

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



BUILDING
A WORLD-LEADING
TECHNOLOGY-DRIVEN
ENGINEERING COMPANY



2022 INTERIM REPORT





IMPORTANT NOTICE

The board of directors (the “**Board**”) and the directors (the “**Directors**”) of SINOPEC ENGINEERING (GROUP) CO., LTD. (“**SINOPEC SEG**” or the “**Company**”) warrant that there are no false representations, misleading statements or material omissions contained in this interim report and are hereby jointly and severally liable for the authenticity, accuracy and completeness of the content hereof. The Directors, Mr. WANG Zizong, Mr. LI Chengfeng and Mr. WU Wenxin of SINOPEC SEG could not attend the Seventh Meeting of the Fourth Session of the Board (the “**Meeting**”) due to official duties. The Director, Mr. WANG Zizong and Mr. LI Chengfeng authorised the other Director, Mdm. SUN Lili and the Director, Mr. WU Wenxin authorised the other Director, Mr. XIANG Wenwu to attend the Meeting, and to vote on their behalves. Mdm. SUN Lili (Chairwoman of the Board), Mr. JIANG Dejun (Director and President), Mr. JIA Yiqun (Chief Financial Officer, Secretary to the Board and Company Secretary) and Mr. WANG Yi (Head of the finance department) of SINOPEC SEG 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 2022 (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 2022 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, petrochemicals, aromatics, coal chemicals, inorganic chemicals, pharmaceutical chemicals, clean energy, storage and transportation facilities, environmental protection and energy saving, and other industry sectors. The Group is an integrated service provider for the whole industry chain and the whole life cycle in energy and chemical industry and 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 and start-up, etc.

After nearly 70 years of continuous development, the Group currently has one academician of the Chinese Academy of Sciences, three academicians of the Chinese Academy of Engineering and nearly 10,000 professionals. The Group has rich project management and implementation experience, and owns and cooperatively owns patents and know-how in core business areas. The Group has delivered on schedule hundreds of modern factories with



enormous investment, complicated process, advanced technology and high quality to clients in more than 20 countries and regions around the world, established long-term and steady cooperative relationships with large energy and chemical enterprises at home and abroad, maintained an extensive and stable client base, and enjoys remarkable industrial influence and social reputation.

In the future, adhering to the development orientation of “Integrated Service Provider with Whole Industry Chain and Whole Life Cycle in Energy and Chemical Industry”, the Group will base itself on the energy and chemical

engineering construction industry, continuously broaden its business scope and extend its value chain, take “Engineering Innovation” and “Value Creation” as the development engines, deepen the implementation of the six development strategies of “Value-Oriented, Innovation-Driven, Green & Clean, Talent-Based, Globalization-Targeted, Fusion & Symbiosis”, comprehensively improve the level of safe, efficient, green and low-carbon service in the business chain, and create a new momentum in achieving the corporate vision of “Building the world’s leading technology-driven 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

Mdm. SUN Lili

AUTHORISED REPRESENTATIVES

Mr. JIANG Dejun

Mr. JIA Yiqun

SECRETARY TO THE BOARD, COMPANY SECRETARY

Mr. JIA Yiqun

REGISTERED ADDRESS

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WEBSITES ON WHICH THIS INTERIM REPORT IS PUBLISHED

Website designated by The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange"):

<http://www.hkex.com.hk>

The Company's website:

<http://www.segroup.cn>

PLACE WHERE THIS INTERIM REPORT IS AVAILABLE FOR INSPECTION

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

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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 2022	As at 31 December 2021	Changes from the end of 2021 (%)
Total assets	72,256,949	72,917,243	(0.9)
Non-current assets	7,848,274	7,979,567	(1.6)
Current assets	64,408,675	64,937,676	(0.8)
Current liabilities	40,382,299	41,370,338	(2.4)
Non-current liabilities	2,347,686	2,423,569	(3.1)
Equity attributable to equity holders of the Company	29,521,670	29,118,084	1.4
Net assets per share of equity holders of the Company (RMB)	6.67	6.58	1.4

Unit: RMB' 000

Items	Six-month periods ended 30 June		Changes over the same period of 2021 (%)
	2022	2021	
Revenue	25,958,552	26,851,392	(3.3)
Gross profit	2,664,294	2,524,351	5.5
Operating profit	1,167,517	1,161,083	0.6
Profit before taxation	1,621,965	1,611,209	0.7
Profit attributable to equity holders of the Company	1,354,606	1,347,127	0.6
Basic earnings per share (RMB)	0.31	0.30	0.6
Net cash flow used in operating activities	(1,378,489)	(1,978,359)	(30.3)
Net cash flow used in operating activities per share (RMB)	(0.31)	(0.45)	(30.3)

Items	Six-month periods ended 30 June	
	2022	2021
Gross profit margin (%)	10.3	9.4
Net profit margin (%)	5.2	5.0
Return on assets ⁽¹⁾ (%)	1.9	1.9
Return on equity ⁽²⁾ (%)	4.6	4.7
Return on invested capital ⁽³⁾ (%)	4.7	4.8

Items	As at 30 June 2022	As at 31 December 2021
Asset-liability ratio ⁽⁴⁾ (%)	59.1	60.1

$$(1) \quad \text{Return on assets} = \frac{\text{Profit for the period}}{(\text{The opening total assets} + \text{The closing total assets})/2}$$

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

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

$$(4) \quad \text{Asset-liability ratio} = \frac{\text{Total liabilities as at the end of the period}}{\text{Total assets as at the end of the period}}$$

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 2021		Increase/Decrease of this change (+, -)			As at 30 June 2022	
	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 921 shareholders of the Company. As at 21 August 2022, 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	-876,509	-	1,453,698,280	32.83	99.51
ZHANG SAIYU	+900,000	-	2,900,000	0.07	0.20
HUI MO CHEE	+370,000	-	870,000	0.02	0.06
HUI SIU SHUN WAN	+140,000	-	340,000	0.01	0.02
WONG CHOK SHUN	0	-	300,000	0.01	0.02
WONG CHUI CHUNG	0	-	295,000	0.01	0.02
CHAN LAI KUEN SELINA	+500	-	195,500	0.00	0.01
WONG CHUI CHUNG	0	-	195,500	0.00	0.01
CHOI LAI MING	+130,000	-	130,000	0.00	0.01

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 archiving 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) 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 (%) ⁽⁶⁾	Percentage in the total share capital of the Company (%) ⁽⁷⁾
China Petrochemical Corporation⁽¹⁾	Domestic Share	Beneficial owner/Interests of controlled corporation	2,967,200,000(L)	100.00(L)	67.01(L)
FMR LLC⁽²⁾	H Share	Beneficial owner	132,185,946(L)	9.05(L)	2.99(L)
Brown Brothers Harriman & Co.⁽³⁾	H Share	Agent	102,302,925(L)	7.00(L)	2.31(L)
			102,302,925(P)	7.00(P)	2.31(P)
Pandanus Associate Inc.⁽⁴⁾	H Share	Interests of controlled corporation	76,193,353(L)	5.22(L)	1.72(L)
Pandanus Partners L.P.⁽⁴⁾	H Share	Interests of controlled corporation	76,193,353(L)	5.22(L)	1.72(L)
FIL Limited⁽⁴⁾	H Share	Interests of controlled corporation	76,193,353(L)	5.22(L)	1.72(L)
BlackRock, Inc.⁽⁵⁾	H Share	Interests of controlled corporation	73,123,691(L)	5.01(L)	1.66(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 8 July 2022 and filed by FMR LLC with the Hong Kong Stock Exchange.
- (3) The information is based on the Corporate Substantial Shareholders Notice dated 23 November 2021 and filed by Brown Brothers Harriman & Co. with the Hong Kong Stock Exchange.
- (4) The information is based on the Corporate Substantial Shareholders Notices dated 22 July 2021 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.
- (5) The information is based on the Corporate Substantial Shareholders Notice dated 24 March 2022 and filed by BlackRock, Inc. with the Hong Kong Stock Exchange.
- (6) It is calculated on the basis that the Company has issued 2,967,200,000 Domestic Shares and 1,460,800,000 H Shares.
- (7) It is calculated on the basis that the Company has issued 4,428,000,000 Shares in total.

BUSINESS REVIEW AND PROSPECTS





1 Business Review

In the first half of 2022, the internal and external environments became more complicated and severe and various risks were closely intertwined. China's economy was confronted with "triple pressure" of shrinking demand, supply shocks and weakening expectations. The impact of unexpected factors such as the rebound of the pandemic and the change in international situation rapidly increased. Facing the complicated situations, Chinese government effectively coordinated pandemic prevention and control and economic and social development. Positive results were achieved in pandemic prevention and control in key regions, and the effects of economic stabilization policies were gradually released. In June, major economic indicators stabilized and rebounded, and positive factors increased continuously.

In the first half of 2022, the supply and demand pattern of global energy was profoundly reshaped by the violent fluctuation of international energy market, the change in international situation and the repetition of the pandemic, all posing huge challenges to industrial development and business operation of the Company. Domestically, all sectors of energy and chemical industry accelerated their restructuring. The megatrend of green and low-carbon development drove the traditional refining and chemical industry to speed up transformation and upgrading, and propelled the new energy industry to grow rapidly. A series of changes and challenges faced by the energy industry also put forward new requirements on technical research and development and engineering transformation capability of the Company.

Although facing the severe and complicated situations in the first half of the year, the Group keep firmly in mind the entrustment to "ensure energy security", and the Group comprehensively promoted pandemic prevention and control as well as business operation and made all-out efforts to ensure stability of production and business operation, and obtained hard-won results. During the Reporting Period, the Group achieved total revenue of RMB25.959 billion, representing a decrease of 3.3% compared with the same period last year (hereinafter referred to as "year-on-year"), and the net profit was RMB1.355 billion, representing a year-on-year increase of 0.6%.

In the first half of 2022, the Group gave full play to the integrated strength of "Large Troop Formation" combat mode. All 1,138 projects under implementation domestically and overseas were under control in terms of progress, expenditure, safety, quality and environmental protection. During the Reporting Period, projects such as Tianjin Nangang Ethylene and Xinjiang Kuqa Green Hydrogen started successfully; projects such as Hainan Refining and Chemical Integration, Baling Caprolactam, Anqing Refinery Structural Adjustment and a batch of LNG projects such as Tianjin LNG, Shandong LNG, Wenzhou LNG were efficiently carried forward; projects such as Jiujiang Aromatics and Maoming Crude Cracking to Ethylbenzene/Styrene realized high-quality mechanical completion, Zhenhai Refining and Chemical Ethylene Expansion Project completed overall start-up, thousand-t/a-grade high-isotactic polybutene-1 industrial demonstration device produced eligible products, providing strong support for customers' high-quality development and industrial upgrading and transformation.

In the first half of 2022, the Group fully exerted the advantages of integrated engineering service, actively served the development needs of owners and made new progress in market development. During the Reporting Period, the value of newly-signed contracts of the Group was RMB44.150 billion, representing a year-on-year increase of 20.4%. Domestically, the Group signed engineering design contracts for projects such as Daxie Petrochemical Polypropylene and CNOOC-Shell Phase 2 Ethylene Transformation as well as EPC contracts of projects such as Huizhou Ethylene, Tianjin Nangang Ethylene and High-end Composite New Material of Zhenhai Refining and Chemical, the value of domestic newly-signed contracts amounted to RMB40.391 billion. Overseas, the Group signed EPCC contracting for projects such as LNG Storage Tank Project in Skikda of Algeria and MTBE in Arzew of Algeria, the value of overseas newly-signed contracts reached approximately USD587 million.

(1) Operating Environment

In the first half of 2022, unexpected changes of international situations occurred, the domestic pandemic situation showed sporadic resurgences, the decline pressure on the economy increased, the energy market fluctuated sharply, and the instability and uncertainty significantly rose, bringing huge challenges to the production and operation of the Company.

Domestically, the construction of large refining and chemical integration projects was in full swing, the pace of transformation from oil to chemical and transformation from oil to special products was accelerated, a number of high-end new material projects were rapidly deployed, and the petrochemical industry was further enhanced into an intensified, integrated, high-end and clean industry; benefiting from the growth of clean energy demand represented by natural gas, the enthusiasm for investment in related projects increased in recent years, and a large number of natural gas projects especially for LNG entered the peak period of construction and delivery; in terms of new energy, the development was prosperous, the proportion of related investment continued to rise, and the coupled and integrated development of power of wind, solar, electric and hydrogen and traditional energy has become a trend.

Overseas, geopolitical conflicts led to a significant increase of global demand for oil from the Middle East, some oil and gas production enhancement projects delayed due to the pandemic were restarted successively, and several large integrated petrochemical projects in the downstream entered substantial bidding stage; the economy of Southeast Asia continued to recover in terms of domestic demand and export, the refining and chemical industry has entered a strong business cycle, and the willingness to increase refining and chemical production capacity was significantly on the rise; featuring small scale, low efficiency and operating rate lower than the world's average, refineries in Latin America have certain market potential in terms of upgrading and restructuring; the oil production of Africa remained generally stable, but due to the lack of funds and backward infrastructure, the local oil refining capacity is very limited, and the market has great growth potential.

(2) Operation Overview

During the Reporting Period, the Group's total revenue was RMB25.959 billion, representing a decrease of 3.3% on a year-on-year basis; profits attributable to equity holders of the Company was RMB1.355 billion, representing an increase of 0.6% on a year-on-year 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:

	For the six months ended 30 June				Change (%)
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Engineering, consulting and licensing	1,589,762	5.4	1,613,595	5.2	(1.5)
EPC Contracting	14,785,475	50.4	16,265,498	51.9	(9.1)
Construction	12,565,785	42.8	12,969,125	41.4	(3.1)
Equipment manufacturing	397,138	1.4	479,753	1.5	(17.2)
Subtotal	29,338,160	100.0	31,327,971	100.0	(6.4)
Total (after inter-segment elimination) ⁽¹⁾	25,958,552	N/A	26,851,392	N/A	(3.3)

Note:

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

During the Reporting Period, the Group's revenue from engineering, consulting and licensing was RMB1.590 billion and was broadly stable on a year-on-year basis; the revenue of the EPC Contracting segment was RMB14.785 billion, decreased by 9.1% compared to the same period of the previous year; the revenue of construction was RMB12.566 billion, showing a year-on-year decrease of 3.1%; the revenue of equipment manufacturing was RMB397 million, showing a year-on-year decrease of 17.2%, the above changes in revenue of each business segments are mainly affected by the project construction cycle.

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

	Six-month periods ended 30 June				Change
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Oil refining	3,985,415	15.4	5,354,175	19.9	(25.6)
Petrochemicals	16,145,379	62.2	15,050,970	56.1	7.3
New coal chemicals	328,321	1.3	528,703	2.0	(37.9)
Storage, transportation and others	5,499,437	21.1	5,917,544	22.0	(7.1)
Subtotal	25,958,552	100.0	26,851,392	100.0	(3.3)

The Group's revenue is mainly generated from providing services to customers in oil refining, petrochemicals, new coal chemicals, and storage, transportation and others. During the Reporting Period, the Group's revenue from the petrochemical industry amounted to RMB16.145 billion, representing an increase of 7.3% on a year-on-year basis, mainly due to the contribution from petrochemical projects such as Hainan Refining and Chemical Integration and Zhenhai Refinery Ethylene Expansion; revenue from the oil refining industry amounted to RMB3.985 billion, representing a decrease of 25.6% on a year-on-year basis, mainly due to the reduction of new refining projects resulted from the energy transformation; revenue from the new coal chemical industry was RMB328 million, representing a decrease of 37.9% on a year-on-year basis, mainly due to the insufficiency of new coal chemical projects under the "Carbon Peaking" and "Carbon Neutrality" target; income from storage and transportation and others amounted to RMB5.499 billion, representing a decrease of 7.1% on a year-on-year basis, which was mainly due to part of the Crude Oil Storage Facility Projects are in the contracting process and the reduction of new storage and transportation projects on a year-on-year basis.

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

	Six-month periods ended 30 June				Change
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
PRC	23,781,091	91.6	24,749,885	92.2	(3.9)
Overseas	2,177,461	8.4	2,101,507	7.8	3.6
Total	25,958,552	100.0	26,851,392	100.0	(3.3)

During the Reporting Period, the Group's revenue from the PRC amounted to RMB23.781 billion, representing a decrease of 3.9% on a year-on-year basis, mainly affected by the project construction cycle, resulting the revenue decreased slightly on a year-on-year basis; the Group strived to overcome the impact of the overseas COVID-19 pandemic, and the income from overseas was RMB2.177 billion, representing an increase of 3.6% on a year-on-year basis.

The following table sets forth the Group's new contract and backlog for the periods indicated:

	Six months ended 30 June 2022	Six months ended 30 June 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
New contract	44,150,180	36,662,979	20.4

	As at 30 June 2022	As at 31 December 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
Backlog	120,915,979	111,045,177	8.9

During the Reporting Period, the value of new contracts amounted to RMB44.150 billion, representing an increase of 20.4% on a year-on-year basis. As at the end of the Reporting Period, the backlog of the Group amounted to RMB120.916 billion, representing an increase of 8.9% as compared to that as at 31 December 2021.

The following table sets forth the Group's capital expenditure for the periods indicated:

	As at 30 June 2022	As at 30 June 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
Capital expenditure	276,110	381,324	(27.6)

During the Reporting Period, the Group's capital expenditure was approximately RMB276 million, representing a decrease of 27.6% on a year-on-year basis, mainly due to the fact that the Group increased investment in crane transport equipment in the same period of the last year. As at the end of the Reporting Period, the Group's capital expenditure was mainly used for contract energy management, construction of temporary facilities for engineering projects, purchase and renewal of engineering facilities and equipment, lease of right-of-use asset and information technology office facility construction and other supporting auxiliary construction, etc.

(3) Business Highlights

Efficient and stable progress of major projects' constructions

Hainan Refining and Chemical Integration Project: please refer to the 2020 annual report dated 21 March 2021 and announcement dated 16 April 2021 published by the Company for further details. On the date of this report, the project has been delivered.

Tianjin Nangang Ethylene Project: please refer to the announcement dated 19 April 2022 published by the Company for further details. As at the end of the Reporting Period, the project was in the early stage, and the overall progress was about 30%.

Baling Caprolactam Project: please refer to the announcement dated 12 October 2021 published by the Company for further details. As at the end of the Reporting Period, the project has entered the peak period of construction, with an overall progress exceeding 50%.

Xinjiang Kuqa Green Hydrogen Demonstration Project: please refer to the 2021 annual report dated 20 March 2022 published by the Company for further details. As at the end of the Reporting Period, the project was in the early stage, and the overall progress was about 30%.

Tianjin LNG (Phase II) Project: please refer to the 2020 annual report dated 21 March 2021 published by the Company for further details. As at the end of the Reporting Period, the project has entered the peak period of construction, with an overall progress exceeding 70%.

Shandong LNG (Phase III) Project: please refer to the 2021 annual report dated 20 March 2022 and the announcement dated 19 April 2022 published by the Company for further details. As at the end of the Reporting Period, the project has entered the peak period of construction, with an overall progress exceeding 80%.

Wenzhou LNG Project: please refer to the announcement dated 16 April 2021 published by the Company for further details. As at the end of the Reporting Period, the project has entered the peak period of construction, and the overall progress was about 70%.

Longkou LNG Project: please refer to the announcement dated 24 February 2022 published by the Company for further details. As at the end of the Reporting Period, the project was in the early stage, and the overall progress was about 20%.

AGCC Project in Russia: please refer to the announcement dated 4 March 2021 and the 2021 annual report dated 20 March 2022 published by the Company for further details. During the reporting period, some related work of Russian AGCC Project were rescheduled according to the owner's request. For the next step, the Group will maintain active communication with the owner.

Market development continue to achieved success

During the Reporting Period, the total value of new contracts entered into by the Group amounted to RMB44.150 billion, representing a year-on-year increase of 20.4%.

During the Reporting Period, the Group continued to deepen its development in the domestic market. The Group entered into new contracts for a number of large projects, including the BEPC contract for the Huizhou Ethylene Project with a total contract value of approximately billions of dollars; EPC contract for the Tianjin Nangang 1.20 million t/a Ethylene and Downstream High-end New Material Industry Cluster Project with a total contract value of approximately RMB9.174 billion; EPC contract for the Zhenhai Refining and Chemical 11.00 million t/a Refining and High-end Synthetic New Materials Project with a total contract value of approximately RMB4.055 billion; EPC contract for the Xinjiang Kuqa Green Hydrogen Demonstration Project with a total contract value of approximately RMB1.164 billion.

During the Reporting Period, the Group has made major breakthrough in EPC Contracting project field in Africa market, and signed EPCC contract for Skikda LNG Storage Tank Project and Arzew MTBE project of National Petroleum Company of Algeria with total contract value of USD182 million and USD315 million, respectively; continuously consolidated the market in the Middle East, and signed procurement construction contract of Ras Tanura Project of Saudi Aramco and framework agreement for construction of Luberef of Aramco in Jeddah Yanbu; started the "technology + high-end" development in market of Russia and Middle Asia, and signed equipment manufacture, design and procurement contract for MTO Project of Jizzakh Petroleum Company of Uzbekistan; made new breakthrough in front-end consultation service field in Southeast Asia, and signed feasibility study contract for Refining and Chemical Integration Project of Zhejiang Petrochemical in Pengerang in Malaysia.

Engineering technology innovation leads the development of the industry

Steady advancement in research and development of engineering technologies and smooth progress in key scientific research projects

During the reporting period, the Group signed 265 new contracts on various types of technological developments and 39 contracts on licensing of technologies. Innovations in various types of engineering technologies closely focused on strategic development of the Company and technical needs of the engineering market. Key scientific research projects advanced steadily, and critical core technologies achieved important progress in making breakthroughs.

The Group fully utilized the advantages of leading technologies and technological guidance to explore the structural adjustment of the refining and chemical industry and the path of energy conservation and emission reduction under the “Carbon Peaking and Neutrality” targets. By focusing on “bottleneck” technologies, accelerating the layout plan of “three new” areas and deepening digital transformation, high-quality innovations in engineering technologies were used to make advancement in “strengthening the origin and base” and “making high-end growth” in the refining and chemical industry.

In terms of transformation and upgrading of oil refining structure, the Group anchored on the development direction of “oil transformed to chemicals”, “oil producing chemicals” and “oil transformed to special products”, and actively promoted the inception and implementation of projects based on the new technologies of “cracking” and “dehydrogenation”. Steady progress was made in deep catalytic cracking technology for residue to chemicals (RTC) in Anqing, naphtha catalytic cracking (SNCC) in Zhanjiang and moving-bed propane dehydrogenation technology in Zhenhai, providing technical support for the transformation and upgrading of refining and chemical enterprises in improving quality and efficiency; production of qualified products was realized in the third-generation aromatics (Jiujiang) plant; the low-cost ethane cracking gas to styrene demonstration plant started operation successfully for the first time. The above technologies opened up a new route of process technologies for the efficient conversion and utilization of oil products.

In terms of new energy, the Group actively explores the integrated development model of new energy and traditional energy, focusing on research in the fields of green and low-carbon new energy such as CO₂ recycling and “thermal hydrogen wind and solar”. Among them, three well-planned and designed hydrogen refueling stations started operation successfully, making a unique contribution to enabling the “Green Winter Olympics”. Xinjiang Kuqa photovoltaic hydrogen production demonstration project is progressing steadily, and distributed photovoltaic projects of Zhongke were successfully connected to the grid, and several rooftop photovoltaic projects of oil (gas) refueling stations were successfully constructed and started power generation, providing supportive efforts for energy conservation, emission reduction and green development in the energy industry.

In terms of new chemical materials, the Group focused on tackling key problems with “key-bottleneck” materials, acting courageously as the chain leader and striving to build an efficient research and development chain that integrates basic research, engineering transformation and user needs with mutual reinforcement. Among them, the 10,000-ton class 48K large tow carbon fiber project was successfully completed for delivery, and the 1,000-ton class high-grade polybutene-1 industrial demonstration plant started operation successfully in Zhenhai, marking the Group’s new major technological breakthrough in the field of high-end synthetic materials. Steady progress was made in the development of new materials and industrial application projects represented by polyolefin elastomers (POE) in Maoming and polyglycolic acid (PGA) in Guizhou, and actively explored the construction of engineering conversion platform technologies for high-viscosity and ultra-high-viscosity materials, with a high level of China’s engineering research and complemented the critical links in the industrial chain of the refining and chemical industry in China with high-standard engineering research and development and engineering transformation capabilities.

Increasing number of patent applications and numerous fruitful results in technological innovation

During the reporting period, the Group continued to strengthen its patent portfolio, maintained a good momentum of patent applications and completed 272 new patent applications. 280 patents were newly licensed, of which 126 were licensing of invention patents and quality of patents was steadily improved. The patent “A Device and Method for Distributing and Collecting Liquid Materials in an Adsorption Separation Tower” won the Silver Award of China Patents. The Group’s innovations in engineering technologies were closely focused on the Group’s strategic development and technological needs of the engineering market, and 265 new contracts on various types of technological developments and 39 contracts on technology licensing were signed, with the value of technology licensing contracts exceeding RMB150 million. Key scientific research projects were progressing steadily, significant progress was achieved in tackling issues on critical core technologies. Technological innovation yielded further fruitful results. The Group has won a total of 36 scientific and technological advancement awards under various categories, including 9 first prizes of provincial and ministerial level scientific and technological progress prizes.

Engineering and construction projects implementation being carried forward comprehensively and efficiently

During the reporting period, the Group actively fulfilled its core responsibilities of “Ensuring National Energy Security”, gave full play to its advantages in the integration of the industrial chains of engineering and construction, and implemented 1,138 projects, with overall safety, quality and environmental protection under control. The ethylene expansion project in Zhenhai, which was undertaken by the Group through EPC general contracting, was fully completed and put into operation, empowering capabilities and intelligence for the creation of a “world-class, high-tech and integrated” green petrochemical base. Hainan’s refining and chemical integration projects will be delivered in the near future to support the petrochemical industry with high quality development.

During the Reporting Period, the Group continued to strengthen the construction of subcontracting management system, and dynamically evaluated the operational effectiveness of the QHSE (quality, health, safety and environment) system of strategic subcontractors; continued to strengthen the cultivation of strategic subcontractors, ensured the construction proportion of strategic subcontractor, and ensured the quality, safety, progress and cost control of project construction; realized the integrated management of subcontractor resource pool and subcontractor evaluation, optimized the allocation of subcontracting resources and reduced the cost of subcontracting management. The Group continued to promote procurement through framework agreements and centralized procurement, carried out strategic cooperation with overseas project suppliers, and improved the efficiency of procurement management.

Proper fulfillment of accountability of subject for safety, quality and environmental protection

During the reporting period, the Group always adhered to the QHSE core value concepts of “people-oriented, quality first”, adhered to system thinking, deepened the integration of system, production and operation, strictly realized the undertaking of major risk responsibilities, promoted consistent implementation of the system, and effectively improved the penetration power of safety management. Thorough implementing on-site environmental protection, management and control, environmental protection management was integrated into the whole business process, making new contributions to accelerate the creation of a green and low-carbon development industry. The relevant national requirements were implemented consistently, the “three-tier” epidemic prevention and control system operated efficiently, normalized preventive controls and emergency treatment were effectively combined and always maintained a “zero infection” record, while overall public safety and risk of epidemic in overseas projects were under control. As of the end of this reporting period, a total of 119 million consecutive safe man-hours were realized, maintaining good momentum in safe production.

Digital engineering services empower intelligent factory

During the reporting period, the Group aimed at the advanced level of digital engineering capabilities in the industry, continued to deepen the application of digital technology, closely matched the needs of domestic and foreign project execution, established and improved the basic system platform, digital service platform and integrated design platform, and continued to improve engineering design efficiency and quality. Given the new needs of industry customers for digital delivery and intelligent management, an integrated platform for delivery applications was developed based on the internet platform of the industry to achieve the integration of design, construction, delivery, smart factory construction and production consulting services. Digital delivery empowered factory operation and maintenance, and facilitated the extension of digital engineering construction to smart factories.

Company's reform management enhanced governance efficiency

During the reporting period, **in terms of corporate reform**, the Group continued to optimize the organizational structure, management mechanism and operation model of international business, integrated advantageous resources, and utilized overall collaboration to lay the foundation for high-quality development of overseas business. **In terms of system construction**, the Group launched the campaign of "improvement of management penetration" to continuously optimize the management system and enhance management efficiency. The construction of a compliance system based on the new standard ISO 37301 was initiated first, striving to lead the industry in realizing the integration of compliance system and management system, injecting new momentum into the Company's high-quality development. **In terms of internal control and risk control management**, the Group focused on "strengthening internal control, preventing risks and promoting compliance", continued to strengthen the construction of internal control system, and improved the working rules and supporting systems of various governance entities. The management and control system of major business risks based on the entire life cycle of project contracts commenced pilot operation, and the Company's key risk management and control capabilities were further improved.

Continuous optimization of talent team development

During the reporting period, the Group continued to deepen the development strategy of "Talent-based Enterprises", optimized the talent training model, and created a "Future Scientist" platform to carry out the young science and technology elite competition. A group of young science and technology talents with development potential and forward-looking innovative projects stood out. Two outstanding young people won the title of "Sinopec Outstanding Young Technological Innovation Talents". The Group launched the "Talent Seeding Program" and selected 34 "post-1985" outstanding young talents to take temporary positions for training in difficult positions, complex positions and key positions. Through platform building and undertaking burdens of pressure, efforts were increased in nurturing young cadres through source cultivation, practical training and target nurturing to improve the comprehensive capabilities and quality of young talents and realize the common development of talents and enterprises. Through such a series of measures, a bridge for in-depth communication between various units was set up, the Group's advantages of scale and integrated synergies were enhanced continuously with the power of integration.

2 Business Prospects

Looking forward to the second half of 2022, the external environment is becoming more complex and severe, the global inflation pressure continues to accumulate, and the characteristics such as instability, uncertainty and imbalance of world economy development are becoming more prominent. Nevertheless, China's government at the same time has made effective overall plan for pandemic prevention and control as well as economic and social development, strengthened the adjustment of macro-policy, and national economy is gradually overcoming adverse influence and showing a good momentum of recovery.

In the coming period, the energy industry will face a series of transformational challenges: firstly, the rapid development of new energy industry will profoundly affect the energy industry pattern; secondly, the green and low-carbon transformation under the goal of "Carbon Peaking and Neutrality" will become the fundamental drive for the growth of traditional energy industry; thirdly, industrial transformation and upgrading pose higher requirements for independent innovation capability of enterprises.

In the second half of 2022, facing the more complex environment and challenges, the Group will fully study and judge risks and keep clear-minded in the profound and complicated changes. On the other hand, we will always concentrate on self-targeted efforts and make solid steps to maintain basic production and business operation, better deal with the uncertainty of external environment with the certainty of our own business, and strive to reinforce the stability of the annual business performance.

Firstly, insisting on leading by innovation, promoting independence and self-development in science and technology with full efforts. Focusing closely on national strategic needs, daily needs of common people, as well as transformation and development of the industry, our efforts will be concentrated on critical core technologies in solving problems in the fields of “oil transformed to chemicals”, “oil producing chemicals”, “oil transformed to special products”, high-end new materials, and hydrogen energy industrial chain, exploring integrated development models for new energy sources and traditional energy sources, conducting strategic research and building technology reserve for achieving the targets of “Carbon Peaking and Neutrality”, strongly promoting “establishing leaders”, “solving problems with soft teams” and building “innovative joint entities” to stimulate innovative forces and assisting in the realization of compatible and complementary links for “production and learning, research and application”, and using “sophisticated craftsmanship” on the “fine materials” of scientists to design and produce with excellence and transform the fruits of science and technology in the R&D laboratories into green and efficient production capabilities. Meanwhile, full efforts will be exerted to promote digital construction, conducting systematic studies on the application scenarios of digital delivery, continue to deepen the construction of smart plants and lay a solid foundation for building smart plants for the refining and chemical enterprises.

Secondly, insisting on value creation, promoting high-quality and stable growth with full efforts. In terms of market development, we will focus on key domestic projects and consolidate our leading position in the industry with high quality and competitive prices; increase overseas market development, implement new international business operation models, cultivate new competitiveness and development momentum, and strive to achieve new achievements in overseas market development. **In terms of project execution**, in the second half of the year, we will strengthen overall coordination, integrate sophisticated equipment, superb technology and capable forces to promote high-quality, safe and efficient implementation of engineering projects. Meanwhile, taking the intrinsic safety of design as the standard, we will make every effort to carry out the inspection and evaluation of the design compliance of the old equipment of the refining and chemical enterprises, so as to provide a strong guarantee for the improvement of the intrinsic safety level of the whole life cycle of the refining and chemical equipment.

Thirdly, insisting on being Talent-based Enterprises, building a strong portfolio of outstanding talents with full efforts. Based on the six talent projects, the Group will focus on the critical period for the growth of scientific and technological talents and the golden period of innovation, accelerate the improvement of a talent development mechanism with petrochemical characteristics and international competitiveness to achieve high-quality development in the work of talents. The training programs of “Approaching Scientists” and “Entering Advanced Enterprises” will be launched, adopting the method of “inviting in and going out” to strengthen professional quality training, improve the overall quality of cadres and employees, and accelerate the training of a group of strategic scientists and engineering technology leading talents, outstanding engineers, skilled masters and young talents in science and technology, to achieve a high degree of compatibility between talent growth and enterprise development, and contribute powers to the construction of a talent center of worldwide importance and a landmark of innovation for the nation.

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.





7%

24%

19%

20%



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 (%)
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Revenue	25,958,552	100.0	26,851,392	100.0	(3.3)
Cost of sales	(23,294,258)	(89.7)	(24,327,041)	(90.6)	(4.2)
Gross profit	2,664,294	10.3	2,524,351	9.4	5.5
Other income	81,423	0.3	46,685	0.2	74.4
Selling and marketing expenses	(52,099)	(0.2)	(50,754)	(0.2)	2.7
Administrative expenses	(498,144)	(1.9)	(491,040)	(1.8)	1.4
Research and development costs	(897,120)	(3.5)	(892,152)	(3.3)	0.6
Other operating (expenses)/ income	(133,280)	(0.5)	17,953	0.1	–
Other gains – net	2,443	0.0	6,040	0.0	(59.6)
Operating profit	1,167,517	4.5	1,161,083	4.3	0.6
Finance income	483,065	1.9	479,292	1.8	0.8
Finance expenses	(35,626)	(0.1)	(40,479)	(0.2)	(12.0)
Finance income – net	447,439	1.7	438,813	1.6	2.0
Share of losses of joint arrangements	(47)	(0.0)	(99)	(0.0)	(52.5)
Share of profit of associates	7,056	0.0	11,412	0.0	(38.2)
Profit before taxation	1,621,965	6.2	1,611,209	6.0	0.7
Income tax expense	(267,317)	(1.0)	(263,926)	(1.0)	1.3
Profit for the period	1,354,648	5.2	1,347,283	5.0	0.5
Gains on revaluation of retirement benefit plans obligations, net of income tax effect	47	0.0	101	0.0	(53.5)
Share of other comprehensive income of associates	6	0.0	–	0.0	N/A
Exchange differences arising on translation of foreign operations	31,943	0.1	(91)	(0.0)	–
Total comprehensive income for the period	1,386,644	5.3	1,347,293	5.0	2.9

(1) Revenue

The Group's total revenue was RMB25.959 billion, representing a decrease by 3.3% from RMB26.851 billion on a year-on-year basis, mainly affected by the project construction cycle, the revenue slightly decreased year-on-year.

(2) Cost of sales

The cost of sales of the Group decreased by 4.2% from RMB24.327 billion for the six months ended 30 June 2021 to RMB23.294 billion for the six months ended 30 June 2022, mainly due to the decrease in subcontracting and other costs with the decrease in revenue.

(3) Gross profit

The gross profit of the Group increased by 5.5% from RMB2.524 billion for the six months ended 30 June 2021 to RMB2.664 billion for the six months ended 30 June 2022, the gross profit margin increased from 9.4% for the same period last year to 10.3%, mainly due to the fact that Group's efforts to overcome the impact of the COVID-19 pandemic at home and abroad, accelerated the settlement of projects, and the total gross profit and gross profit margin increased year-on-year.

(4) Other income

Other income of the Group increased by 74.4% from RMB47 million for the six months ended 30 June 2021 to RMB81 million for the six months ended 30 June 2022, mainly due to the impact of exchange rate changes, during the Reporting Period, there was an exchange gain of RMB50 million, while the same period last year was an exchange loss.

(5) Selling and marketing expenses

The selling and marketing expenses of the Group were RMB52 million, which remained broadly stable on a year-on-year basis.

(6) Administrative expenses

The administrative expenses of the Group were RMB498 million, which remained broadly stable on a year-on-year basis.

(7) Research and development costs

The research and development costs of the Group were RMB897 million, which remained broadly stable on a year-on-year basis.

(8) Other operating (expenses)/income

Other operating expenses of the Group were RMB133 million, other operating income for the same period last year were RMB18 million. The main reason was that an impairment provision of RMB121 million was made during the Reporting Period, the reversal of impairment provision was RMB66 million for the same period last year.

(9) Other gains – net

The net other gains of the Group were RMB2 million.

(10) Operating profit

The operating profit of the Group was RMB1.168 billion, which remained broadly stable on a year-on-year basis.

(11) Finance income – net

The net finance income of the Group was RMB447 million, which remained broadly stable on a year-on-year basis.

(12) Income tax expense

The Group's income tax expense was RMB267 million, with a comprehensive income tax rate of 16.5%, which remained broadly stable on a year-on-year basis.

(13) Profit for the period

The Group's profit was RMB1.355 billion, which remained broadly stable on a year-on-year basis.

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	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
	(RMB' 000)		(RMB' 000)		(%)		(RMB' 000)		(%)	
Engineering, consulting and licensing	1,589,762	1,613,595	528,347	525,305	33.2	32.6	81,655	71,303	5.1	4.4
EPC Contracting	14,785,475	16,265,498	1,257,663	1,113,478	8.5	6.8	650,769	623,640	4.4	3.8
Construction	12,565,785	12,969,125	855,139	858,581	6.8	6.6	379,061	405,689	3.0	3.1
Equipment manufacturing	397,138	479,753	23,145	26,987	5.8	5.6	5,075	7,783	1.3	1.6
Unallocated	N/A	N/A	N/A	N/A	N/A	N/A	50,957	52,668	N/A	N/A
Subtotal	29,338,160	31,327,971	2,664,294	2,524,351	N/A	N/A	1,167,517	1,161,083	N/A	N/A
Total after inter-segment elimination ⁽³⁾	25,958,552	26,851,392	2,664,294	2,524,351	10.3 ⁽¹⁾	9.4 ⁽¹⁾	1,167,517	1,161,083	4.5 ⁽²⁾	4.3 ⁽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			
	2022		2021	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	1,589,762	100.0	1,613,595	100.0
Cost of sales	(1,061,415)	(66.8)	(1,088,290)	(67.4)
Gross profit	528,347	33.2	525,305	32.6
Selling and marketing expenses	(5,669)	(0.4)	(5,536)	(0.3)
Administrative expenses	(37,511)	(2.3)	(37,019)	(2.3)
Research and development costs	(357,102)	(22.5)	(355,834)	(22.1)
Other income and expenses	(46,410)	(2.9)	(55,613)	(3.4)
Operating profit	81,655	5.1	71,303	4.4

(1) Revenue

During the Reporting Period, the revenue generated from the Group's engineering, consulting and licensing segment was RMB1.590 billion, which remained broadly stable on a year-on-year basis.

(2) Cost of sales

The cost of sales of the Group's engineering, consulting and licensing segment was RMB1.061 billion, which remained broadly stable on a year-on-year basis.

(3) Gross profit

The gross profit of the Group's engineering, consulting and licensing segment was RMB528 million, the gross profit margin was 33.2%, which remained broadly stable on a year-on-year basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's engineering, consulting and licensing segment were RMB6 million, which remained broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's engineering, consulting and licensing segment were RMB38 million, which remained broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's engineering, consulting and licensing segment were RMB357 million, which remained broadly stable on a year-on-year basis.

(7) Operating profit

During the Reporting Period, the operating profit of the Group's engineering, consulting and licensing segment was RMB82 million.

EPC Contracting

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

	Six-month periods ended 30 June			
	2022		2021	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	14,785,475	100.0	16,265,498	100.0
Cost of sales	(13,527,812)	(91.5)	(15,152,020)	(93.2)
Gross profit	1,257,663	8.5	1,113,478	6.8
Selling and marketing expenses	(26,654)	(0.2)	(26,163)	(0.2)
Administrative expenses	(255,749)	(1.7)	(251,924)	(1.5)
Research and development costs	(317,667)	(2.1)	(315,742)	(1.9)
Other income and expenses	(6,824)	(0.1)	103,991	0.6
Operating profit	650,769	4.4	623,640	3.8

(1) Revenue

During the Reporting Period, the revenue generated from the Group's EPC Contracting segment amounted to RMB14.785 billion, mainly due to the contribution of revenue from large-scale projects such as the Hainan Refining and Refining Ethylene and Refinery Renovation and Expansion Project and the Zhenhai Refinery and Chemical Ethylene Expansion Project; the revenue generated from the EPC Contracting segment decreased by 9.1% compared with the same period of the previous year, mainly due to the completion of large-scale projects such as Fujian Gulei Refining and Chemical Integration and the Crude Oil Storage Facility Project Cluster, and the newly started projects such as Tianjin Nangang Ethylene are still at initial stage.

(2) Cost of sales

The cost of sales of the Group's EPC Contracting segment was RMB13.528 billion, representing a decrease of 10.7% on a year-on-year basis, mainly due to the corresponding decrease in costs with the decrease in business volume.

(3) Gross profit

The gross profit of the Group's EPC Contracting segment was RMB1.258 billion, representing an increase of 12.9% on a year-on-year basis; the gross profit margin was 8.5%, representing an increase of 1.7 percentage points on a year-on-year basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's EPC Contracting segment were RMB27 million, which remained broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's EPC Contracting segment were RMB256 million, which remained broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's EPC Contracting segment were RMB318 million, which remained broadly stable on a year-on-year basis.

(7) Operating profit

During the Reporting Period, due to the combined effects of the increase in gross profit, provision for impairment and foreign exchange gains, the operating profit of the Group's general engineering contracting business segment was RMB651 million, representing an increase of 4.4% on a year-on-year basis.

Construction

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

	Six-month periods ended 30 June			
	2022		2021	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	12,565,785	100.0	12,969,125	100.0
Cost of sales	(11,710,646)	(93.2)	(12,110,544)	(93.4)
Gross profit	855,139	6.8	858,581	6.6
Selling and marketing expenses	(17,897)	(0.1)	(17,225)	(0.1)
Administrative expenses	(198,891)	(1.6)	(196,105)	(1.5)
Research and development costs	(215,820)	(1.7)	(214,482)	(1.7)
Other income and expenses	(43,470)	(0.3)	(25,080)	(0.2)
Operating profit	379,061	3.0	405,689	3.1

(1) Revenue

During the Reporting Period, the revenue generated from the Group's construction segment was RMB12.566 billion, representing a decrease of 3.1% on a year-on-year basis.

(2) Cost of sales

The cost of sales of the Group's construction segment was RMB11.711 billion, which decreased by 3.3% on a year-on-year basis.

(3) Gross profit

The gross profit of the Group's construction segment was RMB855 million, and the gross profit margin was 6.8%, which remained broadly stable on a year-on-year basis.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's construction segment were RMB18 million, which remained broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's construction segment were RMB199 million, which remained broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's construction segment were RMB216 million, which remained broadly stable on a year-on-year basis.

(7) Operating profit

During the Reporting Period, due to the combined effects of impairment provisions and foreign exchange losses, the operating profit of the Group's construction business segment was RMB379 million, representing a decrease of 6.6% on a year-on-year basis.

Equipment Manufacturing

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

	Six-month periods ended 30 June			
	2022		2021	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB' 000)	(%)	(RMB' 000)	(%)
Revenue	397,138	100.0	479,753	100.0
Cost of sales	(373,993)	(94.2)	(452,766)	(94.4)
Gross profit	23,145	5.8	26,987	5.6
Selling and marketing expenses	(1,879)	(0.5)	(1,830)	(0.4)
Administrative expenses	(5,993)	(1.5)	(5,992)	(1.2)
Research and development costs	(6,531)	(1.6)	(6,094)	(1.3)
Other income and expenses	(3,667)	(0.9)	(5,288)	(1.1)
Operating profits	5,075	1.3	7,783	1.6

(1) Revenue

During the Reporting Period, the revenue generated from the Group's equipment manufacturing segment decreased by 17.2% from RMB480 million for the six months ended 30 June 2021 to RMB397 billion for the six months ended 30 June 2022, mainly due to the decreased business volume in the manufacturing and the influence of stop of work due to the pandemic.

(2) Cost of sales

The cost of sales of the Group's equipment manufacturing segment decreased by 17.4% from RMB453 million for the six months ended 30 June 2021 to RMB374 million for the six months ended 30 June 2022, mainly due to the cost decrease with the decrease of business volume.

(3) Gross profit

The gross profit of the Group's equipment manufacturing segment decreased by 14.2% from RMB27 million for the six months ended 30 June 2021 to RMB23 million for the six months ended 30 June 2022, mainly due to lower revenue; and gross profit margin was 5.8%, which remained broadly stable on a year-on-year basis.

(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 year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's equipment manufacturing segment were RMB6 million, which remained broadly stable on a year-on-year basis.

(6) Research and development costs

The research and development costs of the Group's equipment manufacturing segment were RMB7 million, which remained broadly stable on a year-on-year basis.

(7) Operating profits

The operating profit of the Group's equipment manufacturing segment was RMB5 million.

3 Discussion on the results by other classification

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

	Six-month periods ended 30 June				Change
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Oil refining	3,985,415	15.4	5,354,175	19.9	(25.6)
Petrochemicals	16,145,379	62.2	15,050,970	56.1	7.3
New coal chemicals	328,321	1.3	528,703	2.0	(37.9)
Storage and transportation and others	5,499,437	21.1	5,917,544	22.0	(7.1)
Subtotal	25,958,552	100.0	26,851,392	100.0	(3.3)

During the Reporting Period, the Group's revenue from the petrochemical industry amounted to RMB16.145 billion, representing an increase of 7.3% on a year-on-year basis, mainly due to the contribution from petrochemical projects such as Hainan Refining and Chemical Integration and Zhenhai Refinery Ethylene Expansion; revenue from the oil refining industry amounted to RMB3.985 billion, representing a decrease of 25.6% on a year-on-year basis, mainly due to the reduction of new refining projects resulted from the energy transformation; revenue from the new coal chemical industry was RMB328 million, representing a decrease of 37.9% on a year-on-year basis, mainly due to the insufficiency of new coal chemical projects under the "Carbon Peaking" and "Carbon Neutrality" target; income from storage and transportation and others amounted to RMB5.499 billion, representing a decrease of 7.1% on a year-on-year basis, mainly due to part of the Crude Oil Storage Facility Projects are in the contracting process and the reduction of new storage and transportation projects on a year-on year basis.

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

	Six-month periods ended 30 June				Change
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
PRC	23,781,091	91.6	24,749,885	92.2	(3.9)
Overseas	2,177,461	8.4	2,101,507	7.8	3.6
Subtotal	25,958,552	100.0	26,851,392	100.0	(3.3)

During the Reporting Period, the Group's revenue from the PRC amounted to RMB23.781 billion, representing a decrease of 3.9% on a year-on-year basis, mainly affected by the construction project cycle, resulting the revenue decreased slightly on a year-on-year basis; the Group strived to overcome the impact of the overseas COVID-19 pandemic, and the income from overseas was RMB2.177 billion, representing an increase of 3.6% on a year on year 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
	2022		2021		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	
	(RMB' 000)	(%)	(RMB' 000)	(%)	
Sinopec Group and its associates	15,895,466	61.2	18,116,343	67.5	(12.3)
Non-Sinopec Group and its associates	10,063,086	38.8	8,735,049	32.5	15.2
Subtotal	25,958,552	100.0	26,851,392	100.0	(3.3)

During the Reporting Period, the revenue of the Group generated from Sinopec Group and its associates was RMB15.895 billion, representing a decrease of 12.3% on a year-on-year basis, mainly affected by the project construction cycle of some large-scale projects from Sinopec Group and its associates; the revenue generated from non-Sinopec Group and its associates was RMB10.063 billion, representing an increase of 15.2% on a year-on-year basis, mainly due to the contribution of Huizhou Ethylene Project, Shenghong Refining and Chemical Integration Project and other projects.

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 customers 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 is 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 2022	As at 31 December 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
Engineering, consulting and licensing	11,133,557	10,776,048	3.3
EPC Contracting	82,512,751	68,746,486	20.0
Construction	26,180,912	30,646,674	(14.6)
Equipment manufacturing	1,088,759	875,969	24.3
Total	120,915,979	111,045,177	8.9

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

	As at 30 June 2022	As at 31 December 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
Oil refining	26,290,022	28,305,346	(7.1)
Petrochemicals	49,430,184	28,068,384	76.1
New coal chemicals	2,572,740	11,006,627	(76.6)
Storage and transportation and others	42,623,033	43,664,820	(2.4)
Total	120,915,979	111,045,177	8.9

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

	As at 30 June 2022	As at 31 December 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
PRC	89,616,983	81,327,589	10.2
Overseas	31,298,996	29,717,588	5.3
Total	120,915,979	111,045,177	8.9

The following table sets forth the total value of backlog categorised by 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 2022	As at 31 December 2021	Change
	(RMB' 000)	(RMB' 000)	(%)
Sinopec Group and its associates	67,437,904	66,686,358	1.1
Non-Sinopec Group and its associates	53,478,075	44,358,819	20.6
Total	120,915,979	111,045,177	8.9

Based on the principle of prudence, the Group adjusted the value of backlog accordingly based on changes and adjustments to contracts in hand for new coal chemical projects. As at 30 June 2022, the Group's backlog was RMB120.916 billion, representing an increase of 8.9% compared to that as at 31 December 2021, and 2.1 times of the total revenue of RMB57.760 billion in 2021.

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

	Six-month periods ended 30 June		Change (%)
	2022	2021	
	(RMB' 000)		
Engineering, consulting and licensing	1,908,143	2,698,911	(29.3)
EPC Contracting	34,129,993	17,869,221	91.0
Construction	7,649,378	15,586,655	(50.9)
Equipment manufacturing	462,666	508,192	(9.0)
Total	44,150,180	36,662,979	20.4

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

	Six-month periods ended 30 June		Change (%)
	2022	2021	
	(RMB' 000)		
Oil refining	1,970,091	5,466,173	(64.0)
Petrochemicals	37,507,181	18,954,409	97.9
New coal chemicals	205,259	430,444	(52.3)
Storage & transportation and others	4,467,649	11,811,953	(62.2)
Total	44,150,180	36,662,979	20.4

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

	Six-month periods ended 30 June		Change (%)
	2022	2021	
	(RMB' 000)		
PRC	40,391,311	30,131,083	34.1
Overseas	3,758,869	6,531,896	(42.5)
Total	44,150,180	36,662,979	20.4

The following table sets forth the total value of new contracts entered into by the Group with customers 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 (%)
	2022	2021	
	(RMB' 000)		
Sinopec Group and its associates	17,488,095	30,796,350	(43.2)
Non-Sinopec Group and its associates	26,662,085	5,860,629	354.5
Total	44,150,180	36,662,979	20.4

During the Reporting Period, the value of the Group's new contracts was RMB44.150 billion, representing an increase of 20.4% as compared with RMB36.663 billion for the same period in 2021.

5 Assets, Liabilities, Equity and Cash Flows

(1) Assets, Liabilities and Equity

Unit: RMB' 000

	As at 30 June 2022	As at 31 December 2021	Changes	Change (%)
Total assets	72,256,949	72,917,243	(660,294)	(0.9)
Current assets	64,408,675	64,937,676	(529,001)	(0.8)
Non-current assets	7,848,274	7,979,567	(131,293)	(1.6)
Total liabilities	42,729,985	43,793,907	(1,063,922)	(2.4)
Current liabilities	40,382,299	41,370,338	(988,039)	(2.4)
Non-current liabilities	2,347,686	2,423,569	(75,883)	(3.1)
Net assets	29,526,964	29,123,336	403,628	1.4
Equity attributable to equity holders of the Company	29,521,670	29,118,084	403,586	1.4
Share capital	4,428,000	4,428,000	0	0.0
Reserves	25,093,670	24,690,084	403,586	1.6
Non-controlling interests	5,294	5,252	42	0.8

As at the end of the Reporting Period, the total assets of the Group were RMB72.257 billion, the total liabilities were RMB42.730 billion, and the equity attributable to the equity holders of the Company was RMB29.522 billion. The changes in the assets and liabilities as compared with those as at the end of 2021 and the main reasons are as follows:

As at the end of the Reporting Period, the total assets were RMB72.257 billion, decreased by RMB660 million as compared with that as at the end of 2021. In particular, the current assets were RMB64.409 billion, decreased by RMB529 million as compared with that as at the end of 2021, mainly due to a decrease of RMB2.094 billion in cash and cash equivalents, a decrease of RMB1.192 billion in prepayments and other receivables, a decrease of RMB384 million in notes and trade receivables, an increase of RMB2.011 billion in contract assets, an increase of RMB854 million in time deposits with financial institutions, an increase of RMB214 million in inventories; non-current assets amounted to RMB7.848 billion, a decrease of RMB131 million over the end of 2021, mainly due to a decrease of RMB81 million in property, plant and equipment, and a decrease of RMB55 million in right-of-use asset.

As at the end of the Reporting Period, the total liabilities were RMB42.730 billion, decreased by RMB1.064 billion as compared with that as at the end of 2021. In particular, the current liabilities were RMB40.382 billion, decreased by RMB988 million as compared with that as at the end of 2021, mainly due to the decrease of contract liabilities by RMB1.045 billion, and the decrease of other payables by RMB103 million. The non-current liabilities were RMB2.348 billion, decreased by RMB76 million as compared with that as at the end of 2021, mainly due to a decrease of RMB74 million in retirement and other supplementary benefit obligations.

Equity attributable to equity holders of the Company was RMB29.522 billion, increased by RMB404 million as compared with that as at the end of 2021, mainly due to the increase in retained earnings.

(2) Cash Flows

During the Reporting Period, the net decrease in cash and cash equivalents was RMB2.262 billion and net cash used in operating activities was RMB1.378 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 2021 and for the six months ended 30 June 2022.

Unit: RMB' 000

Major items of cash flow	Six-month periods ended 30 June	
	2022	2021
Net cash used in operating activities	(1,378,489)	(1,978,359)
Net cash generated from /(used in) investing activities	(883,481)	187,071
Net cash generated from /(used in) financing activities	248	(31,547)
Net decrease in cash and cash equivalents	(2,261,722)	(1,822,835)

During the Reporting Period, the profit before taxation was RMB1.622 billion, and the profit was RMB1.651 billion after adjusting the items in expenses that did not affect the cash flow in operating activities. Major non-cash expense items included net interest income and expenditure of RMB447 million, depreciation and amortisation of RMB416 million, impairment provisions of RMB121 million and exchange gains of RMB50 million. Increased cash outflow of operational receivables and payables is RMB3.193 billion, were mainly shown in: trade and other receivables balance was decreased, causing the cash inflow from operating activities of RMB1.392 billion; contract assets was increased, causing the cash outflow from operating activities of RMB2.066 billion; increased inventory balance, causing the cash outflow from operating activities of RMB214 million; decreased trade and other payables balance, causing the cash outflow from operating activities of RMB1.199 billion; and contract liabilities was decreased, causing cash outflow to operating activities of RMB1.045 billion.

After adjusting non-cash items, receivables and payables for the profit before taxation, deducting the income tax paid amounting to RMB243 million, and increasing inflow of received interest by RMB407 million, the net cash used in operating activities was RMB1.378 billion.

Net cash used in investing activities was RMB883 million, mainly due to expenses on the purchase of property, plant and equipment and an increase in time deposits.

Net cash generated from financing activities was RMB248,000, mainly due to the rental expenses of the leased right-of-use assets and borrowing from the fellow subsidiaries.

The Group will continue to strengthen the settlement of trade debts and control the use of working capital in operating activities. The Group will also continue to effectively manage the investment risk, as well as to 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	
	2022	2021
Net profit margin (%)	5.2	5.0
Return on assets (%) ⁽¹⁾	1.9	1.9
Return on equity (%) ⁽²⁾	4.6	4.7
Return on invested capital (%) ⁽³⁾	4.7	4.8

Main financial ratios	As at 30 June 2022	As at 31 December 2021
Gearing ratio (%) ⁽⁴⁾	0.9	0.8
Net debt to equity ratio (%) ⁽⁵⁾	Net cash	Net cash
Current ratio (%) ⁽⁶⁾	1.6	1.6
Quick ratio (%) ⁽⁷⁾	1.6	1.6

$$(1) \quad \text{Return on assets} = \frac{\text{Profit for the period}}{(\text{The opening total assets} + \text{The closing total assets})/2}$$

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

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

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

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

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

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

Return on assets

During the Reporting Period, the Group's return on assets was 1.9%, which remained stable on a year-on-year basis.

Return on equity

The Group's return on equity decreased to 4.6% from 4.7% for the same period in 2021, mainly due to the increase in the total equity at the end of the Reporting Period.

Return on invested capital

The Group's return on invested capital decreased to 4.7% from 4.8% for the same period in 2021 for the same reasons as the increase in return on equity.

Gearing ratio

The Group's gearing ratio increased from 0.8% as at the end of 2021 to 0.9%, mainly due to the increase 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 2022 and as at 31 December 2021.

Current ratio

The Group's current ratio was 1.6, which remained stable on a year-on-year basis.

Quick ratio

The Group's quick ratio was 1.6, which remained stable on a year-on-year basis.

6 Foreign Exchange Risk

The Group continued to operate some engineering business overseas and formed foreign currency-denominated receivables, payables and cash balances. During the Reporting Period, foreign currencies held by the Group were primarily USD, EUR, Saudi Riyal and Kuwaiti Dinar, Malaysian Ringgit and Ruble. In the future, changes in foreign exchange rates may affect the quotation of the Group's services and expenditure on the purchase of materials in foreign currency. Fluctuations in foreign exchange rates may influence the Group's results of operations and financial position. During the Reporting Period, the Group did not carry out hedging transactions related to foreign exchange fluctuations.

SIGNIFICANT EVENTS





1 Corporate governance

During the Reporting Period, the Company was in compliance with the code provisions of the Corporate Governance Code set out in Appendix 14 to the Hong Kong Listing Rules and did not deviate from any code provision.

2 The dividend distribution plan as at 30 June 2022

The seventh meeting of the fourth session of the Board approved the dividend distribution plan for six months ended 30 June 2022. An interim cash dividend of RMB0.118 (inclusive of applicable taxes) per share 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 2022. Since shareholders of the Company have authorised the Board to decide the interim profit distribution plan of 2022 by ordinary resolution in 2021 annual general meeting held on 26 May 2022, 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, 28 October 2022 to all Shareholders whose names appear on the register of members of the Company at the close of business on Monday, 19 September 2022. In order to qualify for the interim dividend, the holders of H Shares must lodge all share certificates accompanied by the transfer documents with Computershare Hong Kong Investor Services Ltd. (address: Shops 1712-1716, 17/F, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong) before 4:30 p.m. on Tuesday, 13 September 2022 for registration. For the purpose of ascertaining Shareholders who qualify for the dividend, the register of members for H Shares will be closed from Wednesday, 14 September 2022 to Monday, 19 September 2022 (both days inclusive).

The dividend will be denominated and declared in Renminbi. The holders of Domestic Shares will be paid in Renminbi and the holders of H Shares will be paid in Hong Kong dollars. The exchange rate for the dividend to be paid in Hong Kong dollars will be the mean of the exchange rates of Hong Kong dollars to Renminbi as announced by the People's Bank of China during the week prior to the date (i.e., Friday, 19 August 2022) of declaration of the dividend of the Board. Five working days before the date of declaration of the dividend of the Board (i.e., Friday, 19 August 2022), the mean of the exchange rates of Hong Kong dollars to Renminbi as announced by the People's Bank of China is RMB0.86288 to HKD1.00. Therefore, the interim dividend per H share of the company is HKD0.1368 (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, 19 September 2022.

If the individual holders of H Shares are Hong Kong or Macau residents or residents of the countries which had an agreed tax rate of 10% for the cash dividends given to them under the relevant tax agreement 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 had an agreed tax rate of less than 10% under the relevant tax agreement 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 withheld after obtaining the approval of the competent tax authority. Should the individual holders of H Shares be residents of the countries which had an agreed tax rate of over 10% but less than 20% under the tax agreement 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 had an agreed tax rate of 20% under the relevant tax agreement with the PRC, or which has not entered into any tax agreement with PRC, or otherwise, the Company shall withhold and pay the individual income tax at a rate of 20%.

For investors investing in the H Shares of the Company listed on the Hong Kong Stock Exchange through the Shanghai Stock Exchange or Shenzhen Stock Exchange (including enterprises and individuals) (the “**Southbound Trading**”), the Company has entered into the Agreement on Appropriation of Cash Dividends of H Shares for Southbound Trading 《港股通H股股票現金紅利派發協議》 with China Securities Depository and Clearing Corporation Limited, pursuant to which, China Securities Depository and Clearing Corporation Limited, as the nominee of the holders of H Shares for Southbound Trading, will receive all cash dividends distributed by the Company and distribute the cash dividends to the relevant investors of H Shares of Southbound Trading through its 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) 《關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2014]81號) 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.

3 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 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 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 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 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 the Continuing Connected Transactions and Major Transactions under the Financial Services Framework Agreement and the Engineering and Construction Services Framework Agreement” published on 22 August 2021 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 15 September 2021.

The Group's Connected Transactions

During the Reporting Period, the aggregate value of the connected transactions entered into by the Group was RMB19.562 billion. In particular, the expenses amounted to RMB3.268 billion and the revenue amounted to RMB16.294 billion (including RMB15.906 billion from the sale of products and services and RMB389 million from interest income).

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 RMB3.222 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 RMB15.821 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 RMB2 million, which was within the annual cap. The maximum daily balance of deposits and interest income was RMB7.862 billion, which was within the annual cap. The maximum daily balance of entrustment loans was RMB20.5 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 RMB75 million, which was within the annual cap.

During the Reporting Period, the general services provided by the Group to Sinopec Group amounted to RMB5 million, which was within the annual cap.

During the Reporting Period, the general services provided by Sinopec Group to the Group amounted to RMB39 million, which was within the annual cap.

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

During the Reporting Period, the land use and property lease contract provided by Sinopec Group to the Group amounted to RMB5 million, which was within the annual cap.

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

For more information on the major related parties transactions (including the above-mentioned connected transactions) during the Reporting Period, please refer to Note 40 of the consolidated financial statements prepared in accordance with the IFRS in this interim report, among which the above transactions constitute connected transactions, and the Company has complied with the relevant requirements under Chapter 14A of the Hong Kong Listing Rules in relation to these connected transactions.

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, 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.

4 Material Litigation or Arbitration Events

The Group was involved in claims which arose in connection with the collapse of a partially completed oil storage tank of the oil and gas storage tank project in Alberta, Canada on 24 April 2007, which resulted in the deaths of two workers and injuries of four others. The case has not progressed for a long time. The Group submitted a formal application for withdrawal of the case to the court and was approved, the other party has filed an appeal and submitted factual statements to the Court of Appeal in accordance with the statutory procedures, and the Albert Province Court of Appeal of Canada notified that the case is scheduled to be heard in February 2023. There were no other material litigation or arbitration events during the Reporting Period.

5 Other Material Contracts

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

6 Repurchase, Sale and Redemption of Shares

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

7 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.

8 Use of IPO Proceeds

During the Reporting Period, the Group used a total of RMB13 million net proceeds from the global offering, mainly used for the purchase of large lifting and transportation equipment and specialized construction equipment. As at the end of the Reporting Period, the total amount of net proceeds from the global offering used by the Group amounted to RMB4.653 billion, and the remaining balance of the net proceeds from the global offering was approximately RMB6.504 billion (approximately RMB580 million of the unused net proceeds for establishing an engineering and technological R&D center, modular construction base and machinery manufacturing projects, etc.; approximately RMB300 million of the unused net proceeds for improving and developing overseas marketing networks; approximately RMB445 million of the unused net proceeds for information technology construction projects; approximately RMB285 million of the unused net proceeds for purchasing large lifting and transport equipment and specialised construction equipment; approximately RMB1.035 billion of the unused net proceeds for newly added long-term equity investment; and approximately RMB3.859 billion of the unused net proceeds for mergers and acquisitions of engineering companies, purchase of patents and 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 the “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.

9 Assets Transactions

During the Reporting Period, the Group has no material assets transactions other than in the ordinary and usual course of business.

10 Insolvency and Restructuring

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

11 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.

12 Material Acquisitions and Disposals

During the Reporting Period, the Group has not made any material acquisition or disposal of subsidiaries, associates and joint ventures.

13 Financial Derivatives for Hedging Purposes

During the Reporting Period, the Group did not use any financial derivative for hedging purposes.

14 Pledged Assets

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

15 Debt

The Group had about RMB134 million loans to the fellow subsidiaries as at the end of the Reporting Period.

16 Contingent Liabilities

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

17 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 contained 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 25 years of experience in auditing, internal control and consultancy.

18 Significant Events Affecting the Group After the Reporting Periods

From 30 June 2022 and up to the date of this interim report, the Group has no other significant events.

19 Other Important Matters

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

DIRECTORS, SUPERVISORS, OTHER MEMBERS OF SENIOR MANAGEMENT AND EMPLOYEES





1 Directors, Supervisors and Other Members of Senior Management

As at 30 June 2022, 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 Fourth Session of the Board as at the end of the Reporting Period

Name	Gender	Age	Position in the Company	Term of Office as Director
SUN Lili	Female	60	Chairwoman of the Board	October 2021 – October 2024
XIANG Wenwu	Male	56	Vice Chairman of the Board	October 2021 – October 2024
WANG Zizong	Male	57	Director	October 2021 – October 2024
LI Chengfeng	Male	58	Director	October 2021 – October 2024
WU Wenxin	Male	58	Director	October 2021 – October 2024
JIANG Dejun	Male	56	Director and President	October 2021 – October 2024
HUI Chiu Chung, Stephen	Male	75	Independent Director	October 2021 – October 2024
JIN Yong	Male	86	Independent Director	October 2021 – October 2024
YE Zheng	Male	57	Independent Director	October 2021 – October 2024

(2) Supervisors

Profile of the Supervisors of the Fourth Session of the Supervisory Committee as at the end of the Reporting Period

Name	Gender	Age	Position in the Company	Term of Office as Supervisor
ZHU Fei	Male	57	Chairman of the Supervisory Committee and Chairman of the Trade Union	October 2021 – October 2024
ZHANG Xinming	Male	55	Supervisor	October 2021 – October 2024
ZHOU Yingguan	Male	53	Supervisor	October 2021 – October 2024
ZHOU Chengping	Male	59	Supervisor	October 2021 – October 2024
XU Yijun	Male	58	Employee Representative Supervisor	October 2021 – October 2024
WU Zhongxian	Male	59	Employee Representative Supervisor	October 2021 – October 2024
YI Hao	Male	54	Employee Representative Supervisor	October 2021 – October 2024

(3) Other Senior Management

Profile of other members of the Senior Management as at the end of the Reporting Period

Name	Gender	Age	Position in the Company	Date of Taking Office
JIANG Dejun	Male	56	President	December 2020
WANG Guohua	Male	53	Vice President	April 2019
JIA Yiqun	Male	54	Chief Financial Officer Secretary to the Board Company Secretary	August 2012 October 2021 July 2019
ZHENG Lijun	Male	54	Vice President	November 2019

2 Relationship among Directors, Supervisors and Other Members of the Senior Management

There is no financial, business, family or other material relationship between Directors, Supervisors and other members of the Senior Management except for the working relationship.

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

During the Reporting Period, to the best knowledge of the Directors, none of the Directors, Supervisors and members of the Senior Management of the Company and their respective associates had any interest or short positions in any shares or debentures of the Company or any associated corporations (within the meaning of Part XV of the SFO) which are required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), or which were required, pursuant to section 352 of the SFO, to be entered into the register referred to therein, or which are required, pursuant to the Model Code for Securities Transactions by Directors of Listed Companies (the “**Model Code**”) under Appendix 10 to the Hong Kong Listing Rules, to be notified to the Company and the Hong Kong Stock Exchange. After specific inquiries by the Company, all Directors and Supervisors confirmed that they complied with the standards of the Model Code during the Reporting Period.

4 Positions Held by the Directors and Supervisors in Shareholders and Their Competition Interests during the Reporting Period

During the Reporting Period and as at the date of this interim report, (i) Mr. WANG Zizong served as deputy chief engineer of Sinopec Group, general manager of information and digital management department of Sinopec Group, general manager of information and digital management department of Sinopec Corp., and chairman of Petro-CyberWorks Information Technology Co., Ltd.; (ii) Mr. LI Chengfeng served as deputy chief engineer of Sinopec Corp., general manager of chemical business department of Sinopec Corp., chairman of Shanghai SECCO Petrochemical Co., Ltd. and AGCC project joint venture, executive director of Sinopec Asset Management Co., Ltd., and Vice chairman of ZTHC Energy Co., Ltd.; (iii) Mr. WU Wenxin served as the general manager of the engineering department of Sinopec Group, and the general manager of the engineering department of Sinopec Corp; and (iv) Mr. ZHOU Chengping served as a director of Hainan Refinery Chemical Co., Ltd. Save for the above, to the knowledge of the Board, none of the Directors and Supervisors is a director or employee of a company which has an interest in the shares or underlying shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance, or owns interest in any other business which competes or is likely to compete, directly or indirectly, with the business of the Group.

5 Contract Benefits of Directors and Supervisors

As at 30 June 2022 or any time during the six-month period, there is no any transaction, arrangement or contract of significance to which the Company, a parent company of the Company, a subsidiary of the Company or a subsidiary of the Company's parent company is a party, and in which the Directors or Supervisors or any entity connected with any of the Directors or Supervisors is or was materially interested, either directly or indirectly.

All Directors have entered into service agreements with the Company. Such service agreements are effective from the date of approval by the shareholders to the expiry of the term of the Fourth Session of the Board. The service agreements can be renewed in accordance with the Articles of Association and applicable laws and regulations. There is no service contract signed between the Directors and the Company which is not determinable by the Company within one year without payment of compensation (other than statutory compensation).

All Supervisors have entered into agreements with the Company concerning the compliance with relevant laws and regulations, the Articles of Association and arbitration regulations. The term of office for Supervisors starts from the date of their respective appointment to the expiry of the Fourth Session of the Supervisory Committee. The service agreements can be renewed in accordance with the Articles of Association and applicable laws and regulations. There is no service contract signed between the Supervisors and the Company which is not determinable by the Company within one year without payment of compensation (other than statutory compensation).

6 Employees and Remuneration Policy

As at the end of the Reporting Period, there were in total 16,541 employees working in the Group.

The following list is a categorization of employee details in different business sectors as at 30 June 2022.

	As at 30 June 2022	
	Number of Employees	Percentage of the Total Employees (%)
Engineering and Technical Personnel	12,887	77.9
Management Personnel	1,092	6.6
Production Personnel	2,562	15.5
Total	16,541	100.0

The following table lists the information of employees classified based on education background as at 30 June 2022.

	As at 30 June 2022	
	Number of Employees	Percentage of the Total Employees (%)
Master Degree	2,961	17.9
Bachelor Degree	7,644	46.2
Tertiary Qualification	2,746	16.6
Others	3,190	19.3
Total	16,541	100.0

During the Reporting Period, we maintained good labour relationship. 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. As of the six-month period ended 30 June 2022 and the six-month period ended 30 June 2021, the employment costs of the Group were approximately RMB2.220 billion and RMB2.308 billion, respectively.

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 73 to 139, which comprise the consolidated statement of financial position as at 30 June 2022, 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 months 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 2022, and its consolidated financial performance and its consolidated cash flows for the six months 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 RMB25,958,552,000 for the six months period ended 30 June 2022.

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 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 responses:

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;

KEY AUDIT MATTERS (CONTINUED)

Revenue recognition of construction contracts (Continued)

- 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 the extent of progress toward 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 accounting period; and
- performing analytical review procedures on the gross margins of material construction contracts of the Group.

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

(Refer to notes 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 responses:

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 period 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 material trade receivables balances which are past due over 180 days, 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.

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.

BDO Limited

Certified Public Accountants

Ng Wai Man

Practising Certificate number P05309

Hong Kong, 19 August 2022

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE SIX MONTHS ENDED 30 JUNE 2022

	Notes	Six months ended 30 June	
		2022	2021
		RMB' 000	RMB' 000
Revenue	6	25,958,552	26,851,392
Cost of sales		(23,294,258)	(24,327,041)
Gross profit		2,664,294	2,524,351
Other income	8	81,423	46,685
Selling and marketing expenses		(52,099)	(50,754)
Administrative expenses		(498,144)	(491,040)
Research and development costs		(897,120)	(892,152)
Other operating (expenses)/income		(133,280)	17,953
Other gains – net	9	2,443	6,040
Operating profit		1,167,517	1,161,083
Finance income	10	483,065	479,292
Finance expenses	10	(35,626)	(40,479)
Finance income – net		447,439	438,813
Share of loss of a joint arrangement	19(a)	(47)	(99)
Share of profit of associates	19(b)	7,056	11,412
Profit before taxation	11	1,621,965	1,611,209
Income tax expense	12	(267,317)	(263,926)
Profit for the period		1,354,648	1,347,283

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

FOR THE SIX MONTHS ENDED 30 JUNE 2022

	Notes	Six months ended 30 June	
		2022	2021
		RMB' 000	RMB' 000
Other comprehensive income/(loss) for the period, net of tax			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		31,943	(91)
Items that will not be reclassified subsequently to profit or loss:			
Gains on revaluation of retirement benefit plans obligations, net of income tax effect		47	101
Share of other comprehensive income of an associate	19(b)	6	–
		53	101
Other comprehensive income for the period, net of tax		31,996	10
Total comprehensive income for the period		1,386,644	1,347,293
Profit attributable to:			
Equity holders of the Company		1,354,606	1,347,127
Non-controlling interests		42	156
Profit for the period		1,354,648	1,347,283
Total comprehensive income attributable to:			
Equity holders of the Company		1,386,602	1,347,137
Non-controlling interests		42	156
Total comprehensive income for the period		1,386,644	1,347,293
		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	0.31	0.30

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2022

	Notes	As at	As at
		30 June 2022	31 December 2021
		RMB' 000	RMB' 000
ASSETS			
Non-current assets			
Property, plant and equipment	16	4,317,288	4,398,287
Right-of-use assets	17	2,316,988	2,372,201
Intangible assets	18	190,091	203,079
Investment in a joint arrangement	19(a)	3,876	3,923
Investments in associates	19(b)	165,977	158,915
Deferred income tax assets	35	854,054	843,162
Total non-current assets		7,848,274	7,979,567
Current assets			
Inventories	23	694,237	479,931
Notes and trade receivables	20	6,469,876	6,853,516
Prepayments and other receivables	21	6,866,310	8,058,422
Contract assets	22(a)	12,284,765	10,273,333
Loans due from the ultimate holding company	24	20,500,000	20,500,000
Restricted cash	25	170,084	109,685
Time deposits	26	9,211,880	8,357,613
Cash and cash equivalents	27	8,211,523	10,305,176
Total current assets		64,408,675	64,937,676
Total assets		72,256,949	72,917,243

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

AS AT 30 JUNE 2022

	Notes	As at	As at
		30 June 2022	31 December 2021
		RMB' 000	RMB' 000
Equity			
Share capital	28	4,428,000	4,428,000
Reserves		25,093,670	24,690,084
Equity attributable to equity holders of the Company		29,521,670	29,118,084
Non-controlling interests		5,294	5,252
Total equity		29,526,964	29,123,336
LIABILITIES			
Non-current liabilities			
Lease liabilities	30	79,560	88,241
Retirement and other supplemental benefit obligations	31	2,080,002	2,154,036
Provision for litigation claims	32	188,124	181,292
Total non-current liabilities		2,347,686	2,423,569
Current liabilities			
Notes and trade payables	33	20,458,591	20,390,057
Other payables	34	2,783,919	2,886,826
Loan due to a fellow subsidiary	36	134,228	63,757
Contract liabilities	22(b)	16,440,554	17,485,967
Lease liabilities	30	69,401	73,489
Current income tax liabilities		495,606	470,242
Total current liabilities		40,382,299	41,370,338
Total liabilities		42,729,985	43,793,907
Total equity and liabilities		72,256,949	72,917,243
Net current assets		24,026,376	23,567,338
Total assets less current liabilities		31,874,650	31,546,905

On behalf of the directors

SUN Lili
Chairwoman of the Board

JIANG Dejun
Director, President

JIA Yiqun
Chief Financial Officer

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE SIX MONTHS ENDED 30 JUNE 2022

	Attributable to equity shareholders of the Company							Non-controlling interests	Total equity
	Share capital	Capital reserve	Statutory surplus reserve	Specific reserve	Exchange translation reserve	Retained earnings	Total		
	RMB' 000 (Note28)	RMB' 000 (Note29(ii))	RMB' 000 (Note29(i))	RMB' 000 (Note29(iii))	RMB' 000 (Note29(iv))	RMB' 000	RMB' 000		
At 1 January 2022	4,428,000	10,098,729	1,506,179	137,354	(67,686)	13,015,508	29,118,084	5,252	29,123,336
Profit for the period	-	-	-	-	-	1,354,606	1,354,606	42	1,354,648
Other comprehensive income/:									
Defined benefits obligation revaluation of actuarial gain and loss – gross	-	-	-	-	-	58	58	-	58
Defined benefits obligation revaluation of actuarial gain and loss – tax	-	-	-	-	-	(11)	(11)	-	(11)
Exchange differences arising on translation of foreign operations	-	-	-	-	31,943	-	31,943	-	31,943
Share of other comprehensive income of an associate, net of related income tax	-	-	-	-	-	6	6	-	6
Total comprehensive income	-	-	-	-	31,943	1,354,659	1,386,602	42	1,386,644
Transactions with owners:									
Final dividends for 2021	-	-	-	-	-	(983,016)	(983,016)	-	(983,016)
Appropriation of specific reserve	-	-	-	145,743	-	(145,743)	-	-	-
Utilisation of specific reserve	-	-	-	(95,005)	-	95,005	-	-	-
Total transactions with owners	-	-	-	50,738	-	(1,033,754)	(983,016)	-	(983,016)
At 30 June 2022	4,428,000	10,098,729	1,506,179	188,092	(35,743)	13,336,413	29,521,670	5,294	29,526,964

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

FOR THE SIX MONTHS ENDED 30 JUNE 2022

	Attributable to equity shareholders of the Company							Non-controlling interests	Total equity
	Share capital	Capital reserve	Statutory surplus reserve	Specific reserve	Exchange translation reserve	Retained earnings	Total		
	RMB' 000 (Note28)	RMB' 000 (Note29(ii))	RMB' 000 (Note29(i))	RMB' 000 (Note29(iii))	RMB' 000 (Note29(iv))	RMB' 000	RMB' 000		
At 1 January 2021	4,428,000	10,098,729	1,470,998	175,048	(54,233)	12,132,630	28,251,172	4,866	28,256,038
Profit for the period	-	-	-	-	-	1,347,127	1,347,127	156	1,347,283
Other comprehensive income/:									
Defined benefits obligation revaluation of actuarial gain and loss – gross	-	-	-	-	-	122	122	-	122
Defined benefits obligation revaluation of actuarial gain and loss – tax	-	-	-	-	-	(21)	(21)	-	(21)
Exchange differences arising on translation of foreign operations	-	-	-	-	(91)	-	(91)	-	(91)
Total comprehensive income	-	-	-	-	(91)	1,347,228	1,347,137	156	1,347,293
Transactions with owners:									
Final dividends for 2020	-	-	-	-	-	(828,036)	(828,036)	-	(828,036)
Appropriation of specific reserve	-	-	-	79,018	-	(79,018)	-	-	-
Utilisation of specific reserve	-	-	-	(88,557)	-	88,557	-	-	-
Total transactions with owners	-	-	-	(9,539)	-	(818,497)	(828,036)	-	(828,036)
At 30 June 2021	4,428,000	10,098,729	1,470,998	165,509	(54,324)	12,661,361	28,770,273	5,022	28,775,295

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE SIX MONTHS ENDED 30 JUNE 2022

	Notes	Six months ended 30 June	
		2022	2021
		RMB' 000	RMB' 000
Cash flows from operating activities			
Cash used in operations	38	(1,541,865)	(1,855,065)
Income tax paid		(243,388)	(235,541)
Interest received		406,764	112,247
Net cash used in operating activities		(1,378,489)	(1,978,359)
Cash flows from investing activities			
Purchase of property, plant and equipment		(401,253)	(274,275)
Purchase of intangible assets		(8,709)	(1,084)
Interest income on the loans to the ultimate holding company		368,115	378,191
Proceeds from disposal of property, plant and equipment		5,633	2,156
Dividends received from associates		7,000	1,400
Net increase in time deposits		(854,267)	(419,317)
Loans to the ultimate holding company		(5,000,000)	(5,000,000)
Loans repaid by the ultimate holding company		5,000,000	5,500,000
Net cash (used in)/generated from investing activities		(883,481)	187,071
Cash flows from financing activities	41		
Drawdown of borrowings from a fellow subsidiary		63,757	110,084
Repayment of borrowings from a fellow subsidiary		–	(97,064)
Interest paid		–	(797)
Payments of lease liabilities		(63,509)	(43,770)
Net cash generated from/(used in) financing activities		248	(31,547)
Net decrease in cash and cash equivalents		(2,261,722)	(1,822,835)
Cash and cash equivalents at beginning of period		10,305,176	8,440,757
Exchange gains/(losses) on cash and cash equivalents		168,069	(47,920)
Cash and cash equivalents at end of period	27	8,211,523	6,570,002

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

30 JUNE 2022

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 (中國石化集團煉化工程有限公司) in the People’s Republic of China (the “PRC”) on 24 July 2007 under the Company Law of the PRC. The address of the Company’s registered office is No. 8 Building, Shenggujiayuan, Middle Shenggu Road, Chaoyang District, Beijing, 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 19 August 2022.

2. Basis of Preparation

The consolidated financial statements have been prepared in accordance with all International Financial Reporting Standards, International Accounting Standards (“IASs”) and Interpretations (hereinafter collectively referred to as the “IFRSs”) issued by the International Accounting Standards Board (the “IASB”) and the disclosure requirements of the Hong Kong Companies Ordinance. 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 or amended IFRS

The IASB has issued a number of new or amended IFRSs that are first effective for the current accounting period of the Group:

Amendments to IFRS 16	COVID-19-Related Rent Concessions beyond 30 June 2021
Amendments to IAS 16	Proceeds before Intended Use
Amendments to IAS 37	Onerous Contracts – Cost of Fulfilling a Contract
Amendments to IFRS 3	Reference to the Conceptual Framework
Annual Improvements to IFRSs 2018-2020	Amendments to IFRS 9 – Financial Instruments and Amendments to IFRS 16 – Leases

Other than as noted below, the adoption of the new or amended IFRSs had no material impact on how the results and financial position for the current and prior periods have been prepared and presented. The Group has not early applied any new or amended IFRSs that is not yet effective for the current accounting period.

Amendments to IFRS 16 – COVID-19 Related Rent Concessions beyond 30 June 2021

The amendment exempts lessees from having to consider individual lease contract to determine whether rent concessions occurring as a direct consequence of the COVID-19 pandemic are lease modifications and allows lessees to account for such rent concessions as if they were not lease modifications. It applies to COVID-19-related rent concessions that reduce lease payments due on or before 30 June 2021. The amendment does not affect lessors.

Amendments to HKAS 37 Onerous Contracts – Cost of Fulfilling a Contract

The amendments specify that, when an entity assesses whether a contract is onerous in accordance with HKAS 37 Provisions, Contingent Liabilities and Contingent Assets, the unavoidable costs under the contract should reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. Costs of fulfilling the contract include incremental costs and an allocation of other costs that relate directly to fulfilling contracts (for example, an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

Annual Improvements to HKFRSs 2018-2020

The annual improvements amend a number of standards, including:

- **IFRS 9 Financial Instruments**

The amendment clarifies that for the purpose of assessing whether modification of terms of original financial liability constitutes substantial modification under the “10 per cent” test, a borrower includes only fees paid or received between the borrower and the lender, including fees paid or received by either the borrower or the lender on the other’s behalf.

- **IFRS 16 Leases**

The amendment to Illustrative Example 13 accompanying IFRS 16 removes from the example the illustration of reimbursement relating to leasehold improvements by the lessor in order to remove any potential confusion.

- **IAS 41 Agriculture**

The amendment ensures consistency with the requirements in IFRS 13 Fair Value Measurement by removing the requirement in paragraph 22 of IAS 41 to exclude taxation cash flows when measuring the fair value of a biological asset using a present value technique.

The following new or amended IFRSs, potentially relevant to the Group’s consolidated financial statements, have been issued, but not yet effective and have not been early adopted by the Group. The Group’s current intention is to apply these changes on the date they become effective.

Amendments to IAS 1	Classification of Liabilities as Current or Non-current ¹
IFRS 17	Insurance Contracts ¹
Amendments to IAS 8	Definition of Accounting Estimate ¹
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction ¹
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting policies ¹
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture ²

1 Effective for annual periods beginning on or after 1 January 2023

2 The amendments shall be applied prospectively to the sale or contribution of assets occurring in annual periods beginning on or after a date to be determined.

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

3. Summary of Significant Accounting Policies (Continued)

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 period. In addition, the corresponding amounts for the previous period also reflect the combined results of both entities, even though the transaction did not occur until the current period.

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.

3. Summary of Significant Accounting Policies (Continued)

3.2 Consolidation (Continued)

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.

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 3.7).

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

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

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

3.3 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.

3. Summary of Significant Accounting Policies (Continued)

3.4 Foreign currency translation (Continued)

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/(losses)” and “other operating (expenses)/income”.

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

Group companies

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

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

3.5 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
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 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 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 period 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 period 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Financial assets		
<i>Financial assets at amortised cost</i>		
Notes, trade and other receivables	7,497,356	8,118,975
Restricted cash	170,084	109,685
Time deposits	9,211,880	8,357,613
Cash and cash equivalents	8,211,523	10,305,176
Loans due from the ultimate holding company	20,500,000	20,500,000
Total financial assets	45,590,843	47,391,449
Financial liabilities		
<i>Financial liabilities measured at amortised cost</i>		
Notes, trade and other payables	23,018,273	22,658,233
Loan due to a fellow subsidiary	134,228	63,757
Lease liabilities	148,961	161,730
Total financial liabilities	23,301,462	22,883,720

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. The currency that gives rise to this risk is primarily in USD as at 30 June 2022 and 31 December 2021.

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 2022	USD	Others
	RMB' 000	RMB' 000
Restricted cash, time deposits and cash and cash equivalents	2,829,782	1,749,028
Notes, trade and other receivables	86,438	724,500
Notes, trade and other payables	(285,236)	(1,577,153)
Loan due to a fellow subsidiary	(134,228)	–
Lease liabilities	(741)	(16,604)
Net exposure in RMB	2,496,015	879,771

At 31 December 2021	USD	Others
	RMB' 000	RMB' 000
Restricted cash, time deposits and cash and cash equivalents	2,811,345	2,447,819
Notes, trade and other receivables	32,908	792,587
Notes, trade and other payables	(281,951)	(1,316,352)
Loan due to a fellow subsidiary	(63,757)	–
Lease liabilities	(1,199)	(25,840)
Net exposure in RMB	2,497,346	1,898,214

A 5% strengthening of RMB against the USD as at 30 June 2022 and 31 December 2021 would have changed the equity and net profit by the amounts shown below:

	As at 30 June 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Decrease in equity and net profit		
– USD	(93,601)	(93,650)

A 5% weakening of RMB as at 30 June 2022 and 31 December 2021 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 2022							
Notes, trade and other payables	N/A	23,018,273	–	–	–	23,018,273	23,018,273
Loan due to a fellow subsidiary	2.32%	134,228	–	–	–	134,228	134,228
Lease liabilities	4.75%	72,420	35,908	32,681	22,116	163,125	148,961
Total other liabilities		23,224,921	35,908	32,681	22,116	23,315,626	23,301,462

	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 2021							
Notes, trade and other payables	N/A	22,658,233	–	–	–	22,658,233	22,658,233
Loan due to a fellow subsidiary	2.16%	63,757	–	–	–	63,757	63,757
Lease liabilities	4.76%	78,264	39,404	33,874	28,337	179,879	161,730
Total other liabilities		22,800,254	39,404	33,874	28,337	22,901,869	22,883,720

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, 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Total other liabilities	23,301,462	22,883,720
Less: Restricted cash, time deposits and cash and cash equivalents	(17,593,487)	(18,772,474)
Net debt	5,707,975	4,111,246
Total equity (excluding non-controlling interests)	29,521,670	29,118,084
Total capital	35,229,645	33,229,330
Gearing ratio	16%	12%

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 period 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 the construction services. 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 2022, the contract assets (Note 22(a)) and contract liabilities (Note 22(b)) are RMB12,284,765,000 (31 December 2021: RMB10,273,333,000) and RMB16,440,554,000 (31 December 2021: RMB17,485,967,000) 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 2022, the net carrying amount of property, plant and equipment is RMB4,317,288,000 (31 December 2021: RMB4,398,287,000).

(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 and the current market condition and forward-looking information. As at 30 June 2022, the provision for impairment on trade receivables and contract assets are RMB2,375,654,000 (31 December 2021: RMB2,303,492,000) and RMB520,345,000 (31 December 2021: RMB465,962,000) 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 periods. 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 periods in which such estimates are changed. As at 30 June 2022, deferred tax assets recognised in the consolidated statement of financial position is RMB854,054,000 (31 December 2021: RMB843,162,000).

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 period. 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 2022, the net liabilities of retirement benefit plan obligations (Note 31(b)) is RMB2,080,002,000 (31 December 2021: RMB2,154,036,000).

(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 2022, provision for litigation claims (Note 32) is RMB188,124,000 (31 December 2021: RMB181,292,000).

6. Revenue

The Group's revenue is set out below:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Engineering, consulting and licensing	1,550,634	1,580,515
EPC Contracting	14,785,475	16,252,860
Construction	9,372,567	8,709,469
Equipment manufacturing	249,876	308,548
	25,958,552	26,851,392

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.

7. Segment Information (Continued)

Segment liabilities comprise operating liabilities and borrowings.

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.

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 2022:

The segment results for the six-month ended 30 June 2022 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	1,550,634	14,785,475	9,372,567	249,876	–	–	25,958,552
Inter-segment revenue	39,128	–	3,193,218	147,262	–	(3,379,608)	–
Segment revenue	1,589,762	14,785,475	12,565,785	397,138	–	(3,379,608)	25,958,552
Segment results	81,655	650,769	379,061	5,075	50,957	–	1,167,517
Finance income							483,065
Finance expenses							(35,626)
Share of loss of a joint arrangement	(47)	–	–	–	–	–	(47)
Share of profit of associates	4,917	2,139	–	–	–	–	7,056
Profit before taxation							1,621,965
Income tax expense							(267,317)
Profit for the period							1,354,648
Other segment items							
Depreciation	75,194	88,079	220,846	9,935	–	–	394,054
Amortisation	8,974	10,358	2,365	–	–	–	21,697
Capital expenditures							
– Property, plant and equipment	67,113	4,670	160,203	–	–	–	231,986
– Right-of-use assets	2,648	20,463	12,304	–	–	–	35,415
– Intangible assets	354	7,755	600	–	–	–	8,709
Provision for for ECL on trade and other receivables and contract assets, net	9,971	83,361	24,123	3,426	–	–	120,881

The segment assets and liabilities as at 30 June 2022 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	19,550,602	23,258,221	19,995,779	1,020,067	(22,344,882)	41,479,787
Investment in a joint arrangement	3,876	–	–	–	–	3,876
Investment in associates	132,605	33,372	–	–	–	165,977
Unallocated assets						30,607,309
Total assets						72,256,949
Liabilities						
Segment liabilities	27,519,658	20,248,558	16,791,302	683,337	(22,512,870)	42,729,985
Total liabilities						42,729,985

7. Segment Information (Continued)

(ii) For the six months ended 30 June 2021 and as at 31 December 2021:

The segment results for the six months ended 30 Jun 2021 were 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	1,580,515	16,252,860	8,709,469	308,548	–	–	26,851,392
Inter-segment revenue	33,080	12,638	4,259,656	171,205	–	(4,476,579)	–
Segment revenue	1,613,595	16,265,498	12,969,125	479,753	–	(4,476,579)	26,851,392
Segment results	71,303	623,640	405,689	7,783	52,668	–	1,161,083
Finance income							479,292
Finance expenses							(40,479)
Share of loss of a joint arrangement	(99)	–	–	–	–	–	(99)
Share of profit of associates	9,643	1,769	–	–	–	–	11,412
Profit before taxation							1,611,209
Income tax expense							(263,926)
Profit for the period							1,347,283
Other segment items							
Depreciation	130,135	39,133	142,660	8,096	18,327	–	338,351
Amortisation	21,667	575	1,228	–	7,821	–	31,291
Capital expenditures							
– Property, plant and equipment	82,280	32,999	208,736	–	2,000	–	326,015
– Right-of-use assets	12,460	7,205	15,962	2,335	–	–	37,962
– Intangible assets	–	–	–	–	17,347	–	17,347
Provision for/(reversal of) for ECL on trade and other receivables and contract assets, net	23,017	(71,474)	(24,945)	4,322	3,168	–	(65,912)

The segment assets and liabilities as at 31 December 2021 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	28,441,216	32,302,344	22,727,109	1,097,452	(41,551,062)	43,017,059
Investment in a joint arrangement	3,923	–	–	–	–	3,923
Investment in associates	127,682	31,233	–	–	–	158,915
Unallocated assets						29,737,346
Total assets						72,917,243
Liabilities						
Segment liabilities	30,249,398	28,950,927	19,742,143	758,840	(35,907,401)	43,793,907
Total liabilities						43,793,907

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	
	2022	2021
	RMB' 000	RMB' 000
The PRC	23,781,091	24,749,885
Saudi Arabia	960,986	943,166
Kuwait	261,794	430,252
Other countries	954,681	728,089
	25,958,552	26,851,392

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 2022 and 2021, the details are as follows:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Fellow subsidiary and its subsidiaries		
– Customer group A	12,759,716	12,192,266

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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
The PRC	6,763,711	6,893,411
Other countries	230,510	242,994
	6,994,221	7,136,405

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 2022					
– At a point in time	–	–	–	249,876	249,876
– Over time	1,550,634	14,785,475	9,372,567	–	25,708,676
Total revenue	1,550,634	14,785,475	9,372,567	249,876	25,958,552
For the six months ended 30 June 2021					
– At a point in time	–	–	–	308,548	308,548
– Over time	1,580,515	16,252,860	8,709,469	–	26,542,844
Total revenue	1,580,515	16,252,860	8,709,469	308,548	26,851,392
For the six months ended 30 June 2022					
– Oil refining	386,510	2,621,794	976,899	212	3,985,415
– Petrochemicals	900,908	8,482,426	6,512,381	249,664	16,145,379
– New coal chemicals	52,174	139,024	137,123	–	328,321
– Storage and transportation and others	211,042	3,542,231	1,746,164	–	5,499,437
Total revenue	1,550,634	14,785,475	9,372,567	249,876	25,958,552
For the six months ended 30 June 2021					
– Oil refining	505,472	2,450,101	2,335,578	63,024	5,354,175
– Petrochemicals	735,030	9,705,299	4,365,160	245,481	15,050,970
– New coal chemicals	64,122	302,288	162,293	–	528,703
– Storage and transportation and others	275,891	3,795,172	1,846,438	43	5,917,544
Total revenue	1,580,515	16,252,860	8,709,469	308,548	26,851,392

8. Other Income

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Operating lease rental income on property, plant and equipment	36,608	26,685
Income from write back long outstanding payables	1,616	1,271
Government grants (note)	21,058	13,874
Others	22,141	4,855
	81,423	46,685

Note:

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

9. Other Gains – Net

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Gain on separation and transfer of Water/electricity/gas supply and property management	–	5,949
Gains on disposal of property, plant and equipment	2,443	91
	2,443	6,040

10. Finance Income and Finance Expenses

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Finance income		
Interest income from the ultimate holding company	347,279	356,784
Interest income from the fellow subsidiaries	41,242	28,595
Bank interest income	94,544	93,913
	483,065	479,292
Finance expenses		
Interest expenses on retirement and other supplementary benefit obligation	(30,453)	(34,720)
Finance charges on lease liabilities	(3,703)	(4,252)
Interest expense on loan due to a fellow subsidiary	(1,470)	(1,482)
Other interest expenses	–	(25)
	(35,626)	(40,479)
	447,439	438,813

11. Profit Before Taxation

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

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Staff costs, including directors and supervisors emoluments (Note 15)	2,219,778	2,307,906
Retirement benefit plan contribution (including in the above mentioned staff costs)	419,478	410,412
Cost of goods sold	10,164,634	9,575,992
Subcontracting costs	9,232,409	10,585,974
Depreciation and amortisation		
– Property, plant and equipment	309,228	260,352
– Right of use assets	84,826	77,999
– Intangible assets	21,697	31,291
Operating lease rentals		
Short term leases expenses	161,545	148,132
Provision for/(reversal of) for ECL on trade and other receivables and contract assets, net	120,881	(65,912)
Rental income from property, plant and equipment after relevant expenses	(36,608)	(26,685)
Research and development costs	897,120	892,152
Gains on disposal/write-off of property, plant and equipment	(2,443)	(91)
Exchange (gains)/losses, net	(50,387)	24,665

12. Income Tax Expense

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Current tax		
PRC enterprise income tax	288,693	230,866
Overseas enterprise income tax	1,882	12,269
Over provision for income tax in prior periods	(12,355)	(3,446)
	278,220	239,689
Deferred tax		
Origination and reversal of temporary differences (note 35)	(10,903)	24,237
Income tax expense	267,317	263,926

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the six months ended 30 June 2022 and 2021 is 25%.

According to the normal statutory PRC corporate income tax and relevant rules, for the six months ended 30 June 2022 and 2021, 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	
	2022	2021
	RMB' 000	RMB' 000
Profit before taxation	1,621,965	1,611,209
Taxation calculated at the statutory tax rate	405,491	403,899
Income tax effects of:		
Preferential income tax treatments of certain companies	(216,451)	(161,931)
Difference in overseas profits tax rates	6,761	(5,542)
Non-deductible expenses	67,343	32,849
Income not subject to tax	(4,437)	(3,609)
Unrecognised tax losses	34,057	15,805
Utilisation of previously unrecognised tax losses	(13,092)	(11,841)
Over provision for income tax in prior periods	(12,355)	(3,446)
Others	–	(2,258)
Income tax expense	267,317	263,926
Effective income tax rate	16.5%	16.4%

13. Earnings Per Share

(a) Basic

The basic earnings per share for each of the six months ended 30 June 2022 and 2021 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	
	2022	2021
Profit attributable to equity holders of the Company (RMB' 000)	1,354,606	1,347,127
Weighted average number of ordinary shares in issue	4,428,000,000	4,428,000,000
Basic earnings per share (RMB)	0.31	0.30

(b) Diluted

As the Company had no dilutive shares for the each of the six months ended 30 June 2022 and 2021, dilutive earnings per share for the six months ended 30 June 2022 and 2021 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 2022 and 2021.

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Proposed Interim dividends of RMB0.118 per ordinary share (2021: RMB0.091) ⁽¹⁾	522,504	402,948

⁽¹⁾ Pursuant to a resolution passed at the board of Directors' meeting on 19 August 2022, the Directors authorised to declare the interim dividends for the six months ended 30 June 2022 of RMB0.118 (2021: RMB0.091) per share totalling RMB522,504,000 (2021: RMB402,948,000).

15. Employment Benefits

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Salaries, wages and bonuses	1,225,947	1,279,913
Retirement benefits ⁽¹⁾	390,454	374,897
Early retirement and supplemental pension benefit (Note 31(b))		
– service cost	(1,408)	–
– interest cost	30,453	34,720
– Immediate recognition of actuarial (gains)/losses	(21)	795
Housing fund ⁽²⁾	191,165	187,986
Welfare, medical and other expenses	383,188	429,595
	2,219,778	2,307,906

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% (2021: 14% to 19%) of the specified salaries of the PRC employees for the six months ended 30 June 2022. 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	Machinery, transportation equipment and other equipment	Construction-in-progress	Total
	RMB' 000	RMB' 000	RMB' 000	RMB' 000
At 1 January 2021				
Cost	3,454,045	4,896,970	692,596	9,043,611
Accumulated depreciation and impairment	(1,632,561)	(3,529,584)	–	(5,162,145)
Net book amount	1,821,484	1,367,386	692,596	3,881,466
Six months ended 30 June 2021				
Opening net book amount	1,821,484	1,367,386	692,596	3,881,466
Transfers	19,205	186,773	(205,978)	–
Additions	1,527	444	324,044	326,015
Depreciation	(57,184)	(203,168)	–	(260,352)
Disposals/write-off	(650)	(3,038)	(2,280)	(5,968)
Closing net book amount	1,784,382	1,348,397	808,382	3,941,161
At 30 June 2021				
Cost	3,469,383	5,055,153	808,382	9,332,918
Accumulated depreciation and impairment	(1,685,001)	(3,706,756)	–	(5,391,757)
Net book amount	1,784,382	1,348,397	808,382	3,941,161
At 1 January 2022				
Cost	3,745,323	5,375,963	568,543	9,689,829
Accumulated depreciation and impairment	(1,731,646)	(3,559,896)	–	(5,291,542)
Net book amount	2,013,677	1,816,067	568,543	4,398,287
Six months ended 30 June 2022				
Opening net book amount	2,013,677	1,816,067	568,543	4,398,287
Transfers	9,298	169,039	(178,337)	–
Additions	–	–	231,986	231,986
Depreciation	(62,311)	(246,917)	–	(309,228)
Disposals/write-off	(682)	(3,075)	–	(3,757)
Closing net book amount	1,959,982	1,735,114	622,192	4,317,288
At 30 June 2022				
Cost	3,753,672	5,296,088	622,192	9,671,952
Accumulated depreciation and impairment	(1,793,690)	(3,560,974)	–	(5,354,664)
Net book amount	1,959,982	1,735,114	622,192	4,317,288

Depreciation expense recognised is analysed as follows:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Cost of sales	263,523	222,366
Selling and marketing expenses	141	130
Administrative expenses	16,940	11,591
Research and development costs	28,624	26,265
	309,228	260,352

17. Right-of-Use Assets

The Group leases assets including buildings and other facilities, 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	Machinery, transportation equipment and other equipment	Land use right	Total
	RMB' 000	RMB' 000	RMB' 000	RMB' 000
Balance at 1 January 2021	168,526	46,383	2,233,392	2,448,301
Additions	22,819	15,143	–	37,962
Depreciation	(35,679)	(13,677)	(28,643)	(77,999)
Balance at 30 June 2021	155,666	47,849	2,204,749	2,408,264
Balance at 1 January 2022	148,749	49,637	2,173,815	2,372,201
Additions	34,638	777	–	35,415
Depreciation	(41,245)	(14,970)	(28,611)	(84,826)
Modification	(5,396)	(406)	–	(5,802)
Balance at 30 June 2022	136,746	35,038	2,145,204	2,316,988

Depreciation recognised is analysed as follows:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Cost of sales	60,245	48,085
Administrative expenses	24,581	29,914
	84,826	77,999

18. Intangible Assets

	Patent	Computer software	Total
	RMB' 000	RMB' 000	RMB' 000
At 1 January 2021			
Cost	479,882	552,630	1,032,512
Accumulated amortisation	(455,762)	(357,791)	(813,553)
Net book amount	24,120	194,839	218,959
Six months ended 30 June 2021			
Opening net book amount	24,120	194,839	218,959
Additions	–	17,347	17,347
Amortisation	(12,059)	(19,232)	(31,291)
Closing net book amount	12,061	192,954	205,015
At 30 June 2021			
Cost	479,882	569,977	1,049,859
Accumulated amortisation	(467,821)	(377,023)	(844,844)
Net book amount	12,061	192,954	205,015
At 1 January 2022			
Cost	479,882	600,574	1,080,456
Accumulated amortisation	(479,882)	(397,495)	(877,377)
Net book amount	–	203,079	203,079
Six months ended 30 June 2022			
Opening net book amount	–	203,079	203,079
Additions	–	8,709	8,709
Amortisation	–	(21,697)	(21,697)
Disposal			
– Cost	–	(1,809)	(1,809)
– Accumulated amortisation	–	1,809	1,809
Closing net book amount	–	190,091	190,091
At 30 June 2022			
Cost	479,882	607,474	1,087,356
Accumulated amortisation	(479,882)	(417,383)	(897,265)
Net book amount	–	190,091	190,091

Amortisation recognised is analysed as follows:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Cost of sales	3,065	4,786
Selling and marketing expenses	–	899
Administrative expenses	10,657	9,411
Research and development costs	7,975	16,195
	21,697	31,291

19. Investment in a Joint Arrangement and Associates

(a) Investment in a joint arrangement

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Joint venture		
Beginning of the period	3,923	2,475
Share of total comprehensive expense	(47)	(99)
End of the period	3,876	2,376

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 (2021: 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 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Current assets	8,118	10,238
Non-current assets	1,015	1,087
Total assets	9,133	11,325
Current liabilities	1,381	3,479
Total liabilities	1,381	3,479
Equity	7,752	7,846
Share of equity by the Group (50%) (2021: 50%)	3,876	3,923

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Revenue	-	-
Loss and total comprehensive expense for the period	(94)	(199)
Share of total comprehensive expense (50%) (2021:50%)	(47)	(99)

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) Investments in associates

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Beginning of the period	158,915	149,680
Share of total comprehensive income	7,062	11,412
End of the period	165,977	161,092

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 (2021: 50,000)	35.00% (2021: 35.00%)	Technical development, Technical service/ The PRC
Shanghai KSD Bulk Solids Engineering Co., Ltd. (上海金申德粉體工程有限公司) ⁽²⁾	The PRC	5,500 (2021: 5,500)	36.36% (2021: 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 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Current assets	1,395,276	1,475,754
Non-current assets	58,414	60,292
Total assets	1,453,690	1,536,046
Current liabilities	1,035,732	1,132,155
Non-current liabilities	34	34
Total liabilities	1,035,766	1,132,189
Equity attributable to equity holders	378,872	364,805
Non-controlling interests	39,052	39,052
	417,924	403,857
Share of equity by the Group (35%) (2021: 35%)	132,605	127,682

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Revenue	128,283	308,787
Profit for the period attributable to equity holders	14,050	25,269
Other comprehensive income	17	–
Total comprehensive income for the period attributable to equity holders	14,067	25,269
Share of total comprehensive income (35%) (2021: 35%)	4,924	8,844

For the six months ended 30 June 2022, China Petrochemical Technology Co., Ltd. did not declare any dividends (2021: Nil).

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

(2) 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Current assets	186,508	207,814
Non-current assets	1,450	1,516
Total assets	187,958	209,330
Current liabilities	96,144	123,402
Non-current liabilities	5	5
Total liabilities	96,149	123,407
Equity	91,809	85,923
Share of equity by the Group (36.36%) (2021: 36.36%)	33,372	31,242

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Revenue	74,399	71,650
Profit and total comprehensive income for the period	5,885	7,063
Share of total comprehensive income (36.36%) (2021: 36.36%)	2,138	2,568

For the six months ended 30 June 2022, Shanghai KSD Bulk Solids Engineering Co., Ltd. did not declare dividends (2021: 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Trade receivables		
Fellow subsidiaries	1,676,064	1,810,551
Joint ventures of fellow subsidiaries	658,506	445,412
Associates of fellow subsidiaries	321,576	323,414
Associates	31,151	2,473
Third parties	5,478,040	5,522,787
	8,165,337	8,104,637
Less: ECL allowance for impairment	(2,375,654)	(2,303,492)
Trade receivables – net	5,789,683	5,801,145
Notes receivables	680,193	1,052,371
Notes and trade receivables – net	6,469,876	6,853,516

20. Notes and Trade Receivables (Continued)

The carrying amounts of the Group's notes and trade receivables as at 30 June 2022 and 31 December 2021 approximate their fair values.

All notes receivables of the Group are bank's acceptance bills and commercial's acceptance bills and usually collected within one year from the date of issue.

The Group usually provides 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Within 1 year	5,765,107	6,169,387
Between 1 and 2 years	545,758	457,188
Between 2 and 3 years	83,346	160,573
Between 3 and 4 years	39,270	25,288
Between 4 and 5 years	8,192	9,987
Over 5 years	28,203	31,093
	6,469,876	6,853,516

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

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
At the beginning of the period	2,303,492	1,541,497
ECL allowance	366,214	128,743
Receivables written off as uncollectible	–	(272)
Reversal	(294,052)	(184,095)
At the end of the period	2,375,654	1,485,873

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

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
RMB	5,823,094	6,162,544
USD	71,106	18,253
SAR	301,036	314,181
KWD	241,628	285,725
MYR	10,333	47,955
RUB	22,676	18,038
Others	3	6,820
	6,469,876	6,853,516

21. Prepayments and Other Receivables

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Prepayments		
Prepayments for fellow subsidiaries	1,135,129	1,476,856
Prepayments for joint ventures of fellow subsidiaries	412	385
Prepayments for associates of fellow subsidiaries	2,845	3
Prepayments for construction	1,039,299	1,190,350
Prepayments for materials and equipment	2,838,532	3,566,695
Prepayments for labour costs	54,762	10,315
Prepayments for rent	2,325	12,449
Others	70,542	86,378
	5,143,846	6,343,431
Other receivables		
Amounts due from fellow subsidiaries ⁽¹⁾	24,526	16,891
Amounts due from joint ventures of fellow subsidiaries ⁽¹⁾	215,136	245,495
Amounts due from associates of fellow subsidiaries ⁽¹⁾	192,690	190,787
Dividends receivable	3,000	10,000
Interests receivable	131,199	402,177
Petty cash funds	8,765	5,321
Other guarantee deposits and deposits	116,327	121,458
Payment in advance	283,495	237,969
Maintenance funds	64,513	64,393
Value-added tax credit	446,282	249,100
Prepaid value-added tax	163,086	105,075
Prepaid income tax	76,329	85,786
Value-added tax to be certified	9,287	9,571
Land disposal	–	827
Others	94,029	78,234
	1,828,664	1,823,084
Less: ECL allowance for impairment	(106,200)	(108,093)
Prepayments and other receivables – net	6,866,310	8,058,422

(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 2022 and 31 December 2021 approximate their fair values.

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

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
At the beginning of the period	108,093	132,725
ECL allowance	27,470	13,803
Write-off of irrecoverable receivable	(2)	(1,958)
Reversal	(29,361)	(41,838)
At the end of the period	106,200	102,732

22. Contract Assets and Contract Liabilities

(a) Contract assets

	As at 30 June 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Contract assets arising from construction contracts	12,284,765	10,273,333

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 movements of ECL allowance on contract assets are as follows:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
At the beginning of the period	465,962	214,459
ECL allowance	79,661	31,100
Reversal	(25,278)	(13,625)
At the end of the period	520,345	231,934

(b) Contract liabilities

	As at 30 June 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Contract liabilities arising from construction contracts	16,440,554	17,485,967

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 2022 is RMB17,485,967,000 (2021: RMB15,511,149,000), in which RMB10,415,180,000 (2021: RMB11,272,744,000) was recognised as revenue during the period.

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 2022, 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 RMB120,915,979,000 (2021: RMB111,045,177,000), which is expected to be completed in the 60 months (2021: 60 months). 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Raw materials	445,168	259,480
Turnover materials	232,856	215,393
Goods in transit	16,213	5,058
	694,237	479,931

As at 30 June 2022 and 31 December 2021, no provision for impairment on inventories of the Group has been made.

For the six months ended 30 June 2022 and 2021, the cost of inventories recognised as expense and included in cost of sales amounted to RMB10,164,634,000 and RMB9,575,992,000 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	As at
	30 June 2022	31 December 2021
Loans due from the ultimate holding company	3.60%	3.60%

25. Restricted Cash

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Restricted cash		
– RMB	170,084	109,685

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

As at 30 June 2022 and 31 December 2021, 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Time deposits with initial term over three months:		
Time deposits in banks	6,937,531	6,701,030
Time deposits in fellow subsidiaries	2,274,349	1,656,583
	9,211,880	8,357,613

26. Time Deposits (Continued)

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Denominated in:		
– RMB	6,713,954	6,239,654
– USD	2,019,460	1,694,342
– MYR	281,065	276,323
– KWD	197,401	147,294
	9,211,880	8,357,613

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 three years (2021: three months to three years), are approximately 0.16% to 3.3% as at 30 June 2022 (2021: 0.16% to 4.13%).

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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Cash at bank and in hand		
– less than three months time deposits	307,930	1,220,933
– cash deposits	2,548,682	3,171,962
	2,856,612	4,392,895
Deposits in fellow subsidiaries		
– less than three months time deposits	49,865	324,264
– cash deposits	5,305,046	5,588,017
	5,354,911	5,912,281
	8,211,523	10,305,176

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Denominated in:		
– RMB	6,130,639	7,163,971
– USD	810,322	1,117,003
– KWD	248,613	330,093
– RUB	113,516	561,753
– SAR	310,690	219,777
– EUR	515,886	677,638
– THB	10,337	23,640
– MYR	60,088	58,837
– Others	11,432	152,464
	8,211,523	10,305,176

27. Cash and Cash Equivalents (Continued)

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

As at 30 June 2022 and 31 December 2021, 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 (2021: seven days to three months), are approximately 0% to 6.00% as at 30 June 2022 (2021: 0% to 6.9%).

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 2022		As at 31 December 2021	
	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 Sinopec Assets Management Co., Ltd (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 periods' 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 periods' 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.

(ii) Capital reserve

Capital reserve arising from event-driven revaluation represented reserve recognised due to the revaluation arising from the Reorganisation, being the excess of fair value over carrying value net of the deferred tax liabilities. Apart from the above mentioned event-driven revaluation, capital reserve included transactions with holding company such as assets transferred from/to Sinopec Group and also the share premium account and 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	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Total minimum lease payments:		
Due within one year	72,420	78,264
Due in the first to fifth years	68,589	73,278
Due after the fifth year	22,116	28,337
	163,125	179,879
Future finance charges on leases liabilities	(14,164)	(18,149)
Present value of leases liabilities	148,961	161,730
Present value of minimum lease payments:		
Due within one year	69,401	73,489
Due in the first to fifth years	60,787	65,334
Due after the fifth year	18,773	22,907
	148,961	161,730
Less:		
Portion due within one year included under current liabilities	(69,401)	(73,489)
Portion due after one year included under non-current liabilities	79,560	88,241

During the six months ended 30 June 2022, the Group entered into a number of lease agreements for usage of residential properties, office and equipment for 1 to 20 years (2021: 1 to 20 years). The Group makes fixed payments and additional variable payments depends on the usage of the buildings, plant and machinery, transportation equipment and other equipment during the contract period. On lease commencement, the Group recognised right-of-use assets included in property, plant equipment and lease liabilities amounting to RMB35,415,000 (2021: RMB37,962,000).

During the six months ended 30 June 2022, the total cash outflows for the leases are RMB170,949,000 (2021: RMB191,902,000).

Details of the lease activities

As at 30 June 2022, the Group has entered into leases for office and staff quarter.

Types of right-of-use assets	Financial statements items of right-of-use assets included in	Number of leases	Range of remaining lease term
Office and staff quarter	Building and other facilities carried at cost in "property, plant and equipment"	67 (2021:89)	1 to 10 years (1 to 10 years)
Land use rights in PRC	Prepaid land use rights payments	133 (2021: 133)	21 to 60 years (2021: 22 to 61 years)

The Group considered that no extension option or termination option would be exercised at the lease commencement date.

31. Retirement and Other Supplemental Benefit Obligations

(a) State-managed retirement plan

For the six months ended 30 June 2022, 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%, (2021: 14% to 19%) 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 2022 and 2021 are as follows:

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
Contributions to state-managed retirement plan	390,454	374,897

(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 2022 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 2022	As at 31 December 2021
Retirement with honors benefit plan	2.50%	2.50%
Retirement benefit plan	3.00%	3.00%
Early retirement benefit plan	2.50%	2.50%

(ii) Benefit growth rates (per annum):

	As at 30 June 2022	As at 31 December 2021
Retirement with honors benefit plan	1.70%	1.70%
Retirement benefit plan	2.60%	2.60%
Early retirement benefit plan	1.70%	1.70%

31. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

(iii) Duration:

	As at 30 June 2022	As at 31 December 2021
Retirement with honors benefit plan	5.0 years	5.0 years
Retirement benefit plan	14.0 years	14.0 years
Early retirement benefit plan	3.0 years	3.0 years

The below sensitivity analysis details how the Group's retirement benefit plan obligation as at the reporting date would have increased/(decreased) as a result of 0.25% reasonably possible increase or decrease assessed by management in each of the significant actuarial assumptions:

	As at 30 June 2022 Increase/(decrease) in retirement benefit plan obligation		As at 31 December 2021 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	(45,264)	47,125	(46,544)	48,454
Benefit growth rates	45,139	(43,572)	46,397	(44,790)

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 2021				
Net interest expenses	616	32,048	2,056	34,720
Immediate recognition of actuarial losses	–	–	795	795
Benefit cost recognised in profit or loss	616	32,048	2,851	35,515
Revaluation of net benefit obligation liabilities				
Actuarial revaluation of other assumptions change	(38)	(84)	–	(122)
Benefit cost recognised in other comprehensive income	(38)	(84)	–	(122)
Total benefit cost recognised consolidated statement of comprehensive income	578	31,964	2,851	35,393
For the six months ended 30 June 2022				
Service cost:				
Past service cost	(1,408)	–	–	(1,408)
Net interest expenses	359	28,551	1,543	30,453
Immediate recognition of actuarial losses	–	–	(21)	(21)
Benefit cost recognised in profit or loss	(1,049)	28,551	1,522	29,024
Revaluation of net benefit obligation liabilities				
Actuarial revaluation of other assumptions change	(27)	(30)	–	(57)
Benefit cost recognised in other comprehensive income	(27)	(30)	–	(57)
Total benefit cost recognised in the consolidated statement of comprehensive income	(1,076)	28,521	1,522	28,967

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 period.

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 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Net liabilities of retirement benefit plan obligation	2,080,002	2,154,036

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 2021	45,366	2,049,536	157,887	2,252,789
Net interest expenses	616	32,048	2,056	34,720
Immediate recognition of actuarial losses	–	–	795	795
Revaluation gains/(losses):				
Actuarial revaluation of other assumptions change	(38)	(84)	–	(122)
Direct benefit paid by the Group	(6,845)	(82,473)	(25,667)	(114,985)
At 30 June 2021	39,099	1,999,027	135,071	2,173,197
At 1 January 2022	31,832	1,978,116	144,088	2,154,036
Service cost	(1,408)	–	–	(1,408)
Net interest expenses	359	28,551	1,543	30,453
Immediate recognition of actuarial losses	–	–	(21)	(21)
Revaluation gains/(losses):				
Actuarial revaluation of other assumptions change	(27)	(30)	–	(57)
Direct benefit paid by the Group	(3,887)	(76,737)	(22,377)	(103,001)
At 30 June 2022	26,869	1,929,900	123,233	2,080,002

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 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Beginning of the period	181,292	186,593
Exchange difference	7,274	(4,014)
Payment	(442)	(1,287)
End of the period	188,124	181,292

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 2022 and 31 December 2021, no additional provision for litigation claims is provided.

33. Notes and Trade Payables

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Trade payables		
– Fellow subsidiaries	1,172,267	1,064,598
– Associates of fellow subsidiaries	1,252	240
– Joint ventures of fellow subsidiaries	1,686	1,769
– Associates	761	1,477
– Third parties	17,428,743	17,298,198
	18,604,709	18,366,282
Notes payables	1,853,882	2,023,775
Notes and trade payables	20,458,591	20,390,057

The carrying amounts of the Group's notes and trade payables as at 30 June 2022 and 31 December 2021 approximate their fair values.

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

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Within 1 year	16,820,071	16,232,436
Between 1 and 2 years	1,904,556	2,100,996
Between 2 and 3 years	927,999	1,116,808
Over 3 years	805,965	939,817
	20,458,591	20,390,057

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

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
RMB	19,295,242	19,530,933
USD	49,972	55,447
EUR	1,211	1,251
KZT	4,061	4,221
SAR	570,464	392,183
RUB	103,385	206,706
KWD	367,725	63,654
MYR	43,168	94,149
OTHER	22,421	30,195
THB	942	11,318
	20,458,591	20,390,057

34. Other Payables

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Salaries payables	104,967	422,844
Other taxation payables	218,721	612,686
Output value-added tax to be recognised	5,516	5,964
Payable of separation and transfer of "Water/electricity/gas supply and property management"	18,602	21,834
Deposits and guarantee deposits payables	83,931	71,677
Advanced payables	956,979	968,843
Rent, property management and maintenance payables	95,705	93,507
Contracts payables	206,078	351,170
Amounts due to ultimate holding company ⁽¹⁾	–	192
Amounts due to fellow subsidiaries ⁽¹⁾	69,363	264,958
Amounts due to a joint venture ⁽¹⁾	71	71
Amounts due to joint ventures of fellow subsidiaries ⁽¹⁾	242	–
Amounts due to associates of fellow subsidiaries ⁽¹⁾	888	888
Interest payables	953	214
Dividend payables	950,358	–
Others	71,545	71,978
Total other payables	2,783,919	2,886,826

Note:

(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 2022 and 31 December 2021 approximate their fair values.

35. Deferred Income Tax Assets

Deferred income tax assets recognised:

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Deferred income tax assets	854,054	843,162

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

	Six months ended 30 June	
	2022	2021
	RMB' 000	RMB' 000
At the beginning of the period	843,162	709,030
Credited to equity for defined benefit obligations revaluation of actuarial loss	(11)	(21)
Tax credited/(charged) to profit for the period (Note 12)	10,903	(24,237)
At the end of the period	854,054	684,772

35. Deferred Income Tax Assets (Continued)

The movement in deferred income tax assets during the periods ended 30 June 2022 and 2021, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred income tax assets

	Provision for retirement and other supplemental benefit obligation	Provision for impairment on assets	Others	Total
	RMB' 000	RMB' 000	RMB' 000	RMB' 000
At 1 January 2021	368,211	311,825	28,994	709,030
Credited/(charged) to:				
Profit for the period	(13,225)	(11,265)	253	(24,237)
Equity	(21)	–	–	(21)
At 30 June 2021	354,965	300,560	29,247	684,772
At 1 January 2022	355,903	459,331	27,928	843,162
Credited/(charged) to:				
Profit for the period	(12,113)	21,541	1,475	10,903
Equity	(11)	–	–	(11)
At 30 June 2022	343,779	480,872	29,403	854,054

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 follows:

	As at 30 June 2022	As at 31 December 2021
	RMB' 000	RMB' 000
Tax losses for which no deferred income tax asset was recognised	928,036	959,394

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. Loan Due to a Fellow Subsidiary

Loan due to a fellow subsidiary is unsecured, repayable within one year and interest bearing at 2.16% to 2.48% (31 December 2021: 1% to 2.16%) per annum. The fellow subsidiary is Sinopec Century Bright Capital Investment Limited.

37. Commitments

(a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding as at 31 June 2022 and 31 December 2021 not provided for in the consolidated financial statements are as follows:

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Contracted but not provided for		
– Property, plant and equipment	37,111	6,922

(b) Operating leasing commitments

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

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Less than 1 year	61,051	58,100

As at 30 June 2022 and 31 December 2021, 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	
	2022	2021
	RMB' 000	RMB' 000
Profit before taxation	1,621,965	1,611,209
Adjustments for:		
Provision for/(reversal of) for ECL on trade and other receivables and contract assets, net	120,881	(65,912)
Depreciation of property, plant and equipment	309,228	260,352
Depreciation of right-of-use assets	84,826	77,999
Amortisation of intangible assets	21,697	31,291
Net gains on disposal of property, plant and equipment	(2,443)	(91)
Gain on separation and transfer of Water/electricity/gas supply and property management"	–	(5,949)
Interest income	(483,065)	(479,292)
Interest expense	35,626	40,479
Net foreign exchange (gains)/losses	(50,387)	24,665
Share of loss of a joint arrangement	47	99
Share of profit of associates	(7,056)	(11,412)
Cash flows from operating activities before changes in working capital	1,651,319	1,483,438
Changes in working capital:		
– Inventories	(214,306)	(305,732)
– Contract assets	(2,065,815)	(2,017,869)
– Contract liabilities	(1,045,413)	1,137,473
– Notes, trade and other receivables	1,391,653	(370,535)
– Notes, trade and other payables	(1,198,904)	(1,775,097)
– Restricted cash	(60,399)	(6,743)
Cash used in operations	(1,541,865)	(1,855,065)

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

Parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control or jointly control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are subject to control or common control. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or other entities and include entities which are under the significant influence of related parties of the Group where those parties are individuals, and post-employment benefit plans which are for the benefit of employees of the Group or of any entity that is a related party of the Group.

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 during the six months ended 30 June 2022 and 2021 and balances as at 30 June 2022 and 31 December 2021 respectively.

40. Significant Related Party Transactions and Balances (Continued)

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

(a) Significant related party transactions and period 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	
	2022	2021
	RMB' 000	RMB' 000
Construction and services provided to		
– Joint ventures of fellow subsidiaries	661,987	3,287,712
– Associates of fellow subsidiaries	1,369,139	248,119
– Fellow subsidiaries	13,787,533	14,585,143
– Associates	2,351	74,310
	15,821,010	18,195,284
Construction and services received from		
– Ultimate holding company	3,685	4,144
– Joint ventures of fellow subsidiaries	968	1,647
– Associates of fellow subsidiaries	534	775
– Fellow subsidiaries	3,215,118	2,483,233
– Associates	1,483	12,672
	3,221,788	2,502,471
Technology research and development services provided to		
– Ultimate holding company	1,887	5,377
– Fellow subsidiaries	72,617	57,960
	74,504	63,337
General services provided to		
– Joint ventures of fellow subsidiaries	196	419
– Fellow subsidiaries	4,324	1,849
	4,520	2,268
General services received from		
– Fellow subsidiaries	39,060	30,140
Interest income on loans		
– Ultimate holding company	347,279	356,784
Interest expense on borrowings		
– Fellow subsidiaries	1,470	1,482
Expenses in relation to settlement and other financial services		
– Fellow subsidiaries	1,855	924
Deposit interest income from fellow subsidiaries	41,242	28,595

40. Significant Related Party Transactions and Balances (Continued)

(a) Significant related party transactions and period end balances arising with the Sinopec Group, fellow subsidiaries, associates, joint ventures of fellow subsidiaries and associates of fellow subsidiaries: (Continued)

	As at	As at
	30 June 2022	31 December 2021
	RMB' 000	RMB' 000
Deposits and time deposits placed in fellow subsidiaries	7,629,260	7,568,864

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	
	2022	2021
	RMB' 000	RMB' 000
Fee	300	300
Basic salaries, other allowances and benefits-in-kind	2,134	1,373
Discretionary bonus ⁽ⁱ⁾	11,062	5,521
Contributions to pension plans	685	762
	14,181	7,956

(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 2021	163,123	163,943
<i>Cash-flow:</i>		
- Drawdown	110,084	-
- Capital element of lease rentals paid	-	(39,518)
- Interest element of lease rentals paid	-	(4,252)
- Repayment	(97,064)	-
<i>Non-cash:</i>		
- Entered into new lease	-	47,455
- Interest expenses	-	4,252
- Modification	-	(86)
- Exchange difference	(1,574)	(60)
At 30 June 2021	174,569	171,734
At 1 January 2022	63,757	161,730
<i>Cash-flow:</i>		
- Drawdown	63,757	-
- Capital element of lease rentals paid	-	(59,806)
- Interest element of lease rentals paid	-	(3,703)
<i>Non-cash:</i>		
- Entered into new lease	-	53,139
- Interest expenses	-	3,703
- Modification	-	(6,873)
- Exchange difference	6,714	771
At 30 June 2022	134,228	148,961

42. Particulars of Principal Subsidiaries

As at 30 June 2022, 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	500,000	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	500,000	100%	–	Engineering contracting, engineering and consulting/The PRC
SNEI (中石化南京工程有限公司)	The PRC/Limited liability company	556,005	100%	–	Engineering contracting, engineering and consulting/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	300,000	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	33,558 (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 Russia LLC (中石化煉化工程集團俄羅斯子公司)	Russia/Limited liability company	9,804 (USD1,500,000)	100%	–	Engineering contracting and consulting/Russia
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	5,158 (MYR3,607,000)	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	8,000	–	100%	Medicine, pesticide, chemical research/ The PRC

42. Particulars of Principal Subsidiaries (Continued)

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	
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	356 (THB2,000,000)	–	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.

43. Comparative Figures

Certain comparative figures have been reclassified to conform the current period's presentation of the consolidated financial statements.

By Order of the Board

SUN Lili

Chairwoman of the Board

Beijing, the PRC

21 August 2022

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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