	–	9,777
– Joint ventures of fellow subsidiaries	121	2,069
– Associates of fellow subsidiaries	–	2,144
– Fellow subsidiaries	2,115,712	1,946,839
– Associates	–	156
	2,115,833	1,960,985
Technology research and development provided to		
– Ultimate holding company	3,774	4,887
– Fellow subsidiaries	82,549	65,523
	86,323	70,410
Comprehensive services received from		
– Fellow subsidiaries	18,652	20,574
Interest income on loans		
– Ultimate holding company	304,654	299,635
Interest expense on borrowings		
– Fellow subsidiaries	–	8,798
Expenses in relation to settlement and other financial services		
– Fellow subsidiaries	1,423	1,308
Deposit interest income from fellow subsidiaries	35,700	63,367

40. 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 2020	As at 31 December 2019
	RMB' 000	RMB' 000
Deposits and time deposits placed in fellow subsidiaries	6,856,259	7,815,871

	As at 30 June 2020	As at 31 December 2019
	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 and borrowings mainly in state-owned financial institutions. The deposits and borrowings 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 24, trade receivables, prepayments and other receivables are unsecured, interest free and repayable on demand.

(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	
	2020	2019
	RMB' 000	RMB' 000
Fee	300	533
Basic salaries, other allowances and benefits-in-kind	2,937	2,818
Discretionary bonus ⁽ⁱ⁾	6,969	10,005
Contributions to pension plans	532	637
Cash-settled share-based payment	–	–
	10,738	13,993

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

41. Reconciliations of Liabilities Arising from Financing Activities

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

	Loans due to a fellow subsidiary	Lease liabilities
	RMB' 000	RMB' 000
At 1 January 2019	384,339	—
Impact on initial application of IFRS 16	—	185,393
At 1 January 2019, as restated	384,339	185,393
<i>Cash-flow:</i>		
– Capital element of lease rentals paid	—	(38,473)
– Interest element of lease rentals paid	—	(4,884)
<i>Non-cash:</i>		
– Entered into new lease	—	56,264
– Interest expenses	—	4,884
– Modification	—	—
– Exchange difference	644	4,489
At 30 June 2019	384,983	207,673
At 1 January 2020	—	180,953
<i>Cash-flow:</i>		
– Capital element of lease rentals paid	—	(36,404)
– Interest element of lease rentals paid	—	(3,244)
<i>Non-cash:</i>		
– Entered into new lease	—	29,351
– Interest expenses	—	4,070
– Modification	—	(1,757)
– Exchange difference	—	288
At 30 June 2020	—	173,257

42. Particulars of Principal Subsidiaries

As at 30 June 2020, 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 RMB' 000	Effective interest held		Principal activities and place of operation
			Direct held	Indirect held	
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 (USD500,000)	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	500,000	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 PRC
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 period 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, result in particulars of excessive length.

Documents for Inspection

The following documents will be available for inspection during normal business hours after 24 August 2020 (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 2020 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 BDO Limited.

By Order of the Board

Mr. YU Renming

Chairman of the Board

Beijing, the PRC

21 August 2020

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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