BUILDING
A WORLD-LEADING
TECHNOLOGY-DRIVEN
ENGINEERING COMPANY

2023 INTERIM REPORT

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

Stock Code: 2386

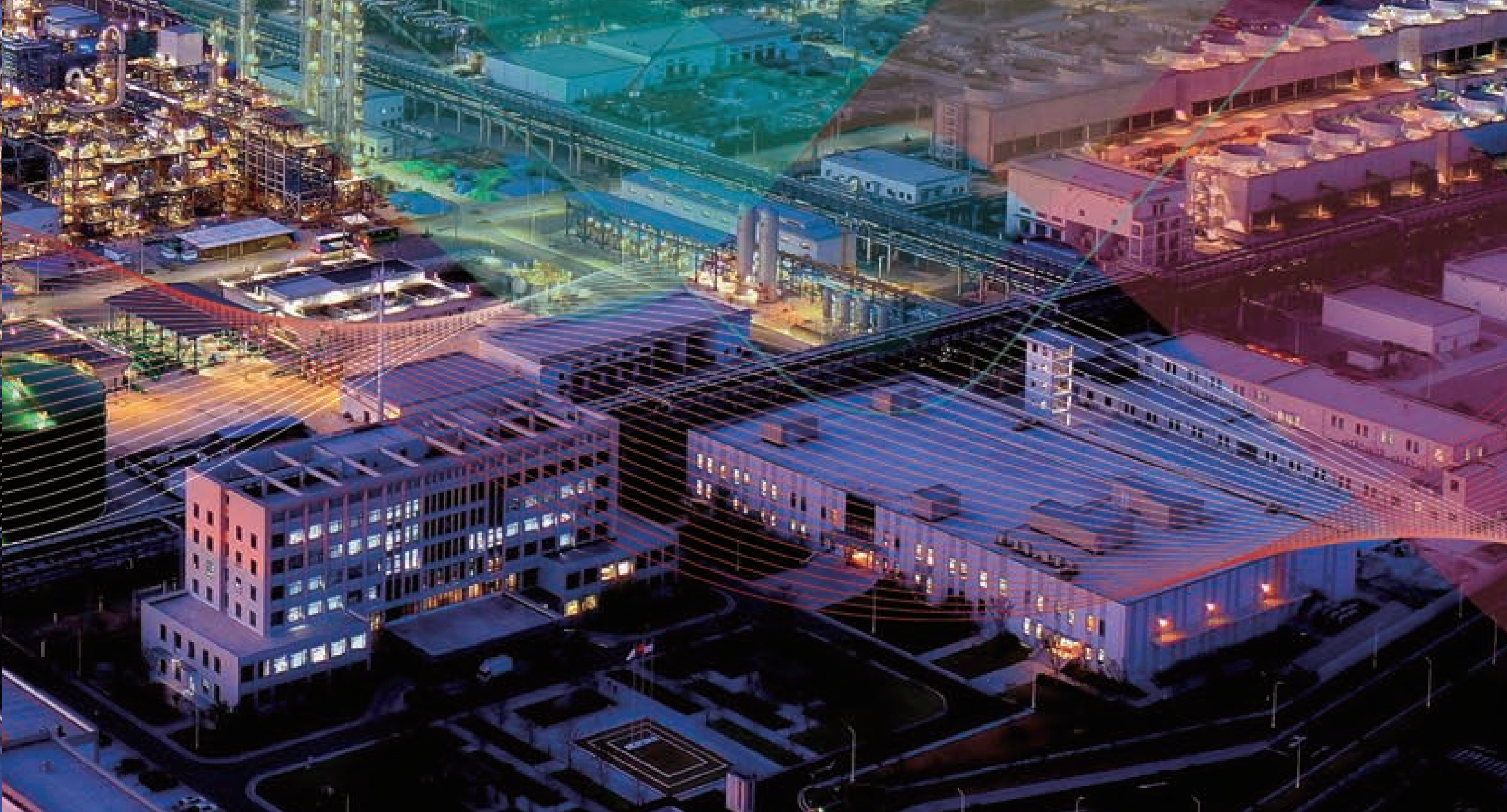
中国石化
SINOPEC

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. LI Chengfeng, Mr. WU Wenxin and Mr. DUAN Xue of SINOPEC SEG could not attend the Thirteenth Meeting of the Fourth Session of the Board (the "**Meeting**") due to official duties. The Directors, Mr. LI Chengfeng and Mr. WU Wenxin authorised Mr. JIANG Dejun, the Director, Mr. DUAN Xue authorised Mr. HUI Chiu Chung, Stephen to attend the Meeting, and to vote on their behalves. Mr. JIANG Dejun (Chairman of the Board), Mr. ZHANG Xinming (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 2023 (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 20 August 2023 and, unless otherwise required by the relevant regulatory authorities, the Company undertakes no obligation or responsibility to update these statements.



CONTENTS

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 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, broaden its business scope and extend its value chain, 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
中石化煉化工程(集團)股份有限公司

CHINESE ABBREVIATION
中石化煉化工程

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

ENGLISH ABBREVIATION
SINOPEC SEG

LEGAL REPRESENTATIVE
Mr. JIANG Dejun

AUTHORISED REPRESENTATIVES
Mr. ZHANG Xinming

Mr. JIA Yiqun

COMPANY SECRETARY
Mr. JIA Yiqun

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

OFFICE AND CORRESPONDENCE ADDRESS
A67, Ande Road, Xicheng District, Beijing, the PRC

Postcode: 100120

Tel: +8610-5673-0525

Website: www.segroup.cn

E-mail: seg.ir@sinopec.com

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.hkexnews.hk

The Company's website:

http://www.segroup.cn

PLACE WHERE THIS INTERIM REPORT IS AVAILABLE FOR INSPECTION
Office of the Board

SINOPEC ENGINEERING (GROUP) CO., LTD.

A67, Ande Road, Xicheng District, Beijing, the PRC

PLACE OF LISTING OF SHARES, STOCK NAME AND STOCK CODE

H Shares: Hong Kong Stock Exchange

Stock name: SINOPEC SEG

Stock code: 2386

UNIFORM SOCIAL CREDIT CODE

911100007109349087

NAMES AND ADDRESSES OF AUDITORS

PRC:

BDO China Shu Lun Pan Certified Public Accountants LLP

Room 1410, 14th Floor, Fanli Mansion,
No. 22 Chaoyangmenwai Street,
Chaoyang District Beijing, the PRC

Overseas:

BDO Limited

25th Floor, Wing On Centre,
111 Connaught Road Central,
Hong Kong, the PRC

NAME AND ADDRESS OF LEGAL ADVISORS

PRC:

King & Wood Mallesons

17th-18th Floor, East Tower,
World Financial Center,
1 Dongsanhuan Zhonglu,
Chaoyang District,
Beijing, the PRC

Hong Kong:

Zhong Lun Law Firm

4/F, Jardine House,
1 Connaught Place, Central,
Hong Kong, the PRC

PRINCIPAL FINANCIAL DATA AND INDICATORS

Principal Financial Data and Indicators

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

Unit: RMB'000

Items	As at 30 June 2023	As at 31 December 2022*	Changes from the end of 2022 (%)
Current assets	69,011,034	70,369,169	(1.9)
Non-current assets	8,086,978	8,313,294	(2.7)
Current liabilities	44,544,197	46,475,288	(4.2)
Non-current liabilities	2,137,631	2,170,383	(1.5)
Consolidated equity attributable to equity holders of the Company	30,410,594	30,031,512	1.3
Net assets per share of equity holders of the Company (RMB)	6.87	6.78	1.3

Unit: RMB'000

Items	Six-month periods ended 30 June		Changes over the same period of 2022 (%)
	2023	2022*	
Revenue	24,829,660	25,958,552	(4.3)
Gross profit	2,240,224	2,664,294	(15.9)
Operating profit	992,967	1,167,517	(15.0)
Profit before taxation	1,499,126	1,621,965	(7.6)
Profit attributable to equity holders of the Company	1,317,070	1,356,259	(2.9)
Basic earnings per share (RMB)	0.30	0.31	(2.9)
Net cash flow used in operating activities	(1,038,507)	(1,378,489)	(24.7)
Net cash flow used in operating activities per share (RMB)	(0.23)	(0.31)	(24.7)

* Starting from 1 January 2023 the Group adopted the IAS 12 (amendment), the adjustments recognized for principal financial data arising from the adoption of the amendments for the year/period ended 31 December 2022 and 30 June 2022.

Items	Six-month periods ended 30 June	
	2023	2022
Gross profit margin (%)	**9.0**	10.3
Net profit margin (%)	**5.3**	5.2
Return on assets[1] (%)	**1.7**	1.9
Return on equity[2] (%)	**4.3**	4.6
Return on invested capital[3] (%)	**4.4**	4.7

Items	As at 30 June 2023	As at 31 December 2022
Asset-liability ratio[4] (%)	**60.5**	61.8

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

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

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

(4) Asset-liability ratio= $\dfrac{\text{Total liabilities at the end of the year}}{\text{Total assets at the end of the year}}$

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 2022		Increase/Decrease of this change (+, -)			As at 30 June 2023	
	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 915 shareholders of the Company. As at 20 August 2023, 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	-694,000	–	1,452,535,280	32.80	99.43
ZHANG SAIYU	0	–	2,900,000	0.07	0.20
HUI MO CHEE	0	–	870,000	0.01	0.06
PANG MING FAI	+650,000	–	650,000	0.01	0.04
HUI SIU SHUN WAN	0	–	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
WONG SIU JUNK	0	–	200,000	0.00	0.01
CHAN LAI KUEN SELINA	0	–	195,500	0.00	0.01
WONG CHUI CHUNG	0	–	195,500	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 connected relationship 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 (%) (5)	Percentage in the total share capital of the Company (%) (6)
China Petrochemical Corporation(1)	Domestic Share	Beneficial owner/Interests of controlled corporation	2,967,200,000(L)	100.00(L)	67.01(L)
FMR LLC(2)	H Share	Interests of controlled corporation	131,591,411 (L)	9.01 (L)	2.97 (L)
Pandanus Associates Inc.(3)	H Share	Interests of controlled corporation	88,066,353 (L)	6.03 (L)	1.99 (L)
Pandanus Partners L.P.(3)	H Share	Interests of controlled corporation	88,066,353 (L)	6.03 (L)	1.99 (L)
FIL Limited(3)	H Share	Interests of controlled corporation	88,066,353 (L)	6.03 (L)	1.99 (L)
Brown Brothers Harriman & Co.(4)	H Share	Agent	86,476,732 (L)	5.92 (L)	1.95 (L)
			86,476,732 (P)	5.92 (P)	1.95 (P)

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, 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. Pursuant to 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 18 April 2023 and filed by FMR LLC with the Hong Kong Stock Exchange.

(3) The information is based on the Corporate Substantial Shareholders Notices dated 22 August 2022 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 38.71% interest in FIL Limited.

(4) The information is based on the Corporate Substantial Shareholders Notice dated 16 May 2023 and filed by Brown Brothers Harriman & Co. with the Hong Kong Stock Exchange.

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

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

BUSINESS REVIEW AND PROSPECTS

1 Business Review

In recent years, the world economic cycle pattern and industrial division system were deeply adjusted, the global energy map was changed profoundly, industrial restructuring evolution was accelerated, and unstable and uncertain factors increased significantly. In the first half of 2023, the external environment is complex and severe; the operation of the domestic economy is facing new difficulties and challenges, mainly due to insufficient demand. Facing challenges, the Group unswervingly promoted high-quality development and went all out to expand the market and stabilized operations. During the Reporting Period, the Group recognized the total revenue of RMB24.830 billion, a decrease of 4.3% compared with the same period last year (hereinafter referred to as "**year-on-year**"), and the net profit of RMB1.317 billion, with a year-on-year decrease of 2.9%.

During the Reporting Period, the Group actively deployed new industrialization. Give full play to the synergistic advantages of "large corps" and the integration of the whole industrial chain, guide the project execution mode to develop to a new industrialization characterized by "standardization, factorization, modularization and intelligence", and continuously improve the level of intrinsic safety. Strengthen the overall planning and optimization of large-scale projects, do a good job in the basic work of refined project management, promote "standardized design, factory prefabrication, modular construction, standardized building site, information management and digital delivery", coordinate and promote engineering digital twin and intelligent manufacturing, and comprehensively improve the service guarantee capacity of engineering construction.

During the Reporting Period, the Group efficiently promoted the internationalization of its operations. Further expand and improve the layout of overseas markets, relying on the five regional market development centers in the Middle East, Central Asia, Southeast Asia, Africa and the Americas, taking root in the local area and deeply cultivating the local area; continuously deepen strategic cooperation with key overseas customers and international engineering companies, and promote the development of overseas markets with higher quality with "high-level promotion + deep support"; strive to lead the engineering contracting business to high-end and front-end breakthroughs through technology and front-end engineering capacity building, and move towards the goal of technology, standards and engineering services as a whole; promote the overall advantages of the industry chain, the project life cycle engineering service capabilities and the construction model with Chinese characteristics to be more fully integrated into overseas business, and continue to enhance the comprehensive competitiveness of overseas business; actively grasp the opportunities of the new energy industry, accelerate the construction of green and low-carbon energy technology and engineering service system, build comprehensive competitiveness with technology as the core, and strive to form strong technical capabilities and commercial competitiveness in the field of new energy; strengthen the intensity and depth of assistance in financing, explore the integrated mode of investment, construction and operation, and at the same time extend investment and financing to technology research and development, technical cooperation and other fields, explore business diversification and drive value creation.

During the Reporting Period, the Group continued to increase its market development efforts, and the value of new contracts entered into was RMB37.731 billion. Domestically, The Group signed a batch of contracts for front-end project consultation and design, including Luoyang Ethylene, Maoming Ethylene and CNOOC Shell Phase III, and EPC contracting and construction contracts for several large-scale park projects such as PetroChina Jihua Transformation and Upgrading, SINOPEC Zhenhai Refining and Chemical High-end Synthetic New Materials, CNOOC Daxie Petrochemical Upgrading, Reconstruction and Expansion, and BASF Integration. In overseas market, the Group signed US$1.112 billion in new contracts, representing a significant increase of 107.1% on a year-on-year basis, maintaining a strong momentum of overseas market development. Among them, the newly signed EPC contract for the Saudi AMIRAL project amounted to US$727 million is another milestone in the Group's international operation history. In addition, the Group has successfully won the bid for the EPC contract of another large-scale project in the Middle East, with contract value expected to reach US$1.3 billion, the contract value has not been counted into the Group's new contract value and backlog yet. Such project is undergoing final contracting and financing negotiations. Overseas "technology +" high-end engineering services achieved good results, and the Group successfully signed front-end service contracts.

During the Reporting Period, the Group continuously improved its production and operation capabilities. The Group has executed 1,242 projects in China and foreign countries, with over 80,000 working headcounts per day, and all projects under implementation domestically and overseas were under control in terms of progress, expenditure, safety, quality and environmental protection. Domestically, the Group fully leverages the advantages of group organization construction, projects such as Hainan Refining and Chemical Integration, SINOPEC Anqing Refining Structural Adjustment, Kuqa Green Hydrogen have been completed and put into operation, projects such as Tianjin Nangang Ethylene, the ExxonMobil Huizhou Ethylene, PetroChina Jihua Transformation and Upgrading, Yulong Refining and Chemical Integration, Shandong LNG, Tianjin LNG have been efficiently promoted, providing important support for the high-quality development and transformation and upgrading of the industry. Among them, the world's first 3 million t/a RTC (Residuum to Chemicals) industrial demonstration plant was successfully put into operation in SINOPEC Anqing, realizing the leapfrog progress of China's catalytic cracking technology, and is the successful practice of China's first traditional refinery to chemical transformation, providing strong technical support for the transformation and upgrading of refining and chemical enterprises; the successful commissioning of the world's largest green hydrogen project, Kuqa Green Hydrogen Project, marks the first time that China has achieved the whole industrial chain of 10,000-ton-level green hydrogen and integrated refinery projects, is of great significance to the rapid development of the green hydrogen industry; The ExxonMobil Huizhou ethylene project has progressed efficiently and was granted a "President's SSH&E Award" from the owner. In overseas market, the Group's overseas project execution has fully resumed normal, the Saudi Arabia project Cluster and ExxonMobil Singapore CRISP integration project have been fully promoted, and the overseas business maintained continuous, stable and healthy operation.

(1) Operating Environment

Looking back at the first half of 2023, the world economic recovery continued to come under pressure, crude oil prices fluctuated downward, and consumption in the chemical market was sluggish, which brought great challenges to the development of the industry and the Company's operation. At the same time, in the face of the complex situation, the Chinese government has better coordinated the overall situation at home and abroad, better coordinated development and security, sustained recovery of the national economy, overall recovery, solid progress in high-quality development, and accumulation of industrial upgrading, laying a good foundation for achieving the annual economic and social development goals, which has also brought new opportunities for the Company's development.

From the point of view of industrial development, domestically, the energy supply capacity and quality continue to improve, the pace of high-quality development of the petrochemical industry is accelerating, and the construction of a modern industrial system is accelerating. With the completion and operation of a large number of refining and chemical integration bases, the refining capacity has shown an intensive, high-end and efficient development mode and the "Oil to Chemical" business has become more profit-oriented. The construction of advantageous production capacity of large-scale ethylene and aromatics has been promoted with high quality, a large number of new chemical material projects have been started, and the continuous optimization and upgrading of the industry has brought stronger development momentum. Green development has become a new economic growth point, the green and low-carbon engineering market is booming, new energy fields such as solar and wind energy are blooming, and the integrated development of wind, solar, electricity and hydrogen with traditional energy has brought more opportunities. Overseas, global refining and chemical production capacity has shifted eastward, major oil-producing countries in the Gulf region of the Middle East have launched investment in petrochemical projects over 100 billion US dollars, and large-scale oil and gas production increase and oil refining and chemical project continue to accelerate. In Southeast Asia, oil refining deep processing and petrochemical production capacity aimed at improving the industrial chain are continuing to be put into operation, and natural gas and LNG-related investment is showing an active trend; natural gas processing and natural gas chemical industries in Central Asia are booming, and the market prospects are good. Africa's local petrochemical industry chain is in the initial stage of development, the refining capacity construction of major oil and gas resource countries in North Africa and West Africa has great potential, and the attention to the natural gas and LNG fields in East Africa is constantly increasing.

(2) Operation Overview

During the Reporting Period, the Group's total revenue was RMB24.830 billion, with a year-on-year decrease of 4.3%; profits attributable to equity holders of the Company was RMB1.317 billion, with a year-on-year decrease of 2.9%.

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				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB'000)	(%)	(RMB'000)	(%)	(%)
Engineering, consulting and licensing	1,743,688	6.3	1,589,762	5.4	9.7
EPC Contracting	14,148,270	51.4	14,785,475	50.4	(4.3)
Construction	11,284,663	41.0	12,565,785	42.8	(10.2)
Equipment manufacturing	364,585	1.3	397,138	1.4	(8.2)
Subtotal	27,541,206	100.0	29,338,160	100.0	(6.1)
Total (after inter-segment elimination)(1)	24,829,660	N/A	25,958,552	N/A	(4.3)

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 construction and equipment manufacturing segments.

During the Reporting Period, the Group's revenue from engineering, consulting and licensing was RMB1.744 billion, representing a year-on-year increase of 9.7% due to the growth of design business volume; affected by the construction project cycle, the revenue of the EPC Contracting segment and construction segment was RMB14.148 billion and RMB11.285 billion, respectively, showing a year-on-year decrease of 4.3% and 10.2%, respectively; affected by the manufacturing cycle, the revenue of equipment manufacturing was RMB365 million, showing a year-on-year decrease of 8.2%.

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

	For the six months ended 30 June				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB'000)	(%)	(RMB'000)	(%)	(%)
Oil refining	**2,362,010**	**9.5**	3,985,415	15.4	(40.7)
Petrochemicals	**17,103,759**	**68.9**	16,145,379	62.2	5.9
New coal chemicals	**220,424**	**0.9**	328,321	1.3	(32.9)
Storage, transportation and others	**5,143,467**	**20.7**	5,499,437	21.1	(6.5)
Subtotal	**24,829,660**	**100.0**	25,958,552	100.0	(4.3)

The Group's revenue mainly comes from providing services to customers in oil refining, petrochemicals, new coal chemicals, storage and transportation and other industries. During the Reporting Period, the Group's revenue from the petrochemical industry amounted to RMB17.104 billion, representing an increase of 5.9% on a year-on-year basis, mainly due to the contribution from petrochemical projects such as the ExxonMobil Huizhou ethylene project and Tianjin Nangang ethylene project; revenue from the oil refining industry amounted to RMB2.362 billion, representing a decrease of 40.7% on a year-on-year basis, mainly due to the slowdown in revenue recognition due to the completion of projects such as Hainan Refining and Chemical Integration and the pre-construction of new projects such as SINOPE Zhenhai Refining and High-end Synthetic New Materials; revenue from the new coal chemical industry was RMB220 million, representing a decrease of 32.9% on a year-on-year basis, mainly due to the decrease in investment in new coal chemical projects; revenue from storage, transportation and others amounted to RMB5.143 billion, representing a decrease of 6.5% on a year-on-year basis, mainly due to the completion of storage and transportation projects such as Wenzhou LNG 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:

	For the six months ended 30 June				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB'000)	(%)	(RMB'000)	(%)	(%)
PRC	**22,737,072**	**91.6**	23,781,091	91.6	(4.4)
Overseas	**2,092,588**	**8.4**	2,177,461	8.4	(3.9)
Subtotal	**24,829,660**	**100.0**	25,958,552	100.0	(4.3)

During the Reporting Period, the Group's revenue generated in the PRC was RMB22.737 billion, representing a decrease of 4.4% on a year-on-year basis, mainly due to the completion of large-scale projects such as Hainan Refining and Chemical Integration, and the early stage of construction of projects such as the ExxonMobil Huizhou ethylene and SINOPE Zhenhai Refining and High-end Synthetic New Materials; the Group's revenue from overseas was RMB2.093 million, representing a decrease of 3.9% on a year-on-year basis, mainly due to the fact that overseas projects such as CRISP in Singapore and AMIRAL in Saudi Arabia were in the early stage of construction.

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

	For the six months ended 30 June 2023	For the six months ended 30 June 2022	Change
	(RMB'000)	(RMB'000)	(%)
New contract	37,731,457	44,150,180	(14.5)

	As at 30 June 2023	As at 31 December 2022	Change
	(RMB'000)	(RMB'000)	(%)
Backlog	125,132,950	112,231,153	11.5

During the Reporting Period, the value of new contracts amounted to RMB37.731 billion, representing a decrease of 14.5% on a year-on-year basis. As at the end of the Reporting Period, the backlog of the Group amounted to RMB125.133 billion, representing an increase of 11.5% as compared to that as at 31 December 2022.

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

	For the six months ended 30 June 2023	For the six months ended 30 June 2022	Change
	(RMB'000)	(RMB'000)	(%)
Capital expenditure	220,236	276,110	(20.2)

During the Reporting Period, the Group's capital expenditure was approximately RMB220 million, representing a decrease of 20.2% on a year-on-year basis, mainly due to the decrease in investment in energy performance contracting and temporary facilities construction of engineering projects compared with the same period of the previous year. As at the end of the Reporting Period, the Group's capital expenditure was mainly used for energy performance contracting, 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

Smooth and orderly implementation of projects

Tianjin Nangang Ethylene Project (EPC): please refer to the announcement published on 19 April 2022 and 2022 Annual Report published on 19 March 2023 published by the Company for further details. As at the end of the Reporting Period, the project was in the peak stage of construction, and the overall progress was over 80%.

Baling Caprolactam Project (EPC): please refer to the announcement published on 12 October 2021 published by the Company for further details. As at the end of the Reporting Period, the project was in the final stage of construction, and the overall progress was over 90%.

SINOPE Zhenhai Refining and High-end Synthetic New Materials Project (EPC): please refer to the announcement published on 14 April 2023, 24 February 2023, 14 October 2022 and 2022 Annual Report published on 19 March 2023 published by the Company for further details. As at the end of the Reporting Period, the project was in the construction stage, and the overall progress was over 40%.

The ExxonMobil Huizhou ethylene project (BEPC): please refer to the announcement published on 12 April 2021 by the Company for further details. As at the end of the Reporting Period, the project has progressed steadily and smoothly and was granted a President's SSH&E Award from the owner.

PetroChina Jihua Transformation and Upgrading Project (EPC): please refer to the announcement published on 14 April 2023 and 2022 Annual Report published on 19 March 2023 published by the Company for further details. As at the end of the Reporting Period, the project was in the early stage of site construction, and the overall progress was over 10%.

Longkou LNG Project (EPC): please refer to the announcement published on 24 February 2022 published by the Company for further details. As at the end of the Reporting Period, the project was in the peak stage of construction, and the overall progress was over 60%.

Tianjin LNG Project (Phase II) (EPC): please refer to the 2020 Annual Report published on 21 March 2021 published by the Company for further details. As at the end of the Reporting Period, the project was in the final stage of construction, and the overall progress was over 90%.

Shandong LNG Project (Phase III) (EPC): please refer to the 2021 Annual Report published on 20 March 2022 and announcement published on 19 April 2022 published by the Company for further details. As at the end of the Reporting Period, the project was in the final stage of construction, and the overall progress was over 90%.

Wenzhou LNG Project (EPC): please refer to the announcement published on 16 April 2021 published by the Company for further details. As at the end of the Reporting Period, the project has been delivered.

Xinjiang Kuqa Green Hydrogen Demonstration Project (EPC): this project is the world's largest green hydrogen project, please refer to the 2021 Annual Report published on 20 March 2022 published by the Company for further details. As at the end of the Reporting Period, the project has been delivered and hydrogen was successfully produced, achieving full procedure integration.

Saudi Aramco crude oil transportation pump station upgrade and renovation project (EPC): please refer to the announcement published on 16 April 2020 published by the Company for further details. As at the end of the Reporting Period, the project was in the peak stage of construction, and the overall progress was over 60%.

ExxonMobil Singapore CRISP integration project (C): As at the end of the Reporting Period, the project was in the early stage of construction, and the overall progress was over 10%.

Yueyang Ethylene, Zhenhai Ethylene and CNOOC Shell Huizhou (Phase III) Ethylene projects were in the basic design stage at the end of the Reporting Period; Luoyang Ethylene, Maoming Ethylene, Huajin Fine Chemicals and Raw Material Engineering were in the overall design stage at the end of the Reporting Period.

Note: "EPC" refers to engineering, procurement and construction contracting, "BEPC" refers to basic design+EPC and "C" refers to construction contracting.

Strive to forge ahead and expand the market

During the Reporting Period, the value of new contracts signed by the Group was RMB37.731 billion.

During the Reporting Period, the Group signed approximately RMB29.949 billion in new contracts in China, maintaining its overall competitiveness in the domestic market. The Group signed a batch of contracts for front-end project consultation and design, including Luoyang Ethylene, Maoming Ethylene and CNOOC Shell Phase III, and EPC contracting and construction contracts for several large-scale park projects. Representative new contracts include the EPC contracts of multiple units for SINOPE Zhenhai Refining and High-end Synthetic New Materials Project with a total contract value of approximately RMB3.288 billion; the EPC contracting of ethylene plant of PetroChina Jihua Transformation and Upgrading Project with a total contract value of approximately RMB3.173 billion; and the EPC Contracting and construction contracts of BASF integration project with a contract value of approximately RMB1.755 billion; the EPC Contracting of SINOPE Qingdao Liquefied Gas Safety Improvement Project with a total contract value of approximately RMB1.353 billion; the EPC Contracting of polypropylene of CNOOC Daxie Petrochemical Upgrading, Renovation and Expansion Project with a contract value of approximately RMB1.673 billion; the EPC Contracting of SINOPE Changling 1 million t/a continuous catalytic reforming combined plant with a contract value of approximately RMB873 million.

During the Reporting Period, the Group's new contracts signed overseas amounted to approximately US$1.112 billion, representing a significant year-on-year increase of 107.1%, maintaining a strong market development momentum. Representative new contracts include EPC Contracting for the tank farms and the integration of SATORP refinery (the "Saudi AMIRAL Project") with a contract value of approximately US$727 million, and the overseas "technology+" high-end engineering services have achieved good results and successfully signed a number of front-end service contracts.

During the Reporting Period, the Group signed 73 new contracts in the new fields such as new energy and new materials, with a total new contract value of approximately RMB2.021 billion, and the expansion of emerging business continued to accelerate.

Vigorously promote scientific and technological breakthroughs

During the Reporting Period, the Group has made prominent achievements in research and development of science and technology. The Group signed 230 new technology development contracts and 36 new licensing and service contracts, the total amount of technology development and licensing contracts reached RMB494 million.

During the Reporting Period, the Group filed 405 new patent applications, among which, 292 were invention patents, accounting for 72.1%; 271 newly licensed patents, 147 of which were invention patents, accounting for 54.2%, patent quality has been continuously optimized.

During the Reporting Period, the Group received a total of 36 science and technology progress awards in scientific and technical innovation and engineering construction fields at the provincial and above level. Among these awards, we won first prizes in 5 topics including "the development and industrial application of PAO production technology", "the creation and industrial application of high-yield olefin catalytic cracking technology" and "the China Refining Technology (Fourth Edition)"; 4 second prizes and 2 third prizes of Sinopec Science and Technology Progress Award; 1 national patent silver award for "A Ethylene Cracking Furnace With Multi-Pass "; 2 National Excellent Design Awards; 19 provincial and ministerial level excellent design awards.

The Group's engineering technology innovation closely focuses on the Company's strategy and market demand, and key scientific research projects have been steadily advanced, and new progress has been made in key core technology research. During the Reporting Period, the Group carried out special work on oil refining and chemical industry chain and technology chain combing, providing forward-looking guidance for the next step of technology upgrading and development. At the same time, the Group will study and judge the situation in a timely manner according to the requirements of industry development, carry out the work of "extend the chain", "complete the chain" and "intensify the chain", and do a good job in technology development and market development.

During the Reporting Period, the Group focused on the transformation of traditional technologies and the goal of "Carbon Peaking and Carbon Neutrality", and achieved major breakthroughs in engineering transformation. The world's first set of 3 million t/a RTC (Residuum to Chemicals) industrial demonstration unit was successfully put into operation, realizing a leapfrog progress of catalytic cracking technology in China, and providing strong technical support for the transformation and upgrading of refinery enterprises from traditional fuel refineries to chemical refineries. It will also lay a solid foundation for the Group to expand market development and contract engineering projects in this field.

During the Reporting Period, China's first 10,000-ton-level green hydrogen demonstration project, Xinjiang Kuqa photovoltaic green hydrogen demonstration project, was successfully put into operation, the project has a hydrogen production scale of 20,000 t/a, and green hydrogen is supplied to SINOPE Tahe nearby, which can reduce carbon dioxide emissions by 485,000 tons per year. This project marks the first time in China to realize the whole industrial chain of 10,000-ton-level green hydrogen and integrated refinery projects, and is of great significance to the rapid development of green hydrogen industry. As at the end of the Reporting Period, another 30,000-ton wind, solar, electricity and green hydrogen project undertaken by the Group, Ordos Green Hydrogen Project has entered the project implementation stage.

During the Reporting Period, the pilot plant for direct olefin production from syngas by the Group was successfully operated in SINOPE Yangtze, and the indicators of one-way conversion rate and olefin selectivity of the reaction reached advanced levels, laying a solid foundation for the industrial application of this technology. This technology has the advantages of simplified process flow and low equipment investment, consolidating the Group's advantages in the field of coal chemicals, and also laying the foundation for the Group's subsequent contract of related technology and engineering business.

During the Reporting Period, the Group's 150,000-t/a CHPPO unit was successfully put into operation in Tianjin Sinopec, which further enriched the Group's epoxy technology; the first domestic micro-interface enhanced diesel hydrogenation technology was successfully put into operation in Jinling Sinopec, achieving significant energy savings and carbon reductions. We completed the development of the process package of the kiloton-level liquid polyolefin technology industrialization test device, and promoted the development of polyolefin synthesis technology towards high performance and multi-function; developed cold energy power generation, thermal seawater desalination, electrolytic seawater hydrogen production and other application scenarios, reserve LNG cold energy utilization technology and improved the efficiency of LNG cold energy utilization; we actively extended the green hydrogen industry chain, reserved green synthetic ammonia and green methanol technology, and prepared for enriching energy and chemical supply under the global carbon reduction policy.

Continuous enhancement of project execution capability

During the Reporting Period, the Group continued to strengthen lean management, strengthen the overall planning of project resources, and make every effort to ensure the smooth operation of projects; with efficiency and progress as the core, implemented the “triple early warning” of schedule deviation, revenue deviation and budget deviation, and timely carried out corrective management; strengthened standardization and integration by optimizing the design workflow and professional division of labor interface; improved design and construction efficiency through standardized design and modular construction; improved subcontracting management, strengthened the cultivation of strategic subcontractors, and effectively improved the execution capacity of subcontracting resources and project quality; organized management benchmarking, and optimized purchase program, so that purchase price negotiation and project supply assurance capability have been continuously enhanced.

During the Reporting Period, the Group increased the application of advanced equipment and technology, promoted the industrial application of automatic welding and welding robots, explored and promoted the implementation of standardization, automation, digitalization and modular construction in engineering construction, focused on improving ergonomics and quality, and actively led the innovation of engineering models. For the first time, the breakthrough of tank vertical seam automatic welding technology was realized, and it was popularized and applied in the tank construction of Tianjin LNG project, continued to promote the improvement of intrinsic safety, work efficiency and quality; the 9-axis all position intelligent welding robot has been developed, which successfully realized the automatic intelligent 360-degree all-position one-time welding of pipelines, and the welding process was digitalized, and the quality control was visualized.

Maintenance of excellent state of safety, quality and environmental protection

During the Reporting Period, the Group took “strengthening process control” as the main line, and promoted the system in depth, strengthened the ability of all employees, grasped the implementation of the whole process, and built barriers in an all-round way, and resolved major risks and improved internal and sensory quality through comprehensive management and special actions. Strive to promote the deep integration of QHSE management system with production and operation and “three basics” work, do a good job in intrinsic safety construction and scientific and technological support, continue to promote green enterprise actions, and help the high-quality development of refining and chemical projects.

During the Reporting Period, the Group continued to promote green enterprise actions, and built a fully enclosed anti-corrosion plant in Zhenhai and other projects to solve the problem of unorganized VOCs emissions from the prefabrication plant of the project; the optimized design and construction of the Tianjin Nangang ethylene project significantly reduced solid waste emissions, set up a green construction site benchmark; successfully planted more than 15,000 trees in the yellow sand surrounding the camp of the Saudi Executive Center, and built an oasis, which could play the role of sewage utilization, emission reduction and carbon reduction, and sand fixation and soil protection.

During the Reporting Period, no quality, safety or environmental accidents occurred. As of the end of this report period, the Company’s cumulative safety man-hours were 128 million, an increase of 7.9% over the same period last year, and the Company’s safety, high-quality and clean production situation was stable and controlled. During the Reporting Period, the Group’s Huizhou ethylene project was granted the President’s SSH&E Award by the Owner.

Further promote the application of digitalization

During the Reporting Period, the Group coordinated the promotion of the construction of the refining and chemical engineering business domain. In the operation management subdomain, promote standardized data governance of business processes, integrate the application architecture requirements of business domains into the Company's management and control system, and further strengthen the "three middle platforms" functions of business, technology and data. In the subdomain of business operations, promote the digital transformation of enterprises, unify the planning of the whole business chain structure such as R&D, design, procurement, manufacturing, construction and delivery, focus on 10 key application fields, and further strengthen the sharing of "data + platform + application" achievements. In terms of deepening applications, we will continuously improve the integrated application of the operation management platform of the refining and chemical engineering business domain and the digital twin of the intelligent factory. During the Reporting Period, the Group's design simulation industrial software adaptation verification has passed the national acceptance.

The construction of talent team

During the Reporting Period, the Group continued to promote the development strategy of "building a strong enterprise by relying on talents" and strengthen the construction of talent team. Implemented the second phase of the "Plan for raising of seedling" to build a platform for young talents to practice and exercise; carried out PMP project management training for all employees of the headquarters to systematically improve the professional management ability of the personnel of the headquarters; carried out an inventory of the international talents to further evaluate the international talent structure and talent capabilities, and consolidate the human foundation for better building an international team; further improved the expert database to better optimize the allocation of resources, and provide professional knowledge and technical support for policy formulation and innovative development. In overseas, we gradually improved the international talent training and introduction mechanism and took a pilot for the international professional manager system in the operation of overseas institutions.

Create an outstanding image in terms of ESG

During the Reporting Period, the Group has been actively explore the potential of integrating ESG experience across the globe and the practice in the PRC, and has continued to develop and improve its ESG working system, strength basic management and enhance its disclosure efforts, so as to develop the Group into a leading enterprise in terms of ESG performance. Firstly, the Group have developed the key performance indicators system that covers key ESG performance indicators such as greenhouse gas emission, resources consumption, pollutant emission, occupational health and safety, integrity and anti-corruption, which had been incorporated in the appraisal system for key management and members, driving the Company towards the annual goals of ESG. Secondly, the Group have established a sound system for disclosure relating to ESG matters, and have included a "performance report" in the ESG Report 2022 as a new section. By doing so, the Group have made responses on a case-by-case basis to the matters relating to the 48 indicators in respect of disclosure in 12 areas. The Group were awarded Grade AA in Wind ESG rating and "the best ESG performance in energy industry in Hong Kong equity market". Thirdly, the Group have basically established the ESG indicator statistic system. The Group has established a reporting and connecting system that covers all subsidiaries and key project sites. This ensure the quality of disclosure of matters relating to ESG reporting, and the Group has initiated the independent assurance relating to ESG reporting. The Group has been striving to continuously enhance its ESG governance, The following steps will be refining the targets of ESG management at the level of Board, in order to continuously enhance its quantitative statistics system and the quality of its ESG data disclosure.

2 Business Prospects

Facing the future, the growth momentum of the world economy remains to be restored, and more inclusive and balanced development opportunities are needed. As an important engine of economic development, the construction of the energy and chemical industry on a global scale is still flourishing and ascending. At the same time, climate change has become an imminent challenge facing the world. The realistic pressure of abnormal climate requires us to work harder, create more paths for sustainable development, and accelerate the implementation of a series of technology reserves of the Group in the fields of carbon reduction and green environmental protection. Facing this important opportunity, the Group will strengthen overall coordination and planning, enhance strategic guidance, and move forward steadfastly along the road of product excellence, brand excellence, innovation leadership and modern governance to achieve world-class level.

The Group will continue to strengthen strategic coordination. The Company will adhere to the functional positioning of "strategic decision making center, resource allocation center, risk control center and service support center", and guide the differentiated development of "one enterprise, one policy" of each Group member in the fields of new business and international operation. The Company will fully unleash the development vitality of each Group member as the main body of production and operation, and have a more balanced layout in the product chain and service chain, and continuously improve the integration and synergy ability, so as to make every effort to build the world's leading technology-oriented engineering company.

The Group will continue to promote technological innovation. On the one hand, the Group will pay attention to the key core technologies and focuses on shifting from producing refined oil products to chemicals and specialty products, new chemical materials, clean coal utilization, energy saving and environmental protection and CCUS to continue to carry out technological research, accelerates technological integration innovation and engineering conversion; accelerates the integrated research and development layout of the whole industrial chain in the construction of hydrogen energy production, storage, transportation and terminal utilization, which forms technical characteristics and continuously injects green development momentum into the high-quality development, and further promotes the integrated development of new energy and petrochemical industries. On the other hand, the Group will pay more attention to technological progress in the field of engineering construction and increases the research and development and promotion of soil treatment, intelligent demolition and safety technology; intensifies the application of advanced equipment and technology, and continuously promotes the development and industrial application of advanced tooling represented by automatic welding and welding robots to improve intrinsic safety and production efficiency.

The Group will actively lead the new industrialization in the engineering industry. The Group will continue to strengthen the integration and coordination of the entire industry chain, and coordinate the promotion of standardized design, factory prefabrication, modular construction, standardized construction site, information management and digital delivery. Systematically integrates design, procurement and construction to create a new operation process, promote the close integration of 3D files and in-depth prefabrication, and promote layered operation on the construction site. Increase the proportion of advanced tooling applications, strive to realize the transformation of engineering construction from on-site installation to factory manufacturing + on-site assembly, continuously improve the intrinsic safety and intrinsic quality, continue to improve the on-site operating environment, and realize the green and low-carbon leadership in engineering construction.

The Group will actively promote the internationalization of our corporate operations. In the next step, the Group will accelerate the development of an international business ecosystem featuring overseas cooperation with domestic partners, strong alliances with international engineering companies, and deepening front-end services and long-term cooperation with strategic customers. The Group will continue to increase the allocation of resources in overseas market development and endeavored to enhance the comprehensive competitiveness of international operations. The Group will give full play to the efficiency advantages of China construction, and make consistent progress towards the high-end of the value chain with a focus on the front end of the industrial chain. The Group will lay more emphasis on the internationalization of resource allocation by continuously promoting the construction of overseas low-cost centers and localized operation capabilities and improving the mechanism for training and introducing international talents.

The Group will strive to achieve diversified value creation. The Group will continue to explore the diversification of its main business and business model, gradually realize a diversified operation, and transform itself from an engineering contractor and equipment manufacturer towards an investment and financing + engineering service provider. The Group will actively make attempts to undertake overseas engineering projects in the mode of "investment-construction-operation", while extending investment and financing to the fields of new technology research and development and new technology cooperation to enhance the competitiveness and value creation through investment. The Group will cultivate and develop professional, highly-sophisticated, specialized and advanced "little giants" in the fields of new energy, new technology, new equipment and energy conservation and environmental protection, and acquire equities, expand business areas and extend value chain through various capital operations.

China's economy has great development resilience and potential, the long-term good fundamentals have not changed, after the smooth turn of epidemic prevention and control, economic recovery will be a wave of development and tortuous progress. In the second half of 2023, the external environment faced by the Group is still complex, the Group will adhere to bottom-line thinking and extreme thinking, while preventing various risks, strive to promote the stable consolidation of annual business performance, and go all out to complete the annual goals with high quality.

In terms of the scientific and technical innovation, the Group will strengthen and optimize technologies in traditional advantages fields, and speed up integration, innovation and engineering transformation of new energy and new material technology at the same time, and continuously enhance independent innovation capability through continuous optimization of innovation system and mechanism. The Group will transform the constraints of the "Carbon Peaking and Carbon Neutrality" target into new opportunities for the Company's development, and systematically carry out research from the links of carbon reduction at source, carbon reduction in process, carbon capture at the end and carbon resource utilization; carry out research of coupled application of nuclear power and oil refining and chemical industry, and put forth efforts on development of core technical competitive power. In the field of hydrogen energy, the Group will make full use of the leading advantages accumulated by Kuqa green hydrogen projects, actively promote a number of major hydrogen energy projects such as Ordos and Ulanqab, accelerate the construction of integrated R&D layout of hydrogen energy production, storage, transportation and terminal utilization, promote the demonstration of hydrogen energy projects in the whole industry. In the field of new chemical materials, the Group will focus on tackling technical problems of key materials, rely on the current projects under implementation such as polyolefin elastomers, special rubber, degradable materials, strengthen the research and construction of supporting platforms such as polymerization and devolatilization technology of high-viscosity and ultra-high-viscosity systems, and provide support and guarantee for accelerating the development of the Company's new chemical material technology, expanding business fields and enhancing competitive advantages. In the field of engineering construction, the Group will actively promote the development and industrial application of advanced tooling represented by automatic welding and welding robots, increases the research and development and promotion of soil treatment, intelligent demolition and safety technology，so as to prepare for leading the new industrialization of the engineering industry. The Group will continue to promote the reform of the scientific research system and mechanism, and improve the "selecting the best candidates via open competition mechanism" for major technological research projects of the Company，stimulate innovation vitality, and improve the efficiency of scientific and technical innovation; do a good job in overall coordination, actively make good use of relevant innovation resources, form an "innovation consortium", continue to increase scientific and technical innovation, promote the development of new technologies and the implementation of R&D results through multiple channels, and realize the integration and benefit of all links of "production, teaching, research and using".

In terms of the market development, domestically, the Group will actively participate in the construction of national large-scale energy and chemical projects, ensure the construction of the national modern industrial system with a more complete and higher level of industrial chain construction capabilities, and provide the best engineering solutions for the high-quality development of the industry, striving to take the leading role in park projects of Luoyang, Maoming and Huajin.. The Group will follow the general trend of industry development, take the initiative in green and low-carbon development and reform, comprehensively do a good job in market research and layout under the "Carbon Peaking and Carbon Neutrality" target, and actively expand the market in new fields such as new energy, new materials, new processes, new technologies and new equipment. The Group will adhere to customer-centric, take the initiative to provide integrated solutions, and create higher value for customers with the advantages of the whole industry chain service to achieve a win-win situation.

Overseas, the Group will formulate and dynamically adjust the development strategy according to the global energy and chemical industry chain and market development trend, further improve and optimize the layout of overseas markets, anchor the key national markets of the "The Belt and Road" and continue to cultivate, promote grouping, integration and industrial chain advantages to give full play, strengthen overseas market development in an all-round way and enhance comprehensive competitiveness, and continue to consolidate and deepen all-round, multi-level and multi-field cooperation with key overseas customers and international engineering companies, and provide preliminary services for projects such as Saudi Western Park, Sri Lanka oil refining and Kazakhstan ethane cracking. At the same time, the Group will continue to strengthen its capabilities of high-tech content and low-cost execution, actively explore overseas front-end high-end business, continuously innovate business models, and strengthen investment and financing to lead the project contracting business to go global. The Group will continue to consolidate the large-scale sustainable development trend of overseas traditional advantageous markets, actively grasp the current regional hot energy and chemical market and new energy industry opportunities, concentrate advantageous resources and capabilities to continuously forge ahead, and continuously bring the high-quality development of international business to a new level.

In terms of the project execution, the Group will take project cost as cardinal line, and focus on full process cost-benefit management and control of projects; continue to optimize project management mode, give full play to the advantages of the Large Corps, strengthen close cooperation between all procedures of design, purchase and construction, and enhance efficiency and quality; propel standardization construction of organization structure of projects, clarify standard for construction of organization structure of projects of the Company, and enhance project implementation capability; bring the leading role of design into play, continue to propel the optimal design and standardized design of the device, enhance the design quality and work efficiency, continue to carry out enhancement of purchase management by benchmarking advanced standard, propel strategic purchase, centralized procurement, platform procurement, and continuously enhance the ability of purchase and supply assurance; strengthen subcontracting management, ensure to give priority to use of high-quality resources, and continuously enhance the ability to guarantee construction resources; increase the application of advanced equipment and technology, promote the industrial application of automatic welding and welding robots, explore and promote the implementation of automation, digitalization and modular construction in engineering construction, improve production efficiency and efficiency, and reduce safety risks. In overseas projects, the Group will strengthen contract performance and strictly control risks. We will continuously strengthen the capacity building of high-tech content and low-cost execution, encourage localized employment, integrate into the community, take root in local areas and fulfill social responsibilities. The Group will summarize experience of Chinese standards, Chinese technology and Chinese equipment for exploration, and "organize a group to go overseas" with domestic partners.

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.


AI

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:

	For the six months ended 30 June				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB'000)	(%)	(RMB'000)	(%)	(%)
Revenue	24,829,660	100.0	25,958,552	100.0	(4.3)
Cost of sales	(22,589,436)	(91.0)	(23,294,258)	(89.7)	(3.0)
Gross profit	2,240,224	9.0	2,664,294	10.3	(15.9)
Other income – net	180,694	0.7	81,423	0.3	121.9
Selling and marketing expenses	(57,137)	(0.2)	(52,099)	(0.2)	9.7
Administrative expenses	(516,030)	(2.1)	(498,144)	(1.9)	3.6
Research and development costs	(793,527)	(3.2)	(897,120)	(3.5)	(11.5)
Other operating (expenses)	(100,536)	(0.4)	(133,280)	(0.5)	(24.6)
Other gains – net	39,279	0.2	2,443	0.0	1507.8
Operating profit	992,967	4.0	1,167,517	4.5	(15.0)
Finance income	529,287	2.1	483,065	1.9	9.6
Finance expenses	(31,978)	(0.1)	(35,626)	(0.1)	(10.2)
Finance income – net	497,309	2.0	447,439	1.7	11.1
Share of losses of joint arrangements	(46)	(0.0)	(47)	(0.0)	(2.1)
Share of profit of associates	8,896	0.0	7,056	0.0	26.1
Profit before taxation	1,499,126	6.0	1,621,965	6.2	(7.6)
Income tax expense	(181,775)	(0.7)	(265,662)	(1.0)	(31.6)
Profit for the period	1,317,351	5.3	1,356,303	5.2	(2.9)
Gains/(losses) on revaluation of retirement benefit plans obligations, net of income tax effect	(32,689)	(0.1)	47	0.0	NA
Share of other comprehensive income of associates	–	–	6	0.0	(100.0)
Exchange differences arising on translation of foreign operations	24,581	0.1	31,943	0.1	(23.0)
Total comprehensive income for the period	1,309,243	5.3	1,388,299	5.3	(5.7)

(1) Revenue

During the Reporting Period, the Group's total revenue decreased by 4.3% from RMB25.959 billion for the six months ended 30 June 2022 to RMB24.830 billion for the six months ended 30 June 2023, which was mainly subject to the impact of the construction project cycle.

(2) Cost of sales

The cost of sales of the Group decreased by 3.0% from RMB23.294 billion for the six months ended 30 June 2022 to RMB22.589 billion for the six months ended 30 June 2023, mainly due to the decrease in procurement, subcontracting and other costs with the decrease in revenue.

(3) Gross profit

The gross profit of the Group decreased by 15.9% from RMB2.664 billion for the six months ended 30 June 2022 to RMB2.240 billion for the six months ended 30 June 2023, the gross profit margin decreased from 10.3% for the same period last year to 9.0%, mainly due to the impact of the project implementation cycle and the decline in profit returns of new projects, but still in a reasonable range.

(4) Other income – net

Other income of the Group increased by 121.9% from RMB81 million for the six months ended 30 June 2022 to RMB181 million for the six months ended 30 June 2023, mainly due to the year-on-year increase in exchange gain.

(5) Selling and marketing expenses

The selling and marketing expenses of the Group increased by 9.7% from RMB52 million for the six months ended 30 June 2022 to RMB57 million for the six months ended 30 June 2023, mainly due to the increase in market development expenses such as travel.

(6) Administrative expenses

The administrative expenses of the Group increased by 3.6% from RMB498 million for the six months ended 30 June 2022 to RMB516 million for the six months ended 30 June 2023, mainly due to the year-on-year increase in project guarantee fees.

(7) Research and development costs

The research and development costs of the Group decreased by 11.5% from RMB897 million for the six months ended 30 June 2022 to RMB794 million for the six months ended 30 June 2023, mainly due to the year-on-year decrease in research and development projects during the Reporting Period.

(8) Other operating expenses

Other operating expenses of the Group decreased by 24.6% from RMB133 million for the six months ended 30 June 2022 to RMB101 million for the six months ended 30 June 2023, mainly due to the year-on-year decrease of the provision for impairment during the Reporting Period.

(9) Other gains – net

The net other gains of the Group increased from RMB2 million for the six months ended 30 June 2022 to RMB39 million for the six months ended 30 June 2023, mainly due to the year-on-year increase in the gain from asset disposal during the Reporting Period.

(10) Operating profit

Due to the above reasons, the operating profit of the Group decreased by 15.0% from RMB1.168 billion for the six months ended 30 June 2022 to RMB993 million for the six months ended 30 June 2023.

(11) Finance income – net

The net finance income of the Group increased by 11.1% from RMB447 million for the six months ended 30 June 2022 to RMB497 million for the six months ended 30 June 2023, mainly due to the increase in deposit interest income.

(12) Income tax expense

The Group's income tax expense decreased by 31.6% from RMB266 million for the six months ended 30 June 2022 to RMB182 million for the six months ended 30 June 2023, the effective income tax rate decreased from 16.4% to 12.1% on a year-on-year basis. The change in the effective income tax rate was mainly due to the profit fluctuation of certain subsidiaries with different tax rates and the impact of enjoying income tax preferential policies.

(13) Profit for the period

Due to the above reasons, the profit for the year decreased by 2.9% from RMB1.356 billion for the six months ended 30 June 2022 to RMB1.317 billion for the six months ended 30 June 2023.

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	
	For the six months ended 30 June		For the six months ended 30 June		For the six months ended 30 June		For the six months ended 30 June		For the six months ended 30 June	
	2023	2022	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
	(RMB'000)		(RMB'000)		(%)		(RMB'000)		(%)	
Engineering, consulting and licensing	**1,743,688**	1,589,762	**536,732**	528,347	**30.8**	33.2	**147,446**	81,655	**8.5**	5.1
EPC Contracting	**14,148,270**	14,785,475	**992,730**	1,257,663	**7.0**	8.5	**454,860**	650,769	**3.2**	4.4
Construction	**11,284,663**	12,565,785	**681,940**	855,139	**6.0**	6.8	**281,733**	379,061	**2.5**	3.0
Equipment manufacturing	**364,585**	397,138	**28,822**	23,145	**7.9**	5.8	**10,994**	5,075	**3.0**	1.3
Unallocated	**N/A**	N/A	**N/A**	N/A	**N/A**	N/A	**97,934**	50,957	**N/A**	N/A
Subtotal	**27,541,206**	29,338,160	**2,240,224**	2,664,294	**N/A**	N/A	**992,967**	1,167,517	**N/A**	N/A
Total after inter-segment elimination(3)	**24,829,660**	25,958,552	**2,240,224**	2,664,294	**9.0(1)**	10.3(1)	**992,967**	1,167,517	**4.0(2)**	4.5(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:

	For the six months ended 30 June			
	2023		2022	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB'000)	(%)	(RMB'000)	(%)
Revenue	1,743,688	100.0	1,589,762	100.0
Cost of sales	(1,206,956)	(69.2)	(1,061,415)	(66.8)
Gross profit	536,732	30.8	528,347	33.2
Selling and marketing expenses	(5,585)	(0.3)	(5,669)	(0.4)
Administrative expenses	(39,145)	(2.2)	(37,511)	(2.3)
Research and development costs	(300,756)	(17.2)	(357,102)	(22.5)
Other income and expenses	(43,801)	(2.5)	(46,410)	(2.9)
Operating profit	147,446	8.5	81,655	5.1

(1) Revenue

During the Reporting Period, the revenue generated from the Group's engineering, consulting and licensing segment was RMB1.744 billion, representing a year-on-year increase of 9.7%, mainly due to the increase in engineering business volume.

(2) Cost of sales

The cost of sales of the Group's engineering, consulting and licensing segment was RMB1.207 billion, representing a year-on-year increase of 13.7%, mainly due to the cost increase corresponding to the increase of business volume.

(3) Gross profit

The gross profit of the Group's engineering, consulting and licensing segment was RMB537 million, which remained broadly stable on a year-on-year basis. The gross profit margin decreased from 33.2% to 30.8% on a year-on-year basis, still maintained at a reasonable level.

(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 RMB39 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 RMB301 million, representing a decrease of 15.8% on a year-on-year basis, mainly due to a decrease in research and development projects during the Reporting Period.

(7) Operating profit

Due to the above reasons, the operating profit of the Group's engineering, consulting and licensing segment increased from RMB82 million for the six months ended 30 June 2022 to RMB147 million for the six months ended 30 June 2023.

EPC Contracting

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

	For the six months ended 30 June			
	2023		2022	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB'000)	(%)	(RMB'000)	(%)
Revenue	14,148,270	100.0	14,785,475	100.0
Cost of sales	(13,155,540)	(93.0)	(13,527,812)	(91.5)
Gross profit	992,730	7.0	1,257,663	8.5
Selling and marketing expenses	(27,045)	(0.2)	(26,654)	(0.2)
Administrative expenses	(260,068)	(1.8)	(255,749)	(1.7)
Research and development costs	(299,370)	(2.1)	(317,667)	(2.1)
Other income and expenses	48,613	0.3	(6,824)	(0.1)
Operating profit	454,860	3.2	650,769	4.4

(1) Revenue

During the Reporting Period, the revenue generated from the Group's EPC Contracting segment was RMB14.148 billion, representing a decrease of 4.3% on a year-on-year basis, mainly affected by the construction project cycle.

(2) Cost of sales

The cost of sales of the Group's EPC Contracting segment was RMB13.156 billion, representing a decrease of 2.8% on a year-on-year basis, mainly due to the decrease in procurement, subcontracting and other costs with the decrease in business volume.

(3) Gross profit

The gross profit of the Group's EPC Contracting segment was RMB993 million, representing a decrease of 21.1% on a year-on-year basis; the gross profit margin decreased from 8.5% to 7.0% on a year-on-year basis, mainly due to the impact of the project implementation cycle and the decline in profit returns of new projects, but still in a reasonable range.

(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 RMB260 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 RMB299 million, representing a decrease of 5.8% on a year-on-year basis, mainly due to a decrease in research and development projects during the Reporting Period.

(7) Operating profit

Due to the above reasons, the operating profit of the Group's EPC Contracting segment decreased from RMB651 million for the same period last year to RMB455 million.

Construction

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

	For the six months ended 30 June			
	2023		2022	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB'000)	(%)	(RMB'000)	(%)
Revenue	11,284,663	100.0	12,565,785	100.0
Cost of sales	(10,602,723)	(94.0)	(11,710,646)	(93.2)
Gross profit	681,940	6.0	855,139	6.8
Selling and marketing expenses	(22,439)	(0.2)	(17,897)	(0.1)
Administrative expenses	(207,043)	(1.8)	(198,891)	(1.6)
Research and development costs	(184,873)	(1.6)	(215,820)	(1.7)
Other income and expenses	14,148	0.1	(43,470)	(0.3)
Operating profit	281,733	2.5	379,061	3.0

(1) Revenue

During the Reporting Period, the revenue generated from the Group's construction segment was RMB11.285 billion, representing a decrease of 10.2% on a year-on-year basis, mainly due to the completion of Hainan ethylene and other projects, large-scale projects such as Huizhou ethylene and Zhenhai refining and chemical high-end synthetic new materials have not yet entered the peak period of construction, and revenue recognition has slowed down.

(2) Cost of sales

The cost of sales of the Group's construction segment was RMB10.603 billion, representing a decrease of 9.5% on a year-on-year basis, mainly due to the corresponding decrease in subcontracting, machinery and other costs as the construction business volume decreases.

(3) Gross profit

The gross profit of the Group's construction segment was RMB682 million, representing a decrease of 20.3% on a year-on-year basis, the gross profit margin decreased to 6.0% from 6.8% in the same period last year, mainly due to the decrease of gross profit margin of projects under implementation.

(4) Selling and marketing expenses

The selling and marketing expenses of the Group's construction segment were RMB22 million, which remained broadly stable on a year-on-year basis.

(5) Administrative expenses

The administrative expenses of the Group's construction segment were RMB207 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 RMB185 million, representing a decrease of 14.3% on a year-on-year basis, mainly due to a decrease in research and development projects during the Reporting Period.

(7) Operating profit

Due to the above reasons, the operating profits of the Group's construction segment decreased from RMB379 million for the same period last year to RMB282 million.

Equipment Manufacturing

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

	For the six months ended 30 June			
	2023		2022	
	Amount	Percentage of segment revenue	Amount	Percentage of segment revenue
	(RMB'000)	(%)	(RMB'000)	(%)
Revenue	**364,585**	**100.0**	397,138	100.0
Cost of sales	**(335,763)**	**(92.1)**	(373,993)	(94.2)
Gross profit	**28,822**	**7.9**	23,145	5.8
Selling and marketing expenses	**(2,069)**	**(0.6)**	(1,879)	(0.5)
Administrative expenses	**(6,382)**	**(1.8)**	(5,993)	(1.5)
Research and development costs	**(6,574)**	**(1.8)**	(6,531)	(1.6)
Other income and expenses	**(2,802)**	**(0.8)**	(3,667)	(0.9)
Operating profit	**10,994**	**3.0**	5,075	1.3

(1) Revenue

During the Reporting Period, the revenue generated from the Group's equipment manufacturing segment was RMB365 million, representing a decrease of 8.2% on a year-on-year basis, which was mainly due to the impact of the longer production and manufacturing cycle of orders in hand.

(2) Cost of sales

The cost of sales of the Group's equipment manufacturing segment was RMB336 million, representing a decrease of 10.2% on a year-on-year basis, mainly due to the cost decrease in line with the decrease of revenue.

(3) Gross profit

The gross profit of the Group's equipment manufacturing segment was RMB29 million, representing an increase of 24.5% on a year-on-year basis, the gross profit margin increased from 5.8% for the same period last year to 7.9%, mainly due to the gross profit growth driven by the active expansion of high value-added equipment manufacturing projects during the Reporting Period.

(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 profit

Due to the above reasons, the operating profit of the Group's construction segment increased from RMB5 million for the same period last year to RMB11 million.

3 Discussion on the results by other classification

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

	For the six months ended 30 June				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB'000)	(%)	(RMB'000)	(%)	(%)
Oil refining	2,362,010	9.5	3,985,415	15.4	(40.7)
Petrochemicals	17,103,759	68.9	16,145,379	62.2	5.9
New coal chemicals	220,424	0.9	328,321	1.3	(32.9)
Storage, transportation and others	5,143,467	20.7	5,499,437	21.1	(6.5)
Subtotal	24,829,660	100.0	25,958,552	100.0	(4.3)

The Group's revenue mainly comes from providing services to customers in oil refining, petrochemicals, new coal chemicals, storage and transportation and other industries. During the Reporting Period, revenue from the petrochemical industry amounted to RMB17.104 billion, representing an increase of 5.9% on a year-on-year basis, mainly due to the contribution from petrochemical projects such as the ExxonMobil Huizhou ethylene project and Tianjin Nangang ethylene project; revenue from the oil refining industry amounted to RMB2.362 billion, representing a decrease of 40.7% on a year-on-year basis, mainly due to the slowdown in revenue recognition due to the completion of projects such as Hainan Refining and Chemical Integration and the pre-construction of new projects such as SINOPEC Zhenhai Refining and High-end Synthetic New Materials; revenue from the new coal chemical industry was RMB220 million, representing a decrease of 32.9% on a year-on-year basis, mainly due to the decrease in investment in coal chemical projects; revenue from storage and transportation and others amounted to RMB5.143 billion, representing a decrease of 6.5% on a year-on-year basis, mainly due to the completion of storage and transportation projects such as Wenzhou LNG 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 clients operate:

	For the six months ended 30 June				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB' 000)	(%)	(RMB' 000)	(%)	(%)
PRC	**22,737,072**	**91.6**	23,781,091	91.6	(4.4)
Overseas	**2,092,588**	**8.4**	2,177,461	8.4	(3.9)
Subtotal	**24,829,660**	**100.0**	25,958,552	100.0	(4.3)

During the Reporting Period, the Group's revenue generated in the PRC was RMB22.737 billion, representing a decrease of 4.4% on a year-on-year basis, mainly due to the completion of large-scale projects such as Hainan Refining and Chemical Integration, the ExxonMobil Huizhou ethylene, SINOPEC Zhenhai Refining and High-end Synthetic New Materials projects and other projects were in the early stage of construction; the Group's revenue from overseas was RMB2.093 billion, representing a decrease of 3.9% on a year-on-year basis, mainly due to the fact that overseas projects such as Singapore's CRISP and Saudi Arabia's AMIRAL were in the early stage of construction.

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

	For the six months ended 30 June				
	2023		2022		
	Revenue	Percentage of total revenue	Revenue	Percentage of total revenue	Change
	(RMB' 000)	(%)	(RMB' 000)	(%)	(%)
Sinopec Group and its associates	**14,999,688**	**60.4**	15,895,466	61.2	(5.6)
Non-Sinopec Group and its associates	**9,829,972**	**39.6**	10,063,086	38.8	(2.3)
Subtotal	**24,829,660**	**100.0**	25,958,552	100.0	(4.3)

During the Reporting Period, affected by the construction project cycle, the Group's the revenue generated from Sinopec Group and its associates was RMB15.000 billion, accounting for 60.4%, representing a decrease of 5.6% on a year-on-year basis; the revenue generated from non-Sinopec Group and its associates was RMB9.830 billion, accounting for 39.6%, representing a decrease of 2.3% on a year-on-year basis.

4 Discussion on the backlog and new contracts

Backlog represents the total estimated contract value of work that remains to be completed pursuant to outstanding contracts as at a certain date, net of estimated value added tax, and is calculated based on the Group's assumption that the relevant contracts will be performed in accordance with their terms. Backlog is not a measure defined by generally accepted accounting principles. Any modification, termination or suspension of these contracts by the Group's clients may have a substantial and immediate effect on the Group's backlog. Projects may also remain in the Group's backlog for an extended period of time beyond what 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 2023	As at 31 December 2022	Change
	(RMB'000)	(RMB'000)	(%)
Engineering, consulting and licensing	11,704,421	10,955,159	6.8
EPC Contracting	84,699,531	76,579,262	10.6
Construction	26,987,869	23,395,035	15.4
Equipment manufacturing	1,741,129	1,301,697	33.8
Total	125,132,950	112,231,153	11.5

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

	As at 30 June 2023	As at 31 December 2022	Change
	(RMB'000)	(RMB'000)	(%)
Oil refining	17,799,238	17,779,006	0.1
Petrochemicals	74,927,022	60,479,006	23.9
New coal chemicals	2,212,640	2,104,056	5.2
Other industries	30,194,050	31,869,085	(5.3)
Total	125,132,950	112,231,153	11.5

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

	As at 30 June 2023	As at 31 December 2022	Change
	(RMB'000)	(RMB'000)	(%)
PRC	98,715,680	91,504,079	7.9
Overseas	26,417,270	20,727,074	27.5
Total	125,132,950	112,231,153	11.5

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

	As at 30 June 2023	As at 31 December 2022	Change
	(RMB'000)	(RMB'000)	(%)
Sinopec Group and its associates	63,382,593	63,131,277	0.4
Non-Sinopec Group and its associates	61,750,357	49,099,876	25.8
Total	125,132,950	112,231,153	11.5

As at 30 June 2023, the Group's backlog was RMB125.132 billion, representing an increase of 11.5% compared to that as at 31 December 2022, and 2.4 times of the total revenue of RMB53.028 billion in 2022.

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:

	For the six months ended 30 June		Change
	2023	2022	
	(RMB'000)		(%)
Engineering, consulting and licensing	2,404,036	1,908,143	26.0
EPC Contracting	22,268,540	34,129,993	(34.8)
Construction	12,489,776	7,649,378	63.3
Equipment manufacturing	569,105	462,666	23.0
Total	37,731,457	44,150,180	(14.5)

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

	For the six months ended 30 June		Change
	2023	2022	
	(RMB'000)		(%)
Oil refining	2,382,242	1,970,091	20.9
Petrochemicals	31,551,775	37,507,181	(15.9)
New coal chemicals	329,008	205,259	60.3
Storage & transportation and others	3,468,432	4,467,649	(22.4)
Total	37,731,457	44,150,180	(14.5)

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

	For the six months ended 30 June		
	2023	2022	Change
	(RMB'000)		(%)
PRC	29,948,673	40,391,311	(25.9)
Overseas	7,782,784	3,758,869	107.1
Total	37,731,457	44,150,180	(14.5)

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

	For the six months ended 30 June		
	2023	2022	Change
	(RMB'000)		(%)
Sinopec Group and its associates	14,773,140	17,488,095	(15.5)
Non-Sinopec Group and its associates	22,958,317	26,662,085	(13.9)
Total	37,731,457	44,150,180	(14.5)

During the Reporting Period, the value of the Group's new contracts was RMB37.731 billion, representing a decrease of 14.5% as compared with RMB44.150 billion for the same period in 2022.

5 Assets, Liabilities, Equity and Cash Flows

(1) Assets, Liabilities and Equity

Unit: RMB'000

	As at 30 June 2023	As at 31 December 2022	Changes	Change (%)
Total assets	**77,098,012**	78,682,463	(1,584,451)	(2.0)
Current assets	**69,011,034**	70,369,169	(1,358,135)	(1.9)
Non-current assets	**8,086,978**	8,313,294	(226,316)	(2.7)
Total liabilities	**46,681,828**	48,645,671	(1,963,843)	(4.0)
Current liabilities	**44,544,197**	46,475,288	(1,931,091)	(4.2)
Non-current liabilities	**2,137,631**	2,170,383	(32,752)	(1.5)
Net assets	**30,416,184**	30,036,792	379,392	1.3
Consolidated equity attributable to equity holders of the Company	**30,410,594**	30,031,512	379,082	1.3
Share capital	**4,428,000**	4,428,000	0	0.0
Reserves	**25,982,594**	25,603,512	379,082	1.5
Non-controlling interests	**5,590**	5,280	310	5.9

As at the end of the Reporting Period, the total assets of the Group were RMB77.098 billion, the total liabilities were RMB46.682 billion, and the equity attributable to the equity holders of the Company was RMB30.411 billion. The changes in the assets and liabilities as compared with those as at the end of 2022 and the main reasons are as follows:

As at the end of the Reporting Period, the total assets were RMB77.098 billion, representing a decrease of RMB1.584 billion as compared with that as at the end of 2022. In particular, the current assets were RMB69.011 billion, representing a decrease of RMB1.358 billion as compared with that as at the end of 2022, which was mainly due to a decrease of RMB1.873 billion in cash and cash equivalents, a decrease of RMB1.845 billion in notes and trade receivables, a decrease in restricted funds of RMB54 million, an increase in contract assets of RMB1.263 billion, an increase in time deposits with financial institutions of RMB741 million, an increase in prepayments and other receivables of RMB337 million, and an increase in inventories of RMB72 million; non-current assets amounted to RMB8.087 billion, a decrease of RMB226 million as compared with that as at the end of 2022, mainly due to a decrease of RMB165 million in property, plant and equipment, a decrease in right-of-use asset of RMB59 million, a decrease in intangible asset of RMB16 million and an increase in deferred income tax asset of RMB14 million.

As at the end of the Reporting Period, the total liabilities were RMB46.682 billion, representing a decrease of RMB1.964 billion as compared with that as at the end of 2022. In particular, the current liabilities were RMB44.544 billion, representing a decrease of RMB1.931 billion as compared with that as at the end of 2022, which was mainly due to the decrease of contract liabilities by RMB1.136 billion, a decrease of RMB864 million in notes and trade payables, a decrease of RMB848 million in other payables and the increase of RMB907 million in dividend payable. The non-current liabilities were RMB2.138 billion, representing a decrease of RMB33 million as compared with that as at the end of 2022, which was mainly due to a decrease of RMB37 million in retirement and other supplementary benefit obligations, a decrease of RMB5 million in lease liabilities, a decrease of RMB4 million in deferred tax liabilities and an increase of RMB12 million in the provision for legal claims.

The consolidated equity attributable to equity holders of the Company was RMB30.411 billion, an increase of RMB379 million as compared with that as at the end of 2022, which was mainly due to the increase in retained earnings.

(2) Cash Flows

During the Reporting Period, the net decrease in cash and cash equivalents was RMB1.585 billion and net cash used in operating activities was RMB1.039 billion. The following table sets forth the main items and their changes in the Group's consolidated cash flow statements for the Reporting Period and the same period last year, respectively.

Unit: RMB'000

Major items of cash flow	For the six months ended 30 June	
	2023	2022
Net cash used in operating activities	(1,038,507)	(1,378,489)
Net cash used in investing activities	(506,405)	(883,481)
Net cash generated from/(used in) financing activities	(40,302)	248
Net decrease in cash and cash equivalents	(1,585,214)	(2,261,722)

During the Reporting Period, the profit before taxation was RMB1.499 billion, and the profit was RMB1.398 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 RMB497 million, depreciation and amortisation of RMB457 million, exchange gains of RMB100 million, impairment provisions and inventory declines of RMB88 million. The increase in cash outflow of changes in working capital was RMB2.449 billion, which were mainly shown in: the decrease in trade and other payables balance which caused the cash outflow from operating activities of RMB1.474 billion; the increase in contract assets which caused the cash outflow from operating activities of RMB1.322 billion; the decrease in contract liabilities which caused cash outflow from operating activities of RMB1.136 billion; the increase in inventory balance which caused the cash outflow from operating activities of RMB72 million; trade and other receivables balance was decreased, causing the cash inflow from operating activities of RMB1.501 billion; and the decrease in restricted funds, causing the cash inflow from operating activities of RMB54 million.

After adjusting non-cash items, receivables and payables for the profit before taxation, deducting the income tax paid amounting to RMB168 million, and increasing inflow of received interest by RMB181 million, the net cash used in operating activities was RMB1.039 billion.

Net cash used in investing activities was RMB506 million, which was mainly due to the equipment acquisition expenses and an increase in time deposits.

Net cash used in financing activities was RMB40 million, mainly due to the rental expenses of the leased right-of-use assets.

Based on the cash flows during the Reporting Period, the Group has adequate working capital at present. In the next step, 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	For the six months ended 30 June	
	2023	2022
Net profit margin (%)	**5.3**	5.2
Return on assets (%)(1)	**1.7**	1.9
Return on equity (%)(2)	**4.3**	4.6
Return on invested capital (%)(3)	**4.4**	4.7

Main financial ratios	As at 30 June 2023	As at 31 December 2022
Gearing ratio (%)(4)	**0.8**	0.9
Net debt to equity ratio (%)(5)	**Net cash**	Net cash
Current ratio (%)(6)	**1.5**	1.5
Quick ratio (%)(7)	**1.5**	1.5

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

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

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

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

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

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

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

Return on assets

During the Reporting Period, the Group's return on equity decreased to 1.7% from 1.9% for the same period in 2022, mainly due to the decrease in the profit during the Reporting Period.

Return on equity

The Group's return on equity decreased to 4.3% from 4.6% for the same period in 2022, mainly due to the increase in total equity as at the end of the Reporting Period and the decrease in the profit during the Reporting Period.

Return on invested capital

The Group's return on invested capital decreased to 4.4% from 4.7% for the same period in 2022, mainly due to the increase in total equity as at the end of the Reporting Period and the decrease in the profit during the Reporting Period.

Gearing ratio

The Group's gearing ratio decreased to 0.8% from 0.9% at the end of 2022, mainly due to the increase in total equity as at the end of the Reporting Period.

Net debt to equity ratio

The Group maintained positive net cash as at 30 June 2023 and as at 31 December 2022.

Current ratio

The Group's current ratio was 1.5, which remained stable on a year-on-year basis.

Quick ratio

The Group's quick ratio was 1.5, 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. 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 2023

The thirteenth meeting of the fourth session of the Board approved the interim dividend distribution plan as of 30 June 2023. An interim cash dividend of RMB0.119 (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 2023. Shareholders of the Company have authorised the Board to decide the interim profit distribution plan of 2023 by ordinary resolution in 2022 annual general meeting held on 26 May 2023.

The interim dividend will be paid on or before Friday, 27 October 2023 to all Shareholders whose names appear on the register of members of the Company at the close of business on Tuesday, 12 September 2023. 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 Wednesday, 6 September 2023 for registration. For the purpose of ascertaining Shareholders who qualify for the interim dividend, the register of members for H Shares will be closed from Thursday, 7 September 2023 to Tuesday, 12 September 2023 (both days inclusive).

The dividend will be denominated and declared in RMB. The holders of Domestic Shares will be paid in RMB 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 shall be RMB0.91812 to HKD1.00, being the average of the exchange rates of Hong Kong dollars to RMB as announced by the People's Bank of China on five working days before the date of declaration of the dividend by the Board (i.e., Friday, 18 August 2023). Therefore, the interim dividend per H Share of the Company is HKD0.1296 (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 Tuesday, 12 September 2023.

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, and 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 for Southbound Trading through its depositary and clearing system. The cash dividends for the investors of H Shares for Southbound Trading will be paid in RMB.

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 by 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 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 Rights and Properties Leasing Framework Agreement;

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

(7) the Safe Production Insurance Fund; and

(8) the Trademark Licensing Agreement.

For the details of the above agreements, please refer to the section headed “Connected Transactions” in the Company’s prospectus published on 10 May 2013, the Company’s announcement entitled “Renewal of the General Services Framework Agreement, the Technology R&D Framework Agreement, the Land Use Rights and Properties Leasing Framework Agreement, the Financial Services Framework Agreement and the 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 RMB16.509 billion. In particular, the expenses amounted to RMB1.101 billion and the revenue amounted to RMB15.408 billion (including RMB15.037 billion from the sale of products and services and RMB371 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 RMB1.063 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 RMB14.949 billion, which was within the annual cap.

During the Reporting Period, the service fees in relation to the settlement and other financial services provided to the Group by 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 RMB7.956 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 RMB80 million, which was within the annual cap.

During the Reporting Period, the general services provided by the Group to Sinopec Group amounted to RMB1 million, which was within the annual cap.

During the Reporting Period, the general services provided by Sinopec Group to the Group amounted to RMB28 million, which was within the annual cap.

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

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

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

For more information on the major related parties transactions (including the above-mentioned connected transactions) during the Reporting Period, please refer to Note 42 of the consolidated financial statements prepared in accordance with the IFRS in this interim report, among which the above transactions constitute connected transactions under the Hong Kong Listing Rules, and the Company has complied with the relevant requirements under Chapter 14A of the Hong Kong Listing Rules in relation to those 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 decide 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 comparison 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 transaction 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 unfinished oil storage tank of the oil and gas storage tank project in Alberta, Canada on 24 April 2007, which resulted in two deaths and four injuries. 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 9 February 2023. Due to the discovery of force majeure events (justified and reasonable within the scope of law), the hearing of the appeal case was adjourned to 12 October 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 but was not 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 RMB26 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 RMB4.747 billion, and the remaining balance of the net proceeds from the global offering was approximately RMB6.41 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 RMB192 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 time for the completion of 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” published on 13 December 2013 and the “Adjustment in the Allocations of the Use of Proceeds from the Global Offering” published on 26 October 2018. During the Reporting Period, there was no material change to the use of proceeds from the global offering of the Group.

9 Assets Transactions

During the Reporting Period, the Group has no 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 or 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 RMB154 million loans due 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 40 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. DUAN Xue. 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 Period

From 30 June 2023 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 publicly 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 2023, 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
JIANG Dejun	Male	57	Chairman of the Board	October 2021 – October 2024
XIANG Wenwu	Male	57	Vice Chairman of the Board	October 2021 – October 2024
LI Chengfeng	Male	59	Director	October 2021 – October 2024
WU Wenxin	Male	59	Director	October 2021 – October 2024
ZHANG Xinming	Male	56	Director and President	May 2023 – October 2024
HUI Chiu Chung, Stephen	Male	76	Independent Non-executive Director	October 2021 – October 2024
DUAN Xue	Male	66	Independent Non-executive Director	May 2023 – October 2024
YE Zheng	Male	58	Independent Non-executive Director	October 2021 – October 2024
XIE Yanli	Female	47	Employee Representative Director	May 2023 – October 2024

Profile of the Retired Directors during and after the Reporting Period

Name	Gender	Age	Position in the Company	Term of Office as Director
SUN Lili	Female	61	Chairwoman of the Board	October 2021 – May 2023
WANG Zizong	Male	58	Director	October 2021 – July 2023
JIN Yong	Male	87	Independent Non-executive Director	October 2021 – May 2023

(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
MA Yanhui	Male	52	Chairman of the Supervisory Committee and Chairman of the Trade Union	May 2023 – October 2024
WU Defei	Male	47	Supervisor	May 2023 – October 2024
HAN Weiguo	Male	52	Supervisor	May 2023 – October 2024
ZHOU Yingguan	Male	54	Supervisor	October 2021 – October 2024
XU Yijun	Male	59	Employee Representative Supervisor	October 2021 – October 2024
YI Hao	Male	55	Employee Representative Supervisor	October 2021 – October 2024
WANG Yi	Male	52	Employee Representative Supervisor	January 2023 – October 2024

Profile of the Retired Supervisor during and after the Reporting Period

Name	Gender	Age	Position in the Company	Term of Office as Supervisor
ZHU Fei	Male	58	Chairman of the Supervisory Committee and Chairman of the Trade Union	October 2021 – May 2023
ZHANG Xinming	Male	56	Supervisor	October 2021 – May 2023
ZHOU Chengping	Male	60	Supervisor	October 2021 – March 2023
WU Zhongxian	Male	60	Employee Representative Supervisor	October 2021 – January 2023

(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
ZHANG Xinming	Male	56	President	May 2023
WANG Guohua	Male	54	Vice President	April 2019
JIA Yiqun	Male	55	Chief Financial Officer Secretary to the Board Company Secretary	August 2012 October 2021 July 2019
FENG Di	Male	55	Vice President	January 2023
SUN Baoping	Male	48	Vice President	January 2023

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

There is no financial, business, family or other material relationship among 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 or members of the Senior Management of the Company and their respective associates had any interest or short positions in any shares, underlying shares or debentures of the Company or any associated corporations (within the meaning of Part XV of the SFO) which are required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), or which were required, pursuant to section 352 of the SFO, to be entered into the register referred to therein, or which are required, pursuant to the Model Code for Securities Transactions by Directors of Listed Companies (the "Model Code") under Appendix 10 to the Hong Kong Listing Rules, to be notified to the Company and the Hong Kong Stock Exchange.

The Company has adopted Model Code as code of conduct regarding the Directors' securities transactions. 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. LI Chengfeng holds certain positions at Sinopec Corp. and its subsidiaries; and (II) Mr. WU Wenxin holds certain positions at Sinopec Group and Sinopec Corp. Save for the above, to the knowledge of the Board, none of the Directors or 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 SFO, 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 2023 or any time during the first half of the year 2023, 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 fellow 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 16,133 employees working in the Group.

The following list is a categorization of employee classified based on business sectors as at 30 June 2023.

	As at 30 June 2023	
	Number of Employees	Percentage of the Total Employees (%)
Engineering and Technical Personnel	**12,610**	**78.2**
Management Personnel	**1,113**	**6.9**
Production Personnel	**2,410**	**14.9**
Total	**16,133**	**100.0**

The following table lists the information of employees classified based on education background as at 30 June 2023.

	As at 30 June 2023	
	Number of Employees	Percentage of the Total Employees (%)
Master Degree	**3,152**	**19.5**
Bachelor Degree	**7,586**	**47.0**
Tertiary Qualification	**2,587**	**16.0**
Others	**2,808**	**17.5**
Total	**16,133**	**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 2023 and the six-month period ended 30 June 2022, the employment costs of the Group were approximately RMB2.228 billion and RMB2.220 billion, respectively.

7 Gender Diversity of Employees

The table below sets forth the gender ratio of all employees (including senior management) of the Group as of 30 June 2023.

	As at 30 June 2023	
	Number of Employees	Percentage of the Total Employees (%)
Female	**4,375**	**27.1**
Male	**11,758**	**72.9**
Total	**16,133**	**100.0**

The table below sets forth the gender ratio of senior management of the Group as at the end of the Reporting Period.

	As at 30 June 2023	
	Number of Senior Managements	Percentage of the Total Employees (%)
Female senior management	**1**	**4.8**
Male senior management	**20**	**95.2**
Total	**21**	**100.0**

The Group adheres to the employment principle of "equal treatment and mutual respect", provides equal development opportunities for employees of different genders, and is committed to creating a working environment where employees of different genders cooperate and respect each other. The Group is committed to improving the gender diversity of employees, but due to the unique nature the engineering and construction industry in which the Group operates, it is more challenging to achieve gender diversity for all employees.

FINANCIAL STATEMENTS

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 77 to 143, which comprise the consolidated statement of financial position as at 30 June 2023, 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 2023, 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 RMB24,829,660,000 for the six months period ended 30 June 2023.

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 2023 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, 18 August 2023

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE SIX MONTHS ENDED 30 JUNE 2023

	Note	Six months ended 30 June	
		2023	2022
		RMB'000	RMB'000
			(restated)
Revenue	6	24,829,660	25,958,552
Cost of sales		(22,589,436)	(23,294,258)
Gross profit		2,240,224	2,664,294
Other income – net	8	180,694	81,423
Selling and marketing expenses		(57,137)	(52,099)
Administrative expenses		(516,030)	(498,144)
Research and development costs		(793,527)	(897,120)
Other operating expenses		(100,536)	(133,280)
Other gains – net	9	39,279	2,443
Operating profit		992,967	1,167,517
Finance income	10	529,287	483,065
Finance expenses	10	(31,978)	(35,626)
Finance income – net		497,309	447,439
Share of loss of a joint arrangement	19(a)	(46)	(47)
Share of profit of associates	19(b)	8,896	7,056
Profit before taxation	11	1,499,126	1,621,965
Income tax expense	12	(181,775)	(265,662)
Profit for the period		1,317,351	1,356,303

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

FOR THE SIX MONTHS ENDED 30 JUNE 2023

	Note	Six months ended 30 June	
		2023	2022
		RMB'000	RMB'000
			(restated)
Other comprehensive income/(expense) for the period, net of tax			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		24,581	31,943
Items that will not be reclassified subsequently to profit or loss:			
Gains/(losses) on revaluation of retirement benefit plans obligations, net of income tax effect		(32,689)	47
Share of other comprehensive income of an associate	19(b)	–	6
		(32,689)	53
Other comprehensive income/(expense) for the period, net of tax		(8,108)	31,996
Total comprehensive income for the period		1,309,243	1,388,299
Profit attributable to:			
Equity holders of the Company		1,317,070	1,356,259
Non-controlling interests		281	44
Profit for the period		1,317,351	1,356,303
Total comprehensive income attributable to:			
Equity holders of the Company		1,308,962	1,388,255
Non-controlling interests		281	44
Total comprehensive income for the period		1,309,243	1,388,299
		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	0.30	0.31

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2023

	Notes	As at 30 June 2023	As at 31 December 2022	As at 1 January 2022
		RMB'000	RMB'000	RMB'000
			(restated)	(restated)
ASSETS				
Non-current assets				
Property, plant and equipment	16	4,498,401	4,663,369	4,398,287
Right-of-use assets	17	2,200,388	2,259,678	2,372,201
Intangible assets	18	176,499	192,024	203,079
Investment in a joint arrangement	19(a)	3,801	3,847	3,923
Investments in associates	19(b)	174,219	174,423	158,915
Fair value through other comprehensive income investments	25	250,000	250,000	–
Deferred income tax assets	36	783,670	769,953	844,168
Total non-current assets		8,086,978	8,313,294	7,980,573
Current assets				
Inventories	23	829,210	757,495	479,931
Notes and trade receivables	20	6,750,579	8,595,313	6,853,516
Prepayments and other receivables	21	6,998,166	6,660,674	8,058,422
Contract assets	22(a)	11,008,718	9,745,992	10,273,333
Loans due from the ultimate holding company	24	20,500,000	20,500,000	20,500,000
Restricted cash	26	29,229	82,916	109,685
Time deposits	27	9,794,544	9,053,681	8,357,613
Cash and cash equivalents	28	13,100,588	14,973,098	10,305,176
Total current assets		69,011,034	70,369,169	64,937,676
Total assets		77,098,012	78,682,463	72,918,249

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

AS AT 30 JUNE 2023

	Notes	As at 30 June 2023	As at 31 December 2022	As at 1 January 2022
		RMB'000	RMB'000	RMB'000
			(restated)	(restated)
Equity				
Share capital	29	4,428,000	4,428,000	4,428,000
Reserves	30	25,982,594	25,603,512	24,684,086
Equity attributable to equity holders of the Company		30,410,594	30,031,512	29,112,086
Non-controlling interests		5,590	5,280	5,223
Total equity		30,416,184	30,036,792	29,117,309
LIABILITIES				
Non-current liabilities				
Lease liabilities	31	62,132	66,816	88,241
Retirement and other supplemental benefit obligations	32	1,877,238	1,913,763	2,154,036
Provision for litigation claims	33	196,234	184,271	181,292
Deferred tax liabilities	36	2,027	5,533	7,033
Total non-current liabilities		2,137,631	2,170,383	2,430,602
Current liabilities				
Notes and trade payables	34	18,928,072	19,792,197	20,390,057
Other payables	35	3,151,826	3,093,433	2,886,826
Loan due to a fellow subsidiary	37	154,209	141,972	63,757
Contract liabilities	22(b)	21,792,949	22,929,193	17,485,967
Lease liabilities	31	41,797	62,254	73,489
Current income tax liabilities		475,344	456,239	470,242
Total current liabilities		44,544,197	46,475,288	41,370,338
Total liabilities		46,681,828	48,645,671	43,800,940
Total equity and liabilities		77,098,012	78,682,463	72,918,249
Net current assets		24,466,837	23,893,881	23,567,338
Total assets less current liabilities		32,553,815	32,207,175	31,547,911

On behalf of the directors

JIANG Dejun	ZHANG Xinming	JIA Yiqun
Chairman of the Board	Director, President	Chief Financial Officer

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE SIX MONTHS ENDED 30 JUNE 2023

	Attributable to equity shareholders of the Company								
	Share capital	Capital reserve	Statutory surplus reserve	Specific reserve	Exchange translation reserve	Retained earnings	Total	Non-controlling interests	Total equity
	RMB'000 (Note29)	RMB'000 (Note30(ii))	RMB'000 (Note30(i))	RMB'000 (Note30(iii))	RMB'000 (Note30(iv))	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2022	4,428,000	10,098,729	1,632,788	185,417	(8,045)	13,697,319	30,034,208	5,303	30,039,511
Net effect of change of accounting standard (note 3.1)	–	–	–	–	–	(2,696)	(2,696)	(23)	(2,719)
At 1 January 2023 (restated)	4,428,000	10,098,729	1,632,788	185,417	(8,045)	13,694,623	30,031,512	5,280	30,036,792
Profit for the period	–	–	–	–	–	1,317,070	1,317,070	281	1,317,351
Other comprehensive income:									
Defined benefits obligation revaluation of actuarial gain and loss – gross	–	–	–	–	–	(38,458)	(38,458)	–	(38,458)
Defined benefits obligation revaluation of actuarial gain and loss – tax	–	–	–	–	–	5,769	5,769	–	5,769
Exchange differences arising on translation of foreign operations	–	–	–	–	24,581	–	24,581	–	24,581
Share of other comprehensive income of an associate, net of related income tax	–	–	–	–	–	–	–	–	–
Total comprehensive income	–	–	–	–	24,581	1,284,381	1,308,962	281	1,309,243
Transactions with owners:									
Final dividends for 2022	–	–	–	–	–	(929,880)	(929,880)	–	(929,880)
Appropriation of specific reserve	–	–	–	104,100	–	(104,100)	–	48	48
Utilisation of specific reserve	–	–	–	(99,981)	–	99,981	–	(19)	(19)
Total transactions with owners	–	–	–	4,119	–	(933,999)	(929,880)	29	(929,851)
At 30 June 2023	4,428,000	10,098,729	1,632,788	189,536	16,536	14,045,005	30,410,594	5,590	30,416,184

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

FOR THE SIX MONTHS ENDED 30 JUNE 2023

	Attributable to equity shareholders of the Company								
	Share capital	Capital reserve	Statutory surplus reserve	Specific reserve	Exchange translation reserve	Retained earnings	Total	Non-controlling interests	Total equity
	RMB'000 (Note29)	RMB'000 (Note30(ii))	RMB'000 (Note30(i))	RMB'000 (Note30(iii))	RMB'000 (Note30(iv))	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2022	4,428,000	10,098,729	1,506,179	137,354	(67,685)	13,015,508	29,118,085	5,251	29,123,336
Net effect of change of accounting standard (note 3.1)	–	–	–	–		(5,999)	(5,999)	(28)	(6,027)
At 1 January 2022 (restated)	4,428,000	10,098,729	1,506,179	137,354	(67,685)	13,009,509	29,112,086	5,223	29,117,309
Profit for the period	–	–	–	–	–	1,356,259	1,356,259	44	1,356,303
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	1,356,312	1,388,255	44	1,388,299
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	(35,742)	13,332,067	29,517,325	5,267	29,522,592

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE SIX MONTHS ENDED 30 JUNE 2023

	Note	Six months ended 30 June	
		2023	2022
		RMB'000	RMB'000
Cash flows from operating activities			
Cash used in operations	39	(1,050,589)	(1,541,865)
Income tax paid		(168,498)	(243,388)
Interest received		180,580	406,764
Net cash used in operating activities		(1,038,507)	(1,378,489)
Cash flows from investing activities			
Purchase of property, plant and equipment		(137,295)	(401,253)
Purchase of intangible assets		(5,936)	(8,709)
Interest income on the loans to the ultimate holding company		330,310	368,115
Proceeds from disposal of property, plant and equipment		40,919	5,633
Dividends received from associates		6,460	7,000
Net increase in time deposits		(740,863)	(854,267)
Loans to the ultimate holding company		(5,000,000)	(5,000,000)
Loans repaid by the ultimate holding company		5,000,000	5,000,000
Net cash used in investing activities		(506,405)	(883,481)
Cash flows from financing activities	42		
Drawdown of borrowings from a fellow subsidiary		5,200	63,757
Interest paid		(1,463)	–
Payments of lease liabilities		(44,039)	(63,509)
Net cash generated from/(used in) financing activities		(40,302)	248
Net decrease in cash and cash equivalents		(1,585,214)	(2,261,722)
Cash and cash equivalents at beginning of period		14,973,098	10,305,176
Exchange (losses)/gains on cash and cash equivalents		(287,296)	168,069
Cash and cash equivalents at end of period	28	13,100,588	8,211,523

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

30 JUNE 2023

1. General Information

1.1 Principal activities

SINOPEC Engineering (Group) Co., Ltd. (中石化煉化工程(集團)股份有限公司, the "Company") and its subsidiaries (together, the "Group") is principally engaged locally and overseas in (1) engineering, consulting and licensing, (2) EPC Contracting, (3) construction and (4) equipment manufacturing in respect of oil refining, petrochemical engineering, storage and transportation 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. (中石化煉化工程(集團)股份有限公司) on 28 August 2012.

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

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

The consolidated financial statements have been approved for issue by the Board of Directors on 18 August 2023.

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 from 1 January 2022 or thereafter of the Group:

IFRS 17	Insurance Contracts
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting policies
Amendments to IAS 8	Definition of Accounting Estimate
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction
Amendments to IAS 12	Income taxes: International tax reform – Pillar Two model rules 47

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.

IFRS 17 Insurance contracts

IFRS 17, which replaces IFRS 4, sets out the recognition, measurement, presentation and disclosure requirements applicable to issuers of insurance contracts. The standard does not have a material impact on these financial statements as the Group does not have contracts within the scope of IFRS 17.

Amendments to IAS 8 Definition of accounting estimates

The amendments provide further guidance on the distinction between changes in accounting policies and changes in accounting estimates. The amendments do not have a material impact on these financial statements as the Group's approach in distinguishing changes in accounting policies and changes in accounting estimates is consistent with the amendments.

Amendments to IAS 12 Deferred tax related to assets and liabilities arising from a single transaction

Pursuant to the requirement of the "Accounting of deferred income tax related to assets and liabilities arising from an individual transaction not applicable to initial recognition exemption" under the "Interpretation of Chinese Accounting Standards No. 16" (Accounting [2022] No.31, hereinafter referred to as Interpretation No.16) promulgated by the Ministry of Finance of China, as for the taxable temporary difference and deductible temporary difference arising from the initial recognition of assets and liabilities, the lessee shall recognize the corresponding deferred income tax liabilities and deferred income tax assets respectively when the transaction occurs while initial recognition of the lease liabilities and right of use assets. Since 1 January 2023, the Company has implemented the Interpretation No.16. The Company adjusted the cumulative impact amount to the opening retained earnings and other related financial statement items of the earliest period presented in the financial statements in accordance with the relevant regulations.

Starting from 1 January 2023 the Group adopted the IAS 12, the table below shows the adjustments recognized for each individual line item arising from the adoption of the amendments for the period/year ended 31 December 2022 and 1 January 2022.

3. Summary of Significant Accounting Policies (Continued)

3.1 New or amended IFRS (Continued)

Amendments to IAS 12, Income taxes: Deferred tax related to assets and liabilities arising from a single transaction (Continued)

	As at 31 December 2022 RMB'000		As at 1 January 2022 RMB'000	
	Before the adjustment	After the adjustment	Before the adjustment	After the adjustment
Deferred income tax assets	769,229	769,953	843,162	844,168
Deferred tax liabilities	2,091	5,533	–	7,033
Total equity attributable to equity shareholders of the Company	30,034,207	30,031,512	29,118,084	29,112,085

Amendments to IAS 12, Income taxes: International tax reform – Pillar Two model rules 47

The amendments introduce a temporary mandatory exception from deferred tax accounting for the income tax arising from tax laws enacted or substantively enacted to implement the Pillar Two model rules published by the Organisation for Economic Co-operation and Development ("OECD") (income tax arising from such tax laws is hereafter referred to as "Pillar Two income taxes"), including tax laws that implement qualified domestic minimum top-up taxes described in those rules. The amendments also introduce disclosure requirements about such tax. The standard does not have a material impact on these financial statements.

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]
Amendments to IFRS 16	Lease liability in a sale and leaseback[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 No effective date has been set

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 3.8).

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

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

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

3.3 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").

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 are all presented in the consolidated statement of profit or loss and other comprehensive income within “Other income – net” and “Other operating expenses”.

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

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 intangibles assets are amortised on a straight-line basis over their estimated useful lives of 8 to 10 years, and recorded in "depreciation and amortisation" within administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

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

3.7 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 – net" 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.

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.

3. Summary of Significant Accounting Policies (Continued)

3.8 Financial instruments (Continued)

(d) Classification and measurement of financial liabilities

The Group's financial liabilities include notes and trade payables, other 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.

3.12 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. Summary of Significant Accounting Policies (Continued)

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.

Other post-employment obligations

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

Termination and early retirement benefits

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

Housing benefits

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

Bonus entitlements

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

3. Summary of Significant Accounting Policies (Continued)

3.17 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 substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

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

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

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, 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. Summary of Significant Accounting Policies (Continued)

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 – net" in the consolidated statement of profit or loss and other comprehensive income.

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.

3. Summary of Significant Accounting Policies (Continued)

3.23 Revenue recognition (Continued)

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.

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. Summary of Significant Accounting Policies (Continued)

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.

3.27 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.

3. Summary of Significant Accounting Policies (Continued)

3.27 Leases (Continued)

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

Measurement and recognition of leases as a lessee (Continued)

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.

(b) The Group as a lessor

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

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

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

3.28 Related parties

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

(a) the party is a person or a close member of that person's family and if that person:

- (i) has control or joint control over the Group;
- (ii) has significant influence over the Group, or
- (iii) is a member of the key management personnel of the Group or of a parent of the Group.

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

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

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

4. Financial and Capital Risks Management

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

4.1 Financial risk management

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

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

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Financial assets		
Financial assets at amortised cost		
Notes, trade and other receivables	7,845,558	9,737,226
Restricted cash	29,229	82,916
Time deposits	9,794,544	9,053,681
Cash and cash equivalents	13,100,588	14,973,098
Loans due from the ultimate holding company	20,500,000	20,500,000
Financial assets at FVTOCI		
Fair value through other comprehensive income investments	250,000	250,000
Total financial assets	51,519,919	54,596,921
Financial liabilities		
Financial liabilities measured at amortised cost		
Notes, trade and other payables	20,863,253	22,080,648
Loan due to a fellow subsidiary	154,209	141,972
Lease liabilities	103,929	129,070
Total financial liabilities	21,121,391	22,351,690

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 2023 and 31 December 2022.

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 2023	USD	Others
	RMB'000	RMB'000
Restricted cash, time deposits and cash and cash equivalents	3,045,714	2,133,833
Notes, trade and other receivables	32,327	734,757
Notes, trade and other payables	(283,163)	(1,494,611)
Loan due to a fellow subsidiary	(72,258)	(76,751)
Lease liabilities	(222)	(16,004)
Net exposure in RMB	2,722,398	1,281,224

At 31 December 2022	USD	Others
	RMB'000	RMB'000
Restricted cash, time deposits and cash and cash equivalents	2,766,345	2,448,911
Notes, trade and other receivables	34,610	645,188
Notes, trade and other payables	(296,841)	(1,614,035)
Loan due to a fellow subsidiary	(69,646)	(72,326)
Lease liabilities	(390)	(16,402)
Net exposure in RMB	2,434,078	1,391,336

A 5% strengthening of RMB against the USD as at 30 June 2023 and 31 December 2022 would have changed the equity and net profit by the amounts shown below:

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Decrease in equity and net profit		
– USD	(102,090)	(91,278)

A 5% weakening of RMB as at 30 June 2023 and 31 December 2022 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 2023							
Notes, trade and other payables	**N/A**	**20,863,253**	**–**	**–**	**–**	**20,863,253**	**20,863,253**
Loan due to a fellow subsidiary	**5.25%**	**154,209**	**–**	**–**	**–**	**154,209**	**154,209**
Lease liabilities	**4.78%**	**43,621**	**24,676**	**28,578**	**15,728**	**112,603**	**103,929**
Total other liabilities		**21,061,083**	**24,676**	**28,578**	**15,728**	**21,130,065**	**21,121,391**

	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 2022							
Notes, trade and other payables	N/A	22,080,648	–	–	–	22,080,648	22,080,648
Loan due to a fellow subsidiary	2.58%	141,972	–	–	–	141,972	141,972
Lease liabilities	4.78%	64,933	27,319	30,078	18,538	140,868	129,070
Total other liabilities		22,287,553	27,319	30,078	18,538	22,363,488	22,351,690

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 30 June 2023	As at 31 December 2022	As at 1 January 2022
	RMB'000	RMB'000	RMB'000
		(restated)	(restated)
Total other liabilities	21,121,391	22,351,690	22,883,720
Less: Restricted cash, time deposits and cash and cash equivalents	(22,924,361)	(24,109,695)	(18,772,474)
Net debt	(1,802,970)	(1,758,005)	4,111,246
Total equity (excluding non-controlling interests)	30,410,594	30,031,512	29,112,086
Total capital	28,607,624	28,273,507	33,223,332
Gearing ratio	N/A	N/A	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 2023, the contract assets (Note 22(a)) and contract liabilities (Note 22(b)) are RMB11,008,718,000 (31 December 2022: RMB9,745,992,000) and RMB21,792,949,000 (31 December 2022: RMB22,929,193,000) 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 2023, the net carrying amount of property, plant and equipment is RMB4,498,401,000 (31 December 2022: RMB4,663,369,000).

(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. Management reassesses the adequacy of provision on a regular basis by reviewing the individual account based on past credit history and any prior knowledge of debtor insolvency or other credit risk which might not be easily accessible public information and market volatility might bear a significant impact which might not be easily ascertained. As at 30 June 2023, the provision for impairment on trade receivables and contract assets are RMB2,304,599,000 (31 December 2022: RMB2,286,527,000) and RMB587,503,000 (31 December 2022: RMB528,294,000) respectively.

(d) Deferred taxes

The estimates of deferred income tax assets (Note 36) 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 2023, deferred tax assets recognised in the consolidated statement of financial position is RMB783,670,000 (31 December 2022: RMB769,953,000).

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 2023, the net liabilities of retirement benefit plan obligations (Note 32(b)) is RMB1,877,238,000 (31 December 2022: RMB1,913,763,000).

(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 2023, provision for litigation claims (Note 33) is RMB196,234,000 (31 December 2022: RMB184,271,000).

6. Revenue

The Group's revenue is set out below:

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Engineering, consulting and licensing	**1,654,774**	1,550,634
EPC Contracting	**14,148,270**	14,785,475
Construction	**8,896,942**	9,372,567
Equipment manufacturing	**129,674**	249,876
	24,829,660	25,958,552

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, contract assets, 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.

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 2023:

The segment results for the six-month ended 30 June 2023 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	1,654,774	14,148,270	8,896,942	129,674	–	–	24,829,660
Inter-segment revenue	88,914	–	2,387,721	234,911	–	(2,711,546)	–
Segment revenue	1,743,688	14,148,270	11,284,663	364,585	–	(2,711,546)	24,829,660
Segment results	147,446	454,860	281,733	10,994	97,934	–	992,967
Finance income							529,287
Finance expenses							(31,978)
Share of loss of a joint arrangement	(46)	–	–	–	–	–	(46)
Share of profit of associates	2,542	6,354	–	–	–	–	8,896
Profit before taxation							1,499,126
Income tax expense							(181,775)
Profit for the period							1,317,351
Other segment items							
Depreciation	160,225	79,167	184,116	10,711	1,301	–	435,520
Amortisation	13,870	6,419	1,172	–	–	–	21,461
Capital expenditures							
– Property, plant and equipment	45,573	56,037	92,926	1,143	–	–	195,679
– Right-of-use assets	4,055	2,137	12,280	149	–	–	18,621
– Intangible assets	3,649	2,287	–	–	–	–	5,936
Provision for/(reversal of) ECL on trade and other receivables and contract assets, net	7,173	58,375	27,102	2,105	(6,922)	–	87,833

The segment assets and liabilities as at 30 June 2023 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	20,894,695	28,984,577	20,010,048	970,415	(26,509,477)	44,350,258
Investment in a joint arrangement	3,801	–	–	–	–	3,801
Investment in associates	54,528	119,691	–	–	–	174,219
Unallocated assets						32,569,734
Total assets						77,098,012
Liabilities						
Segment liabilities	33,362,285	22,778,705	16,801,619	614,175	(26,876,983)	46,679,801
Unallocated liabilities						2,027
Total liabilities						46,681,828

7. Segment Information (Continued)

(ii) For the six months ended 30 June 2022 and as at 31 December 2022:

The segment results for the six months ended 30 June 2022 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	1,550,634	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							(265,662)
Profit for the period							1,356,303
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/(reversal of) 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 31 December 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	30,910,037	22,123,629	21,227,989	1,072,592	(27,154,459)	48,179,788
Investment in a joint arrangement	3,847	–	–	–	–	3,847
Investment in associates	55,627	118,796	–	–	–	174,423
Unallocated assets						30,324,405
Total assets						78,682,463
Liabilities						
Segment liabilities	32,947,171	23,932,728	18,353,474	729,688	(27,320,832)	48,642,229
Unallocated liabilities						3,442
Total liabilities						48,645,671

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	
	2023	2022
	RMB'000	RMB'000
The PRC	22,737,072	23,781,091
Saudi Arabia	1,205,943	960,986
Kuwait	72,520	261,794
Other countries	814,125	954,681
	24,829,660	25,958,552

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 2023 and 2022, the details are as follows:

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Fellow subsidiary and its subsidiaries		
– Customer group A	13,061,264	12,759,716

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

Specified non-current assets

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
The PRC	6,591,996	6,968,179
Other countries	461,312	325,162
	7,053,308	7,293,341

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 2023					
– At a point in time	**–**	**–**	**–**	**129,674**	**129,674**
– Over time	**1,654,774**	**14,148,270**	**8,896,942**	**–**	**24,699,986**
Total revenue	**1,654,774**	**14,148,270**	**8,896,942**	**129,674**	**24,829,660**
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 2023					
– Oil refining	**503,127**	**464,817**	**1,394,066**	**–**	**2,362,010**
– Petrochemicals	**849,237**	**10,098,591**	**6,026,257**	**129,674**	**17,103,759**
– New coal chemicals	**66,795**	**30,727**	**122,902**	**–**	**220,424**
– Storage and transportation and others	**235,615**	**3,554,135**	**1,353,717**	**–**	**5,143,467**
Total revenue	**1,654,774**	**14,148,270**	**8,896,942**	**129,674**	**24,829,660**
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

8. Other Income – Net

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Operating lease rental income on property, plant and equipment	45,300	36,608
Income from write back long outstanding payables	525	1,616
Government grants (note)	33,402	21,058
Net foreign exchange gains	100,149	50,387
Other taxes	(42,024)	(58,614)
Others	43,342	30,368
	180,694	81,423

Note:
Government grants mainly represent financial subsidies from Talent Development Fund and job stabilisation subsidies.

9. Other Gains – Net

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Gains on disposal of property, plant and equipment	39,279	2,443

10. Finance Income and Finance Expenses

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Finance income		
Interest income from the ultimate holding company	311,465	347,279
Interest income from the fellow subsidiaries	59,688	41,242
Bank interest income	158,134	94,544
	529,287	483,065
Finance expenses		
Interest expenses on retirement and other supplementary benefit obligation	(27,042)	(30,453)
Finance charges on lease liabilities	(2,753)	(3,703)
Interest expense on loan due to a fellow subsidiary	(2,183)	(1,470)
	(31,978)	(35,626)
	497,309	447,439

11. Profit Before Taxation

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

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Staff costs, including directors and supervisors emoluments (Note 15)	2,227,701	2,219,778
Retirement benefit plan contribution (included in the above mentioned staff costs)	443,433	419,478
Cost of goods sold	9,788,473	10,164,634
Subcontracting costs	8,323,113	9,232,409
Depreciation and amortisation		
– Property, plant and equipment	359,415	309,228
– Right of use assets	76,105	84,826
– Intangible assets	21,461	21,697
Operating lease rentals		
Short term leases expenses	183,078	161,545
Provision for/(reversal of) ECL on trade and other receivables and contract assets, net	87,833	120,881
Rental income from property, plant and equipment after relevant expenses	(35,412)	(28,393)
Research and development costs	793,527	897,120
Gains on disposal/write-off of property, plant and equipment	(39,279)	(2,443)
Exchange gains, net	(100,149)	(50,387)

12. Income Tax Expense

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
		(restated)
Current tax		
PRC enterprise income tax	220,126	288,693
Overseas enterprise income tax	5,707	1,882
Over provision for income tax in prior periods	(32,604)	(12,354)
	193,229	278,221
Deferred tax		
Origination of temporary differences (note 36)	(11,454)	(12,559)
Income tax expense	181,775	265,662

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the six months ended 30 June 2023 and 2022 is 25%.

According to the normal statutory PRC corporate income tax and relevant rules, for the six months ended 30 June 2023 and 2022, 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	
	2023	2022
	RMB'000	RMB'000
		(restated)
Profit before taxation	1,499,126	1,621,965
Taxation calculated at the statutory tax rate	374,781	405,491
Income tax effects of:		
Preferential income tax treatments of certain companies	(210,689)	(216,451)
Difference in overseas profits tax rates	2,974	6,761
Non-deductible expenses	45,276	65,687
Income not subject to tax	(8,850)	(4,437)
Unrecognised tax losses	19,731	34,057
Utilisation of previously unrecognised tax losses	(8,844)	(13,092)
Over provision for income tax in prior periods	(32,604)	(12,354)
Income tax expense	181,775	265,662
Effective income tax rate	12.1%	16.4%

13. Earnings Per Share

(a) Basic

The basic earnings per share for each of the six months ended 30 June 2023 and 2022 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	
	2023	2022
		(restated)
Profit attributable to equity holders of the Company (RMB'000)	1,317,070	1,356,259
Weighted average number of ordinary shares in issue	4,428,000,000	4,428,000,000
Basic earnings per share (RMB)	0.30	0.31

(b) Diluted

As the Company had no dilutive shares for the each of the six months ended 30 June 2023 and 2022, dilutive earnings per share for the six months ended 30 June 2023 and 2022 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 2023 and 2022.

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
		(restated)
Proposed Interim dividends of RMB0.119 per ordinary share (2022: RMB0.118)[1]	526,932	522,504

(1) Pursuant to a resolution passed at the board of Directors' meeting on 18 August 2023, the Directors authorised to declare the interim dividends for the six months ended 30 June 2023 of RMB0.119 (2022: RMB0.118) per share totalling RMB526,932,000 (2022: RMB522,504,000).

15. Employment Benefits

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
		(restated)
Salaries, wages and bonuses	1,177,087	1,225,947
Retirement benefits[1]	415,930	390,454
Early retirement and supplemental pension benefit (Note 32(b))		
– service income	–	(1,408)
– interest cost	27,042	30,453
– Immediate recognition of actuarial (gains)/losses	461	(21)
Housing fund[2]	205,932	191,165
Welfare, medical and other expenses	401,249	383,188
	2,227,701	2,219,778

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% (2022: 14% to 19%) of the specified salaries of the PRC employees for the six months ended 30 June 2023. 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 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
At 1 January 2023				
Cost	3,807,432	5,834,235	611,257	10,252,924
Accumulated depreciation and impairment	(1,854,313)	(3,735,242)	–	(5,589,555)
Net book amount	1,953,119	2,098,993	611,257	4,663,369
Six months ended 30 June 2023				
Opening net book amount	1,953,119	2,098,993	611,257	4,663,369
Transfers	5,427	119,513	(124,940)	–
Additions	–	735	194,944	195,679
Depreciation	(62,401)	(297,014)	–	(359,415)
Disposals/write-off	(283)	(949)	–	(1,232)
Closing net book amount	1,895,862	1,921,278	681,261	4,498,401
At 30 June 2023				
Cost	3,812,283	5,892,463	681,261	10,386,007
Accumulated depreciation and impairment	(1,916,421)	(3,971,185)	–	(5,887,606)
Net book amount	1,895,862	1,921,278	681,261	4,498,401

Depreciation expense recognised is analysed as follows:

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Cost of sales	315,675	263,523
Selling and marking expenses	370	141
Administrative expenses	23,417	16,940
Research and development costs	19,953	28,624
	359,415	309,228

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 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
Balance at 1 January 2023	**122,047**	**21,802**	**2,115,829**	**2,259,678**
Additions	**16,596**	**2,025**	**–**	**18,621**
Depreciation	**(42,216)**	**(5,288)**	**(28,601)**	**(76,105)**
Modification	**(1,209)**	**(597)**	**–**	**(1,806)**
Balance at 30 June 2023	**95,218**	**17,942**	**2,087,228**	**2,200,388**

Depreciation recognised is analysed as follows:

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Cost of sales	**46,385**	60,245
Administrative expenses	**26,912**	21,454
Research and development costs	**2,808**	3,127
	76,105	84,826

18. Intangible Assets

	Patent	Computer software	Total
	RMB'000	RMB'000	RMB'000
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)
Disposals			
– 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
At 1 January 2023			
Cost	489,982	619,859	1,109,841
Accumulated amortisation	(479,966)	(437,851)	(917,817)
Net book amount	10,016	182,008	192,024
Six months ended 30 June 2023			
Opening net book amount	10,016	182,008	192,024
Additions	–	5,936	5,936
Amortisation	(505)	(20,956)	(21,461)
Closing net book amount	9,511	166,988	176,499
At 30 June 2023			
Cost	489,982	625,795	1,115,777
Accumulated amortisation	(480,471)	(458,807)	(939,278)
Net book amount	9,511	166,988	176,499

Amortisation recognised is analysed as follows:

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Cost of sales	5,784	3,065
Administrative expenses	11,544	10,657
Research and development costs	4,133	7,975
	21,461	21,697

19. Investment in a Joint Arrangement and Associates

(a) Investment in a joint arrangement

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Joint venture		
Beginning of the period	**3,847**	3,923
Share of total comprehensive expense	**(46)**	(47)
End of the period	**3,801**	3,876

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 (2022: 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 2023	As at 31 December 2022
	RMB'000	RMB'000
Current assets	**8,005**	8,160
Non-current assets	**872**	944
Total assets	**8,877**	9,104
Current liabilities	**1,275**	1,409
Total liabilities	**1,275**	1,409
Equity	**7,602**	7,695
Share of equity by the Group (50%) (2022: 50%)	**3,801**	3,847

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Revenue	**–**	–
Loss and total comprehensive expense for the period	**(92)**	(94)
Share of total comprehensive expense (50%) (2022:50%)	**(46)**	(47)

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	
	2023	2022
	RMB'000	RMB'000
Beginning of the period	174,423	158,915
Share of total comprehensive income	8,896	7,062
Dividend distribution	(9,100)	–
End of the period	174,219	165,977

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 (2022: 50,000)	35.00% (2022: 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 (2022: 5,500)	36.36% (2022: 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 2023	As at 31 December 2022
	RMB'000	RMB'000
Current assets	1,743,838	1,748,945
Non-current assets	61,253	64,332
Total assets	1,805,091	1,813,277
Current liabilities	1,364,883	1,367,169
Non-current liabilities	3,335	4,566
Total liabilities	1,368,218	1,371,735
Equity attributable to equity holders	389,487	397,332
Non-controlling interests	47,386	44,209
Equity	436,873	441,541
Share of equity by the Group (35%) (2022: 35%)	136,320	139,066

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Revenue	286,818	128,283
Profit for the period attributable to equity holders	18,158	14,050
Other comprehensive income	–	17
Total comprehensive income for the period attributable to equity holders	18,158	14,067
Share of total comprehensive income (35%) (2022: 35%)	6,355	4,924

For the six months ended 30 June 2023, China Petrochemical Technology Co., Ltd. declares dividends of RMB26,000,000 (2022: 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 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Current assets	240,151	233,652
Non-current assets	2,978	3,364
Total assets	243,129	237,016
Current liabilities	136,828	137,202
Non-current liabilities	2,040	2,543
Total liabilities	138,868	139,745
Equity	104,261	97,271
Share of equity by the Group (36.36%) (2022: 36.36%)	37,909	35,368

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Revenue	93,806	74,399
Profit and total comprehensive income for the period	6,990	5,885
Share of total comprehensive income (36.36%) (2022: 36.36%)	2,541	2,138

For the six months ended 30 June 2023, Shanghai KSD Bulk Solids Engineering Co., Ltd. did not declare dividends (2022: Nil).

There are no material contingent liabilities and commitments relating to the Group's interests in the associates and no material contingent liabilities and commitments of the associates themselves.

20. Notes and Trade Receivables

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Trade receivables		
Fellow subsidiaries	2,223,654	3,635,396
Joint ventures of fellow subsidiaries	308,849	490,604
Associates of fellow subsidiaries	632,611	198,741
Associates	3,875	77,020
Third parties	5,101,683	5,261,796
	8,270,672	9,663,557
Less: ECL allowance for impairment	(2,304,599)	(2,286,527)
Trade receivables – net	5,966,073	7,377,030
Notes receivables	784,506	1,218,283
Notes and trade receivables – net	6,750,579	8,595,313

20. Notes and Trade Receivables (Continued)

The carrying amounts of the Group's notes and trade receivables as at 30 June 2023 and 31 December 2022 approximate their fair values.

All notes receivables of the Group are bank's acceptance bills and commercial's acceptance bills and usually collected within 12 months 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 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Within 1 year	5,943,343	7,871,827
Between 1 and 2 years	569,247	540,571
Between 2 and 3 years	182,106	121,889
Between 3 and 4 years	13,770	20,802
Between 4 and 5 years	12,376	8,112
Over 5 years	29,737	32,112
	6,750,579	8,595,313

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

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
At the beginning of the period	2,286,527	2,303,492
ECL allowance	316,841	366,214
Receivables written off as uncollectible	(9,375)	–
Reversal	(289,394)	(294,052)
At the end of the period	2,304,599	2,375,654

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

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
RMB	6,105,760	8,190,451
USD	31,140	26,055
SAR	456,942	180,066
KWD	138,536	193,281
Others	18,201	5,460
	6,750,579	8,595,313

21. Prepayments and Other Receivables

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Prepayments		
Prepayments for fellow subsidiaries	231,120	472,133
Prepayments for associates of fellow subsidiaries	335	335
Prepayments for joint ventures of fellow subsidiaries	1,042	209
Prepayments for construction	1,731,478	1,825,752
Prepayments for materials and equipment	3,222,450	2,732,945
Prepayments for labour costs	46,898	109,016
Prepayments for rent	2,686	3,383
Others	167,397	76,211
	5,403,406	5,219,984
Other receivables		
Amounts due from fellow subsidiaries(1)	27,829	44,860
Amounts due from joint ventures of fellow subsidiaries(1)	225,777	220,208
Amounts due from associates of fellow subsidiaries(1)	68,175	164,369
Dividends receivable	3,640	1,000
Interests receivable	254,370	198,502
Petty cash funds	5,866	4,736
Other guarantee deposits and deposits	157,107	160,863
Payment in advance	307,282	296,412
Maintenance funds	67,976	64,591
Value-added tax credit	304,560	138,749
Prepaid value-added tax	13,109	56,484
Prepaid income tax	105,251	88,091
Value-added tax to be certified	76,861	15,453
Others	96,874	98,135
	1,714,677	1,552,453
Less: ECL allowance for impairment	(119,917)	(111,763)
Prepayments and other receivables – net	6,998,166	6,660,674

(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 2023 and 31 December 2022 approximate their fair values.

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

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
At the beginning of the period	111,763	108,093
ECL allowance	32,556	27,470
Write-off of irrecoverable receivable	(11)	(2)
Reversal	(24,391)	(29,361)
At the end of the period	119,917	106,200

22. Contract Assets and Contract Liabilities

(a) Contract assets

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Contract assets arising from construction contracts	11,008,718	9,745,992

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	
	2023	2022
	RMB'000	RMB'000
At the beginning of the period	528,294	465,962
ECL allowance	73,669	79,661
Reversal	(14,460)	(25,278)
At the end of the period	587,503	520,345

(b) Contract liabilities

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Contract liabilities arising from construction contracts	21,792,949	22,929,193

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 2023 is RMB22,929,193,000 (2022: RMB17,485,967,000), in which RMB11,790,029,000 (2022: RMB10,415,180,000) 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 2023, 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 RMB125,132,950,000 (2022: RMB112,231,153,000), which is expected to be completed in the 60 months (2022: 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 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Raw materials	637,679	524,201
Turnover materials	212,867	252,707
Goods in transit	6,513	8,436
	857,059	785,344
Provision for impairment on inventories	(27,849)	(27,849)
	829,210	757,495

As at 30 June 2023, no further impairment during the period.

For the six months ended 30 June 2023 and 2022, the cost of inventories recognised as expense and included in cost of sales amounted to RMB9,788,473,000 and RMB10,164,634,000 respectively.

24. Loans due from the Ultimate Holding Company

Loans due from the ultimate holding company are unsecured, repayable within one year and interest bearings as follows:

	As at 30 June 2023	As at 31 December 2022
Loans due from the ultimate holding company	3.00%	3.00% to 3.60%

25. Fair Value Through Other Comprehensive Income Investments

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Beginning of financial year	250,000	–
Additions	–	250,000
End of financial year	250,000	250,000

Financial assets, at FVOCI is analysed as follows:

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Unlisted equity shares	250,000	250,000
Total	250,000	250,000

Unlisted equity shares related to investment in Sinopec Carbon Industry Technology Co., Ltd., the company incorporated in the PRC. The Company mainly provides carbon verification; carbon asset management; research and development of carbon emission reduction, carbon conversion, carbon capture and carbon storage technologies; China certified voluntary emission reduction services; natural science research and experimental development; engineering and technological research and experimental development; technical services, technology development, technology consulting, technology exchange, technology transfer, technology promotion; technology import and export; engineering technology services; production, storage and sales of chemical products and hazardous chemicals; contract energy management; project investment; equity investment; financial asset management services; computer data processing and storage services; big data collection and application; intelligent design consulting; enterprise management consulting and information technology consulting services.

The financial asset, at FVOCI is classified as Level 3 of the fair value hierarchy, based on the unobservable inputs of the net asset value. The lower the net asset value, the lower the fair value.

26. Restricted Cash

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Restricted cash		
– RMB	29,229	82,916

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

As at 30 June 2023 and 31 December 2022, 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.

27. Time Deposits

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Time deposits with initial term over three months:		
Time deposits in banks	7,639,990	7,060,597
Time deposits in fellow subsidiaries	2,154,554	1,993,084
	9,794,544	9,053,681

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Denominated in:		
– RMB	7,087,450	6,567,098
– USD	2,195,460	2,013,327
– MYR	274,016	285,151
– KWD	140,964	159,264
– EUR	–	28,841
– SAR	96,654	–
	9,794,544	9,053,681

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 (2022: three months to three years), are approximately 0% to 5.61% as at 30 June 2023 (2022: 0.50% to 5.20%).

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

28. Cash and Cash Equivalents

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Cash at bank and in hand		
– less than three months time deposits	1,319,726	2,448,480
– cash deposits	6,261,947	6,911,272
	7,581,673	9,359,752
Deposits in fellow subsidiaries		
– less than three months time deposits	451,721	173,998
– cash deposits	5,067,194	5,439,348
	5,518,915	5,613,346
	13,100,588	14,973,098

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Denominated in:		
– RMB	10,628,135	12,244,426
– USD	850,254	753,018
– KWD	291,977	191,516
– SAR	181,828	654,062
– EUR	604,269	540,027
– THB	42,994	15,076
– MYR	77,976	46,646
– Others	423,155	528,327
	13,100,588	14,973,098

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

As at 30 June 2023 and 31 December 2022, 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 (2022: seven days to three months), are approximately 0% to 5.70% as at 30 June 2023 (2022: 0% to 4.50%).

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

29. Share Capital

	As at 30 June 2023		As at 31 December 2022	
	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).

30. 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 Chinese Accounting Standards 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.

31. Lease Liabilities

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Total minimum lease payments:		
Due within one year	43,621	64,933
Due in the second to fifth years	53,254	57,397
Due after the fifth year	15,728	18,538
	112,603	140,868
Future finance charges on leases liabilities	(8,674)	(11,798)
Present value of leases liabilities	103,929	129,070
Present value of minimum lease payments:		
Due within one year	41,797	62,254
Due in the second to fifth years	49,446	51,048
Due after the fifth year	12,686	15,768
	103,929	129,070
Less:		
Portion due within one year included under current liabilities	(41,797)	(62,254)
Portion due after one year included under non-current liabilities	62,132	66,816

During the six months ended 30 June 2023, the Group entered into a number of lease agreements for usage of residential properties, office and equipment for 1 to 20 years (2022: 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 RMB18,621,000 (2022: RMB35,415,000).

During the six months ended 30 June 2023, the total cash outflows for the leases are RMB162,199,000 (2022: RMB170,949,000).

Details of the lease activities

As at 30 June 2023, 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"	78 (2022:67)	1 to 9 years (2022:1 to 10 years)
Land use rights in PRC	Prepaid land use rights payments	131 (2022: 133)	21 to 60 years (2022: 21 to 60 years)

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

32. Retirement and Other Supplemental Benefit Obligations

(a) State-managed retirement plan

For the six months ended 30 June 2023, 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%, (2022: 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 2023 and 2022 are as follows:

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Contributions to state-managed retirement plan	415,930	390,454

(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 2023 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 2023	As at 31 December 2022
Retirement with honors benefit plan	2.25%	2.50%
Retirement benefit plan	2.75%	3.00%
Early retirement benefit plan	2.25%	2.50%

(ii) Benefit growth rates (per annum):

	As at 30 June 2023	As at 31 December 2022
Retirement with honors benefit plan	2.00%	2.00%
Retirement benefit plan	2.20%	2.20%
Early retirement benefit plan	2.10%	2.10%

32. Retirement and Other Supplemental Benefit Obligations (Continued)

(b) Group employee retirement benefit plans (Continued)

(iii) Duration:

	As at 30 June 2023	As at 31 December 2022
Retirement with honors benefit plan	5.0 years	5.0 years
Retirement benefit plan	13.0 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 2023 Increase/(decrease) in retirement benefit plan obligation		As at 31 December 2022 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	(39,174)	40,726	(39,613)	41,179
Benefit growth rates	39,089	(37,781)	39,508	(38,189)

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.

32. 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 2022				
Service cost:				
Past service cost	(1,408)	–	–	(1,408)
Net interest expenses	359	28,551	1,543	30,453
Immediate recognition of actuarial gains	–	–	(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 consolidated statement of comprehensive income	(1,076)	28,521	1,522	28,967
For the six months ended 30 June 2023				
Service cost:				
Past service cost	–	–	–	–
Net interest expenses	342	25,542	1,158	27,042
Immediate recognition of actuarial losses	–	–	461	461
Benefit cost recognised in profit or loss	342	25,542	1,619	27,503
Revaluation of net benefit obligation liabilities				
Actuarial revaluation of economic assumptions change	224	38,334	–	38,558
Actuarial revaluation of other assumptions change	(22)	(78)	–	(100)
Benefit cost recognised in other comprehensive income	202	38,256	–	38,458
Total benefit cost recognised in the consolidated statement of comprehensive income	544	63,798	1,619	65,961

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 2023	As at 31 December 2022
	RMB'000	RMB'000
Net liabilities of retirement benefit plan obligation	1,877,238	1,913,763

32. 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 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 gains	–	–	(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
At 1 January 2023	30,463	1,774,691	108,609	1,913,763
Service cost	–	–	–	–
Net interest expenses	342	25,542	1,158	27,042
Immediate recognition of actuarial losses	–	–	461	461
Revaluation gains/(losses):				
Actuarial revaluation of economic assumptions change	224	38,334	–	38,558
Actuarial revaluation of other assumptions change	(22)	(78)	–	(100)
Direct benefit paid by the Group	(4,889)	(77,095)	(20,502)	(102,486)
At 30 June 2023	26,118	1,761,394	89,726	1,877,238

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

33. Provision for Litigation Claims

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Beginning of the period	184,271	181,292
Exchange difference	11,963	4,876
Payment	–	(1,897)
End of the period	196,234	184,271

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 2023 and 31 December 2022, no additional provision for litigation claims is provided.

34. Notes and Trade Payables

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Trade payables		
– Fellow subsidiaries	293,323	306,790
– Associates of fellow subsidiaries	61	232
– Joint ventures of fellow subsidiaries	255	635
– Associates	3,096	48
– Third parties	16,875,724	17,442,700
	17,172,459	17,750,405
Notes payables	1,755,613	2,041,792
Notes and trade payables	18,928,072	19,792,197

The carrying amounts of the Group's notes and trade payables as at 30 June 2023 and 31 December 2022 approximate their fair values.

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

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Within 1 year	15,583,657	16,452,797
Between 1 and 2 years	1,474,683	1,521,141
Between 2 and 3 years	788,663	883,714
Over 3 years	1,081,069	934,545
	18,928,072	19,792,197

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

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
RMB	17,869,285	18,615,829
USD	25,563	48,337
SAR	604,751	614,264
KWD	343,209	347,111
MYR	24,384	36,173
OMR	714	12,757
THB	13,693	2,745
Others	46,473	114,981
	18,928,072	19,792,197

35. Other Payables

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Salaries payables	99,126	457,724
Other taxation payables	309,761	802,300
Output value-added tax to be recognised	36	2,682
Payable of separation and transfer of "Water/electricity/gas supply and property management"	6,065	8,360
Deposits and guarantee deposits payables	78,124	72,117
Advanced payables	1,078,191	1,049,747
Rent, property management and maintenance payables	188,565	116,537
Contracts payables	315,867	419,668
Amounts due to ultimate holding company(1)	25	209
Amounts due to fellow subsidiaries(1)	74,782	68,598
Amounts due to joint ventures(1)	71	71
Amounts due to joint ventures of fellow subsidiaries(1)	241	241
Amounts due to associates of fellow subsidiaries(1)	955	888
Dividend payables	906,848	–
Others	93,169	94,291
Total other payables	3,151,826	3,093,433

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 2023 and 31 December 2022 approximate their fair values.

36. Deferred Income Tax

Deferred income tax assets recognised:

	As at 30 June 2023	As at 31 December 2022	As at 1 January 2022
	RMB'000	RMB'000	RMB'000
		(restated)	(restated)
Deferred income tax assets	783,670	769,953	844,168

Deferred income tax liabilities recognised:

	As at 30 June 2023	As at 31 December 2022	As at 1 January 2022
	RMB'000	RMB'000	RMB'000
		(restated)	(restated)
Deferred income tax liabilities	2,027	5,533	7,033

36. Deferred Income Tax (Continued)

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

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
		(restated)
At the beginning of the period	767,138	843,162
Net effect of change of accounting standard	(2,718)	(6,028)
At the beginning of the period (restated)	764,420	837,134
Credited to equity for defined benefit obligations revaluation of actuarial gain or loss	5,769	(11)
Tax credited/(charged) to profit for the period (Note 12)	11,454	12,559
At the end of the period	781,643	849,682

The movement in deferred income tax assets during the periods ended 30 June 2023 and 2022, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

	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 2022	355,903	459,331	27,928	843,162
Net effect of change of accounting standard	–	–	(6,028)	(6,028)
At 1 January 2022 – restated	355,903	459,331	21,900	837,134
Credited/(charged) to:				
Profit for the period	(12,113)	21,541	3,131	12,559
Equity	(11)	–	–	(11)
At 30 June 2022	343,779	480,872	25,031	849,682
At 1 January 2023	289,562	450,045	27,531	767,138
Net effect of change of accounting standard	–	–	(2,718)	(2,718)
At 1 January 2023 (restated)	289,562	450,045	24,813	764,420
Credited/(charged) to:				
Profit for the period	(11,380)	15,991	6,843	11,454
Equity	5,769	–	–	5,769
At 30 June 2023	283,951	466,036	31,656	781,643

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 2023	As at 31 December 2022
	RMB'000	RMB'000
Tax losses for which no deferred income tax asset was recognised	595,306	896,098

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.

37. Loan Due to a Fellow Subsidiary

Loan due to a fellow subsidiary is unsecured, repayable within one year and interest bearing at 3.13% to 7.37% (31 December 2022: 2.16% to 7.37%) per annum. The fellow subsidiary is mainly Sinopec Century Bright Capital Investment Limited.

38. Commitments

(a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding as at 31 June 2023 and 31 December 2022 not provided for in the consolidated financial statements are as follows:

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Contracted but not provided for		
– Property, plant and equipment	17,051	22,424

(b) Operating leasing commitments

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

	As at 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Less than 1 year	52,195	43,140

As at 30 June 2023 and 31 December 2022, 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.

39. Cash Used in Operations

	Six months ended 30 June	
	2023	2022
	RMB'000	RMB'000
Profit before taxation	1,499,126	1,621,965
Adjustments for:		
Provision for/(reversal of) ECL on trade and other receivables and contract assets, net	87,833	120,881
Depreciation of property, plant and equipment	359,415	309,228
Depreciation of right-of-use assets	76,105	84,826
Amortisation of intangible assets	21,461	21,697
Net gains on disposal of property, plant and equipment	(39,279)	(2,443)
Interest income	(529,287)	(483,065)
Interest expense	31,978	35,626
Net foreign exchange gains	(100,149)	(50,387)
Share of loss of a joint arrangement	46	47
Share of profit of associates	(8,896)	(7,056)
Cash flows from operating activities before changes in working capital	1,398,353	1,651,319
Changes in working capital:		
– Inventories	(71,715)	(214,306)
– Contract assets	(1,321,935)	(2,065,815)
– Contract liabilities	(1,136,244)	(1,045,413)
– Notes, trade and other receivables	1,501,340	1,391,653
– Notes, trade and other payables	(1,474,075)	(1,198,904)
– Restricted cash	53,687	(60,399)
Cash used in operations	(1,050,589)	(1,541,865)

40. 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 33).

41. 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 2023 and 2022 and balances as at 30 June 2023 and 31 December 2022 respectively.

41. 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	
	2023	2022
	RMB'000	RMB'000
Construction and services provided to		
– Ultimate holding company	4,287	–
– Joint ventures of fellow subsidiaries	553,355	661,987
– Associates of fellow subsidiaries	895,879	1,369,139
– Fellow subsidiaries	13,437,241	13,787,533
– Associates	58,671	2,351
	14,949,433	15,821,010
Construction and services received from		
– Ultimate holding company	4,419	3,685
– Joint ventures of fellow subsidiaries	126	968
– Associates of fellow subsidiaries	383	534
– Fellow subsidiaries	1,002,393	3,215,118
– Associates	55,864	1,483
	1,063,185	3,221,788
Technology research and development provided to		
– Ultimate holding company	1,143	1,887
– Joint ventures of fellow subsidiaries	1,179	–
– Fellow subsidiaries	77,552	72,617
	79,874	74,504
General services provided to		
– Joint ventures of fellow subsidiaries	–	196
– Fellow subsidiaries	363	4,324
– Associates of fellow subsidiaries	449	–
	812	4,520
General services received from		
– Fellow subsidiaries	27,502	39,060
Interest income on loans		
– Ultimate holding company	311,465	347,279
Interest expense on borrowings		
– Fellow subsidiaries	2,182	1,470
Expenses in relation to settlement and other financial services		
– Fellow subsidiaries	1,939	1,855
Deposit interest income from fellow subsidiaries	59,688	41,242

41. 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 30 June 2023	As at 31 December 2022
	RMB'000	RMB'000
Deposits and time deposits placed in fellow subsidiaries	7,673,469	7,606,430

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	
	2023	2022
	RMB'000	RMB'000
Fee	300	300
Basic salaries, other allowances and benefits-in-kind	2,501	2,134
Discretionary bonus(i)	8,233	11,062
Contributions to pension plans	910	685
	11,944	14,181

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

42. 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 2022	63,757	161,730
Cash-flow:		
– Drawdown	63,757	–
– Capital element of lease rentals paid	–	(59,806)
– Interest element of lease rentals paid	–	(3,703)
Non-cash:		
– 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
At 1 January 2023	**141,972**	**129,070**
Cash-flow:		
– Drawdown	**5,200**	**–**
– Capital element of lease rentals paid	**–**	**(41,286)**
– Interest element of lease rentals paid	**–**	**(2,753)**
Non-cash:		
– Entered into new lease	**–**	**12,307**
– Interest expenses	**–**	**2,753**
– Modification	**–**	**2,791**
– Exchange difference	**7,037**	**1,047**
At 30 June 2023	**154,209**	**103,929**

43. Particulars of Principal Subsidiaries

As at 30 June 2023, the Company has direct and indirect interests in the following principal subsidiaries:

Name	Establishment/ Place of incorporation and type of legal entity	Registered and fully paid capital	Effective interest held		Principal activities and place of operation
			Direct held	Indirect held	
		RMB'000			
SEI (中國石化工程建設有限公司)	The PRC/Limited liability company	500,000	100%	–	Engineering contracting, engineering and consulting/The PRC
LPEC (中石化洛陽工程有限公司)	The PRC/Limited liability company	500,000	100%	–	Engineering contracting, engineering and consulting/The PRC
SSEC (中石化上海工程有限公司)	The PRC/Limited liability company	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, consulting, and equipment manufacturing/The PRC
SNEI (中石化南京工程有限公司)	The PRC/Limited liability company	556,005	100%	–	Engineering contracting, 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/ engineering planning and research 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 (中石化煉化工程(集團)股份有限公司俄羅斯公司)	Russia/Limited liability company	9,804 (USD1,500,000)	100%	–	Engineering contracting, engineering 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

43. Particulars of Principal Subsidiaries (Continued)

Name	Establishment/ Place of incorporation and type of legal entity	Registered and fully paid capital	Effective interest held		Principal activities and place of operation
			Direct held	Indirect held	
		RMB'000			
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, results in particulars of excessive length.

44. 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

JIANG Dejun

Chairman of the Board

Beijing, the PRC

20 August 2023

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.

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

中国石化
SINOPEC

Address: A67, Ande Road, Xicheng District, Beijing, PRC
Postcode: 100120
Web: www.segroup.cn
Email: seg.ir@sinopec.com

Printed on environmentally friendly paper