中国石化
SINOPEC

中石化石油工程技術服務股份有限公司
Sinopec Oilfield Service Corporation

(Stock Code A Share : 600871 ; H Share : 1033)

2021
Annual Report

IMPORTANT NOTES

1. The Board of Directors ("the Board"), the Supervisory Committee of the Company, its directors, supervisors and senior management warrant that there are no false representations, misleading statements or material omissions in this Annual Report and individually and jointly take full responsibility for the authenticity, accuracy and completeness of the information contained in this Annual Report.

2. The 2021 Annual Report has been approved at the eighth meeting of the tenth session of the Board. A total of 8 directors of the Company attended the meeting, Mr. Lu Baoping, director of the Company, was absent from the meeting due to other working arrangements, and had authorized Mr. Yuan Jianqiang, director of the Company, to attend the meeting and to exercise the voting right on his behalf.

3. The financial statements of the Company for 2021, which have been prepared in accordance with the PRC Accounting Standards for Business Enterprises ("PRC ASBE") and International Financial Reporting Standards ("IFRS") have been audited by BDO China Shu Lun Pan CPAs (LLP) and BDO Limited, respectively. Both auditors have issued unqualified opinions on the financial statements.

4. Mr. Chen Xikun, Chairman of the Board, Mr. Yuan Jianqiang, General Manager, Mr. Cheng Zhongyi, Chief Financial Officer and Mr. Yang Yulong, Manager of the Asset and Accounting Department of the Company warranted the authenticity and completeness of the financial statements contained in the Annual Report.

5. Consideration of the profit distribution proposal or the reserve capitalization proposal by the Board during the reporting period.

   In 2021, after the audit by BDO China Shu Lun Pan CPAs (LLP) and prepared in accordance with the PRC ASBE, the net profit attributable to shareholders of the Company is RMB179,791,000 (In accordance with the IFRS, the net profit attributable to shareholders of the Company is RMB140,450,000), and the parent company's undistributed profit at the end of 2021 is RMB-1,529,605,000. Since the undistributed profit of the parent company at the end of the year is negative, the Board recommends that no cash dividend distribution be made for the financial year 2021, nor the capital reserve conversion to share capital. The proposal still needs to be submitted to the general meeting of shareholders for consideration.

6. Due to the uncertainty of the forward-looking statement about the future plan and development strategy in the annual report, the future plans involved in these forward-looking statements do not represent any guarantee made by the Company to the investors. Investors are advised to exercise caution when making investments.

7. There was no appropriation of funds by the controlling shareholder of the Company and its connected parties for non-operation purpose.

8. The Company did not provide external guarantees made in violation of required decision-making procedures.

9. There is no situation where more than half of the directors of the Company cannot guarantee the authenticity, accuracy and completeness of the Company's 2021 annual report.

10. There are no significant risks that need to be prompted in the Company.

Contents

Section I Definitions

In this Annual Report, unless the context otherwise requires, the following expressions shall have the following meanings:

Company	Sinopec Oilfield Service Corporation, a joint stock limited company incorporated in the PRC whose A Shares are traded on the SSE (Stock code 600871) and H Shares are listed on the Main Board of the Stock Exchange (Stock code 1033)
Group	The Company and its subsidiaries
Board	The board of directors of the Company
Articles of Association	The articles of association of the Company, as amended, modified or supplemented from time to time
CPC	China Petrochemical Corporation, a wholly State-owned company established in the PRC and the controlling shareholder of the Company
Sinopec	China Petroleum & Chemical Corporation, a joint stock limited company established in the PRC and listed on the Main Board of the Stock Exchange as well as in New York, London and Shanghai, the subsidiary of CPC
A Shares	Outstanding shares of the Company which are listed on the SSE and par value per share is RMB1.00
H Shares	Overseas listed foreign Share(s) each which is (are) listed on the Main Board of the HKSE and par value per share is RMB1.00
SSE	Shanghai Stock Exchange
HKSE	The Stock Exchange of Hong Kong Limited
Listing Rules	the Rules Governing the Listing of Securities on HKSE
Model Code	Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules
CSRC	China Securities Regulatory Commission
Century Bright Company	Sinopec Century Bright Capital Investment, Ltd.
SOSC	Sinopec Oilfield Service Co., Ltd., the subsidiary of the Company
Qi Xin Gong Ying Scheme	Qi Xin Gong Ying Scheme for the management of Sinopec Oilfield Service Corporation
Share Option Incentive Scheme	A Share Option Incentive Scheme of the Company
Proposed Grant	The Company granted the total amount of incentive objects not exceeding 50.85 million stock options according to the Share Option Incentive Scheme.
Shanghai Offshore Petroleum Bureau	Sinopec Group Shanghai Offshore Petroleum Bureau Co., Ltd., a subsidiary of China Petrochemical Corporation
Geophysical exploration, geophysical	A method and theory of exploration the underground mineral and researching the geological formations by using physics principles. Such as seismic exploration, electrical and magnetism exploration
Drilling	The engineering of drilling formations down to a certain depth by using the mechanical equipment, and finally forming a cylindrical hole
CCUS	Carbon capture, utilization and storage
completion	The last part of the drilling engineering, including connecting the drilling casing to the oil layer, selection of completion method, cementing, and perforating, etc
logging	The technology of acquiring parameters of various formation characteristics from downhole by using special tools or equipment and technology, and of being used to discover the oil and gas reservoir and other mineral resources
mud logging	Recording and acquiring the information during the drilling process. Mud Logging is the basic technique in oil and gas exploration and production activities, and is the most timely and most direct way to find and evaluate the reservoir. It has the characters of timely and various to acquire the downhole information.
Downhole Operation service	During the oilfield exploration, in accordance with the requirement of the oilfield, using take technical measures, equipment and tools to oil or water wells for the purpose of EOR, increasing the amount of injection and production, improving oil flow conditions, improving well conditions and increasing production rate, etc
Two dimensional geophysical	A method for seismic data gathering by using a set of sound source and one or more collection point; 2D is generally used for drawing geographical structure for a preliminary analysis
Three dimensional geophysical	A method for seismic data gathering by using two sets of sound source and two or more collection point; 3D is generally used for acquiring sophisticated seismic data, and improving the chances of successful drilling to the oil and gas wells

Section I Definitions

HSE	Health, safety and environment management system
LPR	The loan interest rate announced by the People's Bank of China
CNPC	China National Petroleum Corporation
CNOOC	China National Offshore Oil Corporation
Four Improvements	The improvement of the quality, service speed, efficiency and production
PipeChina	China Oil & Gas Pipeline Network Corporation
CNSPC	SINOPEC Star Petroleum Co., Ltd
PRC	People's Republic of China
Hong Kong	Hong Kong Special Administrative Region of the People's Republic of China

Section II Company Profile and Principal Financial Indicators

1. Company Information

Company's Chinese Name	中石化石油工程技術服務股份有限公司
Abbreviation of the Company's Chinese name	石化油服
Company's English name	Sinopec Oilfield Service Corporation
Abbreviation of the Company's English name	SSC
Legal representative	Chen Xikun

2. Contact Information

	Secretary to the Board	Company Secretary/Securities Affairs Representative
Name	Cheng Zhongyi	Shen Zehong
Address	Office of the Board, #9 Jishikou Road, Chaoyang District, Beijing, China	
Telephone	86-10-59965998	
Fax	86-10-59965997	
Email	ir.ssc@sinopec.com	

3. Company Profile

Registered address	No. 22 Chaoyangmen North Street, Chaoyang District, Beijing, PRC
Historical changes of registered address	The Company's registered address was changed to No. 22 Chaoyangmen North Street, Chaoyang District, Beijing, PRC from Yizheng City, Jiangsu Province, PRC in June, 2016
Office address	No. 9 Jishikou Road, Chaoyang District, Beijing, PRC
Post Code of Office address	100728
Company Internet Website	http://ssc.sinopec.com
E-mail	ir.ssc@sinopec.com

4. Disclosing information and inspection place

Domestic Newspapers disclosing information	China Securities, Shanghai Securities News, Securities Times
Internet websites designated by stock exchange to publish the Annual Report	http://www.sse.com.cn http://www.hkexnews.hk
Place where the Annual Report available for inspection	Office of the Board of director of the Company

5. Stock Briefs

Share Type	Place of listing	Stock name	Stock Code	Stock name before altering
A Share	SSE	SINOPEC SSC	600871	
H Share	HKSE	SINOPEC SSC	1033	

6. Other related Information

Domestic Auditors	Name	BDO China Shu Lun Pan CPAs (LLP)
	Address	4th Floor, 61 Nanjing East Road, Shanghai
	Signing accountants	Jin Chunhua, Miao Song
Overseas Auditors	Name	BDO Limited
	Address	25th Floor, Wing On Centre, 111 Connaught Road, Central, Hong Kong
	Signing accountants	Chen Zihong
Name of the domestic legal advisor	Beijing Haiwen & Partners	
Address	20/F, Fortune Financial Center, 5 Dong San Huan Central Road, Chaoyang District, Beijing	
Name of the overseas legal advisor	Zhong Lun Law Firm	
Address	4/F, Jardine House, 1 Connaught Place, Central, Hong Kong	
Share registrars and transfer office	A Share	China Securities Registration and Clearing Corporation Limited Shanghai Branch
	Address	No. 188 Yanggao South Road, China (Shanghai) Pilot Free Trade Zone
	H Share	Hong Kong Registrars Limited
	Address	Rooms 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Roads East, Hong Kong

7. The financial principal information and financial indicators of the Company in the last 3 years (Extracted from the financial statements prepared in accordance with the PRC ASBE)

(1) Principal financial data

Unit: RMB'000

	For the year ended 31 December 2021	For the year ended 31 December 2020	Increase/(Decrease) (%)	For the year ended 31 December 2019
Operating income	**69,533,053**	68,073,394	2.1	69,870,147
Operating income deducted the amount unrelated to main business and the amount without commercial essence	**68,215,016**	67,045,738	1.7	/
Operating profit ("-" for losses)	**347,678**	283,335	22.7	1,251,242
Profit before income tax ("-" for losses)	**490,522**	348,054	40.9	1,355,768
Net profit attributable to equity shareholders of the Company ("-" for losses)	**179,791**	78,978	127.6	914,244
Net profit deducted extraordinary gain and loss attributable to equity shareholders of the Company ("-" for losses)	**-100,263**	-266,915	Not applicable	503,704
Net cash inflow from operating activities ("-" for outflow)	**6,206,909**	4,471,820	38.8	1,377,053

	As at 31 December 2021	As at 31 December 2020	Year-on-year change (%)	As at 31 December 2019
Total equity attributable to equity shareholders of the Company	**6,861,517**	6,722,866	2.1	6,763,872
Total assets	**64,052,447**	61,091,195	4.8	62,069,378

(2) Principal financial indicators

Unit: RMB'000

	For the year ended 31 December 2021	For the year ended 31 December 2020	Year-on-year change (%)	For the year ended 31 December 2019
Basic earnings per share (RMB) ("-" for losses)	**0.009**	0.004	125.0	0.048
Diluted earnings per share (RMB) ("-" for losses)	**0.009**	0.004	125.0	0.048
Basic earnings per share deducted extraordinary gain and loss (RMB) ("-" for losses)	**-0.005**	-0.014	Not applicable	0.027
Weighted average return on net assets (%)	**2.64**	1.16	increased by 1.48 percentage points	14.66
Weighted average return on net assets deducted extraordinary gain and loss (%)	**-1.47**	-3.92	increased by 2.45 percentage points	8.08

Explanations of the principal financial information and financial indicators of the Company in the last 3 years.

☐ Applicable √ Not Applicable

8. Differences between the financial statements of the Company prepared in accordance with PRC ASBE and IFRSs

Unit: RMB'000

	Net profit ("-" for losses) attributable to owners of the Company		Total equity attributable to owners of the Company	
	2021	2020	**For the year ended 31 December 2021**	For the year ended 31 December 2020
PRC ASBE	**179,791**	78,978	**6,861,517**	6,722,866
Difference items and amount:				
Special reserve (a)	**-39,341**	-114,715	**–**	–
IFRS	**140,450**	-35,737	**6,861,517**	6,722,866

Explanation of differences between domestic and foreign accounting standards:

(a) Special reserve

In accordance with the PRC ASBE, the safety production expenses withdrawn in accordance with national regulations are recorded in the current profit and loss and separately reflected in the special reserve in the owner's equity. When expenses related to production safety are incurred, the special reserve is directly offset. When using fixed assets related to production safety, the special reserve shall be written off according to the cost of forming the fixed assets, and the accumulated depreciation of the same amount shall be confirmed, and the relevant assets will no longer be depreciated in future periods. In accordance with the IFRS, expense expenditures are included in profit or loss when incurred, capital expenditures are recognized as fixed assets when incurred, and depreciation is accrued according to the corresponding depreciation method.

9. Quarterly Financial Data of 2021 (Prepared in accordance with PRC ASBE)

Unit: RMB'000

	The first quarter (January~March)	The second quarter (April~June)	The third quarter (July~September)	The fourth quarter (October~December)
Operating income	14,599,813	16,970,248	15,143,830	22,819,162
Net profit attributable to equity shareholders of the Company ("-" for loss)	165,646	202,912	-48,217	-140,550
Net profit deducted extraordinary gain and loss attributable to equity shareholders of the Company ("-" for loss)	130,487	180,131	-139,983	-270,898
Net cash inflow from operating activities ("-" for outflow)	-385,477	744,338	-545,627	6,393,675

Explanations of the differences between the quarterly data and the data in the disclosed periodically report

☐ Applicable √ Not Applicable

10. Extraordinary gain and loss items and amounts (Extracted from the financial statements prepared in accordance with PRC ASBE)

Unit: RMB'000

Extraordinary gain and loss item	2021	2020	2019
Gain and loss on disposal of non-current assets	**88,723**	5,961	67,044
Government grants recognised in profit or loss during the year	**123,873**	293,684	170,446
Gain and loss from debt restructuring	**29,404**	53,960	154,539
Gains or losses on previously held equity interests re-measured at acquisition date	**–**	–	27,474
Other non-operating income and expenses excluding the aforesaid items	**107,666**	64,719	104,526
Other gains and losses that meet the definition of non-recurring profit and loss	**–**	–	-1,292
Tax effect	**-69,612**	-72,431	-112,197
Total	**280,054**	345,893	410,540

11. Items measured by fair value

Unit: RMB'000

Item	Balance for 2020	Balance for the year ended 31 December 2021	The change during the period	Affected amount of profit during the period
Other benefits tools	22,835	21,760	-1,075	–
Receivables financing	1,323,425	1,295,971	-27,454	–
Total	1,346,260	1,317,731	-28,529	–

12. Financial information extracted from the financial statements prepared in accordance with IFRSs

Unit: RMB'000

	As at 31 December				
	2021	2020	2019	2018	2017 (Restated)
Total assets	**64,052,447**	61,091,195	62,069,378	60,904,715	62,089,315
Total liabilities	**57,190,930**	54,368,329	55,305,506	55,126,305	64,190,633
Equity attributable to owners of the Company	**6,861,517**	6,722,866	6,763,872	5,778,410	(2,099,946)
Net assets per share attributable to owners of the Company (RMB)	**0.36**	0.35	0.36	0.30	(0.15)
Equity ratio of owners	**10.71%**	11.00%	10.90%	9.49%	(3.38%)
Return on net assets	**2.05%**	(0.53%)	14.59%	4.16%	(503.02%)

	For the year ended 31 December				
	2021	2020	2019	2018	2017(Restated)
Revenue	**69,533,053**	68,073,394	69,870,147	58,409,078	48,593,948
Profit/(Loss) before income tax	**451,181**	233,339	1,428,397	613,769	(10,324,177)
Income tax expense	**310,731**	269,076	441,524	373,581	239,034
Profit/(Loss) attributable to owners of the Company	**140,450**	(35,737)	986,873	240,188	(10,563,211)
Basic and diluted earnings/(loss) per share (RMB)	**0.007**	(0.002)	0.052	0.013	(0.747)

Dear Shareholders,

On behalf of the Board of the Company, I would like to express my sincere gratitude to our shareholders and people from all walks of life for your interest and support to the Company.

In 2021, General Secretary Xi Jinping visited the 70183 Drilling Team of Shengli Oil Engineering Huanghe Drilling Corporation and gave important instructions during his inspection of Shengli Oilfield, which has embraced us with a feeling of great warmness, proudness and inspiration. Over the past year, we exerted our full efforts to overcome difficulties, create benefits, exploit market and enhance efficiency to ensure the progress of exploration and development works and accelerate high-quality development, striving for a great start of the "14th Five-Year Plan" for high-quality development. In 2021, the Company's consolidated revenue under PRC ASBE amounted to RMB69.53 billion, a year-on-year increase of 2.1%; and the net profit attributable to the shareholders of the Company amounted to RMB179.79 million, a year-on-year increase of 127.6%.

In 2021, the Company actively leveraged on substantial increases in international oil prices to vigorously expand and optimize our market coverage with newly signed contracts amounted to RMB70.9 billion, representing a year-on-year increase of RMB1,100 million. In the domestic Sinopec market, synergy advantages were completely displayed, bringing newly signed contracts up to RMB44.4 billion, a year-on-year increase of 7%, among which the full support given to acquiring more oil and gas reserves and breakthroughs made in shale gas replacement in Shunbei New Area are particular worth noting. Seven gas storage facilities were efficiently completed to effectively serve the upstream exploration and development. For domestic external markets, we further consolidated our position in three large scale and well-established customers or markets, namely CNPC, CNOOC, and PipeChina, and signed up new contracts of RMB12.8 billion, including CNPC's southwest shale gas project of RMB4.1 billion, CNOOC's market large-scale storage tank construction project of RMB1.1 billion, and PipeChina's project of RMB3.0 billion. For overseas markets, we proactively overcame the impact of the pandemic to tap into and nurture large markets with good potentials. The development in Saudi Arabia, Kuwait, etc. maintained its momentum and rendered newly signed contracts of RMB13.7 billion. The oilfield comprehensive service project in Ecuador recorded income of RMB59 million. We were also awarded tender projects of oil and gas transmission in Uganda and 3D seismic detection in Mexico in the amounts of US$610 million and US$310 million, respectively.

The Company endeavored to enforce the strategy of "innovation-driven development" in 2021 with an aim to build up ourselves as a technology guided oil service company by making breakthroughs in key technologies and enhancement of technical service capabilities. We applied for 897 patents and were granted 542 patent authorizations and both reached our all-time high. By integrating innovative ultra-deep well drilling and completion and oil and gas operation and testing techniques, Shunbei 56X well and Tashen No. 5 well reached depths of 9,300 meters and 9,017 meters, respectively, setting the deepest records for onshore directional wells and vertical wells in Asia, respectively. Ancillary technologies such as shale oil and gas wellbore speeding up tactic, rotary steering measurement and control, and crack network fracturing were widely applied in blocks in Fuling, Fuxing, and Baima, and their average drilling cycles were shortened by 11%, 34%, and 37%, respectively. Our self-developed Type I rotary steering system made it first one-kilometer drilling in one go and the ultra-deep high-temperature electrical imaging logging instrument went beyond 200°C. The construction of the cloud platform for SICP petroleum project was fully commenced. The wellbore business integration coordination system was put into operation. Several well site digital command centers were established. Advancements were made in engineering methods and digital models.

Section III Chairman's Statement

In 2021, the Company continued to intensify our efforts in reform implementation, bolster our top-level composition and coordination, and expand resource sharing. For shaping market landscape and optimization of resource allocation, we fine-tuned configuration among the domestic and foreign markets to formulate an overall market layout which facilitates orderly competition, regional resource sharing, and intensive and guaranteed services. For the construction of a new project-based management system, we continued to deepen and optimize the sharing and allocation of human, financial and material resources, logistics bases, and logistics supplies, and put forward online information sharing through accelerated construction of "two pools, two warehouses and one platform" supported with "talents pool", "fund pool", "materials warehouse", "equipment warehouse" and "information platform". Eighteen material centres were set up while logistics bases were reduced to 44. For professional reorganization, the Company accomplished the reorganization of testing, logging and locating operation, established Jingwei Company, furthered consolidation of regional measurement and control companies, and set up a drilling and downhole operation service management unit, i.e., the oil reservoir management department. Finally, our five business lines were linked up by professional management as a whole body. For financial management, we centralized coordination of domestic and foreign fund flows and continued to settle and clear account receivables and inventories. As a result of the settlement and recovery of RMB390 million bad and doubtful debts, our financial expenses decreased by RMB310 million year-on-year and we had an available cash flow of RMB1.8 billion.

In 2021, the Company was committed to green and low-carbon development by accelerating the research, planning, implementation and promotion of transformation and development in the context of "dual-carbon". Through our continuous efforts in research and development of low-carbon technologies, we proactively participated in the expansion of emerging markets such as CCUS, geothermal energy, coalbed methane and hydrogen energy, vigorously implemented clean energy projects such as electric drilling rigs, grid electric drilling, grid electric fracturing, gas power and solar energy, continuously promoted energy-saving technologies such as oil-to-gas conversion, oil-to-electricity conversion, waste heat and pressure recovery, widely used dual-fuel engines and other new energy-saving devices, and supported the completion of the Shengli Oilfield – Sinopec Qilu Megaton CCUS Project, taking solid steps towards comprehensive sustainable and high-quality development. Meanwhile, the Company attached importance to giving back to the society and fulfilling its social responsibilities with practical actions by proactively promoting rural revitalization, participating in voluntary activities and emergency rescue. In the process of market development and the construction of the "Belt and Road", the Company cooperated with domestic and overseas partners and general public in industrial zones to build a harmonious and stable community relationship, contributing to the harmonious development of society.

In February 2021, the Company completed the election of the new session of the Board in accordance with laws and regulation and the Articles of Association. Over the past year, all directors of that new Board worked diligently and conscientiously together, paid more attention to industry trends, emphasized on risk management and control, prudent and scientific decision-making, and strived to ensure the sustainable and healthy development of various business segments of the Company.

Looking ahead to 2022, the Company will encounter both challenges and opportunities. From the perspective of favorable factors, international oil prices have risen sharply, foreign oil companies generally increase their upstream capital expenditures, and domestic oil companies unswervingly implement the "Seven-year Action Plan" and increase their exploration and development efforts. In particular, affected by sudden geopolitical changes in some regions, the oil and gas supply situation has tightened and the oil service market will be increasingly benefited in the short term, but there are still uncertainties. From a long-term perspective, the Company's technological innovation capabilities and the value creation capabilities along the entire industry chain need to be continuously improved. The task of international operation still has a long way to go. The transformation and development against the background of "dual-carbon" still needs to be accelerated with more efforts. From the perspective of the Company's own situation, with the diligence and perseverance across the Company, the structure and systems of our Company have become more streamlined and efficient. Our market coverage and asset allocation are kept on making adjustment and optimizing. We shall not stop acquiring breakthroughs in our core technologies nor speeding upgrade of our key equipment, so as to lay a concrete foundation for the high-quality development and accumulate strength for the comprehensive improvement of the Company.

2022 is the crucial year to realize our high-quality development. The Company will thoroughly follow the important instructions of General Secretary Xi Jinping given during his visit to Shengli Oilfield, fully carry out the themed actions of "Keep the entrustment in mind, make new contributions, create new achievements and celebrate the 20th NCPC", conduct in-depth "Comprehensive Improvement Year" activities, focus on high-quality scale market, accurately optimize resource allocation, continue to increase its efforts in technological innovation, reform innovation and management innovation, comprehensively improve our technical capability, management capability, comprehensive quality and competitiveness and strive to promote the overall improvement of the Company's development and business performance.

Firstly, we have to extend market reach, increase income and acquire efficiency. Our planned newly signed contract value for 2022 is RMB72 billion. The Sinopec market should do a good job in expansion of in oil and gas reserves and production and the strengthening of the complete process of production, supply, storage and sales. For domestic external markets, we shall closely monitor every move our key markets including CNPC, CNOOC, and PipeChina. For overseas markets, we shall continue expand and strengthen the three major markets, and accelerate the pace of "Going Out" of the technical service business.

Secondly, we have to keep bolstering technology innovation and ramping up our scientific strength in support of advancements in our 17 core technologies including measurement while drilling technology and high-temperature and high-pressure logging in order to comprehensively enhance our engineering capability to next level.

Thirdly, we have to coordinate and plan our "dual-carbon" transformation and development. We shall build and operate a new energy R&D center, actively expand CCUS, wind energy, geothermal, environmental protection, underground coal gasification and other new businesses, expand into new energy markets and develop high value-added industries.

Fourthly, we have to keep deepening our internal reform. We shall comprehensively promote project-based management in our organization to strengthen project cost management and control, improve operational efficiency, coordinate marketing deployment, optimize resource allocation, and facilitate business quality and efficiency upgrades.

The Board and I believe that through the joint efforts of the Board, the Supervisory Committee, the management and all the staff, coupled with the support of our shareholders and the wider community, the Company will follow its paces toward the high-quality development track, keep advancing to be a world class leading technology-guided oil service company and create more value for shareholders and the society.

Chen Xikun

Chairman

Beijing, China

29 March 2022

1. Discussion and analysis of operation during the reporting period

Financial figures, except where specifically noted, contained herein have been extracted from the consolidated financial statements prepared in accordance with the PRC ASBE.

Annual Results

During 2021, while sparing no effort to deal with the volatile epidemic, price increases of raw materials, divergence of oil and gas service income from its normal level and other unfavorable factors, the Company swiftly leveraged opportunities or situations such as economic recovery, rising oil prices, and picking up of the demand by striving to expand our market, reducing costs and expenses, exploring potentials, and enhancing efficiency. As such, our operating results recorded substantial growth and every subsidiary was making profits, signifying our resilience has been strengthened.

In 2021, the Company's consolidated revenue was RMB69,530,000,000, representing a year-on-year increase of 2.1%, and net profit attributable to shareholders of the Company amounted to RMB180,000,000, representing a year-on-year increase of 127.6%. Basic earnings per share was RMB0.009, representing a year-on-year increase of RMB0.005. Through the increase in clearance of inventories and account receivable, the strict control of cost and expense and capital expenditure, the Company maintained sound cash flow conditions and the net cash flow in operating activities reached RMB6,210,000,000 representing a year-on-year increase of RMB1,740,000,000.

Operation Review

In 2021, the Company proactively seized the favorable opportunity for domestic oil companies to expand reserves and production, vigorously improved its support capability in engineering and technical services, strengthened cooperation with oil companies for win-win outcomes, while steadily advancing its market development. The total cumulative amount of newly signed contracts reached RMB70.9 billion, representing a year-on-year increase of 1.6%, a new high since the "13th Five-Year" Plan, of which the newly signed contracts in the Sinopec market amounted to RMB44.4 billion, representing a year-on-year increase of 7.3%; the newly signed contracts in domestic external markets amounted to RMB12.8 billion, roughly the same as the previous year; the newly signed contracts in overseas markets amounted to RMB13.7 billion, a year-on-year decrease of 12.2%. As the Company provided good and efficient engineering and technical services, we undertook 577 projects throughout the year, that is another new record, and successively made breakthroughs in a number of our core technologies. Significant progress was also made in market configuration and resource optimization with relevant management continued to improve. It also strengthened its efforts in HSE, while maintaining stable running of the overall production and operation. HSE and drilling-well risks remained under control and the overall production and operation were running stable and smoothly.

1. Geophysical services

In 2021, the Company's operation revenue from the principal business of geophysical service was RMB4.66 billion, an increase of 1.4% from RMB4.60 billion in the same period of the previous year. The completed 2D seismic accumulated for 2,654 kilometers in the year, a decrease of 68.5% than the previous year; while the 3D seismic accumulated for 16,680 square kilometers, a decrease of 19.3% than the previous year. The Company improved the quality of seismic data continuously, with 2D and 3D records reaching pass rate of 100%. The proportion of our seismic data acquired with first grade quality was 4.6 percent points higher than required by the contracts and the average daily efficiency increased by 9.0% as compared with last year. High-end acquisition technology and equipment such as full-node seismic exploration technology and high-efficiency vibroseis acquisition were introduced and source-driven excitation, UAV aerial survey, and Beidou technology were widely used. As a result, digital and smart-intelligent levels at our production sites were enhanced.

2. Drilling service

In 2021, the Company's operation revenue from the principal business of drilling service was RMB33.08 billion, a decrease of 3.3% from RMB34.20 billion in the same period of the previous year. Our completed drilling footage reached 9,150 kilometers, representing a year-on-year decrease of 1.8%. The Company intensified the requirements on integrated geological engineering, facilitating China Petrochemical Corporation's high-efficient exploration and efficiency development in a high-quality and efficient manner, and we made every effort to promote the improvement of the quality, service speed, efficiency and production, i.e., the Four Improvements, in "Northwest China, North China, Northeast China and Sichuan", achieving the average drilling cycle and the time on complicated failures reducing by 12.4% and 60.8%, respectively. We completed drilling of 6 high-yield wells, including Shunbei 41X well and Shunbei 8X well, of daily production in thousand ton per well and a group of very potential oil or gas discovery wells, giving a strong support for the provision of 200 million-ton oil and gas reserves in Shunbei New Area and a tremendous breakthrough of a position replacement with 300 million-ton shale oil. By combining our resource advantage, we had 44 qualified drilling teams to work in southwestern market of CNPC. The first 19 teams were already in operation and signed RMB4.1 billion new contracts.

3. Logging/Mud logging service

In 2021, the Company's operation revenue from the principal business of logging and mud logging service was RMB3.21 billion, an increase of 17.5% from RMB2.73 billion in the same period of the previous year. Our completed logging projects had a total of 267,830,000 standard meters, a decrease of 2.5% than the previous year. Our completed mud logging projects had a total of 9,170 kilometers, a decrease of 2.6% than the previous year. The pass rate of logging and mud logging data was 100% and the one-time success rate of logging was above 95%. The Company consistently improved our logging and mud logging service capabilities, and spared no effort to meet domestic oil companies' requirement for stable oil supply, more gas provision and cost reduction in the market, providing high-quality and effective guarantee for stable and increasing production for China Petrochemical Corporation's key regions in "Northwest China, North China, Northeast China and Sichuan" and eastern old oil fields. In response to the steadily growing scale of domestic and foreign markets, including CNPC's southwest shale gas and local coal bed methane, we continued to strengthen our special capability in integration of directional drilling, logging and rotary steering, traction services, etc.

4. Downhole operation service

In 2021, the Company's operation revenue in downhole operation was RMB9.38 billion, an increase of 9.2% from RMB8.60 billion in the same period of the previous year. It completed downhole operation for 7,123 wells, an increase of 14.4% than the previous year. The pass rate of one-time downhole special operation was 99.7%. The Company continued to improve the construction capability for large-scale fracturing in shale oil and gas well factories and acid fracturing testing of deep and ultra-deep wells. The fracturing construction efficiency in key regions in "Northwest China, North China, Northeast China and Sichuan" was improved by 24.5%. The application of smart-intelligent and standardized electric drive fracturing in the Fuling shale gas field, as a demonstration, made remarkable results. After acid pressure testing, several high-yield oil wells with a daily output of thousand ton were discovered in Shunbei oil and gas fields, which helped to achieve a major breakthrough in shale oil exploration in the Shengli industrial areas. With increased efforts in the cooperative development of difficult-to-recover reserves, newly-built production capacity of hard-to-recover reserves in Shengli industrial areas was 362,000 ton and a new model of low-cost cooperation in shale gas was developed in Fuling Baima shale gas block with proven reserves of shale gas increased by 104.8 billion cubic meters.

5. Engineering and construction service

In 2021, the Company's operation revenue in engineering and construction service was RMB16.71 billion, an increase of 6.6% from RMB15.68 billion in the same period of the previous year. In 2021, the cumulative value of newly signed contracts was RMB17.8 billion, an increase of 14.1% than the same period of the previous year. The Company completed key projects such as the Zhongyuan gas storage group and the Shunbei No. 5 Union Station and made safe and efficient progress in the construction of 71 key projects, demonstrating our ability and edges in increasing oil and gas production and reserves and supporting the construction of large-scale projects of CPC. Tremendous achievement was made in our EPC sector. We were awarded 14 EPC tender projects in the year, which is a new record, with contract value of RMB6.39 billion. We continued our expansion in PipeChina's market, forming a large-scale and efficient market base, with newly signed contracts amounting to RMB3.51 billion, and entering the first party of the market. Also, we were admitted into CNOOC large storage tank market, which can be a new growth engine, for the first time and the newly signed contracts amounted to RMB1.1 billion in the year.

International business

In 2021, the Company's operation revenue in international business service was RMB9.52 billion, a decrease of 16.0% from RMB11.33 billion in the same period of the previous year. The revenue contributed by the international business accounted for 14.0% of the total revenue, with a year-on-year decrease of 2.9 percentage points. In 2021, in the face of the overall downturn in overseas markets, the Company overcame difficulties of the pandemic by consolidating traditional markets, striving to expand new business and opening up new markets, maintaining the stable development in Saudi Arabia, Kuwait and Ecuador, three large-scale markets, and making significant breakthroughs in potential markets such as Mexico and Uganda. In short, our market development was beyond expectations. In Saudi Arabia market, we signed the coiled tubing service subcontracting project and was awarded a well washout tender project for the first time, extending our business to a new technical service field. In Kuwait market, we won the bid for 10 workover rig contracts, renewed the contract for 30 drilling and workover rigs, and passed the qualification review of the drilling large contract. In Ecuadorian market, we made greater progress in the general contracting service project of drilling and completion, with the newly signed contract value reaching a record high. Our geophysical exploration business entered Petroleos Mexicanos market for the first time and the newly signed HUELITLI 3D seismic acquisition and processing project had a contract value of US$0.357 billion which is the highest among all tender projects of seismic acquisition and processing we have been awarded overseas. Our engineering construction business won the bid for a general contracting project of oil and gas gathering and transportation in Uganda, with a contract amount of US$0.61 billion, which is the largest single engineering construction project that the Company has won the bid overseas.

Technology research & development

In 2021, the Company deeply implemented the innovation-driven strategy and stepped up efforts in overcoming difficulties in scientific research. We achieved various new results and new progress and was granted 542 new domestic and overseas patents. Firstly, a number of important achievements were made in integrated supporting technologies. In terms of super-deep and ultra-deep well engineering ancillary technologies, we integrated and innovated technologies for drilling, completion, operation and oil and gas testing of ultra-deep wells. Leveraging tool and equipment innovation, we had ultra-deep wells which exceeded 9,000 meters. Shunbei 56X well and Tashen No. 5 well reached depths of 9,300 meters and 9,017 meters, respectively, setting the deepest records for onshore directional wells and vertical wells in Asia, respectively. In terms of shale oil and gas engineering technology, the application of ancillary technologies such as whole wellbore speed increase, rotational steering measurement and control, and fracture network fracturing became more mature. Their application in blocks in Fuling, Fuxing, and Baima substantially shortened the relevant average drilling cycles. Shengye 9-6HF well set a record for the longest horizontal section of Sinopec (3,601 meters). Secondly, our core technology research made successive breakthroughs. The core units and key modules of the Type I rotary steering system roughly finalized. We accomplished our first "one-kilometer drilling in one go". Our ultra-deep high-temperature electrical imaging logging tool contributed to the completion of the construction of key wells such as Tashen 5 and Yuanfei 203H, successfully breaking the high temperature threshold of 200 °C. Research and development of technologies such as ultra-short radius horizontal wells, coiled tubing sidetracking, and efficient geophysical acquisition were in full swing.

Internal reform and management

In 2021, the Company continued to deepen internal reform and various reform measures were seen to be effective. Firstly, for shaping market landscape and optimization of resource allocation, important progress was achieved. We reasonably divided the market service area of our subsidiaries, optimized the allocation of drilling rigs, teams, materials, etc., and basically facilitated a new market pattern of orderly competition, regional resource sharing, and intensive and guaranteed services. Secondly, the construction of a new project-based management system acquired positive outcomes. We introduced guidelines for "project-based management", "human pool", "fund pool", "material warehouse", and "equipment warehouse". Throughout the year, 18,000 person-times were utilized and more than 4,500 person-times were exported, generating revenue of RMB0.26 billion. Eighteen material centres were set up while logistics bases were reduced to 44. Thirdly, we made a great leap in the internal professional reform. The Company accomplished the reorganization of testing, logging and locating operation and established Sinopec Jingwei Co., Ltd, and furthered consolidation of regional measurement and control companies. Fourthly, the industrialization of products made remarkable results. Three industrialization bases for machinery and equipment, tools and instruments, and chemical additives, respectively, were built, and 21 product lines in seven series were developed. Fifthly, good results were seen in our strict and meticulous management. The Company comprehensively carried out benchmarking improvement, continued to enhance efficiency, low-cost competitiveness and risk prevention and control capabilities, strictly monitor the optimization of the whole process, and reduce costs and increase effectiveness in all fronts, reducing costs and expenses of RMB0.56 billion throughout the year.

Capital expenditures

In 2021, the Company had a capital expenditure of RMB4.34 billion. Focusing on the improvement of exploration and development service capabilities and competitive strength in 2021, the Company increased investment in equipment for the "Four Improvements", actively promoted the standardization of drilling rig classification and matching, and optimize the structure of drilling rigs. Throughout the year, the investment was mainly made for transformation and modification of 33 drilling rigs, 18 sets of fracturing trucks (crowbars), 60,000 seismic acquisition equipment, 9 sets of automatic welding equipment, a 12,000-horsepower multi-purpose vessel, 21 sets of rig network electrical equipment, 34 sets of top-drive guiding devices, 96 sets of mud pumps, 7 sets of rotary steering equipment, 5 sets of coiled tubing equipment, and investment projects such as safety hazard management and environmental protection.

2. The industry situation of the Company in the reporting period

While global economy was gradually recovering in 2021, economic activities in the PRC were steadily resumed with an annual gross domestic product (GDP) growth of 8.1% year-on-year, which was the best among the major developed economies. International crude oil prices fluctuated upwards. The average spot price of North Sea Brent crude oil during the year was US$70.86 per barrel, an increase of 68.9% over 2020. Although international oil prices had increased, there was still a certain lag and prudence in investment from international oil companies in exploration and development and the oil service market size restored slowly. Meanwhile, because of lingering effects of the pandemic overseas, delays in the start of operation resulted in certain decline in equipment operation volume and utilization rate year-on-year. Due to the continuous running of "Seven-year Action Plan" for upstream expansion in reserves and production of domestic oil companies, we saw steady growth of oil and gas production and stable performance in oilfield service market in China.

3. The business situation of the Company in the reporting period

With more than 60 years of business operation and rich experience in project execution, the Company is the largest, integrated, and professional oilfield service provider in China and a leader in providing integrated and full industrial-chain services covering the whole life cycle of oil and gas field exploration. By the end of 2021, the Company provided oilfield services in 76 basins and 561 blocks in more than 20 provinces in China, while its overseas business keeps growing in more than 30 countries and regions.

The Company has five major business sectors – geophysics, drilling, logging & mud logging, downhole operation service and engineering construction, covering the full industrial-chain from exploration, drilling, completion, oil and gas production, collection and transportation, and well abandonment.

The Company has a technological R&D supporting system covering the full industrial-chain from oil and gas exploration to production and is able to provide integrated services in high-acid oil & gas, tight oil & gas, shale gas and heavy oil reservoirs. The Company was awarded National Prize for Progress in Science and Technology and the Golden Prize of National High-Quality Project for the Sichuan-Eastern China Natural Gas Transmission Pipeline project. The Company has shale gas oilfield supporting technologies featuring five technological series of drilling, logging, fracturing and testing, equipment manufacturing, and engineering and construction at shallow shale gas reservoirs above 3,500 meters with most key and core technologies localized, making the Company a national leader in this respect.

Committed to the vision of "leading technology, creating value, supporting oil and gas, serving customers", the Company will vigorously promote its specialized, market-oriented, distinctive, high-end and international business. It will expand its business from onshore to offshore fields, from domestic to international markets, from conventional to unconventional fields, and from single engineering service to integrated reservoir services in order to realize its corporate vision – a world-class integrated oilfield service provider.

4. Analysis on core competitiveness in the reporting period

The Company has the service ability to cover the full industrial-chain of oilfield service. As of the end of 2021, there were 665 land drilling rigs (including 316 rigs above 7,000 meters), 12 offshore drilling platforms, 59 seismograph hosts, 142 imaging logging systems, 435 integrated logging tools, and 237 sets of 2,500 and 3,000 fracturing trucks, 42 workover rigs above 750HP, 1,571 drilling, geophysical and other professional teams. It can provide the full range of services from exploration, development and production for oilfields and bring value to oil companies. The Company has been the largest onshore drilling contractor of Saudi Aramco, Kuwait Petroleum and Ecuadorian National Petroleum Corporation for many years, and Algeria's largest international geophysical contractor status.

The Company is the large-scale integrated provider of petroleum engineering services and integrated oilfield technical services in China, with over 60 years of experiences for oilfield service and strong execution capabilities. Its representative projects include Puguang gas field, Fuling shale gas, Yuanba gas field, Tahe oilfield, Shunbei oil and gas field etc.

The Company has advanced exploration and development technologies as well as strong R&D abilities. It has a number of advanced technologies with proprietary intellectual property rights, such as shale gas, highly acidic oil and gas reservoirs, and ultra-deep well drilling, etc. which can bring sustainable high added-value to its services.

The Company has the experienced management as well as highly efficient and well-organized operation team.

The Company has a stable and growing client base. It has the solid client base such as Sinopec Group in China, and the growing number of clients overseas.

5. Statement of main business during the reporting period

(1) Main business analysis

A. The analysis table of changes related to the income statement and cash flow statement

	2021 RMB'000	2020 RMB'000	The rate of change (%)
Operating revenue	**69,533,053**	68,073,394	2.1
Operating cost	**64,520,925**	63,080,210	2.3
Selling and distribution expenses	**80,463**	71,047	13.3
General and administrative expenses	**2,184,739**	2,307,412	-5.3
Financial expenses	**864,135**	1,196,670	-27.8
Research and development expenditures	**1,669,706**	1,369,501	21.9
Net cash inflow from operating activities	**6,206,909**	4,471,820	38.8
Net cash inflow from investing activities	**-3,253,443**	-1,599,872	Not applicable
Net cash inflow from financing activities	**-1,948,207**	-2,880,102	Not applicable

The change in operating income was mainly due to increases in downhole operation service and engineering and construction service.

The change in operating costs was mainly due to increases in downhole operation service and engineering and construction service.

The change in selling and distribution expenses was mainly due to an increase in staff for external market development.

The change in general and administrative expenses was mainly due to a decrease in community comprehensive service charges after the transfer of water/electricity/gas and property management.

The change in financial expense was mainly due to decreases in comprehensive financing costs and net foreign exchange losses.

The change in research and development expenditure was mainly due to an increase in investment for overcoming technological difficulties and key core technologies.

The change in net cash inflow from operating activities was mainly due to more efforts given to settle and clear account receivables and inventories and supplier bills.

The change in net cash inflow from investing activities was mainly due to an increase investment for equipment to accomplish the Four Improvements.

The change in net cash inflow from financing activities was mainly due to the repayment of sale and leaseback payments in 2020.

The detailed description of material change in Company business type, profit composition or source of profit

☐ Applicable √ Not Applicable

B. Income and cost analysis

a. Statement of operation by industry and products

Industry	Operating income for 2021	Operating cost for 2021	Gross profit margin	Increase or decrease in operating income as compared with last year	Increase or decrease in operating cost as compared with last year	Gross profit margin compared with last year
	RMB'000	RMB'000	(%)	(%)	(%)	
Geophysical	4,663,346	4,422,077	5.2	1.4	3.7	Decreased by 2.1 Percentage points
Drilling	33,081,850	31,597,108	4.5	-3.3	-1.6	Decreased by 1.6 Percentage points
Logging/Mud logging	3,207,549	2,589,402	19.3	17.5	15.8	Increased by 1.2 Percentage points
Downhole Operation	9,384,197	8,591,027	8.5	9.2	4.8	Increased by 3.9 Percentage points
Engineering and construction	16,714,720	15,318,511	8.4	6.6	6.0	Increased by 0.5 Percentage points
Other	1,163,354	1,166,970	-0.3	-7	-8.9	Increased by 2.2 Percentage points
Total	68,215,016	63,685,095	6.6	1.7	1.8	Decreased by 0.1 Percentage points

b. Operating income by regions

Region	Operating income for 2021	Operating cost for 2021	Gross profit margin	Change in operating income as compared with last year	Change in operating cost as compared with last year	Gross profit margin compared with last year
	RMB'000	RMB'000	(%)	(%)	(%)	
Mainland China	58,694,320	54,984,258	6.3	5.3	4.9	Increased by 0.4 Percentage points
Hong Kong, Macau, Taiwan, and overseas	9,520,696	8,700,837	8.6	-16.0	-14	Decreased by 2.1 Percentage points

c. Cost analysis

Unit: RMB'000

Product	Item of costs structure	Amount in 2021 RMB'000	Percentage of amount in 2021 in total cost (%)	Amount in 2020 RMB'000	Percentage of amount in 2020 in total costs (%)	Year-on-year change (%)
Geophysical Service	Raw materials	360,696	8.2	365,193	8.6	-1.2
	Fuel and power	171,526	3.9	174,543	4.1	-1.7
	Employees costs	1,391,831	31.5	1,324,721	31.2	5.1
	Depreciation and amortization	415,543	9.4	479,782	11.3	-13.4
	Subcontracting costs and outsourcing services expenditures	309,038	7	280,865	6.6	10
	Others	1,773,443	40	1,639,518	38.3	8.2
	Sub-total	4,422,077	100	4,264,622	100	3.7
Drilling Service	Raw materials	6,556,042	20.7	7,147,247	22.5	-8.3
	Fuel and power	1,457,078	4.6	1,499,898	4.7	-2.9
	Employees costs	7,634,999	24.2	7,606,586	23.9	0.4
	Depreciation and amortization	3,202,990	10.1	3,226,534	10.2	-0.7
	Subcontracting costs and outsourcing services expenditures	2,990,013	9.5	3,014,340	9.5	-0.8
	Others	9,755,986	30.9	9,625,312	29.9	1.4
	Sub-total	31,597,108	100	32,119,917	100	-1.6
Logging/Mud logging Service	Raw materials	637,641	24.6	561,162	25.4	13.6
	Fuel and power	32,997	1.3	29,200	1.3	13
	Employees costs	1,370,048	52.9	1,152,569	52.2	18.9
	Depreciation and amortization	258,712	10	234,801	10.6	10.2
	Subcontracting costs and outsourcing services expenditures	90,578	3.5	91,139	4.1	-0.6
	Others	199,426	7.7	167,250	7.5	19.2
	Sub-total	2,589,402	100	2,236,121	100	15.8
Downhole operation Service	Raw materials	2,178,138	25.4	2,566,030	31.5	-15.1
	Fuel and power	433,204	5	382,819	4.7	13.2
	Employees costs	1,480,582	17.2	1,311,067	16.1	12.9
	Depreciation and amortization	795,195	9.3	885,921	10.9	-10.2
	Subcontracting costs and outsourcing services expenditures	1,740,128	20.3	1,617,788	19.9	7.6
	Others	1,963,780	22.8	1,435,562	17.5	36.8
	Sub-total	8,591,027	100	8,199,187	100	4.8
Engineering and Construction Service	Raw materials	3,498,080	22.8	3,235,927	22.4	8.1
	Fuel and power	177,891	1.2	156,763	1.1	13.5
	Employees costs	2,341,518	15.3	2,221,835	15.4	5.4
	Depreciation and amortization	290,967	1.9	240,693	1.7	20.9
	Subcontracting costs and outsourcing services expenditures	2,017,271	13.2	1,810,294	12.5	11.4
	Others	6,992,784	45.6	6,783,152	46.9	3.1
	Sub-total	15,318,511	100	14,448,664	100	6.0

d. Changes in the equity of major subsidiaries during the reporting period led to changes in the scope of mergers

☐ Applicable √ Not Applicable

e. Changes in business, products or services during the reporting period

☐ Applicable √ Not Applicable

f. Information about major customer and major suppliers

During the reporting period, the aggregate operating revenue from the top five largest customers was RMB58,280,597,000 accounting for 83.8% of the Company's total operating revenue in 2021. Among the operating revenue form the top five largest customers, sales amount of related parties was RMB50,181,415,000, accounting for 72.2% of the Company's total operating revenue in 2021. The operating revenue of the top five customers in 2020:

Number	Name of client	Amount	Percentage to operating income
		(RMB'000)	(%)
1	CPC and its subsidiaries	47,036,417	67.6
2	PipeChina	3,144,998	4.5
3	SAUDI ARABIAN OIL COMPANY	2,963,413	4.3
4	KUWAIT OIL COMPANY	2,776,255	4.0
5	CNPC	2,359,514	3.4
Total		58,280,597	83.8

During the reporting period, the aggregate purchase amount from the top five largest suppliers was RMB13,967,925,000 accounting for 25.0% of the Company's total purchase amounts in 2021. Among the purchase amount form the top five largest suppliers, purchase amount of related parties was RMB12,015,348,000 accounting for 21.5% of the Company's total purchase amount in 2021. Purchase amount from the largest supplier accounted for 21.5% of the total purchase amount of the Company. The largest supplier was China Petrochemical Corporation and its subsidiaries.

During the reporting period, except the disclosure information about the connected transactions with controlling shareholder and its subsidiaries in the part of "Information on connected transactions" in "Significant Events", the directors, supervisors of the Company and their close contacts or any other shareholders holding over 5% of shares of the Company are not found having any equity interest in the above main customers and suppliers.

During the reporting period, procurement proportion from an individual supplier exceeded 50% of the total or the existence of a new supplier among the top five suppliers or relying on a small number of suppliers.

☐ Applicable √ Not Applicable

C. Expense

Item	2021	2020	Year-on-year change	Reason for change
	RMB'000	RMB'000	(%)	
General and administrative expenses	**2,184,739**	2,307,412	-5.3	Mainly due to the reduction in comprehensive community service costs
Selling and distribution expenses	**80,463**	71,047	13.3	Mainly due to the increase in the investment of external market developers
Financial cost	**864,135**	1,196,670	-27.8	Mainly due to the increase in comprehensive financing costs and net loss of exchange
Credit impairment loss	**22,492**	38,350	-41.4	Mainly due to recalling receivables
Asset impairment loss	**-2,826**	70,743	-104.0	Mainly due to the decrease in the loss of impairment of contract assets year-on-year by handling project settlement
Income tax expenses	**310,731**	269,076	15.5	Mainly due to the increase in total profit year-on-year

D. Statement of research and development expenditure

a. research and development expenditure

Unit: RMB'000

Expenditure research and development expenditure for 2021	1,669,706
Capitalized research and development expenditure for 2021	–
Total research and development expenditure for 2021	1,669,706
Percentage of total research and development expenditure in operating income (%)	2.4
The proportion of R&D investment of capital (%)	–

In 2021, the Company's research and development expenditure was RMB1,669,706,000, representing an increase of 21.9 percent as compared with RMB1,369,501,000 in last year. It is mainly due to the increase in technology investment in key technologies such as Type I rotary steering system, ultra-deep high-temperature electrical imaging logging tool, ultra-short radius horizontal wells, coiled tubing sidetracking, and efficient geophysical acquisition.

b. R&D personnel status sheet

Number of R&D personnel in Company	3,246
Percentage of R&D personnel number in the total personnel number of the Company (%)	4.7

Academic structure of R&D personnel	
Education level	**Number of personnel**
Doctor degree	60
Postgraduate degree	603
Undergraduate degree	2,049
Junior college education	297
High school and below	237

Age structure of R&D personnel	
Age structure	**Number of personnel**
Under 30 years old (not include 30)	230
30-40 years old (include 30, not include 40)	1,046
40-50 years old (include 40, not include 50)	1,042
50-60 years old (include 50, not include 60)	922
60 years old and above	6

E. Changes in cash flow statement items

Unit: RMB'000

Item	2021	2020	Increased/ decreased by	Change (%)	Reason for change
Net cash inflow from operating activities ("-" for outflow)	**6,206,909**	4,471,820	Inflow increased by 1,735,089	Inflow increased by 38.8%	Mainly due to increasing the clearance of account receivables and inventories and the settlement of note payable
Net cash inflow from investing activities ("-" for outflow)	**-3,253,443**	-1,599,872	Outflow increased by 1,653,571	Not Applicable	Mainly due to increasing equipment investment in Four Improvements
Net cash inflow from financing activities	**-1,948,207**	-2,880,102	Outflow decreased by 931,895	Not Applicable	Mainly due to repayment of after-sales leaseback in the previous year

(2) Explanations of significant changes in profit led by the Non-core business

☐ Applicable √ Not Applicable

(3) Statement of assets and liabilities analysis

A. Assets and liabilities

Item	Amount at 31 December, 2021	Percentage of amount at 31 December, 2021 in total assets	Amount at 31 December, 2020	Percentage of amount at 31 December, 2020 in total assets	Changes from the end of the preceding year to the end of this year
	RMB'000	**(%)**	RMB'000	(%)	(%)
Cash and cash equivalents	**2,508,224**	**3.9**	1,551,458	2.5	61.7
Accounts receivable	**8,151,019**	**12.7**	9,358,385	15.3	-12.9
Receivables at FVTOCI	**1,295,971**	**2.0**	1,323,425	2.2	-2.1
Inventories	**1,088,304**	**1.7**	1,033,678	1.7	5.3
Contract assets	**13,546,895**	**21.1**	11,610,888	19.0	16.7
Other current assets	**2,238,006**	**3.5**	1,995,808	3.3	12.1
Long-term equity investments	**47,048**	**0.1**	43,046	0.1	9.3
Investment in other equity instruments	**21,760**	**0.0**	22,835	0.0	-4.7
Fixed assets	**23,461,781**	**36.6**	22,939,838	37.6	2.3
Construction in progress	**668,364**	**1.0**	284,292	0.5	135.1
Right-of-use assets	**720,938**	**1.1**	1,265,583	2.1	-43.0
Intangible assets	**506,596**	**0.8**	504,966	0.8	0.3
Long-term deferred and prepaid expenses	**6,595,930**	**10.3**	5,855,143	9.6	12.7
Short-term borrowings	**17,520,091**	**27.4**	19,370,520	31.7	-9.6
Notes Payable	**8,334,086**	**13.0**	6,305,228	10.3	32.2
Accounts Payable	**21,556,262**	**33.7**	20,497,509	33.6	5.2
Contract liabilities	**3,547,938**	**5.5**	3,024,461	5.0	17.3
Other payables	**2,355,823**	**3.7**	1,675,104	2.7	40.6
Non-current liabilities due within one year	**296,045**	**0.5**	356,747	0.6	-17.0
Long-term borrowings	**1,554,686**	**2.4**	580,716	1.0	167.7
Lease liabilities	**390,866**	**0.6**	898,469	1.5	-56.5
Long-term payables	**28,885**	**0.0**	26,812	0.0	7.7
Deferred income	**9,288**	**0.0**	14,186	0.0	-34.5
Other comprehensive income	**-3,823**	**0.0**	-2,014	0.0	Not applicable
Special reserves	**219,182**	**0.3**	258,523	0.4	-15.2

Reasons for the changes:

(1) Cash and cash equivalents increased by RMB956,766,000 compared with the end of the previous year, mainly due to the fact that property owners mostly settle outstanding balances at year end.

(2) Construction in progress increased by RMB384,072,000 compared with the end of the previous year, mainly due to non-completed installation or construction of certain equipment newly acquired for the Four Improvements.

(3) Right-of-use assets decreased by RMB544,645,000 compared with the end of the previous year, mainly due to expiry of leases with related parties.

(4) Bill payable increased by RMB2,028,858,000 compared with the end of the previous year, mainly due to an increase in bill settlement with suppliers and subcontractors.

(5) Other payables increased by RMB680,719,000 compared with the end of the previous year, mainly due to an increase in quality guarantee deposit, performance bond and investment payables.

(6) Long-term borrowings increased by RMB973,970,000 compared with the end of the previous year, mainly due to an increase in long-term borrowings with related parties.

(7) Lease liabilities decreased by RMB507,116,000 compared with the end of the previous year, mainly due to expiry of leases with related parties.

(8) Deferred income decreased by RMB4,898,000 compared with the end of the previous year, mainly due to the recognition of other gains based on the progress of project research and development.

(9) Other comprehensive income decreased by RMB1,810,000 compared with the end of the previous year, mainly due to changes in fair value of other equity instrument investments.

B. Statement of overseas assets

The amount of overseas assets is RMB18,443,119,000, accounting for 28.8% of total assets.

C. Limitation of main assets by the end of the reporting period

√ Applicable ☐ Not Applicable

On 31 December 2021, the Company's funds with restricted use such as margin deposit, etc. was RMB32,918,000 (On 31 December 2020: RMB28,106,000) and net book value of sale-leaseback fixed assets was RMB0 (On 31 December 2020: RMB20,715,000).

(4) Analysis of the industry operation information

1. Market of crude oil and natural gas

In 2021, domestic oil and gas production grew steadily. Domestic oil and gas companies continued to increase their efforts in exploration and development, expand reserves and production, and strive to ensure oil and gas for the economy and people's livelihood. According to the data provided by National Bureau of Statistics, the crude oil output was 198.98 million ton during the year, an increase of 2.4% as compared with the previous year and an increase of 4.0% as compared with 2019, which was an average growth of 2.0% per year. Natural gas production was 205.3 billion cubic meters, an increase of 8.2% as compared with the previous year and an increase of 18.8% as compared with 2019, which was an average growth of 9.0% per year. It was also the fifth year in a row with additional production over 10 billion cubic meters.

In 2021, domestic demand for refined oil products picked up. According to the data provided by the National Development and Reform Commission, the processing volume of crude oil was 703.55 million ton during the year, an increase of 4.3% as compared with the previous year and an increase of 7.4% as compared with 2019, which was an average growth of 3.6% per year. Refined oil consumption was 341.48 million ton, a year-on-year decrease of 3.2%, of which consumption of gasoline, diesel oil diesel, and jet fuel increased by 5.7%, 0.5%, and 5.7%, respectively, year on year. Domestic natural gas consumption continued to grow relatively faster. According to the data provided by the National Development and Reform Commission, in 2021, in 2020, the apparent natural gas consumption in the country was 372.6 billion cubic meters, a year-on-year increase of 12.7%.

2. The capital expenditure in exploration and exploitation of domestic and overseas companies

Although international oil prices had fluctuated upwards, there was still a certain lag and prudence in investment from international oil companies in exploration and development in 2021. They continued to maintain a prudent attitude towards investment in oil and gas exploration and development, especially in risky exploration, frontier areas, etc. Subject to the general constraint of carbon peak and neutrality targets, international oil companies sought to accelerating their trials or attempts of transformation into new energy companies. There was a rush of bigger investment in new energies. As the overall domestic economic situation continued to improve, domestic oil companies kept putting forward the "Seven-Year Action Plan" which encourages expansion in reserves and production by increasing capital expenditures for upstream exploration and development. For example, Sinopec had an exploration and development capital expenditure of RMB68.1 billion in 2021, a year-on-year increase of 20.7% and CNOOC estimated its exploration and development capital expenditure was RMB90.0 billion in 2021, 16.3% higher from RMB77.4 billion in 2020.

3. Business information in oilfield service industry

In 2021, the global oilfield service industry showed signs of recovery as a whole; however, we still saw excess supply in the market, especially for overseas markets which continued to suffer from repeated outbreaks of the epidemic and had to delay, postponed or even cancelled some exploration and development projects. Compared with the prior-pandemic situation, there was a substantial lower equipment utilization. Still, prices for oilfield services did not restored their previous level. Thanks to continuous implementation of the "Seven-Year Action Plan" which encourages expansion in reserves and production by domestic oil companies, the oilfield service market in the PRC maintained its steady growth.

(5) Analysis of investments

1. Significant equity investment

During the reporting period, no significant equity investment items of the Company occurred.

2. Significant non-equity investment

During the reporting period, no significant non-equity investment items of the Company occurred.

3. Information of financial assets measured at fair value

☐ Applicable √ Not Applicable

(6) Sales of major assets and equity

During the reporting period, no sales of major assets and equity of the Company occurred.

(7) Information on the Company's subsidiaries and shareholding companies

Name of company	Registered capital	Shareholding percentage	Amount of total assets	Amount of total liabilities	Amount of total net assets	Amount of net profit	Main Business
		%	RMB'000	RMB'000	RMB'000	RMB'000	
SOSC	RMB4,000,000,000	100	64,066,421	61,536,377	2,530,045	193,310	Petroleum engineering technical service
Sinopec Shengli Oil Engineering Company Limited*	RMB700,000,000	100	10,759,290	10,749,300	9,989	22,067	Petroleum engineering technical service
Sinopec Zhongyuan Oil Engineering Company Limited*	RMB450,000,000	100	11,688,306	11,425,437	262,869	531	Petroleum engineering technical service
Sinopec Jianghan Oil Engineering Company Limited*	RMB250,000,000	100	3,893,839	2,711,953	1,181,886	40,931	Petroleum engineering technical service
Sinopec East China Oil Engineering Company Limited*	RMB860,000,000	100	4,292,454	3,746,365	546,089	1,641	Petroleum engineering technical service
Sinopec North China Oil Engineering Company Limited*	RMB890,000,000	100	4,504,482	2,625,047	1,879,435	11,111	Petroleum engineering technical service
Sinopec Southwest Oil Engineering Company Limited*	RMB300,000,000	100	6,353,555	2,978,538	3,375,017	970	Petroleum engineering technical service
Sinopec Oil Engineering Geophysical Company Limited*	RMB300,000,000	100	3,638,900	3,354,799	284,101	10,755	Geophysical exploration
Sinopec Oil Engineering and Construction Corporation*	RMB500,000,000	100	20,240,696	19,866,864	373,833	173,911	Construction
Sinopec Jingwei Company Limited	RMB1,000,000,000	100	3,422,523	2,692,035	730,488	101,900	Testing, logging and locating service
Sinopec Offshore Oilfield Services Company*	RMB2,000,000,000	100	4,728,081	1,031,845	3,696,236	11,341	Offshore Oil Engineering Technology Service
Sinopec International Petroleum Service Corporation*	RMB700,000,000	100	2,578,624	1,535,850	1,042,774	1,631	Petroleum engineering technical service

Name of company	Revenue	Operating profit
	RMB'000	RMB'000
SOSC	69,533,054	361,197
Sinopec Shengli Oil Engineering Company Limited*	13,938,821	62,431
Sinopec Zhongyuan Oil Engineering Company Limited*	10,984,593	65,073
Sinopec Jianghan Oil Engineering Company Limited*	5,788,668	61,616
Sinopec East China Oil Engineering Company Limited*	3,619,379	15,991
Sinopec North China Oil Engineering Company Limited*	3,945,830	10,025
Sinopec Southwest Oil Engineering Company Limited*	5,473,139	-1,873
Sinopec Oil Engineering Geophysical Company Limited*	4,663,567	29,802
Sinopec Oil Engineering and Construction Corporation*	16,728,497	136,818
Sinopec Jingwei Company Limited	4,032,510	153,307
Sinopec Offshore Oilfield Services Company*	1,565,007	1,009
Sinopec International Petroleum Service Corporation*	864,287	10,477

* Note: The Company holds shares though SOSC.

(8) Information on the structured subjects controlled by the Company

☐ Applicable √ Not Applicable

6. Discussion and analysis on the Company's business in the future

(1) Competitive Structure and Development Trend

Looking ahead to 2022, it is expected global economy can manage to have a recovery growth but instability, uncertainty, and imbalance will characterize the process. Strong fundamentals of China will not be changed in the long run, but the development is subject to pressure from shrinking demand, supply shocks, and weakening expectations. Difficulty of stabilizing growth, adjusting structure, and preventing risks has increased significantly. International crude oil prices are expected to fluctuate at a high level. High oil prices are conducive to the recovery of capital investment by foreign oil and gas companies, and will help the overseas oil service market continue to recover. At the same time, domestic oil companies will continue to increase large-scale exploration and development to ensure energy security, thereby promoting the steady growth of the domestic oil service market. Due to the accelerated development trend of low-carbon development of the global energy industry, the development of traditional oil and gas industry is facing increasing challenges, which will propel oil service companies to provide higher quality, more efficient, and more cost-competitive service. In short, competition in the oil service market continues to be fierce.

(2) Operation Plans in 2022

Facing the complex and severe market situation in 2022, the Company will continue to leverage the advantages of complicated services and special technologies to carry out the activities of "Year of Comprehensive Improvement". The Company will focus on high-quality and large-scale markets, precisely optimize resource allocation, stabilize oil, increase gas output and reduce costs in a high-quality manner, strengthen market expansion and increase efficiency, and coordinate and optimize the market layout. The Company plans to sign new contract to reach a yearly value of over RMB72 billion, in which RMB45 billion will be from Sinopec market, RMB13.3 billion from domestic external market, and RMB13.7 billion from overseas market. We will continue to deepen internal reform, optimize and integrate resources, promote technological innovation, strengthen cost control and improve management, accelerate the establishment of a technology-guided oil service company, and promote the overall improvement of the capability of the Company to serve and protect exploration and development. The Company puts emphasis on the following aspects:

1. Geophysical service

In 2022, the Company will continue to strengthen the coordination of equipment and protection capacity, continue to improve construction efficiency and data quality, advance the high-quality development of geophysical services, and facilitate major breakthroughs in exploration. It will efficiently serve the exploration and deployment of China Petrochemical Corporation, and do a good job in oil field and natural gas exploration in the Tarim Basin, eastern old oil fields, Junggar Basin, Sichuan Basin and Ordos Basin. In the domestic and overseas markets, the Company will continue to leverage its advantages in geophysical technology, penetrate deeply into the markets of the China Geological Survey and the Chinese Academy of Geological Sciences, and fully develop integrated cooperation in acquisition, processing and interpretation; it will also meet the needs of national and local construction and develop new businesses such as mapping and geographic information, engineering geophysical exploration and non-seismic, in order to grow bigger and stronger. It plans to complete annual acquisition of 2D seismic data of 4,130 kilometers and 3D of 18,260 sq. kilometers.

2. Drilling service

In 2022, the Company will vigorously satisfy the demands for efficient exploration and profitable development of China Petrochemical Corporation, leverage the technical advantages of the whole industry chain, provide high-quality and efficient services to ensure the construction of production capacity in key industrial areas such as the Shunbei ultra-deep oil and gas field, Southwest natural gas, Ordos tight oil and gas, Weirong deep shale gas and Fuling shale gas, helping China Petrochemical Corporation to stabilize oil, increase gas output and reduce costs; continue to consolidate the internal market share of China Petrochemical Corporation, improve the utilization rate of the team, shorten the annual drilling cycle by 6%, reduce the the time on complicated failures by 10%, and achieve a rig utilization rate of 85%. In the domestic and foreign markets, it will continue to optimize the layout of external resources, consolidate and expand the market share in high-quality markets such as CNPC and CNOOC and strive to achieve greater breakthroughs in CNPC's Southwest shale gas, Northwest conventional oil and gas and other high-quality markets; actively expand local coalbed methane and other unconventional and non-oil businesses to achieve increase amid stability. The Company plans to complete drilling footage accumulated for 9,500 kilometers in 2022.

3. Logging/Mud logging service

In 2022, the Company will continue to adhere to the technology to expand the market unswervingly, and continue to improve its market competitiveness and overall efficiency level. The Company will follow closely the deployment of China Petrochemical Corporation in exploration and development, leverage the advantages of integration of logging and guidance, advance intervention, continue to optimize the market layout, enhance the ability to provide accurate services, and help make a big breakthrough in exploration, steady growth in crude oil and big development in natural gas. In the domestic and overseas markets, we are actively expanding into the Chinese oil market, following up on the progress of the drilling lump sum project in Chuanqing, paying close attention to the shale gas markets in Guizhou, Sichuan and Chongqing, and continuing to follow up on the China Geological Survey and the new energy sector to create a new position for sustainable development. The Company plans to complete logging footage accumulated for 279,100 kilometers in 2022, while the mud logging footage accumulated for 9,200 kilometers.

4. Downhole operation service

In 2022, the Company will continue to optimize downhole special operation resources, strengthen professional management, increase technology integration and equipment renewal, and continuously improve the service guarantee capacity of exploration and development. It will focus on safeguarding China Petrochemical Corporation's ultra-deep well exploration and test oil and gas projects in the Sichuan Basin and Tarim Basin, enhancing the scale development benefits of shale gas in Sichuan and Chongqing and shale oil in Shengli, and optimising the transformation of dense sandstone reservoirs in Ordos and western Sichuan. The fracturing construction efficiency will be further improved by 15%. We will continue to refine, strengthen and expand our high-end businesses such as continuous oil pipeline operations and high-pressure pressurised operations; continue to expand the shale gas market in CNPC's southwestern industrial zone and local shale gas markets to provide support for increased gas output; accelerate the extension of the industrial chain, continue to focus on the cooperative development of difficult-to-use reserves of shale gas in potential blocks such as eastern and southwest Shengli and western Sichuan, and actively explore new models of clients and vendors cooperation and sharing to strive for new breakthroughs. In 2022, the Company plans to complete downhole operation service of 7,180 well times.

5. Engineering and construction service

In 2022, the Company will boost efforts in overall deployment and coordination, promote the integrated operation of engineering projects, innovate development concepts, concentrate advantageous resources in the expansion of high-efficient and high-quality markets and effectively manage and control low-efficient markets. In the internal market of China Petrochemical Corporation, it will improve the quality of service, and focus on the construction of projects such as the Dongying crude oil depot relocation project, Shunbei natural gas processing station and Zhongyuan gas storage depot complex; leverage the EPC advantages of long-distance pipelines to expand the domestic long-distance pipeline engineering market, focusing on the development and construction of projects such as the Shandong pipeline network east main line, the Zaozhuang branch of the south main line, the Zhangqiu-Gaomi natural gas pipeline, and the Shandong pipeline network liaison line between Shandong, Henan and Anhui. It will seize the opportunity of new energy development and strengthen the market expansion of large LNG storage tanks, CCUS, green power hydrogen production, maritime wind power and hydrogen transmission, focusing on the carbon dioxide pipeline between Qilu Petrochemical and Shengli Oilfield, the green power hydrogen production project of ZTHC Energy and the large LNG storage tank project of Natural Gas Branch. In 2022, the Company plans to sign new contracts valued RMB20.7 billion and complete contracts valued RMB16.6 billion.

6. International business

In 2022, the Company will firmly expand its main market, focus on optimizing the structure of overseas specialties, business levels and regional layouts, strive to improve its ability to generate efficiency, and accelerate the high-quality development of its overseas business; in the Saudi market, it will focus on promoting the resumption of temporary suspension of pending rigs as soon as possible, vigorously promote the development of fracturing services business, actively seek subcontracting of rigs for lump sum projects, solidly promote the pre-qualification of technical services such as directional wells, offshore drilling and logging, and strive to expand its surface business such as pipelines and municipal roads and bridges. In the Kuwait market, it will closely follow up the drilling and repair projects of deep wells and developed wells, and the subcontracting lump sum projects of thick oil, accelerate the qualification of cementing and drilling fluid, and strive to win the bidding of conventional directional well service projects. In the Ecuadorian market, we took the oilfield drilling and completion lump sum project as an opportunity to accelerate the development of professional technical service business such as mud logging, logging and drilling fluids; made full use of the favorable opportunity of oil price recovery to strengthen the project management of two reservoirs, EBANO in Mexico and I-L-Y in Ecuador, rationalize the production plan and continuously improve the operating efficiency. In 2022, the Company plans to sign new contracts valued US$2.15 billion and complete contracts valued US$1.6 billion.

7. Technology development

In 2022, the Company will continue to step up efforts in overcoming technology difficulties, integrate scientific research resources, concentrate on making breakthroughs in key and core technologies and accelerate its progress towards a technology-guided oil service company. The Company will improve its engineering technology, improve nine integrated technologies for extra-deep and shale oil and gas, promote the application of a number of applicable technologies such as vertical drilling and fine pressure control, and strive to make strategic breakthroughs in key technologies such as 10,000-meter extra-deep wells, 5,000-meter ultra-long horizontal sections, 50-segment fracturing, ultra-deep oil and gas testing and deep shale gas horizontal wells. The Company will work hard to forge scientific and technological tools and continue to develop a series of key core technologies such as follow-on drilling and logging, high-temperature and high-pressure logging. The Type I rotary guidance system will achieve final mass production, and the Type II high slope-making rotary guidance system will accelerate field testing and application, promoting the overall technical level of the Company to become a domestic leader and more technologies to reach the international advanced level.

8. Internal reform and management

In 2022, the Company will deepen its reform and optimisation to achieve overall improvement in stimulating momentum and releasing vitality. The Company will complete the three-year action task of deepening reform with high quality, continue to promote the co-ordination of market layout and optimisation of resource allocation, strengthen the optimisation of resources such as institutions, teams, equipment and service support of subsidiaries, improve the matching of resource allocation with value creation, reduce operating costs and further enhance efficiency and effectiveness. It will promote the transformation of the institutional mechanism to project-based management, accelerate the construction of a project-based management system centered on project management and supported by "two pools, two banks and one platform", and promote the concentration of core resources such as talents, funds, equipment, materials and information on projects; vigorously promote the transformation of scientific and technological achievements and the industrialization of products, and continue to promote the construction of industrial bases for machinery and equipment, tools and instruments and oilfield chemicals. It will expand the scale of application of self-developed products such as drilling tubular column automation system, series of drilling speed-up tools, key drilling fluid chemicals and intelligent node acquisition instruments, and cultivate a number of individual products with an output value of over RMB10 million. It will continue to put more efforts on the performance evaluation, implement the performance evaluation of the entire staff, and promote income increase or decrease. It will also make joint efforts to reduce cost and fees by enhancing the cost control in all factors and the entire process. In 2022, the reduced cost and fees are expected to be RMB500 million.

9. Capital expenditures

In 2022, the Company plans to arrange capital expenditure of RMB4.5 billion on fixed assets. The Company will promote the standardization of technical equipment for "Four Improvements" and the standardization of drilling and downhole operation sites, continue to increase the deployment of automated and intelligent equipment, arrange for the renewal and reconstruction of 60 drilling rigs and the purchase of 32 fracturing trucks (skids) and other equipments to reduce the labor intensity of employees. The Company will insist on leading by innovation, focus on technology research and conversion, and increase investment in equipment such as rotary guidance equipment, high-temperature wireless drilling equipment, integrated loggers and seismic node acquisition equipment. The Company will adhere to the efficiency orientation, increase investment in the protection of key equipment in the external quality market, and purchase 10 sets of fully automatic welding equipment and construction equipment for 3D physical exploration in Mexico, in order to guide and promote the business structure towards the middle and high end of the value chain.

(3) Potential risks

In the course of its production and operation, the Company actively took various measures to avoid and mitigate various types of risks. However, in practice, it may not be possible to prevent all risks and uncertainties completely.

A. Market uncertainty risk

At present, the competitive pattern of the oilfield service market has not changed significantly, and there is still a situation where supply exceeds demand, coupled with the influence of political, economic and other factors, there is still great uncertainty in the trend of international oil prices, and there may be protections for the local oilfield service industry market in some countries or regions, and market competition remains intense. At the same time, impacted by the epidemic, the oilfield service industry is facing greater operating pressure.

B. Health, safety and environmental protection risk

Petrochemical services involve certain risks, which may cause unexpected or dangerous incidents such as personal injury or death, property damage, environmental damage and disruption to operations, etc. In light of Chinese and other countries' governments making tougher supervision requirements in environmental protection, if the Company causes environmental pollution caused by accidents in its operation, it will stand trial and pay compensation. As its operation expands, hazard risks faced by the Company also increase accordingly. Further, new regulations promulgated by the state in recent years set out higher standards for production safety. In addition, natural disasters such as earthquake and typhoon as well as emergency public health events may cause losses to properties and personnel of the Company, and may affect the normal operations of the Company. The Company has implemented strict HSE management system and used its best endeavors to avoid the occurrence of accidents. However, the Company cannot completely avoid potential financial losses caused by such contingent incidents.

C. Overseas operation risk

The Company has business in many foreign countries, and will increase communication with territorial governments, enterprises and staff. Due to the influence of geopolitics, economy, religion, humanity, policy changes, legal differences and other conditions, including political instability, fiscal instability and tax policies, barriers to entry, contract breaches, tax and legal disputes, etc., the risks of the company's overseas business development and operations may increase. At the same time, the current epidemic situation in countries where the company's key overseas markets are located continues to change, and some newly signed projects have been delayed and construction efficiency has decreased, which has also increased the impaction on the company's overseas projects operating.

D. Exchange rate risk

Because the Company holds US dollar debts and conducts business in many countries and regions abroad, involving the income and expenditure activities of multiple currencies, the exchange rate fluctuation of the RMB against the relevant foreign currency and the exchange rate between currencies will affect the Company's operating costs. Through regular research and analysis of exchange rate trends, the Company reduces exchange risk exposure and controls exchange rate risk.

7. Statements for the Company failed to disclose information in accordance with the standards due to special reasons such as non-applicability, national or business secrets, etc.

☐ Applicable √ Not Applicable

8. Assets, liabilities, equity and cash flow (extracted from the financial statements prepared in accordance with IFRS)

The Group's main sources of funds are operating activities, short-term and long-term borrowings, and the main uses of funds are operating expenses, capital expenditures and repayment of short-and long-term borrowings.

(1) Assets, liabilities and equity analysis

	As at 31 December 2021	As at 31 December 2020	The rate of change
	RMB'000	RMB'000	%
Total assets	**64,052,447**	61,091,195	4.8
Current assets	**31,752,732**	29,802,287	6.5
Non-current assets	**32,299,715**	31,288,908	3.2
Total liabilities	**57,190,930**	54,368,329	5.2
Current liabilities	**55,020,881**	52,473,241	4.9
Non-current liabilities	**2,170,049**	1,895,088	14.5
Total equity attributable to owners of the Company	**6,861,517**	6,722,866	2.1

Total assets were RMB64,052,447,000, representing an increase of RMB2,961,252,000 from that at the end of 2020, of which: current assets were RMB31,752,732,000, representing a increase of RMB1,950,445,000 from that at the end of 2020. The increase was mainly due to an increase in cash and cash equivalents of RMB951,955,000, an increase in contract assets of RMB1,936,007,000, an increase in other current assets of RMB242,198,000 and a decrease in notes and trade receivables of RMB1,234,820,000. Non-current assets were RMB32,299,715,000, representing an increase of RMB1,010,807,000 from that at the end of 2020, which was mainly due to the combined impact of the increase in the property, plant and equipment of RMB349,043,000, the increase of RMB740,388,000 in other long-term assets due to the purchase of special tools for petroleum engineering and the decrease of RMB544,645,000 in right of use assets due to the lease expires.

Total liabilities were RMB57,190,930,000, representing an increase of RMB2,822,601,000 from that at the end of 2020, of which: current liabilities were RMB55,020,881,000, an increase of RMB2,547,640,000 as compared with the end of 2020, which was mainly due to comprehensive impact of an increase in notes and trade payables of RMB3,087,611,000, an increase in contract liabilities of RMB523,477,000, an increase in other payables of RMB902,798,000, a decrease in short-term borrowings of RMB1,911,131,000. Non-current liabilities were RMB2,170,049,000, an increase of RMB274,961,000 compared with the end of 2020, which was mainly due to the increase of long-term borrowings of RMB460,767,000. Lease liabilities decreased RMB507,603,000, mainly due to the decrease in projected liabilities of RMB176,875,000.

Total equity attributable to owners of the Company was RMB6,861,517,000, an increase of RMB138,651,000 as compared with the end of 2020, mainly due to the gains attributable to equity holders of the Company in 2021 achieved RMB140,450,000.

As at 31 December 2021, the ratio of total liabilities to total assets was 89.3%, and 89.0% as at 31 December 2020.

(2) Cash flow analysis

The main items of cash flow of the Group in 2021 and 2020 showed in the following table.

Main items of cash flow	2021	2020
	RMB'000	RMB'000
Net cash inflow from operating activities	6,206,909	4,471,820
Net cash outflow from investing activities	(3,253,443)	(1,599,872)
Net cash outflow from financing activities	(1,948,207)	(2,880,102)
Increase/(decrease) in cash and cash equivalents	1,005,259	(8,154)
Effect of exchange rate changes	(53,305)	(119,226)
Cash and cash equivalents at the beginning of the year	1,523,352	1,650,732
Cash and cash equivalents at the end of the year	2,475,306	1,523,352

During the year ended 31 December 2021, the Group's net cash inflow from operating activities was RMB6,206,909,000, representing an increase of cash inflow by RMB1,735,089,000 as compared with last year. This was mainly due the increase in collection of the account receivables and inventories and settlement of bills payable.

During the year ended 31 December 2021, the Group's net cash outflow from investing activities was RMB3,253,443,000, an increase of cash outflow by RMB1,637,571,000 as compared with last year. It was mainly due to the increase in "Four Improvement" equipment investment.

During the year ended 31 December 2021, the Group's net cash inflow from financing activities was RMB1,948,207,000, presenting a decrease of cash inflow by RMB931,895,000 compared with last year. This was mainly due to repayment of after-sales leaseback payments.

(3) Bank and affiliated company borrowings

As at 31 December 2021, the Company's bank and affiliated borrowings were RMB19,074,777,000 (31 December 2020: RMB19,951,236,000). These borrowings included the short-term borrowings in RMB17,520,091,000, and the long-term borrowings due more than one year of RMB1,554,686,000; the fixed-rate loans were RMB1,000,000,000 and the floating rate loans were RMB18,074,777,000. As at 31 December 2021, the balance of RMB borrowings accounted for approximately 86.8% and the balance of US dollar borrowings accounted for 13.2%.

(4) Gearing ratio

As at 31 December 2021, the gearing ratio of the Group was 71.6% (2020: 74.6%). The gearing ratio is computed as the following formula: (liability with interest – cash & cash equivalents)/(liability with interest – cash & cash equivalents + shareholders' equity)

9. The required information disclosure according to the Listing Rules

(1) Assets pledge

As at year ended 31 December 2021, there was no pledge on the Group's assets.

(2) Foreign Exchange Risk Management

It is set forth in note 43 of the financial statements prepared in accordance with the IFRSs of the Annual Report.

(3) Financial Summary

A summary of the results and of the assets and liabilities of the Company for the last five financial years (extracted from the financial statements prepared in accordance with the IFRSs) is set forth in the section on "Company Profile and Principal Financial Indicators" of the Annual Report.

A summary of the results and of the assets and liabilities of the Company for the last three financial years (extracted from the financial statements prepared in accordance with the PRC Accounting Standards for Business Enterprises) is set forth in the section on "Company Profile and Principal Financial Indicators" of the Annual Report.

(4) Reserves

Changes in reserves of the Company during the reporting period are set forth in note 30 of the financial statements prepared in accordance with the IFRSs of the Annual Report.

(5) Fixed assets

Movements in fixed assets of the Group, during the reporting period, are set forth in note 17 of the financial statements prepared in accordance with the IFRSs of the Annual Report.

(6) Bank loans and other borrowings

Details of bank loans and other borrowings of the Company as at 31 December 2021 are set out in note 35 of the financial statements prepared in accordance with the IFRSs of the Annual Report.

(7) Retirement plan

Particulars of the retirement plan operated by the Group are set forth in note 16 of the financial statements prepared in accordance with the IFRSs of the Annual Report.

(8) Income tax

As of the twelve months ended 31 December 2021, the Company's incoming tax was RMB310,731,000 (2020: RMB269,076,000). The main reason for the change of the tax amount is as following: 1) the existence of losses of the Company and its certain subsidiaries, 2) the expansion of the Group's overseas business, and the different calculation method of tax rate in different countries of the Company's overseas subsidiaries, and 3) the fluctuations of the revenue contributions of the Company's certain subsidiaries which enjoy preferential income tax rate. In addition, the Group has paid tax in the countries and regions where it has businesses.

(9) Capitalized Interest

For the year ended 31 December 2021, there was no capitalized interest of the Company.

(10) Donations

During the reporting period, the Group donated approximately RMB830,000.

(11) The Company's environmental policy and performance

(1) The Company's environmental policy: guided by the construction of ecological civilization and green low-carbon strategy, the Company continues to carry out clean production, energy saving and emission reduction, carbon asset inventory and verification, and the "Energy Efficiency Doubling" plan, and in-depth implementation of the clear water blue sky environmental protection special action. The effectiveness of energy and environmental work continued to improve.

(2) In 2021, the Company will not be included in the list of companies with serious pollution published by the Chinese environmental protection department, and there will be no major environmental protection or other major social safety issues.

(3) The Company has established a comprehensive environmental impact assessment system to further strengthen environmental management and control. In 2021, the Company did not have any environmental pollution accidents, the detailed information about complained, fined or sanctioned due to environmental pollution or violations of environmental regulations are set in section "Environmental and Social Responsibility" in this annual report.

(12) Compliance with laws and regulations

(1) For details of the relevant laws and regulations that have a significant impact on the Company, please refer to the Company's website on the Shanghai Stock Exchange www.sse.com.cn and the Hong Kong Stock Exchange website dated 27 October 2014. About this major asset reorganization the disclosure of major laws and regulations in appendix I of the regulatory summary of the circular.

(2) In 2021, the Company strictly complied with the relevant laws and regulations that have significant influence on the Company, and has not received any complaint, fined or sanctioned for due to violating major laws and regulations.

(13) Key employees, customers and suppliers of the company

(1) Employees, customers and suppliers of the Company who has significant influence on the prosperity of the Company.

(2) For the information about the Company's major customers and suppliers, please refer to subsection (1)B(f) of "Statement of main business during the reporting period" in this section.

(14) Management contract

During the reporting period, the Company has not signed or has any contracts for the management and administration of the whole or any important business.

(15) Pre-emptive rights

There are no provisions for preemptive rights in the Company's Articles of Association or PRC laws.

(16) Purchase, sale or redemption of the Company's listed securities

The Company has not repurchased, sold or redeemed any of the Company's listed shares during the twelve months ended 31 December 2021

(17) Directors' interests in competing business

Certain directors of the Company hold positions in China Petrochemical Corporation and its subsidiaries. For details, please refer to the item 4 "Information about directors, supervisors and senior management" of section "Corporate Governance" of this annual report.

(18) Directors' interests in contracts

No director had a material interest, either directly or indirectly, in any contract of significant to the business of the Group to which the Company or any of its holding companies, subsidiaries or fellow subsidiaries was a party during the reporting period.

(19) Directors service contracts

No director has a service contract with the Company or any of its subsidiaries which is not terminable by the Company within one year without payment of compensation, other than statutory compensation.

(20) Permitted indemnity provisions

During the reporting period, the Company has purchased liability insurance for all directors to minimize their risks arising from the performance of their duties. The permitted indemnity provisions are provided in such directors' liability insurance in respect of potential liability and costs associated with legal proceedings that may be brought against such directors.

(21) Equity-linked agreement

For the year ended 31 December 2021, except for the disclosures under item 11 and 12 under "Corporate Governance" in this annual report, the Company has not entered into any equity-linked agreement.

On behalf of the Board

Chen Xikun

Chairman

Beijing, China, 29 March 2022

1. Information on Corporate Governance

During the reporting period, the Company strictly complied with domestic and overseas regulatory requirements and regularly continued to operations. In accordance with the Articles of Association, relevant laws, regulations, and securities regulatory rules in the place listed, and combined with the actual situation of the Company, continuously improve and effectively implement the work system and related work processes of the Board and its professional committees. The Company's board of supervisors operates in accordance with the law, committed to its duties, is diligent and dedicated, and strictly follows the regulatory requirements. The board of supervisors held meetings as scheduled to review and pass relevant proposals, and expressed opinions and suggestions of the board of supervisors in a timely manner. At the same time, the board of supervisors actively organized and carried out supervisory inspection activities, strengthened on-site supervision and inspection, and promoted and improved the Company's various operations and management tasks.

During the reporting period, corporate governance of the Company complied with the relevant regulatory requirements related with listed companies' corporate governance which were published by regulators and stock exchanges. According to the rules of Articles of Association, the Company completed change of the new session of the Board of directors and supervisors, adjusted members of the special committee under the Board, appointed a new session of senior management, and amended the Articles of Association and the Rules of Procedures for the Board under the requirement of governing enterprises in accordance with laws. With the principles of marketization and commercialization, the Company discussed and approved major decisions related to reform and development, such as the proposed annual caps of continuing connected transaction with CPC for 2022, 2023 and 2024 and the proposed annual cap of daily related transactions with PipeChina for 2021.

The Company stayed focus on information disclosure and strictly discloses information in a timely and compliant manner in strict accordance with the requirements and procedures of the regulatory rules of the place where our shares are listed. During the reporting period, the Company paid close attention to the change of the new Securities Law and regulatory rules, adapted to the new requirements on corporate governance, information disclosure and inside information actively, revised the "Information Disclosure Management Regulation", strengthened the construction and function of the information disclosure system. At the same time, the Company disclosed information timely, accurately, precisely and completely to ensure all the shareholders have equal access to the Company information and improved transparency in corporate governance.

In this reporting period, the Company carried out inside information and insider management in accordance with regulatory requirements and company regulations, continuously optimized the inside information management mechanism, improved the compliance awareness of insider information insiders, and did a good job in insider registration. During the reporting period, there was no insiders' illegal trading of company stock by using inside information.

In strict accordance with the requirements of relevant laws and regulations including "Company Law", "the Securities Law", "Administrative Measures for the Disclosure of Information of Listed Companies", domestic and overseas "Listing Rules", the Company will continuously perfect management system of the Company, improve the standard operation and management level of the Company, protect the interests of the Company and all the shareholders and promote the sustainable and healthy development of the Company.

2. The solution of the Controlling Shareholders who guarantee the independence with respect to Business, Personnel, Assets, Organisation and Finance between the Company and continuous work plan for avoid affecting the independence of the Company

☐ Applicable √ Not Applicable

The situation with the controlling shareholder, actual controller and its controlling unit in the same or similar industry competition, the significant influence on the Company and resolutions have already taken or will be taken

☐ Applicable √ Not Applicable

3. Summary of Shareholders' Meetings

During the reporting period, the Company held the first extraordinary general meeting for 2021 on 2 February 2021 in Beijing. The annual general meeting for the year 2020, the first A shareholders class meeting for 2021 and the first H shareholders class meeting for 2021 of the Company were held on 18 June 2021 in Beijing. The second extraordinary general meeting for 2021 was held on 2 November 2021 in Beijing. Details are as follows:

Name of meeting	Date of meeting	Website designated for searching the resolutions	Domestic disclosure date of resolutions	Resolutions
The first extraordinary general meeting for 2021	2 February 2021	www.sse.com.cn www.hkexnews.hk	3 February 2021	1. The remuneration plan for the tenth session of the Board and the Supervisory Committee. 2. Elected Mr. Chen Xikun, Mr. Yuan Jianqiang, Mr. Lu Baoping, Mr. Fan Zhonghai, Mr. Wei Ran and Mr. Zhou Meiyun as non-independent directors of the tenth session of the Board. 3. Elected Mr. Chen Weidong, Mr. Dong Xiucheng and Mr. Zheng Weijun as independent directors of the tenth session of the Board. 4. Elected Mr. Ma Xiang, Mr. Du Jiangbo, Mr. Zhang Jianbo and Ms. Zhang Qin as non-employee representative supervisors of the tenth session of the Supervisory Committee.
The annual general meeting for the year 2020	18 June 2021	www.sse.com.cn www.hkexnews.hk	19 June 2021	1. The Report of the Board of the Directors of the Company for the year 2020. 2. The Report of the Supervisory Committee of the Company for the year 2020. 3. The audited financial statements and the auditor's report of the Company for the year 2020. 4. The profit distribution plan of the Company for the year 2020. 5. To appoint BDO China Shu Lun Pan Certified Public Accountants LLP as the domestic auditor and internal control auditor of the Company for the year 2021 and to appoint BDO Limited as the international auditor of the Company for the year 2021. 6. To approve provision of guarantee for wholly owned subsidiaries and joint venture. 7. To grant to the Board a general mandate to issue new domestic shares and/or overseas listed foreign shares of the Company. 8. To approve the authorisation to the Board to repurchase domestic shares and/or overseas listed foreign shares of the Company.
The first A shareholders class meeting for 2021	18 June 2021	www.sse.com.cn www.hkexnews.hk	19 June 2021	To approve the authorisation to the Board to repurchase domestic shares and/or overseas listed foreign shares of the Company.
The first H shareholders class meeting for 2021	18 June 2021	www.sse.com.cn www.hkexnews.hk	19 June 2021	To approve the authorisation to the Board to repurchase domestic shares and/or overseas listed foreign shares of the Company.
The second extraordinary general meeting for 2021	2 November 2021	www.sse.com.cn www.hkexnews.hk	3 November 2021	1. To approve the resolution in relation to the mutual products supply framework agreement and the continuing connected transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 2. To approve the resolution in relation to the general services framework agreement and the Non Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 3. To approve the resolution in relation to the engineering and construction services framework agreement and the continuing connected transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 4. To approve the resolution in relation to the financial services framework agreement and the Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 5. To approve the resolution in relation to the technology R&D framework agreement and the Non Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 6. To approve the resolution in relation to the land use rights and property leasing framework agreement and the Non Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 7. To approve the resolution in relation to the equipment leasing framework agreement and the Non Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 8. To approve the resolution in relation to the provision of counter guarantee to China Petrochemical Corporation. 9. To approve the resolution in relation to the annual cap for the 2021 continuing related transactions with China Oil & Gas Pipeline Network Corporation. 10. To approve the resolution in relation to the amendments to Articles of Association and the Rules of Procedure for the Board of Directors.

4. Information about directors, supervisors and senior management

(1) Information on the changes of shareholdings and the remuneration of directors, supervisors and senior management

Name	Position	Gender	Age	The beginning of the term	The end of the term	Number of shares at the beginning of the year	Number of shares at the end of the year	Reason for change	Salaries from the Company during reporting period (RMB) (before taxation)	Whether get payment from related party of the Company
Chen Xikun	Chairman	male	57	19 December 2019	1 February 2024	0	0	No Change	922,741	No
	Executive Director			8 February 2018						
Yuan Jianqiang	General Manager	male	58	20 May 2019	1 February 2024	0	0	No Change	922,741	No
	Executive Director			26 June 2019						
Lu Baoping	Non-Executive Director	male	60	8 February 2018	1 February 2024	0	0	No Change	–	Yes
Fan Zhonghai	Non-Executive Director	male	56	8 February 2018	1 February 2024	0	0	No Change	–	Yes
Wei Ran	Non-Executive Director	male	54	20 June 2018	1 February 2024	0	0	No Change	–	No
Zhou Meiyun	Non-Executive Director	male	52	2 February 2021	1 February 2024	0	0	No Change	–	Yes
Chen Weidong	Independent Non-Executive Director	male	66	20 June 2018	1 February 2024	0	0	No Change	200,000	No
Dong Xiucheng	Independent Non-Executive Director	male	60	20 June 2018	1 February 2024	0	0	No Change	200,000	No
Zheng Weijun	Independent Non-Executive Director	male	54	2 February 2021	1 February 2024	0	0	No Change	183,344	No
Ma Xiang	Chairman of the Supervisory Committee	male	60	19 December 2019	1 February 2024	0	0	No Change	842,171	No
Du Jiangbo	Supervisor	male	57	16 June 2015	1 February 2024	0	0	No Change	–	Yes
Zhang Jianbo	Supervisor	male	59	8 February 2018	1 February 2024	0	0	No Change	–	Yes
Zhang Qin	Supervisor	female	59	9 February 2015	1 February 2024	0	0	No Change	–	Yes
Sun Yongzhuang	Employee Representative Supervisor	male	56	2 February 2021	1 February 2024	0	0	No Change	754,594	No
Zhang Bailing	Employee Representative Supervisor	male	56	2 February 2021	1 February 2024	0	0	No Change	723,848	No
Du Guangyi	Employee Representative Supervisor	male	58	2 February 2021	1 February 2024	0	0	No Change	765,163	No
Zhang Yongjie	Deputy General Manager	male	58	9 February 2015	1 February 2024	0	0	No Change	859,469	No
Zuo Yaojiu	Deputy General Manager	male	59	27 June 2017	1 February 2024	0	0	No Change	864,278	No
Zhang Jinhong	Deputy General Manager	male	58	28 April 2015	1 February 2024	0	0	No Change	894,294	No
Zhang Jiankuo	Deputy General Manager	male	47	29 October 2020	1 February 2024	0	0	No Change	739,938	No
Cheng Zhongyi	Chief Financial Officer	male	45	27 April 2021	1 February 2024	0	0	No Change	477,650	No
	Secretary to the Board			3 August 2021						
Sun Bingxiang	Deputy General Manager	male	50	3 August 2021	1 February 2024	50,300	50,300	No Change	232,847	No
Jiang Bo	Former Independent Non-Executive Director	female	66	9 February 2015	2 February 2021	0	0	No Change	16,666	No
Zhai Yalin	Former Supervisor	male	58	26 June 2019	2 February 2021	0	0	No Change	–	Yes
Zhang Hongshan	Former Employee Representative Supervisor	male	61	23 February 2017	2 February 2021	0	0	No Change	60,067	No
Xiao Yi	Former Chief Financial Officer	male	52	19 December 2019	27 April 2021	0	0	No Change	278,391	No
Li Honghai	Former Secretary to the Board	male	58	9 February 2015	3 August 2021	0	0	No Change	460,807	No

Note:

1. Mr. Chen Xikun, Mr. Yuan Jianqiang, Mr. Ma Xiang, Mr Zhang Yongjie, Mr. Zuo Yaojiu, Mr. Zhang Jinhong and Mr. Zhang Jiankuo all received 12 months of salary in 2021. Mr. Sun Yongzhuang, Mr. Zhang Bailing and Mr. Du Guangyi started to serve as employee representative supervisors on 2 February 2021 and received 11 months of salary in 2021. Mr. Cheng Zhongyi started to serve as chief financial officer on 27 April 2021 and received 8 months of salary in 2021. Mr. Sun Bingxiang started his position of deputy general manager of the Company on 3 August 2021 and received 4 months of of salary in 2021.

2. Mr. Zhang Hongshan resigned as employee representative supervisor on 2 February 2021 and received 1 month of salary in 2021. Mr. Xiao Yi resigned as chief financial officer on 27 April 2021 and received 4 months of salary in 2021. Mr. Li Honghai resigned as secretary to the board of the Company on 3 August 2021 and received 8 months of salary in 2021.

3. Mr. Chen Weidong and Mr. Dong Xiucheng received 12 months of directors' fee in 2021; Mr. Zheng Weijun started to serve as the independent non-executive director on 2 February 2021 and received 11 months of director's fee in 2021. Ms. Jiang Bo resigned as the independent non-executive director on 2 February 2021 and received 1 month of director's fee in 2021.

Biographical details of the current directors, supervisors and senior management

Director

Mr. CHEN Xikun#, aged 57, Chairman, Party Secretary. Mr Chen is a professor-level senior accountant with a master degree. In January 2003, he was appointed as the chief accountant of Sinopec Jiangsu Oilfield Branch Company; in April 2006, he was appointed as deputy manager and chief accountant of Sinopec Shengli Oilfield Branch Company; in December 2008, he was appointed as deputy general manager and chief accountant of Sinopec Shengli Oilfield Branch Company; in December 2011, he was appointed as chief accountant of Sinopec Exploration & Production Department; since March 2015, he acted as deputy general director of Sinopec Exploration & Production Department; from June 2015 to June 2018, he acted as director of Sinopec Oilfield Equipment Corporation; from June 2017 to February 2018, he was appointed as executive deputy general manager of the Company; in January 2018, he was appointed as the Secretary of CPC Committee of the Company. Since February 2018, he has been appointed as the Director of the Company. From February 2018 to May 2019, he has been appointed as Deputy General Manager of the Company. Since May 2019, he has been appointed as the Vice Chairman of the Board of the Company. Since December 2019, he has been appointed as the Chairman of the Board of the Company. And in February 2021, he renewed the Chairman of the Board of the Company.

Mr. YUAN Jianqiang#，aged 58, general manager, executive director. Mr. Yuan is a professor-level senior engineer with a Ph. D degree. He has been working for Henan Petroleum Exploration Administration of China Petrochemical Corporation as the deputy general manager and general manager of Drilling Company; in January 2008, he was appointed as deputy director of Henan Petroleum Exploration Administration of China Petrochemical Corporation; since December 2012, he acted as the executive director and general manager of Sinopec Henan Oil Engineering Company Limited; since June 2016, he acted as the executive director and general manager of Sinopec Huadong Oil Engineering Company Limited; from July 2017, he acted as the chairman and the secretary of CPC Committee of Sinopec Oilfield Equipment Corporation. Since May 2019, he has been appointed as the general manager of the Company. Since June 2019, he has been appointed as the executive director of the Company. And in February 2021, he renewed the executive director and the general manager of the Company.

Mr. LU Baoping*, aged 60, non-executive director. Mr. Lu is a professor-level senior engineer with a Ph.D. degree. In September 2001, he was appointed as Deputy General Manager of Sinopec Star Petroleum Co., Ltd. In June 2003, he was appointed as Deputy Manager of Sinopec International Petroleum Exploration and Production Corporation. Since April 2009, he has served as the President of Sinopec Petroleum Engineering Technology Research Institute. Since October 2017, he has served as executive director and the general manager of Sinopec Petroleum Engineering Technology Research Institute Limited Corporation. In November 2021, he has served as the chairman and the general manager of Sinopec Petroleum Engineering Technology Research Institute Limited Corporation. From December 2012 to September 2014, he was appointed as Deputy Manager of SOSC. From August 2016 to December 2017, he served as Deputy Manager of the Company. Since February 2018, he has been appointed as the Non-Executive Director of the Company. And in February 2021, he renewed the non-executive director of the Company.

Mr. FAN Zhonghai*, aged 56, non-executive director. Mr. Fan is a professor-level senior engineer with a master degree. Mr. Fan joined the Henan Petroleum Exploration Bureau in 1989 and was appointed as Deputy Chief Geologist, Chief Geologist and Vice Dean of Research Institute of Petroleum Exploration and Development of Henan Petroleum Exploration Bureau consecutively. In September 2000, he was appointed as Deputy Chief Geologist of Henan Petroleum Exploration Bureau of China Petrochemical Corporation. In November 2001, he was appointed as General Manager of Henan Oilfield Branch Company of China Petrochemical Corporation In June 2016, he was appointed as Deputy Director of Petroleum Exploration & Development Research Department of China Petrochemical Corporation. Since December 2019, he has been appointed as the Deputy Manager of Petroleum Exploration & Development Research Department of Sinopec.Since February 2018, he has been appointed as the Non-Executive Director of the Company. And in February 2021, he renewed the non-executive director of the Company.

Mr. WEI Ran*, aged 54, non-executive director. Mr. Wei is a Senior Economist and obtained a Master degree in Finance from Maastricht School of Management. Mr. Wei has successively served as the Deputy Head and the Deputy General Manager of Credit Department, Vice President of Hunan Branch, General Manager of Investment Management Department and General Manager of Business Development and Innovation Department of the Export-Import Bank of China. Since April 2016, he has served as General Manager of China Chengtong Fund Management Co., Ltd., and since September 2016, he has served concurrently as Secretary to the Board of China Structural Reform Fund Co., Ltd. Since June 2018, he has been appointed as the Non-Executive Director of the Company. And in February 2021, he renewed the non-executive director of the Company.

Executive Director

* Non-executive Director

Mr. ZHOU Meiyun*, aged 52, non-executive director. Mr. Zhou is a professor-level senior accountant with a Master degree. Mr. Zhou joined the Shanghai Petrochemical General Plant in 1991 and served successively as the head, assistant to the director, deputy director, and director of the Finance Department of Sinopec Shanghai Petrochemical Co., Ltd. (hereinafter referred to as Shanghai Petrochemical); he was appointed as Shanghai Secco Petrochemical Co., Ltd. in May 2011 Director of the Company's Finance Department; served as Deputy General Manager and Chief Financial Officer of Shanghai Petrochemical in February 2017; Executive Director of Shanghai Petrochemical in June 2017, Chairman of China Jinshan United Trading Co., Ltd. in July 2017, and Shanghai in May 2019 General Counsel of Petrochemical Corporation; Since September 2020, he has been appointed as Deputy General Manager of the Finance Department of China Petrochemical Corporation Since February 2021, he has been appointed as the non-executive director of the Company.

Mr. CHEN Weidong+, aged 66, independent non-executive Director. Mr. Chen obtained a Master degree in Economic Law from China University of Political Science and Law. In 1982, Mr. Chen joined China National Offshore Oil Corporation ("CNOOC") and successively served as Deputy Manager of Exploration Department of CNOOC, General Manager of China Offshore Geophysical Company Limited under CNOOC, as well as Executive Vice President and Secretary to the Board, Chief Strategy Officer of China Oilfield Services Limited, etc. Since May 2017, he has served as the Dean of Beijing Zhongguancun Smart Energy Technology Innovation Institute. Since June 2018, he has been appointed as the independent non-executive Director of the Company. And in February 2021, he renewed the independent non-executive director of the Company.

Mr. DONG Xiucheng+, aged 60, independent non-executive Director. Mr. Dong currently is a Professor and Ph.D. Supervisor of International Trade and Economics School of University of International Business and Economics, and concurrently serves as Vice President of China Petroleum Circulation Association, Vice Chairman of Energy Resources System Engineering Branch of Systems Engineering Society of China, member of the Price Expert Advisory Committee of National Development and Reform Commission and Distinguished Expert of National Energy Administration, etc. In 1985, Mr. Dong joined the Business Administration School of China University of Petroleum (Beijing) and he has been successively promoted as a Lecturer, Associate Professor and Professor, during which period he also served as Assistant Dean and Secretary of the Party Committee and other administrative positions. Since October 2017, he has served as a Professor and Ph.D. Supervisor in the International Trade and Economics School of University of International Business and Economics. Since June 2018, he has been appointed as the independent non-executive Director of the Company. And in February 2021, he renewed the independent non-executive director of the Company.

Mr. ZHENG Weijun+, aged 54, independent non-executive director, graduated from MBA. Mr Zheng is a certified public accountant, certified tax agent, senior accountant, senior member of the Chinese Institute of Certified Public Accountants, a leading talent in the national certified public accountant industry of the Ministry of Finance and an extracurricular tutor for master's degree students in the college of accounting, Central University of Finance and Economics. Mr. Zheng served as a full-time member of the 13th, 14th and 15th Main Board Issuance Review Committee of the China Securities Regulatory Commission, and a member of the Professional Ethics Standards Committee and Professional Technical Steering Committee of the Chinese Institute of Certified Public Accountants. Since November 2001, he has been a partner of ShineWing Certified Public Accountants. Since September 2017, he has also served as an independent director of Beijing Kangtuo Infrared Technology Co., Ltd. Director, concurrently served as an independent director of Shanghai Fudan Fuhua Technology Co., Ltd. from December 2017 to December 2020. Since February 2021, he has been appointed as the independent non-executive director of the Company.

Supervisor

Mr. MA Xiang, aged 60, chairman of the Supervisory Committee. Mr. Ma is a senior political engineer with bachelor's degree. Since September 1999, he worked in Supervisory Bureau of China Petrochemical Corporation. Since December 2012, he served as Deputy Secretary of the Communist Party Committee, Secretary of the Commission for Discipline Inspection and Chairman of the Labour Union of China Petrochemical Corporation Wuhan Petrochemical Plant. Since December 2014, he was appointed as Chief of Beijing Group of Discipline Inspection Group of the Communist Party Committee of China Petrochemical Corporation and Director of the Beijing Branch of Supervisory Bureau of China Petrochemical Corporation. Since January 2018, he was appointed as Chief of China Petrochemical Corporation Party Committee Discipline Inspection Group of Sinopec International Petroleum Exploration and Production Corporation. From October 2019 to September 2021, he has been working as Deputy Secretary of the Communist Party Committee, Secretary of the Commission for Discipline Inspection and Chairman of the Labour Union of Sinopec Oilfield Service Corporation. Since December 2019, Mr. Ma has been appointed as employee representative supervisor and chairman of the Supervisory Committee. Since February 2021, he has been appointed again as chairman of the Supervisory Committee.

Mr. DU Jiangbo, aged 57, Supervisor of the Company. Mr. Du is a professor-level Senior Economist with a M.A. degree. In September 2006, he was appointed as Head of the Legal Affairs Division of Headquarters of Sichuan-East China Gas Transmission Construction project. In November 2010, he was appointed as Deputy Director of the Legal Affairs Division of China Petrochemical Corporation; and in March 2015, he was appointed as Director of the Legal Affairs Department of China Petrochemical Corporation. In December 2019, he was appointed as Deputy General Manager of business reform and Legal Affairs Department of China Petrochemical Corporation. Since December 2021, he was appointed as General Manager of business reform and Legal Affairs Department of China Petrochemical Corporation. Since June 2015, he has been appointed as Supervisor of the Company. And in February 2021, he has been appointed again as Supervisor of the Company.

Mr. ZHANG Jianbo, aged 59, Supervisor of the Company. Mr. Zhang is a professor-level senior engineer with a bachelor degree. He joined Shengli Petroleum Administrative Bureau in 1985. Since 1999, Mr. Zhang has served as Deputy Director and Director of the Human Resources Department of China Petrochemical Corporation. Mr.Zhang was appointed Deputy Secretary of the Communist Party Committee of Shanghai Petrochemical since August 2013 and concurrently, he successively held several positions such as the Secretary of the Communist Party Discipline Supervisory Committee, Chairman of the Labor Union and Chairman of the Supervisory Committee of Shanghai Petrochemical. In June 2017, Mr. Zhang was appointed as Deputy Director of Supervision Bureau of China Petrochemical Corporation. In May 2019, he was appointed as Deputy Director of the Supervisory Administration of China Petrochemical Corporation. Since May 2020, he has been appointed as Deputy Director of the Office of the Supervisory Administration of China Petrochemical Corporation. Since February 2018, he has been appointed as the supervisor of the company. And in February 2021, he renewed supervisor of the company.

* Non-executive Director

+ Independent non-executive Director

Ms. ZHANG Qin, aged 59, Supervisor of the Company. Ms. Zhang is a professor-level senior administration engineer with a master degree. In December 1998, she was appointed as Head of the political Work Department, Propaganda Office of China Petrochemical Corporation; in January 2009, she was appointed as the Direct Deputy Secretary of CPC Committee, and the Direct Secretary of Discipline Inspection Committee of China Petrochemical Corporation; and from March 2015, she was appointed as the Deputy Director of the Political Work Department (administrative office of CPC Committee) of China Petrochemical Corporation. In December 2019, she was appointed as Deputy Director of Political Work Department of China Petrochemical Corporation. Since September 2014, she has been serving as a supervisor of SOSC. Since February 2015, she has been appointed as Supervisor of the Company. And in February 2021, she renewed supervisor of the company.

Mr. SUN Yongzhuang, aged 56, Employee Representative Supervisor. Mr. Sun is a professor-level senior administration engineer with a doctoral degree. In June 2004, he served as the manager of the Second Downhole Operation Company of Sinopec Shengli Petroleum Administration Bureau; in June 2008, he served as the general manager of Sinopec Shengli Oilfield Co., Ltd. Dongsheng Jinggong Petroleum Development Group Co., Ltd.; in January 2013, he served as Sinopec Shengli Deputy General Manager of Petroleum Engineering Co., Ltd.; in December 2018, he served as general manager of Sinopec Shengli Petroleum Engineering Co., Ltd.; from December 2020, he served as executive director, party secretary and general manager of Sinopec Shengli Petroleum Engineering Co., Ltd. Since January 2022, Mr. Sun has been appointed as executive director and party secretary of Sinopec Shengli Petroleum Engineering Co., Ltd. Since February 2021, he has been appointed as the Employee Representative Supervisor of the Company.

Mr. ZHANG Bailing, aged 56, Employee Representative Supervisor. Mr. Zhang is a professor-level senior administration engineer with a doctoral degree. Since December 2003, he has successively served as the director of the dispatching department, the director of the production operation department of the Sinopec Southwest Oil and Gas Branch, and the director of the West Sichuan Gas Production Plant; in July 2011, he served as the deputy chief engineer of the Sinopec Southwest Oil and Gas Branch and the Yuanba Project Department. Deputy Manager; Deputy General Manager of Sinopec Southwest Oil and Gas Branch from August 2012 to November 2020; Secretary of the Party Committee of Sinopec Southwest Petroleum Engineering Co., Ltd. in March 2017; Secretary of the Party Committee of Sinopec Southwest Petroleum Engineering Co., Ltd. in August 2017, Deputy General Manager; In May 2020, he served as executive director and party secretary of Sinopec Southwest Petroleum Engineering Co., Ltd.; from November 2020, he served as executive director and party secretary of Sinopec Zhongyuan Petroleum Engineering Co., Ltd. Since February 2021, he has been appointed as the Employee Representative Supervisor of the Company.

Mr. DU Guangyi, aged 58, Employee Representative Supervisor. Mr. Du is a professor-level senior administration engineer with a doctoral degree. From December 2001 to June 2017, he served as deputy director of Sinopec Zhongyuan Petroleum Exploration Bureau; in January 2013, he served as party secretary of Sinopec Zhongyuan Petroleum Engineering Co., Ltd.; from March 2016, he served as executive director and general manager of Sinopec Zhongyuan Petroleum Engineering Co., Ltd. Manager; served as executive director and general manager of Sinopec Petroleum Engineering Construction Co., Ltd. in June 2017; served as chairman and party secretary of Sinopec Petroleum Machinery Co., Ltd. in June 2019; served as executive director of Sinopec Petroleum Engineering Construction Co., Ltd. from November 2020, Secretary of the Party Committee. From September 2014 to June 2017, he served as the Employee Representative Supervisor of the Company; Since February 2021, he has been appointed as the Employee Representative Supervisor of the Company again.

Senior management

Mr. ZHANG Yongjie, aged 58, Deputy General Manager. Mr. Zhang is a senior engineer with a master degree. In April 2002, he was appointed as Deputy General Manager and General Manger of the Foreign Trade and Economic Corporation under Zhongyuan Petroleum Exploration Administration of China Petrochemical Corporation; in December 2003, he was appointed as Deputy General Manager of Sinopec International Petroleum Service Corporation; and in November 2010, he was appointed as Director and General Manager of Sinopec International Petroleum Service Corporation. In August 2013, he was appointed as Executive Director and General Manager of Sinopec International Petroleum Service Corporation. In March 2018, he was appointed concurrently as secretary of CPC Committee of Sinopec International Petroleum Service Corporation. Since June 2012, Mr. Zhang has acted as Deputy General Manager of SOSC. Since February 2015, he has been appointed as Deputy General Manager of the company. And in February 2021, he renewed deputy general manager of the company.

Mr. ZUO Yaojiu, aged 59, Deputy General Manager. Mr Zuo is a Professor-level Senior Engineer with a bachelor degree. In December 2003, he was appointed as deputy general manager of Sinopec International Petroleum Service Corporation; since November 2010, he also acted as General Manager of Sinopec (Brazil) Co., Ltd. and chief representative of China Petrochemical Corporation's South America Representative Office; in August 2012, he was appointed as secretary of CPC Committee and deputy general manager of Sinopec Engineering & Construction Co., Ltd.; in September 2014, he was appointed as executive director and general manager of Sinopec Engineering & Construction Co., Ltd. From September 2014 to February 2015, he acted as deputy general manager of the Company. Since June 2017, he has been appointed as Deputy General Manager of the Company. And in February 2021, he was appointed again as deputy general manager of the company.

Mr. ZHANG Jinhong, aged 58, Deputy General Manager. Mr. Zhang is a Professor-level Senior Accountant, Master degree. In October 2000, he was appointed as the vice chief accountant and manager of drilling department of Jiangsu Petroleum Exploration Bureau of Sinopec Group; in July, 2004, he was appointed as the vice chief accountant and manager of the engineering technology management department; in June 2008, he was appointed as the vice director of Huadong Bureau of Sinopec Group; in December 2012, he was appointed as the Executive Director, General Manager and Party Secretary of Sinopec Huadong Oilfield Service Corporation. In June 2018, he was appointed as director of Sinopec Oilfield Equipment Corporation. Since April 2015, he has been appointed as Deputy General Manager of the company. Since September 2020, he has appointed as the Chief Expert of China Petrochemical Corporation in the field of petroleum engineering (efficient drilling technology). And in February 2021, he was appointed again as deputy general manager of the company.

Mr. ZHANG Jiankuo, aged 47, Deputy General Manager. Mr. Zhang is a professor-level Senior Engineer with a master degree. In May 2013, he served as the deputy manager of Sinopec Shengli Petroleum Engineering Co., Ltd. Huanghe Drilling Corporation; in November 2015, he served as the manager and deputy secretary of the party committee of Sinopec Shengli Petroleum Engineering Co., Ltd. Huanghe Drilling Corporation; in December 2018, he served as Sinopec Shengli Petroleum Engineering Co., Ltd. Deputy General Manager. Since October 2020, he has been appointed as the Deputy General Manager of the Company. And in February 2021, he was appointed again as deputy general manager of the company.

Mr. CHENG Zhongyi, aged 45, Chief Financial Officer and Secretary to the Board. Mr. Cheng is a senior accountant with a master degree in Engineering. In January 2015, he served as deputy director of financial planning department and chief financial officer of overseas engineering management center of Sinopec Shengli Oil Engineering Company Limited. In October 2017, he served as director of financial planning department of Sinopec Shengli Oil Engineering Company Limited. In April 2018, he served as chief financial officer of Sinopec Oil Engineering Geophysical Company Limited. In May 2020, he served as deputy general manager of Sinopec Shared Services Company Limited. In April 2021, he served as the chief financial officer of the Company, and in August 2021, he served as the secretary to the Board of the Company.

Mr. SUN Bingxiang, aged 50, Deputy General Manager. Mr. Sun is a senior engineer with a master degree. In April 2009, he was appointed as deputy head of general management division of the engineering and technology department of headquarters of Sichuan-East China Gas Transmission Construction project. In February 2011, he served as deputy head of technology information division of petroleum engineering management department of China Petrochemical Corporation. In November 2012, he served as deputy manager of technology development department of Sinopec Oilfield Service Co., Ltd. In January 2018, he served as deputy manager of technology information department of the Company. In August 2018, he served as deputy manager (treated as principal middle-level management) of technology information department of the Company. In July 2020, he served as manager of technology information department of the Company, and in August 2021, he served as the deputy general manager of the Company.

(2) Positions of the directors, supervisors and senior management

a. Positions in shareholders

Name	Name of corporate shareholders	Position held in corporate shareholders	The starting date of term in office	The termination
Zhou Meiyun	CPC	Deputy general manager of Finance Department	September 2020	–
Du Jiangbo	CPC	Deputy general manager of business reform and Legal Affairs Department	December 2019	December 2021
	CPC	General manager of business reform and Legal Affairs Department	December 2021	–
Zhang Qin	CPC	Deputy Director of the Political Work Department	December 2019	–
Zhang Jianbo	CPC	Deputy Director of the Office of the Supervisory Administration	May 2020	–

b. Positions in other enterprises

Name	Name of other enterprises	Position held in other enterprises	Beginning date of term	End date of term
Lu Baoping	Sinopec Petroleum Engineering Technology Research Institute	President	April 2009	–
	Sinopec Petroleum Engineering Technology Research Institute Limited Corporation	Executive director of the board General manager	October 2017	November 2021
	Sinopec Petroleum Engineering Technology Research Institute Limited Corporation	Chairman of the board General manager	November 2021	–
Fan Zhonghai	Sinopec	Deputy Manager of Petroleum Exploration & Development Research Department	December 2019	–
Zhang Jinghong	Sinopec Oilfield Equipment Corporation	Director	June 2018	–
Xiao Yi	Pecinternational Leasing Co., LTD	Vice Chairman	June 2019	–
	Taiping Petrochemical Financial Leasing co. LTD	Director	June 2019	–
	Shanghai Zheshi Futures Brokerage Co., Ltd.	Director	June 2019	–

(3) Remuneration of the directors, supervisors and senior management

Decision procedure of the remuneration of directors, supervisors and senior management.	The remuneration of directors and supervisors is approved by the General Meeting of shareholders, the remuneration of senior management is approved by the Board.
The basis of remuneration determination of directors, supervisors and senior management.	Decided by the duties and responsibilities of directors, supervisors and senior management, and by the performance of the Company.
The payable remuneration of directors, supervisors and senior management.	RMB10,398,999
As to the end of reporting period, the remuneration actual obtained by the directors, supervisors and senior management.	RMB10,398,999

(4) Change of directors, supervisors and senior management

Name	Position	Change	Reasons for change
Jiang Bo	Independent Non-Executive Director	Resigned	Expiration of term of office
Zhai Yalin	Supervisor	Resigned	Expiration of term of office
Zhang Hongshan	Employee Representative Supervisor	Resigned	Expiration of term of office
Zhou Meiyun	Non-executive Director	Elected	Elected by the general meeting
Zheng Weijun	Independent Non-executive Director	Elected	Elected by the general meeting
Sun Yongzhuang	Employee Representative Supervisor	Elected	Elected by the employee's representative meeting
Zhang Bailing	Employee Representative Supervisor	Elected	Elected by the employee's representative meeting
Du Guangyi	Employee Representative Supervisor	Elected	Elected by the employee's representative meeting
Xiao Yi	Chief Financial Officer	Resigned	Change of work
Cheng Zhongyi	Chief Financial Officer	Appointment	Appointed by the Board
Li Honghai	Secretary to the Board	Resigned	Age
Cheng Zhongyi	Secretary to the Board	Appointment	Appointed by the Board
Sun Bingxiang	Deputy General Manager	Appointment	Appointed by the Board

The Company's independent non-executive director Ms. Jiang Bo, supervisor Mr. Zhai Yalin and employee representative supervisor Mr. Zhang Hongshan resigned as independent non-executive director, supervisor and employee representative supervisor of the Company, respectively, due to the expiry of their terms of office with immediate effect from 2 February 2021. After the election by the shareholders at the Company's first extraordinary general meeting for 2021 held on 2 February 2021, Mr. Chen Xikun, Mr.Yuan Jianqiang, Mr.Lu Baoping, Mr. Fan Zhonghai, Mr. Wei Ran, Mr. Zhou Meiyun, Mr. Chen Weidong, Mr. Dong Xiucheng and Mr. Zheng Weijun were appointed or re-elected as directors of the tenth session of the Board, with a term of office commencing from 2 February 2021 to the date when the term of the tenth session of the Board expires (February 2024). Mr. Ma Xiang, Mr. Du Jiangbo, Mr. Zhang Jianbo and Ms. Zhang Qin were re-elected as supervisors of the tenth session of the Supervisory Committee, with a term of office commencing from 2 February 2021 to the date when the term of the tenth session of the Supervisory Committee expires (February 2024). The employee's representative meeting of the Company was held on 2 February 2021, at which Mr. Sun Yongzhuang, Mr. Zhang Bailing and Mr. Du Guangyi were elected as the employee representative supervisors of the tenth session of the Supervisory Committee, with a term of office commencing from 2 February 2021 to the date when the term of the tenth session of the Supervisory Committee expires (February 2024).

On 2 February 2021, the Company held the first meeting of the tenth session of the Board and Mr. Chen Xikun was elected as the chairman of the tenth session of the Board. According to the nomination of the chairman, the Board continued to appoint Mr. Yuan Jianqiang as the general manager of the Company, and his term of office shall commence from 2 February 2021 to the date when the term of the tenth session of the Board expires (February 2024); according to the nomination of the general manager, the Board continued to appoint Mr. Zhang Yongjie, Mr. Zuo Yaojiu, Mr. Zhang Jinhong, and Mr. Zhang Jiankuo as deputy general managers of the Company and continued to appoint Mr. Xiao Yi as the Chief Financial Officer of the Company, and their terms of office shall commence from 2 February 2021 to the date when the term of the tenth session of the Board expires (February 2024). According to the nomination of the chairman, the Board continued to appoint Mr. Li Honghai as the secretary to the Board of the Company, with a term of office commencing from 2 February 2021 to the date when the term of the tenth session of the Board expires (February 2024).

On 2 February 2021, the Company held the first meeting of the tenth session of the Supervisor Committee and Mr. Ma Xiang was elected as the chairman of the tenth session of the Supervisor Committee.

Mr. Xiao Yi resigned as the Chief Financial Officer of the Company due to change in his work position. According to the nomination of the general manager, the Board resolved to appoint Mr. Cheng Zhongyi as the Chief Financial Officer of the Company, with a term of office commencing from 27 April 2021 to the date when the term of the tenth session of the Board expires.

Mr. Li Honghai resigned as the secretary to the Board of the Company due to his age. According to the nomination of the chairman, the Board resolved to appoint Mr. Cheng Zhongyi as the secretary to the Board, with a term of office commencing from 3 August 2021 to the date when the term of the tenth session of the Board expires. Meanwhile, according to the nomination of the general manager, the Board resolved to appoint Mr. Sun Bingxiang as the deputy general manager of the Company, with a term of office commencing from 3 August 2021 to the date when the term of the tenth session of the Board expires.

The Company expresses its sincere gratitude to Ms. Jiang Bo, Mr. Zhai Yalin, Mr. Zhang Hongshan, Mr. Xiao Yi and Mr. Li Honghai for their diligent work and contributions during their tenures.

(5) Information of any punishment by securities regulators in the last three years

☐ Applicable √ Not Applicable

5. Summary of Board meetings during the reporting period

Name of meeting	Date of meeting	Resolutions
The first meeting of the tenth session of the Board	2 February 2021	The meeting approved: 1. Elected the chairman of the tenth session of the board. 2. Elected the member of the special committees for the tenth session of the board. 3. Appointed the general manager of the Company. 4. Appointed the deputy general manager and the chief financial officer of the Company. 5. Appointed the secretary to the board of the Company. 6. Appointed Company secretary according to Listing Rules from the Stock Exchange of Hong Kong Limited. 7. Appointed the Company authorized representative in the Stock Exchange of Hong Kong Limited. 8. Appointed securities affairs representative in Company.
The second meeting of the tenth session of the Board	24 March 2021	The meeting approved: 1. The Report of the Board of the Directors of the Company for the year 2020. 2. The completeness of goal tasks for 2020 and the work arrangements for 2021. 3. The profit distribution plan of the Company for 2020. 4. The daily related transactions of the Company in 2020. 5. The financial report for the year 2020. 6. Remuneration to the directors, supervisors and senior managers for 2020. 7. The remuneration of domestic and overseas accounting firms and the internal control accounting firm. 8. To appoint BDO China Shu Lun Pan Certified Public Accountants LLP as the domestic auditor and internal control auditor of the Company for the year 2021 and to appoint BDO Limited as the international auditor of the Company for the year 2021. 9. The annual report of the Company for the year 2020 and the abstract of the annual report. 10. The Environment, Safety and Governance Report of the Company for 2020. 11. The internal control assessment report for 2020. 12. Proposed amendments to the internal control handbook (2021). 13. To grant to the Board a general mandate to issue new domestic shares and/or overseas listed foreign shares of the Company. 14. Proposed the authorisation to the Board to repurchase domestic shares and/or overseas listed foreign shares of the Company. 15. Convening the annual general meeting for the year 2020, the first A shareholders class meeting for 2021 and the first H shareholders class meeting for 2021 of the Company.
The third meeting of the tenth session of the Board	27 April 2021	The meeting approved: 1. 2021 first quarterly results of the Company. 2. Providing guarantees for wholly-owned subsidiaries and joint ventures. 3. Appointed the chief financial officer of the Company.
The fourth meeting of the tenth session of the Board	3 August 2021	The meeting approved: 1. Sinopec Shengli Oil Engineering Company Limited transferred a set of assembled drilling platform (including pipes) to Sinopec Shengli Oilfield Branch Company through agreement. 2. Appointed the deputy general manager of the Company. 3. Appointed the secretary to the board of the Company. 4. "Information Disclosure Management Regulation of Sinopec Oilfield Service Corporation (revised in 2021)" and "Insider Information Registration Regulation of Sinopec Oilfield Service Corporation (revised in 2021)".
The fifth meeting of the tenth session of the Board	25 August 2021	The meeting approved: 1. 2021 interim report of the Company and the summary of interim report. 2. 2021 interim financial reports. 3. The proposal on no dividend distribution for mid of 2021.
The sixth meeting of the tenth session of the Board	16 September 2021	The meeting approved; 1. The mutual products supply framework agreement with CPC and the continuing connected transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 2. The general services framework agreement with CPC and the Non-Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 3. The engineering and construction services framework agreement with CPC and the continuing connected transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 4. The financial services framework agreement with CPC and the Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 5. The technology R&D framework agreement with CPC and the Non-Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 6. The land use rights and property leasing framework agreement with CPC and the Non-Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 7. The equipment leasing framework agreement with CPC and the Non-Major Continuing Connected Transactions contemplated thereunder and the proposed annual caps of such transaction for 2022, 2023 and 2024. 8. The proposal of 2021 trademark license agreement with CPC. 9. Executed SPI fund document with CPC and the proposed annual caps of paying premiums ended up to 31 December 2022, 31 December 2023, and 31 December 2024. 10. Proposed provision of counter-guarantee to CPC. 11. The Termination Agreement of the Lease Agreement in relation to the "Exploration IV" Drill Rig between Ocean Petroleum Engineering and Shanghai Offshore Petroleum Bureau. 12. The annual cap for the 2021 continuing related transactions with China Oil & Gas Pipeline Network Corporation. 13. Proposed amendments to the Articles of Association and the rules of Procedures for the Board. 14. The proposal of convening the second extraordinary general meeting for 2021.
The seventh meeting of the tenth session of the Board	28 October 2021	The meeting approved: 1. The third quarter report of the Company for 2021. 2. Cancellation of the Share Options of the Third Exercise Period under the First Grant of the A Share Option Incentive Scheme. 3. Proposed Sinopec Oilfield Service Corporation Measures for management members' business performance appraisal and Sinopec Oilfield Service Corporation Measures for management members' remuneration system.

6. Performance of the Directors

(1) The Directors' attendance at the Board Meetings and General Meetings

Name of Director	Whether as Independent Director	Attendance at Board meetings						Attendance of the general meeting
		Number of Board meetings eligible to attend during the year	Number of meetings attended in person (no. of times)	Attendance by correspondence (no. of times)	Attendance by proxy (no. of times)	Absence (no. of times)	Whether not attending in person for two consecutive times	Number of times for attending at shareholders' general meetings
Chen Xikun	No	7	7	4	0	0	No	5
Yuan Jianqiang	No	7	7	4	0	0	No	5
Lu Baoping	No	7	6	4	1	0	No	4
Fan Zhonghai	No	7	5	4	2	0	No	0
Wei Ran	No	7	4	4	3	0	Yes	0
Zhou Meiyun	No	7	7	4	0	0	No	5
Chen Weidong	Yes	7	7	4	0	0	No	5
Dong Xiucheng	Yes	7	7	4	0	0	No	5
Zheng Weijun	Yes	7	7	4	0	0	No	5

The Board meetings held during the year (No. of times)	7
Including: meetings held on site (No. of times)	3
Meetings held by correspondence (No. of times)	4
Meetings held by correspondence on site and by correspondence (No. of times)	0

(2) The information of the objections proposed by the directors

During the reporting period, the Company's directors did not raise objections against the proposals of the Board meetings or the proposals which does not require the review on the Board meetings. The detail information related to the performance of the independent directors is published in the report of the Company's independent directors 2021 on the website of Shanghai Stock Exchange and Hong Kong Stock Exchange.

7. Special committees under the Board

(1) Members of special committee under the Board

Name of special committee	Name of members
Strategy Committee	Chief Officer: Mr. Chen Xikun Members: Mr. Yuan Jianqiang, Mr. Lu Baoping, Mr. Fan Zhonghai, Mr. Dong Xiucheng
Audit Committee	Chief Officer: Mr. Zheng Weijun Members: Mr. Zhou Meiyun, Mr. Chen Weidong, Mr. Dong Xiucheng
Remuneration Committee	Chief Officer: Mr. Chen Weidong Members: Mr. Fan Zhonghai, Mr. Dong Xiucheng, Mr. Zheng Weijun

(2) 7 meetings held in the reporting period

Name of meeting	Date of meeting	Resolutions
The thirteenth audit committee meeting of the ninth session of the board	22 January 2021	Approved the audit plan for 2020 annual financial report made by Grant Thornton, accounting firm of the Company, and the preliminary financial statement for 2020 which was agreed to be audited by Grant Thornton. Approved performance pre-decrease announcement for the year 2020, and agreed to disclose according to domestic and foreign regulatory rules.
The first audit committee meeting of the tenth session of the board	22 March 2021	Approved the financial report for the year 2020, summary report of auditors engaged in audit work in 2020, the remuneration of domestic and overseas accounting firms in 2020, suggestion about appointing domestic, international auditor and internal control auditor of the Company for the year 2021, and the performance report of audit committee in 2020. Such proposals were agreed to be submitted to the Board for review.
The second audit committee meeting of the tenth session of the board	23 August 2021	Approved 2021 interim report of the Company and the proposal on no dividend distribution for mid of 2021.
The third audit committee meeting of the tenth session of the board	16 September 2021	Approved the framework agreement and the continuing connected transaction contemplated thereunder such as 8 continuing transaction agreements and SPI fund document signed with CPC, and the proposed annual caps of such transactions for three years ended up to 31 December 2022, 31 December 2023, and 31 December 2024. Approved provision of counter-guarantee to CPC, and the annual cap for the 2021 continuing related transactions with China Oil & Gas Pipeline Network Corporation.
The fourth audit committee meeting of the tenth session of the board	28 October 2021	Approved the third quarter financial statement of the Company for 2021.
The first remuneration committee meeting of the tenth session of the board	22 March 2021	Approved remuneration of directors, supervisors and senior managers, and the performance report of remuneration committee for the year 2020.
The second remuneration committee meeting of the tenth session of the board	28 October 2021	Approved the proposal of cancellation of the share options of the third exercise period under the first grant of the A share option incentive scheme, Sinopec Oilfield Service Corporation measures for management members' business performance appraisal, and Sinopec Oilfield Service Corporation measures for management members' remuneration system.

The audit committee made significant suggestions as follows:

a. To further reduce the gearing ratio of the Company. The current gearing ratio remains at a high level of around 90%. The Company will reduce the overall debt and improve its cash flow condition by increasing profits, reducing costs, putting more efforts to recover accounts receivable and inventory, and optimizing the debt structure.

b. Secondly, tax planning should be carried out reasonably to reduce the fund occupation formed by withholding tax and paying taxes in advance. Since the Company changed business tax to VAT in 2016, the amount of value-added tax (VAT) retained and prepaid VAT from different places has continued to increase every year, and the funds for tax and fee occupation have increased year by year. At the same time, the Company is short of cash and currently has around RMB20 billion of interest-bearing debt a year. It is suggested that the Company should pay attention to the continuous growth of VAT retention and VAT prepayment from different places for many years, find out the specific reason and make plan correspondingly.

c. The third is to strengthen the study of overcoming challenges from carbon peak and neutral, and plan actively for how to grasp the opportunity of energy transformation as an oil service enterprise. For oil service enterprises, carbon peak and neutralization, and the ensuing energy transformation, is not only a huge challenge, but also an opportunity for technological progress, market opening, industrial adjustment and transformation. It is suggested that the Company should study the background, target, path and method of carbon reduction clearly as soon as possible, keep up with the trend of energy transformation and development of oil companies, and actively plan the transformation and development path of oil service companies.

d. To continue to pay attention to foreign exchange risks and rationally use financial derivatives to effectively prevent exchange rate fluctuations.

(3) Statements on objected matters

☐ Applicable √ Not Applicable

8. The information on the existence of risk found by the supervisory committee

The supervisory committee has no objection on the supervised matters during the reporting period.

9. Information on the employee of the Company and its major subsidiaries

(1) Employee information

The number of the Company' serving staff	126
The number of the Company's major subsidiaries' serving staff	69,106
The total number of the serving staff	69,232
The number of retired staff whose expense should be born by the Company and its major subsidiaries	15,458
Professional composition	
Type of Professional	**Number of the staff**
Production Staff	37,904
Technical Staff	21,341
Researcher	3,246
Financial Staff	1,790
Market and Administrative Staff	3,804
Others	1,147
Total	69,232
Education	
Type	**Number of the staff**
Master or above	3,750
Bachelor	21,794
Junior college	13,758
Others	29,930
Total	69,232
Gender	
Male	59,448
Female	9,784
Total	69,232

(2) Remuneration Policies

The Company's Remuneration Distribution system consists of mid/long-term incentives and short-term incentives which include basic salary, allowance, monthly and annual performance bonuses. The Company has established differentiation incentive scheme based on different positions and different kinds of professionals, not only to create a fair competition environment but also give full play to the incentive and restraint role of performance appraisal, aiming at stimulating employees' creativity and keeping the remuneration in reasonable income difference.

(3) Training plan

Committed to staff training, the Company has established a differentiated and multi-tiered training management system which focuses on promoting staff fulfillment of responsibilities and talent building. Centered on central tasks in production and operation, the Company carries out the management, professional skills staff, operating skills staff and international staff training programs, highlights trainings in key positions such as domestic and international market development, project managers, conducts training for transferred employees and ability trainings, and make effective use of various trainings such as on-job training, off-job training and online training to improve the ability of employees to perform their duties and realize the mutual development of employees and the Company.

(4) Labor outsourcing

☐ Applicable √ Not Applicable

10. Profit Distribution Plan for Ordinary Shares or Plan to Convert Surplus Reserves into Share Capital

(1) Formulation, implementation or adjustment of dividend policy

The Company's current dividend policy is as follows: during the reporting period, under the situation of: 1) Company's profit gaining, 2) the Company's positive accumulated undistributed profit and 3) the Company's cash flow meets the requirement of its normal operation and sustainable development, then the Company shall have the dividends and the annual dividends shall not be less than 40% of the current net profit attributed to the Company shareholders. The specific amount of dividends shall be proposed by the Board of Directors of the Company, and be finally approved by the General Meeting. During the process of enacting and executing of the Company's dividend policy, the independent directors fulfilled their responsibilities following the corresponding obligations, which fully reflected the opinions and demands of minority shareholders and protected their legitimate rights and interests.

Due to the negative of the Company's undistributed profits at the end of 2021, the board of directors suggest no cash dividends and no capital reserve conversion to equity. The proposal still needs to be approved by shareholders' meeting. All of independent directors of the board agreed the profit distribution plan above, and expressed independent opinion. The Company would strictly implement its dividend policy in Articles of Association, and as soon as the achievement of capability for cash dividends, the Company will perform decision-making process in accordance with relevant provisions. And independent directors will play their roles to safeguard the legitimate rights and interests of the minority shareholders.

(2) Special statement on cash dividend policy

√ Applicable ☐ Not Applicable

Whether the cash dividend policy in accordance with the rules of Articles of Association or resolutions of shareholders' meeting	√Yes ☐No
Whether the dividend standard is accurate and clear	√Yes ☐No
Completeness of relevant decision making procedures	√Yes ☐No
Whether the independent directors of the board undertake their responsibilities	√Yes ☐No
Whether give chance to minority shareholders for expressing opinions and fully protect their rights	√Yes ☐No

(3) If the Company records profits and the parent company records a positive distribution of profit available to shareholders of ordinary shares during the Reporting Period but there is no proposal for cash dividend for ordinary shares, the Company shall disclose the reasons and the usage of the undistributed profits and the usage plan in details

☐ Applicable √ Not Applicable

11. Company's share option incentive plan and its effect

(1) The grant date and quantity

Grant date: 1 November 2016

Number of share options granted: 49,050,000

Number of participants: 477 persons

(2) Information on share options granted to directors, chief executives or major shareholders

The Company granted 1.85 million A-share stock options to ten people such as Mr. Lu Baoping, director, Mr. Zhang Yongjie, deputy general manager, Mr. Liu Rushan, deputy secretary of the Party Committee, and Mr. Zuo Yaojiu, deputy general manager of the Company, Mr. Zhang Jinhong, deputy general manager, Mr. Li Honghai, secretary of board of directors, Mr. Sun Qingde, former vice chairman and general manager of the Company, Mr. Zhou Shiliang, former director and deputy general manager, Mr. Huang Songwei, former supervisor, and Mr. Wang Hongchen, former Chief Financial Officer, accounting for 3.8% of the total amount of share options in the Proposed Grant, and accounting for 0.0131% of the total shares of the Company as at the grant date.

(3) Information on share options granted to key business personnel holding core positions

The Proposed Grant covers 467 key business personnel holding core positions, and the total amount of share options granted to them was 47.20 million shares, accounting for 96.2% of the total amount of the share options in the Proposed Grant, and accounting for 0.3337% of the total shares of the Company as at the grant date.

(4) Exercise price of the Proposed Grant

According to the determining principle of exercise price, the exercise price of the Proposed Grant is RMB5.63 per share (If, during the Validity Period, any capitalisation of capital reserves, distribution of dividend, subdivision, allotment or reduction of the Shares or any other events takes place, an adjustment to the exercise price of Share Options shall be made accordingly).

(5) Validity Period and Exercise Arrangement under the Proposed Grant

Under the Scheme, Options under the Proposed Grant have a validity period of five years commencing from the Grant Date. The Exercise Period for the Options shall be three years after the expiry of the two-year vesting period after the Grant Date. There shall be three Exercise Periods (one year for each Exercise Period, same for the following) for each plan of grant under the Scheme. And during the 1st, 2nd and 3rd Exercise Period, there will be 30%, 30% and 40% respectively of the total options granted may be exercised upon fulfillment of the conditions for exercise of Share Options.

Stage	Timing Arrangement	Exercise Ratio Cap
Grant Date	To be determined by the Board upon fulfillment of the grant conditions under the Scheme	
1st Exercise Period	Commencing on the first trading day after the expiration of 24 months from the Grant Date and ending on the last trading day of 36 months from the Grant Date	30%
2nd Exercise Period	Commencing on the first trading day after the expiration of 36 months from the Grant Date and ending on the last trading day of 48 months from the Grant Date	30%
3rd Exercise Period	Commencing on the first trading day after the expiration of 48 months from the Grant Date and ending on the last trading day of 60 months from the Grant Date	40%

(6) Exercise and Cancellation of the Proposed Grant during the reporting period

As the Company has not fulfilled the exercise conditions for exercise of Option during the 1st exercise period under the First Grant of the A Share Option Incentive Scheme, the Participants cannot exercise the options. On 29 October 2018, the Company convened the 7th meeting of the 9th session of the Board at which the "Resolution relating to non-fulfillment of the exercise conditions for the 1st exercise period under the First Grant of the A Share Option Incentive Scheme" was considered and approved. The Participants can not exercise the Options and we agreed to cancel the 14,715,000 Share Options corresponding to the 1st exercise period which have been granted to but not yet been exercised by the Participants of the A Share Option Incentive Scheme.

Meanwhile, in view of a total of 24 Participants of the Company's A Share Option Incentive Scheme came across matters such as retirement, change in job positions, resignation and death, etc., according to the Measures for the Administration of Equity Incentive Plans of Listed Companies and the relevant provisions, as the above Participants have not meet the qualifications, the Company proposes to cancel a total of 2,163,000 Share Options that have been granted to but not yet been exercised by the above-mentioned personnel. After this adjustment, the Participants of the Company's A Share Option Incentives were adjusted from 477 to 453, and the number of A Share Options which have been granted but not yet been exercised were adjusted from 34,335,000 to 32,172,000.

For details, please refer to the "Announcements relating to Non-fulfillment of Exercise Conditions for the First Exercise Period and Adjustment to the List of Participants and the Number of Share Options under the First Grant of the A Share Option Incentive Scheme" published in China Securities Journal, Shanghai Securities News, Securities Times and on www.sse.com.cn on 30 October 2018, and on www.hkexnews.hk on 29 October 2018.

The performance of the Company has not fulfilled the exercise conditions for exercise of Option during the 2nd exercise period under the First Grant of the A Share Option Incentive Scheme. On 28 October 2019, the Company convened the 17th meeting of the ninth session of the Board at which the "Resolution relating to non-fulfillment of the exercise conditions for the 2nd exercise period under the First Grant of the A Share Option Incentive Scheme" was considered and approved. After consideration, the Board will cancel the 13,788,000 Share Options corresponding to the 2nd exercise period which have been granted but not yet been exercised under the First Grant of the A Share Option Incentive Scheme.

Meanwhile, in view of a total of 30 Participants of the Company's A Share Option Incentive Scheme came across matters such as retirement, change in job positions, resignation and death, etc., according to the Measures for the Administration of Equity Incentive Plans of Listed Companies and the relevant provisions, as the above Participants have not met the qualifications, the Company proposes to cancel a total of 1,300,000 Share Options that have been granted to but not yet been exercised by the above-mentioned personnel. After this adjustment, the Participants of the Company's A Share Option Incentives were adjusted from 453 to 423, and the number of A Share Options which have been granted but not yet been exercised were adjusted from 18,384,000 to 17,084,000.

For details, please refer to the "Announcement relating to Non-fulfillment of Exercise Conditions for the Second Exercise Period and Adjustment to the List of Participants and the Number of Share Options under the First Grant of the A Share Option Incentive Scheme I." (P.2019-044) published in China Securities, Shanghai Securities News, Securities Times, and on www.sse.com.cn on 29 October 2019 and on www.hkexnews.hk on 28 October 2019.

In view of the relatively substantial difference between the Company's A Share price and the exercise price arising in the Third Exercise Period, under the relevant provisions of the Measures for the Administration of Share Incentive Plans of Listed Companies and Share Option Incentive Scheme for SSC's A Shares, the Company held the seventh meeting of the tenth session of the board and the seventh meeting of the tenth session of the supervisory committee on 28 October 2021 to pass the proposal about Cancellation of the Share Options of the Third Exercise Period under the First Grant of the A Share Option Incentive Scheme, cancelled a total of 17,084,000 Share Options, to be expired but unexercised at the Third Exercise Period, granted to 423 Participants.

For details, please refer to the "Announcement relating to Cancellation of the Share Options of the Third Exercise Period under the First Grant of the A Share Option Incentive Scheme" (P.2021-042) published in China Securities, Shanghai Securities News, Securities Times, and on www.sse.com.cn on 29 October 2021 and on www.hkexnews.hk on 28 October 2021.

As of the end of this reporting period, the Company has already completed the Proposed Grant of the A share option incentive scheme, All of the A share options granted have not been exercised and have been cancelled.

12. Information on share option held by directors, supervisors and senior management

(1) Share option held by current directors, supervisors and senior management

Unit: shares

Name	Position	Number of share options held at the beginning of 2021	Number of share options newly granted during the reporting period	Exercisable share options during the reporting period	Share options cancelled during the reporting period	Exercise price of share options (RMB/share)	Number of share options by the end of reporting period	Stock price at the end of reporting period (RMB/share)
Sun Yongzhuang	Employee Representative Supervisor	60,000	0	0	-60,000	5.63	0	2.14
Zhang Yongjie	Deputy General Manager	76,000	0	0	-76,000	5.63	0	2.14
Zuo Yaojiu	Deputy General Manager	72,000	0	0	-72,000	5.63	0	2.14
Zhang Jinhong	Deputy General Manager	72,000	0	0	-72,000	5.63	0	2.14
Zhang Jiankuo	Deputy General Manager	40,000	0	0	-40,000	5.63	0	2.14
Li Honghai	Former Secretary to the Board	56,000	0	0	-56,000	5.63	0	2.14
Total	/	376,000	0	0	-376,000	/	0	/

(2) Qi Xin Gong Ying Scheme participated by directors, supervisors and senior management

On 25 January 2018, the Company non-publicly issued 1,503,568,702 and 23,148,854 shares of restricted-sale A shares to the China Petrochemical Corporation and the Qi Xin Gong Ying Scheme respectively. Qi Xin Gong Ying Scheme is managed by Changjiang Pension Insurance Co., Ltd., and its shares shall be subscribed by certain directors, supervisors, senior management and other core management personnel of the Company. The number of subscribers shall not exceed 198, and the subscription amount is RMB60.65 million in total. The subscription price for each scheme share under Qi Xin Gong Ying Scheme is RMB1.00. The duration of Qi Xin Gong Ying Scheme is 48 months commencing from 25 January 2018, and the first 36 months shall be the lock-up period and the last 12 months shall be the unlocking period. On 25 January 2021, the lock-up period of 23,148,854 A shares held by Qi Xin Gong Ying Scheme with limited selling conditions ended and was listed for trading.

In Qi Xin Gong Ying Scheme, the Company's directors, supervisors and senior management subscribed for a total of 4.85 million, accounting for approximately 8.0% of the total share of the scheme. The total number of directors, supervisors and senior management of the Company who subscribed for the Qi Xin Gong Ying Scheme was 14 persons. For details of the participation of the incumbent and former directors, supervisors and senior management of the Company in the Qi Xin Gong Ying Scheme, see the following table.

Name	Position	Subscription scheme amount under Qi Xin Gong Ying Scheme (RMB)	Subscription scheme shares under Qi Xin Gong Ying Scheme (share)	Subscription Price (RMB/A Share)	Subscription amount of A share (share)
Chen Xikun	Chairman, Secretary of Party Committee	400,000	400,000	2.62	152,671
Sun Yongzhuang	Employee Representative Supervisor	300,000	300,000	2.62	114,503
Zhang Bailing	Employee Representative Supervisor	350,000	350,000	2.62	133,587
Du Guangyi	Employee Representative Supervisor	350,000	350,000	2.62	133,587
Zhang Yongjie	Deputy General Manager	350,000	350,000	2.62	133,587
Zuo Yaojiu	Deputy General Manager	350,000	350,000	2.62	133,587
Zhang Jinhong	Deputy General Manager	350,000	350,000	2.62	133,587
Zhang Jiankuo	Deputy General Manager	300,000	300,000	2.62	114,503
Li Honghai	Former Secretary to the Board	300,000	300,000	2.62	114,503
Sun Qingde	Former Deputy Chairman, General Manager	400,000	400,000	2.62	152,671
Li Wei	Former Chairman of the Supervisory Committee	350,000	350,000	2.62	133,587
Li Tian	Former Chief Financial Officer	350,000	350,000	2.62	133,587
Huang Songwei	Former Supervisor	350,000	350,000	2.62	133,587
Zhang Hongshan	Former Supervisor	350,000	350,000	2.62	133,587
Total	/	4,850,000	4,850,000	–	1,851,134

In the reporting period, Qi Xin Gong Ying Scheme reduced holding 11,574,427 shares of A share through centralized bidding. By the end of the reporting period, Qi Xin Gong Ying Scheme still holds 11,574,427 shares of A share.

(3) Directors', Supervisors' and Chief Executive's rights to acquire shares and debentures and short position

As at 31 December 2021, the Company's deputy general manager Mr. Sun Bingxiang held 50,300 A shares of the Company. Save as disclosed above and the Share Option Incentive Scheme and Qi Xin Gong Ying Scheme disclosed below, none of the directors, supervisors or other senior management of the Company had any interest or short positions in any shares, underlying shares or debentures of the Company or any of its associated corporations within the meaning of Part XV of the SFO, as recorded in the registry by the Company pursuant to Section 352 of the SFO or as otherwise notified to the Company and the HKSE pursuant to the Model Code.

(4) Directors' and Supervisors' service contracts

Each Director and Supervisor entered into a service contract with the Company. Main contents are set out below:

a. More details about the expired date of the terms of Directors in the tenth session of the Board and the Supervisors in tenth session of Supervisory Committee, please see the section in "Directors, Supervisors, Senior Management and Employees".

b. The remuneration for the tenth session of executive directors, supervisor Mr. Ma Xiang and the employee representative supervisors under the service contract shall be determined in accordance with relevant national regulations and the Company's senior management remuneration implementation measures. It is provided in the measures for implementation of remuneration packages for senior management of the Company that the remuneration consists of a basic salary, performance bonus and mid- and long term incentives, with specific functions and responsibilities of the management members and performance of the Company as a whole being taken into account. An independent non-executive Director entitled to a director's fee of RMB200,000 per annum (pre-tax). Mr. Du Jiangbo, Mr. Zhang Jianbo and Ms. Zhang Qin, who are non-executive directors and supervisors who are not represented by employee representatives, shall not receive any remuneration from the Company.

(5) Special treatment to Directors, Supervisors and Senior Management

There has been no special treatment granted to the directors, supervisors or senior management during the reporting period.

(6) Regarding the performance evaluation for senior management, and the establishment and implementation of stimulating mechanism during the reporting period

Under the guidance of the annual operation and management target set by the Board, Remuneration and Assessment Committee of the Company effectively appraised and inspected the performance of senior management, submitted it to the Board of the Company for consideration, and has been working hard to establish and optimize evaluation criteria and a stimulating and binding mechanism for senior management.

During the Reporting Period, in order to implement the decisions and arrangements of the CPC Central Committee and the State Council on deepening the reform of state-owned enterprises, establishing a sound market-oriented operation mechanism, and stimulating enterprise vitality, and to accelerate the construction of a new management responsibility system – a modern enterprise system with Chinese characteristics, the Company implemented the tenure system and contractual management for the members of the management team. In accordance with relevant laws and regulations, the Articles of Association and relevant management systems, the Company also formulated two supporting systems based on its actual situation, namely Measures for Performance Assessment Measures for Management Members of Sinopec Oilfield Service Corporation and Remuneration Management Measures for Management Members of Sinopec Oilfield Service Corporation, as well as term of office and annual performance assessment responsibility letter.

13. Establishment and implementation of internal control system during the reporting period

In 2021, the Company kept improving the internal control system and risk management system, and made the operation of the internal control system effective by way of strengthening risk assessment, optimizing the business process, control and continuously enhancing supervision. The Board will take responsibility for establishing and maintaining sufficient internal control of financial report, and the annual review of the Company's risk management and internal control system. The supervisory committee conduct supervision on the Board about establishment and implement of internal control. Managers take charge of organizing routine operation of internal control. In 2021, the Board assessed internal control of the Company during the past year, in accordance with "basic norms of enterprise internal control", "application guidelines of enterprises internal control", "evaluation guidelines of enterprises internal control" and concluded that there is no important deficiency or significant deficiencies till 31 December, 2021. The internal control system of the Company's financial report is sound and effective.

The Board approved the Company's 2021 annual self-assessment of internal control on 29 March 2022. Please visit the website of the Hongkong stock exchange or the website of the Shanghai Stock Exchange for details of the report. All members of the Board ensure that this report is true, accurate and complete and there is no false records, misleading statements or major omissions.

Description about major defects of the internal control during the reporting period

☐ Applicable √ Not Applicable

14. Statement on management and control of the subsidiaries

☐ Applicable √ Not Applicable

15. Information about the audit report of internal control

Whether disclose the audit report of internal control: yes

BDO China Shu Lun Pan CPAs (LLP) audited the Company's internal control till 31 December 2021 and issued a standard unqualified audit report on internal control. For detailed information, please refer to the 2021 annual internal control audit report disclosed on 30 March 2022.

16. Rectified the problems found in the special self-inspection activity for listed company

On 24 March 2021, the Company submitted the problem list of special self-inspection activity for listed company according to relevant requirement. Through the way of self-inspection, the Company found that Mr. Pan Ying, former independent director of the board, didn't attend the board meeting in person due to illness in 2019 and 2020. On 2 April 2020, Mr. Pan Ying resigned his position of independent director for physical reason. During this reporting period, three current independent directors of the board of the Company attended all of the board meetings in person.

17. Compliance with Code of Corporate Governance Practices of HKSE

During the reporting period, the Company has not established a nomination committee. The duties of the nomination committee as stipulated in the "Corporate Governance Code" are implemented by the Board of the Company. The Company believes that the selection of director candidates by the Board is more in line with the actual operation of the Company. In addition to the foregoing, the Company has been in strict compliance with the Code of Corporate Governance of HKSE. On 29 March 2022, the Company has established the nomination committee and will apply principles recorded in the "Corporate Governance Code" to enterprise governance and general practice The details are as follows:

A.1 The Board

(1) The Board meets regularly to fulfill their responsibilities. The Board held seven meetings in 2021, including four regular meetings. The Directors' attendance of the Board meetings is set forth in item 6 "Performance of duties by the Directors" of this section.

(2) All Directors can raise matters in the agenda for the Board meetings and have the right to ask for more related documents.

(3) The notice has been given 14 days before regular meetings and the notice of the other Board meetings has usually been given 10 days before.

(4) The Board Secretary records and keeps the minutes of the Board meetings and meetings of Board Committees. The Articles of Association regulates the contents of the minutes, and the procedure that the minutes should be sent to all Directors for their comment and signature after the Board meetings.

(5) The Secretary to the Board continuously provides service for the Directors and reminds all Directors in order to ensure them to follow all applicable rules and regulations of domestic and overseas regulatory authorities.

A.2 Chairman and Chief Executive Officer

(1) Mr. Chen Xikun was elected as Chairman of the Company by the Board. Nominated by Chairman of the Company, Mr. Yuan Jianqiang was appointed as General Manager of the Company by the Board. The responsibilities between Chairman and General Manager are set out clearly in the Articles of Association. There are no financial, business, domestic or other important relation among the directors, senior managements and main shareholders in the Company.

(2) Procedures to acquire necessary information for decision were regulated in the "the Rules and Procedures for the Board" of the Company. Directors can require General Manger or relevant departments through General Manger to provide information and explanation. If necessary, Independent Directors can consult independent professionals and the Company should pay the relevant expenses.

A.3 The Board composition

(1) The Board of the Company consists of 9 members with extensive professional and management experiences. Among the 9 members, there are 2 executive directors, 4 non-executive directors and 3 independent non-executive directors. The independent non-executive directors represent one third of the Board. The company's executive directors and non-executive directors have extensive management experiences in petrochemical and large-sized enterprises; Independent non-executive directors have working background as well-known finance experts with rich experience in international capital management and investment and in energy research. The composition of the Board is reasonable and diversified.

(2) The Company has received from each independent non-executive director a letter of confirmation regarding its compliance with relevant independence requirements set out in Rule 3.13 of the Hong Kong Listing Rules. The Company considers that each of the independent non-executive directors is independent.

(3) The independent non-executive directors are identified in all corporate communications in which also listed all the directors' names. The list of the current Directors of the Company had been published on its website and the HKSE's website.

A.4 Appointment, re-election and removal

(1) All Directors are elected by shareholders' general meetings for a term of not more than 3 years. A Director may serve consecutive terms if re-elected upon the expiration of the term. The Board has no right to appoint temporary directors.

(2) The term of office of Independent Directors shall not be more than 6 years. The term of the independent non-executive directors is set forth in the item 4 "Information about directors, supervisors and senior management" of this section.

A.5 Nomination Committee

(1) The Board has not established Nomination Committee. The responsibility of Nomination Committee regulated in the Code of Corporate Governance will be taken by the board of the Company. Pursuant to the Articles of Association of the Company, the candidates for independent directors may be nominated by the Board, the Supervisory Committee, or shareholders holding individually or collectively more than one per cent of the issued shares of the Company. The candidates for the remaining directors shall be nominated by the Board, the Supervisory Committee, or shareholders holding individually or collectively more than three per cent of the issued shares of the Company. All candidates should be elected by the shareholders' general meeting of the Company. The Board shall nominate the candidate for directors on the basis of the skills and experience required for the overall good functioning of the Board, with due regard to the objectives and requirements of board diversity and the independent non-executive directors should express their independent opinions before the Board nominated the candidate for directors.

(2) On 29 March 2022, the eighth meeting of the tenth session of the Board reviewed and approved the proposal of setting nomination committee under the tenth session of the Board and working rules for the Board's nomination committee. The company has set up the Nomination Committee, which consists of independent non-executive Director Mr. Dong Xiucheng as the Head, the chairman of the Board Mr. Chen Xikun, the independent non-executive directors Mr. Chen Weidong and Mr. Zheng Weijun as members. The nomination committee mainly provides suggestions on appointment standards, procedures and candidates for the Board of directors, and reviews on the structure, numbers and diversity of members of the Board, ensuring the Board's composition in accordance with the Listing Rules.

(3) The Company understands and acknowledges the benefit of diversifying board members, and considers it as a key factor to achieve strategic goals, maintain competitive advantages and completes sustainable development. On the first meeting of the eighth session of the Board dated 9 February 2015, the Company has approved the boards' diversified policy. This policy specifies that the Company shall consider the diversity of board members from multiple aspects when setting the composition of board members, including but not limited to gender, age, cultural and educational background, region, professional experience, skills, knowledge, service tenure and other regulatory requirements of the listed place. At present, all of directors of the board are males and have extensive working experience, their expertises not only include management in petrochemical enterprises, but also include economics, accounting and finance, which can help the board to make scientific decision, but the directors are male only. In the future, the Company will increase the proportion of female directors in the board based on talents, skills and experiences required for the board's overall operation. It will be completed on change of a new session of the board by February 2024 at the latest.

A.6 Responsibilities of Directors

(1) All the non-executive directors have the same authorities as the executive directors. In addition, the non-executive directors, especially the independent non-executive directors are entitled to certain specific authorities. The Articles of Association and the Rules and Procedures for the Board clearly specify for the authorities of directors including independent non-executive directors, which are published on the website http://ssc.sinopec.com.

(2) Each of the directors was able to devote sufficient time and efforts to handling the matters of the Company. Directors shall abstain from voting at the Board meeting due to conflicts of interests.

(3) Each of the directors confirmed that he or she has complied with the "Model Code for Securities and Transactions by Directors of Listed Company" during the reporting period. In addition, the Company formulated the "Rules Governing Shares Held by Company Directors, Supervisors and Senior Manager and changes in shares" and the "Model Code of Securities Transactions by Company Employees" (requirements no less than the "Model Code" above) to regulate the activities of China Petrochemical Corporation's personnel in purchase and sale of the securities of the Company.

(4) The Company has arranged trainings for directors and provided relevant training fees. In reporting period, the Company's directors participated in professional training persistently, developing their knowledge and skills to ensure that they can hold comprehensive information and make contribution to the Company as required by the Board. The Company's directors and supervisors mainly attended the training courses by way of watching video or reading articles, which organized by Beijing Listed Company Association and SSE, the non-executive independent directors participated in other relevant follow-up training. In addition, the Company also provided information for directors regularly about updated ongoing responsibility of Listed Company directors of the Board, and introduced the Group's business operation information through monthly report.

Participation in training of the current directors of the Company

		Corporate governance/ laws, regulations and rules updates		Accountancy/finance/corporate management and business operation updates	
Name	Position	Reading materials	Attend training or meeting	Reading materials	On-site visit and research
Chen Xikun	Chairman of the Board	√	√	√	√
Yuan Jianqiang	Executive director of the Board General manager	√	√	√	√
Lu Baoping	Non-executive director	√	√	√	√
Fan Zhonghai	Non-executive director	√	√	√	√
Wei Ran	Non-executive director	√	√	√	√
Zhou Meiyun	Non-executive director	√	√	√	√
Chen Weidong	Non-executive independent director	√	√	√	√
Dong Xiucheng	Non-executive independent director	√	√	√	√
Zheng Weijun	Non-executive independent director	√	√	√	√

A.7 Supply of and access to information

(1) The Company provides information relating to business operation of the Company regularly, to help Directors to understand the Company's operation. Where any director requires information, the Company will supply the related materials in a timely manner.

(2) All Directors usually acquire adequate information 3 working days before the Board meetings which can help them to make accurate decisions.

(3) The Board Secretary provides sustainable services for all Directors. Directors can review all Board documents and relevant information at all times.

B. Remuneration of Directors and Senior Management

(1) The company has set up the Remuneration Committee. The Remuneration Committee under the tenth session of the Board consists of independent non-executive Director Mr. Chen Weidong as the Head, the non-executive director Mr. Fan Zhonghai and the independent non-executive directors Dong Xiucheng and Zheng Weijun as members, and they have made the rules. The Remuneration Committee has its working rules which can be found in the website of the company or the Hong Kong Stock Exchange. During the reporting period, the Remuneration Committee held 2 meetings.

(2) Pursuant to the principles approved by the shareholders' general meeting, the Service Contract which was entered into between the Company and each Director or Supervisor, the proposal raised by the Remuneration Committee and with reference to the operating results, the Board considered and approved the remuneration of the Directors, Supervisors and Senior Management. The details of the remuneration of the Directors during the reporting period are set forth in this section 4 "Directors, Supervisors, Senior Management and Employees".

(3) The Remuneration Committee acquires authorization from the Board to formulate and review the compensation policies and assessment matters of the directors, supervisors and senior managers of the Company. It can make recommendations to the Board, ensuring that the personnel concerned are properly remunerated according to the Company's strategy and long-term and short-term performance. The members of Remuneration Committee can consult Chairman or General Manager, and can consult independent professionals and the Company shall pay the relevant expenses.

C. Accountability and audit

C.1 Financial reporting

(1) The Company assures that the senior management has provided adequate financial information to the Board and the Audit Committee.

(2) The Directors are responsible for preparing the accounts for every fiscal year, which can give a view of the state of affairs of the Company as at 31 December 2021 and of the Company's profit and cash flows for the year. The Directors has selected the appropriate accounting policies to carry out, made prudent and reasonable judges and estimates, and prepared accounts on a going concern basis. The Board and all directors warranted that there were no material omissions, or misrepresentations or misleading statements contained in the annual report, and jointly and severally accepted full responsibility for the authenticity, accuracy and integrity of the content.

(3) Required under the Listing Rules by HKEX, the Company announces and publishes the annual reports, interim reports, quarterly reports and other share price-sensitive affairs timely and accurately.

(4) The external auditors of the Company made a statement about their reporting responsibilities in the auditor's report contained in the financial statements.

C.2 Risk management and internal control

(1) The Company has set up and kept improving risk management and internal control system to guard against the operational, financial and compliance risks. The Board is the decision-making body of internal control and risk management, and takes responsibility for examining the effect of internal control system and risk management procedures. The Board and the audit committee receive documents about internal control and risk management from the Company's management regularly (at least once a year). Significant issues about internal control and risk management will be reported to the Board and the audit committee. The Company has set up the internal audit department, which is equipped with sufficient professional staff. Internal control & management department and internal audit department report to the audit committee regularly (at least twice a year).

(2) As for internal control, the Company adopts the international internal control frame structure proposed by the Committee of Sponsoring Organizations of The National Commission of Fraudulent Financial Reporting. Based on the Articles of Association and current management system, and combined with domestic and foreign supervisory regulations, the Company made the internal control manual and continuously improved it, and realized total-factor internal control of internal environment, risk evaluation, control activities, information & communication, and internal supervision. Meanwhile, the Company continuously supervised and evaluated its internal control, included the corporate and regional companies into the internal control and evaluation scope by comprehensive inspections such as periodic test, self-examination, audit examination, etc., and made internal control evaluation report. The Board reviews internal control evaluation report annually. For the information about the internal control during the reporting period, please refer to 2021 Internal Control Evaluation Report Prepared by the Company.

The Company developed and implemented Information disclosure system and insider registration system. The Company assessed the implement of system periodically and disclosed it according to related regulations. For detailed information about information disclosure system, please refer to the website of the Company.

(3) As for the risk management, the Company adopts the enterprise risk management frame made by the Committee of Sponsoring Organizations of The National Commission of Fraudulent Financial Reporting. It developed risk management system and established risk management organization system. The Company organizes annual risk evaluation every year, recognizes significant risks, implements responsibilities for risk management, makes corresponding strategies and measures for significant risks based on internal control system, and tracks the implement of corresponding measures for significant risks on a regular basis, in order to make sure that the Company's significant risks can get enough attention, supervision and response.

(4) During the reporting period, the Board of the Company assessed internal control and risk management, and the Board considers the Company's internal control and risk management is effective.

C.3 The Audit Committee

(1) The tenth session of the Company's Audit Committee consists of independent non-executive director Mr. Zheng Weijun as the Head, non-executive director Mr. Zhou Meiyun, and independent non-executive directors Mr. Chen Weidong and Dong Xiucheng as the members. As verified, none of them had served as a partner or former partner in our current auditing firm.

(2) The Company has published the terms of reference of the Audit Committee. According to the terms of reference, the Audit Committee assist the Board in financial reports, risk management and internal control. The terms of reference are available for inspection at the website of the Company and the Hong Kong Stock Exchange for reference.

(3) The Audit Committee may consult independent professionals. Reasonable costs arising from or in connection with such consultation are borne by the Company. The working expenses of the committee are included in the budget of the Company. Meanwhile, according to the Company policies, the senior management and relevant departments of the Company shall actively cooperate with the Audit Committee.

(4) During the reporting period, the Audit Committee held 5 meetings and reviewed the Company's 2020 financial report, 2021 semi-annual financial report, 2021 first quarter report and 2021 third quarter report. The Audit Committee review opinions were given at the meetings and submitted to the Board after signed by members. During the reporting period, the Board and the Audit Committee did not have any different opinion.

As recommended by the sixth audit meeting of the tenth session of the Board, the eighth meeting of the tenth session Board of Directors of the Company has resolved to appoint BDO China Shu Lun Pan Certified Public Accountants LLP ("BDO China") and BDO Limited as the Company's domestic and international auditors for 2022 again, and to appoint BDO China as the internal control auditor of the Company for the year 2022 again. Such proposed appointment of auditors of the Company is subject to approval by the shareholders of the Company at the 2021 annual general meeting.

An analysis of remuneration in respect of audit services is set forth in item 6 of the "Significant Events" section in this Annual Report.

D. Delegation by the Board

(1) The Strategy and Investment Committee, the Audit Committee and the Remuneration Committee under the Board have the specific authority and duties delegated by the Board, and should report to the Board.

(2) The Board, the senior management and each committees under the Board have specific authority and duties, which are set forth in the Articles of Association, the Rules and Procedures for shareholders' general meeting, the Rules and Procedures for the Board. The board of directors leads management directly or indirectly through its committees, including the ways of setting strategies and supervising management's implementation. The board of the Company supervises the performance of finance and business operation, reviews the remuneration policy and appointment program, and ensures that the Company formulating effective corporate governance and social responsibility policies. The Company has effective internal controlling and risks management system, senior management is responsible for the daily management of the Company's business under the leading of the general manager, besides, executes strategies which approved by the board of directors.

(3) The attendance record of the tenth session of the Board's Committee meeting during the reporting period is as follows.

The Audit Committee

Name	attended in Person	attended by Proxies	Times of Absence
Zheng Weijun	4	–	–
Zhou Meiyun	4	–	–
Chen Weidong	5	–	–
Dong Xiucheng	5	–	–
Jiang Bo	1	–	–

Note: Since 2 February 2021, Mr. Zheng Weijun was served as the head of the tenth session of the Audit Committee, and Mr. Zhou Meiyun was served as a member of the Audit Committee. Ms. Jiang Bo was not the head of the Audit Committee since 2 February 2021.

The Remuneration Committee

Name	attended in Person	attended by Proxies	Time of Absence
Chen Weidong	2	–	–
Fan Zhonghai	2	–	–
Dong Xiucheng	2	–	–
Zheng Weijun	2	–	–

Note: Since 2 February 2021, Mr. Zheng Weijun was appointed as a member of The Remuneration Committee.

E. Communication with shareholders

(1) Shareholders who individually or jointly hold more than 10% of the total number of shares with voting rights issued by the Company may request the Board to convene a general meeting of shareholders in writing; the detailed contact information are set in section "Company Profile and Principal Financial Indicators" in this report. If the Board fails to agree to the shareholders' meeting convening meeting in accordance with the Rules of Procedure of the shareholders' meeting, shareholders may convene and hold a meeting, and the reasonable expenses incurred by the Company shall be borne by the Company. The foregoing provisions are based on the premise that the contents of the shareholders' meeting proposal shall fall within the scope of the general meeting of shareholders, have clear issues and specific resolutions, and comply with the relevant provisions of laws, administrative regulations and the Articles of Association.

(2) When the Company convened a general meeting of shareholders, shareholders who hold more than 3% of the total number of shares with voting rights of the Company, either individually or in combination, may submit an interim proposal 10 days before the general meeting of shareholders.

(3) During the reporting period, the Chairman should propose a separate resolution in respect of each substantially separate issue at a shareholders' general meeting. All resolutions are voted by ballots, so that the interests of all shareholders could be guaranteed. When the Company is to hold a shareholders' general meeting, it shall issue a written notice 45 days prior to the meeting (the day of meeting not included) informing all the registered shareholders.

(4) The circulars to the shareholders of the Company set forth in detail the rights of the shareholders who are entitled to attend the shareholders' general meetings, the agenda and the voting procedures. The shareholders of the Company can raise concerns or require to check records to the board at any time. The detailed contact information are set in section "Company Profile and Principal Financial Indicators – Contact Information" in this report. The policy for shareholders' contraction could ensure that they get same and complete information of the Company in time, and the policy would be reviewed regularly to ensure its effectiveness.

(5) Chairman attends the shareholders' general meetings as president. The members of the Board, the senior management attend the shareholders' general meetings to respond to the inquiries from the shareholders. The auditors of the Company also attend the 2020 annual general meetings.

F. Company Secretary

(1) Relevant qualifications of the Company Secretary are recognized by the HKSE, and the secretary was nominated by the Board Chairman and appointed by the Board. The secretary makes recommendation to the Board in respect of corporate governance and arranges orientation training and professional development for directors.

(2) The Company Secretary actively participates in career development trainings. The Company Secretary, Mr. Shen Zehong has participated in the professional trainings organized by the Hong Kong Institute of Chartered Secretaries and has already been trained over 15 hours during the reporting period.

G. Investor relations

The Company attaches great importance to investor relations work. The management leads the team to introduce roadshows to investors every year, introducing the Company's development strategy, production and operation performance and other issues of concern to investors; the Company set up a person responsible for communication with investors. Under the regulatory requirements, the Company strengthen communication with investors by holding meetings with institutional investors, set up investor hotlines and communicated via online platforms.

The Company held the second extraordinary general meeting for 2021 on 2 November 2021, approved the proposal of amending Articles of Association, and revised relevant contents according to the requirement of governing enterprises on the basis of laws.

Section VI Environmental and Social Responsibility

1. Environmental Information

(1) Description of the environmental protection of listed companies and their subsidiaries that belong to heavily polluting industries stipulated by the national environmental protection department

☐ Applicable √ Not applicable

(2) Description of the environmental protection situation of companies other than key pollutants

√ Applicable ☐ Not applicable

A. Administrative penalty due to environmental protection problems

√ Applicable ☐ Not applicable

On 8 January 2021, during an inspection of the block belonging to Oil Production Plant No. 1 of North China Oil and Gas Branch of China Petroleum & Chemical Corporation, Bin4 Well under construction by Wupu Drilling Branch of Sinopec North China Petroleum Engineering Company Limited, an indirect wholly-owned subsidiary of the Company, received a notice of administrative penalty with a fine of RMB5,300 from Ning County Branch of Qingyang City Ecological and Environmental Bureau of Gansu Province on 19 January 2021 (Ning Sheng Huan Fa Gao Zi [2021] No. 02) for failing to establish a hazardous waste generation ledger and set up a hazardous waste temporary storage room (containing oil-bearing rock chips), among other issues. The well team immediately implemented rectification measures and transported the oil-bearing rock chips to the centralized treatment station for hazardous waste (rock chips) of the Oil Production Plant No. 1 for harmless treatment, and all issues were rectified and accepted on 20 January 2021.

On 18 March 2021, during an inspection by Ning County Branch of Qingyang City Ecological and Environmental Bureau of Gansu Province, it was found that the wastewater collection pond at the wellhead of the oil test well of Bin4 Well operated by Sinopec North China Petroleum Engineering Company Limited, an indirect wholly-owned subsidiary of the Company, had not conducted impermeable treatment and the wastewater was leaking. on 6 April 2021, a notice of administrative penalty was received from Ning County Branch of Qingyang City Ecological and Environmental Bureau of Gansu Province (Ning Sheng Huan Fa Gao Zi [2021] No. 22), with a fine of RMB52,000. The operation team immediately implemented rectification measures by plastering the surrounding and bottom of the square well with cement, laying geomembrane and cofferdam, and taking anti-seepage measures around the wellhead, and all issues were rectified and accepted on 15 April 2021.

On 7 May 2021, in the law enforcement and improvement of raise dust, Dongying City, the Sheng Jian Hua Yuan project undertaken by the Company's indirect wholly-owned subsidiary, Sinopec Shengli Oil Engineering Company Limited, was found to be naked earth and construction garbage were not cleared in time. The project department immediately implemented rectification measures, which have been fully cover by the earth, cleaned up construction waste in time, and the dust removal devices and measures were effectively operated as required. All problems were rectified and completed and accepted on 8 May 2021. On 27 May 2021, a comprehensive administrative penalty decision was received from Dongying District and fined RMB10,000.

On 9 September 2021, Qianjiang City Ecological and Environmental Bureau of Hubei Province, during an overhead inspection by drones, discovered that there were problems of dust pollution and coal piles exceeding the height of the enclosures during the unloading of coal in its transshipment coal yard owned by Sinopec Jianghan Petroleum Engineering Company Limited, an indirect wholly-owned subsidiary of the Company, which were investigated and confirmed by the fourth team of the comprehensive law enforcement division of Qianjiang City Ecological and Environmental Bureau at the site. The relevant company immediately made rectification by further improving the operation procedures, strengthening the control of the height of coal piles, closing and renovating the storage shed and installing additional spraying devices. All issues were rectified and accepted on 12 September 2021. On 26 September 2021, Qianjiang City Ecological and Environmental Bureau issued a letter of decision on administrative penalty (Qian Huan Fa [2021] No. 11), with a fine of RMB22,000.

B. Other disclosure environmental information refers to heavily polluting industries

The Company adheres to the development philosophy of safety, environmental protection and green and low-carbon, and has formulated relevant systems such as the Environmental Protection Management Regulations, the Pollution Prevention Management Regulations, the Radiation Management Regulations and the Energy Saving Management Regulations in 2021. The Company strictly complies with environmental protection regulations and requirements of the emission standards and international conventions in the countries where it operates. For hazardous waste, the Company conducts recycling and treatment by delivering the waste to the entities with treatment qualifications.

Currently, the pollutants discharged by the Company mainly include exhaust gas, domestic sewage, solid waste and oil-based rock chip, etc. Exhaust gas includes diesel engine exhaust and gas fuel exhaust, and the emission indicators have met the local standards and requirements; domestic sewage includes the domestic sewage from fixed places and the domestic sewage from mobile construction sites, and the domestic sewage from fixed production sites is transferred to municipal pipeline network for centralized treatment, and the domestic sewage from mobile construction sites is recycled after on-site pre-treatment; solid wastes are mainly drilling waste mud and rock chip, and are organized and treated by the project owners or through landfill after harmless treatment and comprehensive utilization after harmless treatment in accordance with the requirements of the owners, and domestic wastes are treated by professional institutions; As per the authorization by the project owner or the Company, the oil-based rock chips is collected, transported, stored, and disposed of by a qualified entity and is utilized in a comprehensive manner after harmless treatment through thermal analysis. We actively initiate inspection, rectification and improvement for solid waste and hazardous waste management. By issuing the Notice on Further Strengthening Environmental Protection Governance on Contractors and Solid Waste Management at the Construction Sites, the Company has prepared an implementation plan for scrutiny and a scrutiny table, determined the scrutiny priority, requirement, and timing, thereby performing a comprehensive scrutiny on existing contractors and cooperative treatment entities involved in the environmental protection. In whole year of 2021, the Company disposed of 1,705,000 tons of general solid waste (including drilling water-based waste mud), 165,000 tons of hazardous waste (including oil-based rock chip and oil-bearing waste), 420,000 cubic meters of domestic sewage and 1,288,000 cubic meters of drilling operation waste water according to laws and regulations.

Section VI Environmental and Social Responsibility

The Company strengthened on-site energy efficiency management, implemented energy conservation and clean production technical measures, and vigorously implemented energy efficiency improvement projects. In whole year of 2021, the comprehensive energy consumption for RMB10,000 industrial output value was 0.234 tons of standard coal, representing a year-on-year decrease of 12.03%. At the same time, the Company actively organized the establishment of green project companies and the creating activities of green grassroots, amended six professional indicators for creating green grassroots such as drilling, downhole operation, geophysical, oil project construction sites, radiation depot and laboratory instrument servicing center. 779 teams initiated the creating activities of green grassroots, 729 teams passed the acceptance on green grassroots, the pass rate is 93.6%, increased 274 teams and 252 environmental toilets in 2021, amounted to 779 sets in total. The drilling construction site was basically equipped, the underground operation team was equipped in an orderly manner, the site use and effect were good, and the working and living environment of employees has been further improved. In 2021, 2 enterprises passed the green enterprise recheck and 5 green enterprises completed the creating work for the first time.

The Company has established an environmental emergency management system, improved the environmental emergency network, prepared and timely revised the environmental emergency plans according to the risk assessment results, and filed the environmental emergency plan according to the requirements. The Company has also established emergency rescue teams and conduct regular emergency plan training and drills.

C. Relevant information conducive to ecological protection, pollution prevention and control, and environmental responsibility

√ Applicable ☐ Not applicable

In accordance with the Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste and other relevant laws and regulations, the Company issued the Notice on Further Improving the Work Relating to the Construction of Green Grassroots, organising company-wide rectification and improvement actions in several aspects, such as the acceptance of green grassroots and prevention of risks of water pollution. The Company supervised its subsidiaries to update and improve the establishment plan and evaluation and assessment mechanism in accordance with their own actual situation, to assume responsibilities, standardize the process, and strictly inspect and accept, so as to speed up the acceptance of green grassroots and implement green grassroots construction with quality and quantity. The Company organised all enterprises to create green grassroots benchmark teams according to conditions in the construction area, forming demonstration models, carrying out internal exchanges and observations, and promoting the overall improvement of the quality of green grassroots construction.

In order to continuously safeguard air quality and implement the relevant work requirements of the State, the Company organised the five subsidiaries in key areas to formulate air quality safeguard work plans and implemented progress in accordance with the requirements of the plans. Grease and fume purification facilities have been installed in staff canteens, the renewal of network power installations and the upgrading of drilling rigs electrification in the corresponding areas have been completed, diesel trucks operating under National III emission standards or below have been phased out, generator sets for drilling which cannot meet stable emission standards have been phased out, and dust suppression measures have been taken at relevant drilling operation sites.

D. Measures and effects on the Company to reduce the carbon emissions

√ Applicable ☐ Not applicable

In whole year of 2021, the Company has strengthened the application of clean energy. In view of the advantages that the drilling projects of the operation units in Sichuan, Xinjiang, Phase II Fuling etc. have long cycles and it's suitable for them to use electricity and natural gas, the Company created chances to advocate the use of clean energy such as electricity and natural gas and promoted to adjust the energy consumption structure. Specifically, in 2021 domestic area, we carried out well completion for 997 wells by use of network electrical drilling rigs, with a drilling footage of 3,858,000 meters, accounting for 51% of the total drilling footage of 7,561,000 meters. The use of electricity in substitute of 485,000 tons of diesel managed to save 604,000 tons of standard coal. The Company strengthens carbon asset management, organizes further investigations of greenhouse gas emission facilities, emission sources, and emission categories, comprehensively configures the carbon asset management system in a targeted manner, and conducts specialized training for personnel of carbon asset management of subsidiaries.

2. Information of social responsibility work

√ Applicable ☐ Not applicable

This content please refers to the "Environment, Society and Governance Report in 2021" of the Company.

3. Poverty alleviation program launched by the Company

☐ Applicable √ Not applicable

1. Performance of undertaking

(1) The special undertakings made by the Company, the actual controller, shareholders, related parties, acquirer and other associated parties and the performance of such undertakings for the year ended 31 December 2021:

Undertaking Background	Undertaking Type	Undertaking party	Undertaking	Date and duration of the Undertaking	Whether there is a performance period	Whether the undertaking has been strictly fulfilled
Undertaking regarding the material assets reorganization	To solve horizontal competition	CPC	The Non-Competition Undertaking 1. China Petrochemical Corporation undertook that it would not engage with the Company's production and business activities in competition, and will ensure its subsidiaries not to engage with the Company's production and business activities in competition through exercise of its shareholder rights. 2. After the material assets reorganization, if Sinopec Star's new business opportunity has any direct or indirect competition with the Company's main business, priorities of the above-mentioned opportunity will be given to the Company. 3. After the material assets reorganization, if China Petrochemical Corporation and its subsidiaries' new business opportunity has any direct or indirect competition with the Company's main business, priorities of the above-mentioned opportunity will be given to the Company. If China Petrochemical Corporation intends to transfer, sell, lease, license or otherwise transfer or permit to use any of the above business which would result in the competition with the Company's main business, priorities of the above-mentioned opportunity will be given to the Company for avoiding the competition. 4. China Petrochemical Corporation consent that it will bear and pay damages to the listed companies caused by its violation of the commitment.	Date of undertaking: 12 September 2014 Duration: long term	No	During the reporting period, China Petrochemical Corporation did not act contrary to the undertaking.
Undertaking regarding the Material Assets Reorganization	To solve connected transactions	CPC	The Undertaking of Regulating the connected transaction: China Petrochemical Corporation and its other controlling companies will regulate its/their connected transactions with the Company. For the connected transactions with reasonable grounds, China Petrochemical Corporation and its controlling Company's will sign the standard agreement of connected transactions, and will fulfill the obligations of the program for approval and information disclosure, in accordance with the provisions of relevant laws and regulations, and the Company's Articles of Association. The confirmation price related to the connected transaction will follow the principle of fair, reasonable and impartial.	Date of undertaking: 12 September 2014 Duration: long term	No	During the reporting period, China Petrochemical Corporation did not act contrary to the promise.
Undertaking regarding the Material Assets Reorganization	Others	CPC	Issued "The commitment letter regarding to the regulating of connected transaction and maintaining the independence of the Company": 1. China Petrochemical Corporation and its controlling companies guarantee the maintaining of the separation from the Company's asset, personnel, finance, organization and business, strictly comply with the relevant provisions regarding to the listed Company's independency of CSRC. China Chemical Corporation will not utilize, control or violate the Standardized operation program of the listed company, not intervene the Company's operating decisions, and not jeopardize the legitimate rights and interests of the Company and its shareholders. 2. China Petrochemical Corporation and its controlling companies guarantee not to illegally use the funds of the Company and its holding Company. 3. If China Petrochemical Corporation violate the above commitment, it would undertake the law and compensate the losses caused to the Company.	Date of undertaking: 12 September 2014 Duration: long term	No	During the reporting period, China Petrochemical Corporation did not act contrary to the promise.

(2) The existence of earnings forecast about the Company's assets and projects, and the reporting period is still in the earnings forecast period, the information about whether the Company's assets or projects achieved the original earning forecast and its reasons.

☐ Achieved ☐ Not Achieved √ Not Applicable

(3) The completion of performance pledges and impact on goodwill impairment tests

☐ Applicable √ Not applicable

2. Occupancy of fund for non-operating purpose by the controlling shareholders and other related parties during the reporting period

☐ Applicable √ Not applicable

3. Illegal guarantee

☐ Applicable √ Not applicable

4. Explanation of the Company on non-standard opinion given by the auditors

☐ Applicable √ Not applicable

5. Analysis and explanation of the Company on the reasons and impact of the changes in accounting policy, accounting estimation and corrections to material accounting errors.

(1) Analysis and explanation of the reasons and effects of changes in accounting policies and accounting estimates

√ Applicable ☐ Not applicable

A. Changes in significant accounting policies

a. Implementation of Accounting Standards for Business Enterprises Interpretation No. 14

On 2 February 2021, the Ministry of Finance issued the Accounting Standards for Business Enterprises Interpretation No. 14 (Cai Kuai [2021] No. 1, hereinafter referred to as "Interpretation No. 14") with the effective from the date of issuance ("the Effective Date"). Any newly added service from 1 January 2021 to the Effective Date shall be subject to the adjustments under Interpretation No. 14.

① Government and Public-Private-Partnership ("PPP") project contract

Interpretation No. 14 applies to PPP project contracts that meet both the "Dual feature" and "Dual control" described in the interpretation, and retroactive adjustments should be made to the relevant PPP project contracts that were implemented before 31 December 2020 and have not been completed by the effective date. For those that a retroactive adjustment is not practicable, it should be applied from the beginning of the earliest period for which retroactive adjustments can be made, the retained profit at the beginning of the year and other related items of the financial statements on the effective date of the cumulative impact adjustment, without adjusting the information for comparable periods.

The implementation of this Interpretation 14 has no material impact on the Company's financial position and operating results.

② Interest rate benchmark reform

Interpretation No. 14 provides simplified accounting treatment for changes in the basis for determining cash flows related to financial instrument contracts and lease contracts as a result of the interest rate benchmark reform.

In accordance with the provisions of the interpretation, a retrospective adjustment should be applied to operations related to the benchmark interest rate reform that occurred before 31 December 2020, unless otherwise it is impractical to do so, and there is no need to adjust the prior period comparative financial statement data. At the effective date of the interpretation, the difference between the original and new carrying amounts of financial assets and financial liabilities shall be included in opening undistributed profit or other comprehensive income for the annual reporting period in which the Interpretation is effective.

The implementation of the provision did not have a material impact on the Company's financial position and operating results.

b. Implementation of the Accounting Treatment Provisions on Rent Concessions related to the COVID-19

On 19 June 2020, the Ministry of Finance issued the Accounting Treatment Provisions on Rent Concessions related to the COVID-19 (Cai Kuai [2020] No. 10), which will come into effect on 19 June 2020, allowing enterprises to adjust the relevant rent concessions that occurred between 1 January 2020 and the date of effect of the provision. According to the provision, enterprises can choose to use simplified methods for accounting treatment for rent reductions, delay in payment and other rent concessions directly caused by the COVID-19.

On 26 May 2021, the Ministry of Finance issued the Circular on Adjustment to the Scope of Implementation of the Provisions on Accounting Treatment of Rental Concession Related to COVID-19 Pandemic (Cai Kuai [2020] No. 9), with effect from 26 May 2021, adjusting the scope of implementation of adopting a simplified method for accounting treatment of rental concession related to COVID-19 pandemic as stipulated in the Provisions on Accounting Treatment of Rental Concession Related to COVID-19 Pandemic from "any reduction or concession in lease payments affects only lease payments payable before 30 June 2021" to "any reduction or concession in lease payments affects only lease payments payable before 30 June 2022", and other applicable conditions remain unchanged.

The Company has adopted the simplified method for accounting treatment for all eligible lease contracts before the adjustment of the scope of application, and also adopted the simplified method for accounting treatment for all eligible lease contracts after the adjustment of the scope of application, and adopted leases before the notice was issued. Retrospective adjustments will be made to the relevant lease contracts that are subject to accounting changes, but the previous comparative financial statement data will not be adjusted; the relevant rent concessions that have not been accounted for in accordance with the provisions of the notice that occur between January 1, 2021 and the effective date of the notice, would adjust according to the notice.

c. Implementation of Accounting Standards for Business Enterprises Interpretation No. 15 on the Presentation of Centralized Management of Funds

On 30 December 2021, the Ministry of Finance issued the Accounting Standards for Business Enterprises Interpretation No. 15 on the Presentation of Centralized Management of Funds (Cai Kuai [2021] No. 35, hereinafter referred to as "Interpretation No. 15") with the effective from the date of issuance and the financial statement figures for the comparable period have been adjusted accordingly.

Interpretation No. 15 clearly provides for the presentation and disclosure in the balance sheets regarding the balances related to the centralized and unified management of funds of the parent company and its member units through internal clearing houses and finance companies.

The implementation of the provision did not have a material impact on the Company's financial position and operating results.

d. Implementation of the fifth batch of Q&A on the implementation of Accounting Standards for Business Enterprises in 2021 issued by the Accounting Department of the Ministry of Finance

The Accounting Department of the Ministry of Finance has issued the fifth batch of Q&A on the implementation of Accounting Standards for Business Enterprises in 2021. According to the implementation Q&A, 1) for daily repair costs of fixed assets of the Group which do not qualify for subsequent expenditures on capitalisation of fixed assets, the Group will adjust the repair costs of the production department which qualify for such costs and were previously included in administrative expenses to cost of sales in the current year, and adjust the comparative figures for the same period; 2) for transportation activities performed for the purpose of fulfilling a revenue contract, if such transportation activities do not constitute an individual performance obligation, the related transportation costs are treated as contract fulfilment costs and adjusted for amortization of contract fulfilment costs charged to profit or loss when presented in the income statement, and the freight and miscellaneous costs which qualify for such costs and were previously included in selling and distribution expenses are adjusted to cost of sales in the current year and the comparative figures for the same period are adjusted.

The Company has changed the relevant accounting policies and retrospectively restated the comparative financial statements and the relevant financial statement items for the last year after the restatement are as follows:

Item	Amount disclosed in the previous year	Amount disclosed in the current period	Difference
	RMB'000	RMB'000	RMB'000
Cost of sales	62,605,007	63,080,210	475,203
Selling and distribution expenses	72,604	71,047	-1,557
General and administrative expenses	2,781,058	2,307,412	-473,646

B. Changes in significant accounting estimates

There were no changes in the significant accounting estimates of the Company during the Reporting Period.

(2) Analysis and explanation of the Company on the reasons and impact of corrections to material accounting errors

☐ Applicable √ Not applicable

(3) Communication with former accounting firm

☐ Applicable ☐ Not applicable

6. The appointment and dismissal of the auditor

	Currently hired
The name of the domestic auditor	BDO China Shu Lun Pan CPAs (LLP)
The remuneration of the domestic auditor	RMB6,050,000
The audit period for the domestic auditor	1
The name of the overseas auditor	BDO Limited
The remuneration of the overseas auditor	RMB1,150,000
The audit period for the overseas auditor	1

	Name	Remuneration
The internal control auditor	BDO China Shu Lun Pan CPAs (LLP)	RMB1,300,000

The description for the appointment and dismissal of the auditor:

In the reporting period, the Company changed accounting firm.

According to the relevant regulations of the Ministry of Finance and the State-owned Assets Supervision and Administration Commission of the People's Republic of China, there are certain restrictions in respect of the number of years for an accounting firm to continuously undertake the auditing services of the same state-owned enterprise and its subsidiaries. In view of such requirements, Grant Thornton (Special General Partnership) and Grant Thornton Hong Kong Limited respectively retired as domestic and international auditor of the Company with effected from the conclusion of the annual general meeting for the year 2020 of the Company.

After recommended by the second meeting of the tenth session of the board and approved by the annual general meeting for the year 2020, the Company appointed BDO China Shu Lun Pan Certified Public Accountants LLP and BDO Limited as the domestic auditor and the international auditor of the Company for 2021. BDO China Shu Lun Pan Certified Public Accountants LLP was appointed as the internal control accounting firm of the Company for 2021 at the same time.

7. Situation about confronting the risk of the suspension of listing

(1) Reasons which resulted in the suspension of listing

☐ Applicable √ Not applicable

(2) Corresponding measures to be taken by the Company

☐ Applicable √ Not applicable

(3) Situation about confronting the termination of listing and corresponding reasons

☐ Applicable √ Not applicable

8. Insolvency and restructuring

During the reporting period, the Company was not involved in any insolvency or restructuring matters.

9. Material litigation and arbitration

☐ In the reporting period, the Company had material litigation and arbitration

√ In the reporting period, the Company had no material litigation and arbitration

China National Chemical Engineering No. 11 Construction Co., Ltd. (中國化學工程第十一建設有限公司) (the "Applicant") entered into the "Works Contract for the Package C Construction of the Saudi Yanbu-Medina Phase III Pipeline Project (《沙特延布－麥迪那第三期管線項目 C 包施工工程合同》)" (the "Construction Works Contract") with Sinopec International Petroleum Services Corporation (中國石化集團國際石油工程有限公司), a wholly-owned subsidiary of the Company (the "International Services Corporation" or the "Respondent") on 16 August 2012. Pursuant to the Construction Works Contract, International Services Corporation subcontracted to the Applicant the construction of the "Package C Project" of the "Saudi Yanbu-Medina Phase III Pipeline Project". On 29 May 2018, the Applicant submitted to the China International Economic and Trade Arbitration Commission in Beijing the "Application for Arbitration" in respect of the contract dispute between the Applicant and the Respondent during the performance of the Construction Works Contract, requesting the Respondent to pay RMB456,810,240 for the project fee and the accrued interest, RMB145,968,410.5 for the loss due to stoppage of work and the accrued interest, RMB38,018,100 for the advance payment under the letter of guarantee and the accrued interest, and RMB500,000 for attorney fee and the arbitration fee for the case. The China International Economic and Trade Arbitration Commission accepted the case on 15 June 2018 and issued the "Notice of Arbitration for the Dispute Case of Project Contract No. P20180585 ([2018] China Trade Zhong Jing Zi No. 048223)".

As the case is still under trial, it is currently impossible to determine its impact on the current or future profits of the Company. The Company will make active response and safeguard the legitimate rights and interests of the Company.

For details, please refer to the "Announcement on a wholly-owned subsidiary involving arbitration" (P. 2018-049) disclosed in "China Securities Journal", "Shanghai Securities News", "Securities Times", and on www.sse.com.cn on 26 June 2018 and on www.hkexnews.hk on 25 June 2018.

On 16 August 2018, Sinopec (Brazil) Co., Ltd., an indirectly wholly-owned overseas subsidiary of the Company (the "Brazil Subsidiary") applied for judicial reorganization to the Third State Court of Commercial Enterprises in Rio de Janeiro, Brazil (the "Court of Rio") according to the relevant local laws in Brazil. On 31 August 2018, the Brazil Subsidiary received ruling from Court of Rio, approved Brazil subsidiary's entering into judicial reorganization and the law firm Nascimento & Rezende Advogados was appointed as the judicial reorganization manager by Court of Rio. For details, please refer to the "Announcement regarding the Proposed Judicial Reorganization by an indirectly wholly-owned overseas Subsidiary" (P. 2018-056) disclosed in "China Securities Journal", "Shanghai Securities News", "Securities Times", and on www.sse.com.cn on 4 September 2018, and on www.hkexnews.hk on 3 September 2018.

On 15 July 2019 (Brazil time), the Brazil Subsidiary received a ruling from the Court of Rio on the approval of the judicial reorganization plan of the Brazil Subsidiary. For details, please refer to the "Announcement on Approval of Judicial Reorganization Plan of an Indirectly Wholly-owned Overseas Subsidiary by Overseas Court" (P. 2019-032) disclosed in "China Securities Journal", "Shanghai Securities News", "Securities Times", and on www.sse.com.cn on 19 July 2019, and on www.hkexnews.hk on 18 July 2019. After the judicial reorganization judge officially approved and published the reorganization scheme, the reorganization procedure entered into the execution stage with an execution period of two years. The Company actively and prudently pushes forward the judicial reorganization work in accordance with the general principles of "strengthening organization, detailing measures, being active and prudent,and putting risks under control", actively communicates and cooperates with all parties concerned, and pays creditors in accordance with regulations and the restructuring plan. Large-scale payment has been basically completed. At present, the judicial reorganization procedure is still being carried out in an orderly and steady manner.

As of 14 July 2021 (Brazil time), due to the impact of the COVID-19 pandemic, certain labour-related lawsuits and a few lawsuits with suppliers, service providers and subcontractors remain unsettled, and the obligations prescribed by the Judicial Reorganization Plan are not fully performed. In combination with the Brazil judicial reorganization practice, the Brazil Subsidiary will not apply for the closure of the judicial reorganization procedure, and the judicial reorganization procedure will be automatically deferred. For details, please refer to the "Announcement of the progress of Judicial Reorganization of an indirectly wholly-owned overseas Subsidiary" (P. 2021-024) disclosed in "China Securities Journal", "Shanghai Securities news", "Securities Times", and on www.sse.com.cn on 16 July 2021, and on www.hkexnews.hk on 15 July 2021.

As of 31 December 2021, according to the progress of the judicial restructuring plan, the Company estimated that the Brazil Subsidiary will pay a total of approximately USD58.42 million (equivalent to RMB389 million) for the restructuring plan. In 2018, the Company has accrued an estimated judicial restructuring expenses of USD69.25 million (equivalent to approximately RMB475 million in the year). Therefore, the Company proposed to reverse an estimated liability of USD10.83 million (equivalent to approximately RMB69 million) by the end of 2021, which will increase the net profit of the Company by approximately RMB69 million for the period ended 31 December 2021. For details, please refer to the "Announcement of the progress of Judicial Reorganization of an indirectly wholly-owned overseas Subsidiary" disclosed in "China Securities Journal", "Shanghai Securities news", "Securities Times", and on www.sse.com.cn on 22 January 2022, and on www.hkexnews.hk on 21 January 2022.

On 8 October 2014, the Ecuador Banya Duri Company (厄瓜多爾斑尼亞杜麗公司), an indirectly wholly-owned subsidiary of the Company (the "Banya Duri Company") entered into the Contract for I-L-Y Oilfield Comprehensive Service Projects in Ecuador (the "I-L-Y Oilfield Projects Contract") with Corporacion Estatal Petrolera Ecuatoriana (the "PAM"). The Banya Duri Company is a project company established by the Company in Ecuador to engage in I-L-Y oilfield comprehensive service with 90% and 10% of its shares held by Sinopec International Petroleum Service Corporation (中國石化集團國際石油工程有限公司), a wholly-owned subsidiary of the Company, and Sinopec International Petroleum Service Corporation Ecuador Subsidiary respectively. During the implementation of the projects, the parties had disputes on the payments for some increased oil production. After repeated unsuccessful negotiations, in April 2019, the Banya Duri Company served the Notice of Application for Legal Arbitration to the PAM in relation to such contract disputes in accordance with the relevant provisions of the I-L-Y Oilfield Projects Contract, recommending the Permanent International Court of Arbitration in Hague as the arbitration institution to conduct arbitrations in accordance with the arbitration rules of the UNCITRAL Arbitration Rules (1976 Edition). The Banya Duri Company requests made by Banya Duri Company include: the PAM should pay an invoice amount of US$63.29 million for the increased oil production with interest, confirm the Y-12 well would operate with optimized production capacity and pay US$8.13 million, as well as pay the losses brought to the Applicant due to the default of the PAM and relevant charges for the legal arbitration. In August 2019, Banya Duri Company and PAM has each recommended one arbitrator and jointly appointed one presiding arbitrator to form the arbitration tribunal. In November 2020, PAM had submitted its Statement of Defense to the arbitral tribunal. From April to August in 2021, both sides completed the second round of defense and jurisdictional objection reply procedure. From 20 to 24 September 2021, both sides held a five-day hearing under the auspices of the arbitral tribunal, and completed opinions return after arbitral court on 25 October 2021.

On 22 February 2022, the Banya Duri Company received the following ruling on the arbitration: 1. The arbitration tribunal required PAM to compensate Banya Duri Company or pay accounts payable, tax, and fees for arbitration, experts and consultants, totaling approximately US$64 million to Banya Duri Company. 2. The arbitration tribunal did not support the arbitration request of Banya Duri Company for PAM to pay for the service fees of increased oil production incurred by the YNEB 12 well in the Y oilfield of US$7 million. 3. The arbitration require PAM to pay the default interest as determined and calculated in accordance with the arbitration ruling and relevant provisions of the Civil Code of Ecuador. The arbitration location of the arbitration was Chile. In accordance with the relevant laws on arbitration in Chile, PAM may apply to the courts of Chile to revoke the arbitration ruling.

As the ruling has not yet been executed, there is uncertainty in its implementation As such, it is currently impossible to determine the impact of the Arbitration on the current or future profits of the Company. The Company has made a certain proportion of bad debt provision for the above accounts receivable according to their aging. The Company will make active response and safeguard the legitimate rights and interests of the Company. For details, please refer to the"Announcement on an Arbitration in relation to an Indirectly Wholly-owned Subsidiary" (P. 2019-033) disclosed in "China Securities Journal", "Shanghai Securities News", "Securities Times", and on www.sse.com.cn on 27 August 2019, and on www.hkexnews.hk on 26 August 2019, the"Announcement on an Arbitration in relation to an Indirectly Wholly-owned Subsidiary" (P. 2022-005) disclosed in "China Securities Journal", "Shanghai Securities News", "Securities Times", and on www.sse.com.cn on 26 February 2022, and on www.hkexnews.hk on 25 February 2022.

10. The punishment or rectification situation suffered by the Company or its directors, supervisors, senior management, controlling shareholders and actual controllers

During the reporting period, neither the Company nor its other Directors, Supervisors, senior management, controlling shareholders or actual controllers were subject to any investigation by relevant authorities or enforcement by judicial or disciplinary departments or subject to criminal liability, or subject to investigation or administrative penalty by the CSRC, or any denial of participation in the securities market or deemed unsuitability to act as directors thereby by other administrative authorities or any public criticisms made by a stock exchange.

11. The information on the integrity status of the Company and its controlling shareholders, actual controllers during the reporting period

During the reporting period, the Company and its controlling shareholders, actual controllers kept honest and faithful, and there was no occurrence of dishonesty.

12. Information on connected transactions

(1) The connected transactions relating to ordinary operation during the reporting period.

The nature of the transaction classification	Connected persons	Amount of transaction	Proportion of the same type of transaction
		RMB'000	(%)
Purchase of materials and equipments	China Petrochemical Corporation and its associates	11,678,864	28.6
Rendering engineering services	China Petrochemical Corporation and its subsidiaries and/or associates	47,143,537	68.2
Rendering engineering services	China Oil and Gas Pipeline Network Corporation	3,135,972	4.5
Receiving of community services	China Petrochemical Corporation and its subsidiaries	54,034	100
Receiving of integrated services	China Petrochemical Corporation and its subsidiaries	515,491	100
Rendering of technology development services	China Petrochemical Corporation and its subsidiaries	95,956	93.7
Land and property lease expenses	China Petrochemical Corporation and its subsidiaries	114,253	33.1
Equipment rental expenses	China Petrochemical Corporation and its subsidiaries	386,968	47.0
Interest expenses	China Petrochemical Corporation and its associates	597,814	82.3
Borrowings obtained	China Petrochemical Corporation and its subsidiaries	60,848,383	100
Borrowings repaid	China Petrochemical Corporation and its subsidiaries	61,654,200	97.04
Safety and insurance fund expenses	China Petrochemical Corporation	75,600	100
Safety and insurance fund refund	China Petrochemical Corporation	132,145	100

On 16 September 2021, the Company entered into the 2021 Connected Transactions Framework Agreements with China Petrochemical Corporation, and will continue to conduct the continuing connected transactions above with Sinopec Group. Relevant connected transactions and their annual caps for the three years ending 31 December 2024 have already been approved by independent shareholders of the Company.

The Company considers that it is important for the above connected transactions and selection of related parties for transactions and the above transactions would continue to occur. The agreements of connected transaction are based on the Company's operations needs and actual market situation. Purchasing materials and equipment from China Petrochemical Corporation and its subsidiaries will ensure the stable and safe supply of the Company's raw materials. Providing engineering service to China Petrochemical Corporation and its subsidiaries is decided by the history of the operating system of China's petroleum development and by the history of China Petrochemical Corporation's development, which also constitute the Company's main business income source. The loan made from China Petrochemical Corporation can satisfy the financial needs of the Company under the situation of the fund shortage, which therefore is beneficial to the Company. The pricing of the above transactions was mainly based on the market price or contract price determined through open bidding or negotiation, reflecting the principal of fairness, justice and openness, which is beneficial to the development of Company's main business, and ensure the maximization of the shareholder interests. The above connected transactions have no adverse effects on the profits of the Company or the independence of the Company.

The Company's independent non-executive directors have reviewed all the Company's continued connected transactions, and concluded that (1) the transactions were concluded in the ordinary and usual course of business of the Company; (2) the transactions were concluded based on the normal commercial terms, if there were no comparable items, no less favour than the terms provided to or received from an independent third party; (3) the transactions were in accordance with the relevant agreements, all the clauses of the agreements were fair and reasonable, and was in the interests of the Company's shareholders as a whole; (4) the annual transaction amount of the above connected transactions did not exceed the relevant annual cap of each kind of connected transactions as approved by the independent shareholders.

In accordance with Rule 14A.56 of the Hong Kong Listing Rules, the Company's auditor issued its unqualified opinion letter regarding the Company's disclosure of continuing connected transactions during the reporting period in which contained its findings and conclusions.

Please refer to Note 10 of this year's financial statements prepared in accordance with the PRC ASBE Standards for details of the connected transactions conducted by the Company during the reporting period. Among them, the significant related party transactions with China Petrochemical Corporation and its subsidiaries also fall under the definition of continuing connected transactions under Chapter 14A of the Hong Kong Listing Rules. During the reporting period, the above-mentioned related party transactions between the Company and China Petrochemical Corporation and its subsidiaries have complied with the disclosure requirements under Chapter 14A of the Hong Kong Listing Rules.

(2) Connected transactions related to acquisition or disposal of assets or equities

On 3 August 2021, Shengli Oil Engineering Company, an indirect wholly-owned subsidiary of the Company, and Shengli Oilfield Branch Company entered into the Asset Transfer Agreement. Pursuant to which, Shengli Oil Engineering Company has agreed to dispose of and Shengli Oilfield Branch Company has agreed to acquire a set of drilling and exploration platform (including jackets) at a price of RMB55,792,300. The disposal price was determined based on the appraised value of the target asset as at the valuation date on 31 March 2021, and the appraised price of the target asset is RMB55,792,300. CPC is the controlling shareholder of the Company, Shengli Oilfield Branch Company is a subsidiary of CPC, therefore, Shengli Oilfield Branch Company is an associate of CPC under the Listing Rules, and hence it is also a connected person of the Company. For details, please refer to the "Announcement on connected transaction disposal of a set of drilling and exploration platform" (P. 2021-027) disclosed in "China Securities Journal", "Shanghai Securities News", "Securities Times", and on www.sse.com.cn on 4 August 2021, and on www.hkexnews.hk on 3 August 2021.

(3) Material related transactions of joint external investment

During the reporting period, no material related transactions of joint external investment material connected transactions of joint external investment of the Company occurred.

(4) Funds provided and debts with related parties during the reporting period:

Unit: RMB'000

Connected parties	Funds provided to related party			Funds provided to the Company by related party		
	Opening balance	Occurrence amount	Closing balance	Opening balance	Occurrence amount	Closing balance
China Petrochemical Corporation and its subsidiaries	7,381,309	874,576	8,255,885	14,816,339	661,290	15,477,629
Sinopec Finance Company Limited	–	–	–	6,400,000	-1,850,000	4,550,000
Sinopec Century Bright Capital Investment Limited	–	–	–	1,970,520	-429	1,970,091
Total	7,381,309	874,576	8,255,885	23,186,859	-1,189,139	21,997,720
Causes of related debts						Normal production and operation
Influence of related debts on the Company						No material adverse effect

(5) The finance business between the Company and the related financial company

A. Deposit business

Unit: RMB'000

Connected parties	Connected relation	Daily maximum deposit limit	Deposit rate scope	Beginning balance	For the twelve months ended 31 December 2021		Ending balance
					Total deposit in this period	Total withdrawal amount for this period	
Sinopec Finance Company Limited	Subsidiary of controlling shareholder	3,000,000	0.35%	107,564	363,294,690	362,499,576	902,678
Sinopec Century Bright Capital Investment Limited	Subsidiary of controlling shareholder		0.01%	649,976	14,465,727	14,424,712	690,991
Total	/	/	/	757,540	377,760,417	376,924,288	1,593,669

B. Loan business

Unit: RMB'000

Connected parties	Connected relation	Daily maximum deposit limit	Deposit rate scope	Beginning balance	For the twelve months ended 31 December 2021		Ending balance
					Total deposit in this period	Total withdrawal amount for this period	
Sinopec Finance Company Limited	Subsidiary of controlling shareholder	16,000,000	LPR-0.1%	6,400,000	**34,140,000**	**35,990,000**	4,550,000
Sinopec Century Bright Capital Investment Limited	Subsidiary of controlling shareholder	600,000 Thousands USD	LIBOR+ 1.18%~2.42%	1,970,520	**3,108,383**	**3,108,812**	1,970,091
Total	/	/	/	8,370,520	**37,248,383**	**39,098,812**	6,520,091

C. Credit extension and other finance business

Unit: RMB'000

Connected parties	Connected relation	Business Type	Total Amount	Actual Amount
Sinopec Finance Company Limited	Subsidiary of controlling shareholder	Guarantees and bill credit	11,800,000	8,827,264

13. Significant contracts and performance

(1) Trusteeship, sub-contracting and leasing

A. Trusteeship

☐ Applicable √ Not applicable

B. Sub-contracting

☐ Applicable √ Not applicable

C. Leasing of the Company during the reporting period.

√ Applicable ☐ Not applicable

Unit: RMB'000

Lessor	Lessee	Leased Assets	The amount of money involved	Lease commencement date	Lease termination date	Rental Income	The basis for determining the rental income	The impact of leasing proceeds on the company	Is it a connected transaction	Connected relation
Shanghai Offshore Petroleum Bureau	Sinopec Shanghai Offshore Oil Engineering Company Limited*	Semi submersible drilling platform exploration No. 4 (Exploration IV)	RMB38.47 million	6 November 2019	31 December 2021	RMB -0.77 million (before tax)	Calculated based on a fixed daily rental of RMB48,140 per day	No significant impact	Yes	Shanghai Offshore Petroleum Bureau is a wholly-owned subsidiary of the controlling shareholder of the Company.

On 16 September 2021, the Company and CPC entered into Equipment Leasing Framework Agreement, which approved by the second extraordinary general meeting and effected from 1 January 2022 with three years validity period. Whereas, the Equipment Leasing Framework Agreement already includes the lease of the Exploration IV Drilling Rig by the Company and its subsidiaries from CPC, the Equipment Leasing Framework Agreement will replace the Lease Agreement on Exploration IV Drill Rig. On 16 September 2021, Ocean Petroleum Engineering and Shanghai Offshore Petroleum Bureau entered into the Termination Agreement of the Lease Agreement in relation to the "Exploration IV" Drill Rig. Pursuant to which, the parties agreed to terminate the Lease Agreement on Exploration IV Drill Rig from 1 January 2022.

(2) Guarantee of the Company during the reporting period

√ Applicable ☐ Not applicable

Unit: RMB'000

External Guarantee of the Company (excluding Guarantees for Subsidiaries)	
Total Amount of Guarantees during the Reporting Period (excluding Guarantees for Subsidiaries)	0
Total Balance of Guarantees at the end of the Reporting Period (A) (excluding Guarantees for Subsidiaries)	0
The Guarantee of the Company and its Subsidiaries to the Subsidiaries	
Total Amount of Guarantees paid to Subsidiaries during the Reporting Period	-2,133,328
Total Balance of Guarantees to Subsidiaries at the end of the Reporting Period (B)	17,781,686
Total Company Guarantee (including Guarantee for Subsidiaries)	
Total guarantee (A+B)	17,781,686
Total Amount of Guarantees as a Percentage of the Company's Net Assets (%)	259.2
Among them:	
Amount of Guarantee provided to Shareholders, Actual Controllers and their related Parties (C)	0
Debt Guarantee Amount directly or indirectly for the guaranteed object whose asset-liability Ratio exceeds 70% (D)	1,079,154
The Amount of the total Guarantee exceeds 50% of the Net Assets (E)	14,350,928
Sum of the three Guarantee above (C+D+E)	15,430,082
Statement of Unexpired Guarantees as potential subject to Joint Liability	None
Guarantee Statement	The guarantees provided by the Company are all provided by the guarantees for the performance of the performance guarantee letters issued by the subsidiaries in the domestic and foreign contracts. The guarantee amount is within the amount approved by the annual general meeting of the Company for 2020.

On 27 August 2019, the 15th meeting of the ninth session of the Board of the Company considered and approved the Resolution on Provision of Counter-guarantee to China Petrochemical Corporation by the Company, and approved the Company to provide corresponding counter-guarantee in respect of joint guarantee liability under the financing credit line of no more than RMB500 million provided by China Petrochemical Corporation to the Company. Such resolution has been reviewed and approved by the the first extraordinary general meeting for 2019 of the Company. For details, please refer to the “Related party transaction announcement on provision of counter-guarantee to controlling shareholders by the Company” (P. 2019-036) disclosed in China Securities Journal, Shanghai Securities News, Securities Times and on www.sse.com.cn on 28 August 2019, and on www.hkexnews.hk on 27 August 2019.

The Company expects that it will continue to use the credit line granted by China Construction Bank Corporation to CPC after 5 November 2021 and CPC will continue to undertake the joint guarantee liability for the RMB300 million credit line jointly and severally. On 16 September 2021, the sixth meeting of the tenth session of the board considered and approved Resolution on Provision of Counter-guarantee to China Petrochemical Corporation by the Company, which approved the Company to provide corresponding counter-guarantee in respect of the joint guarantee liability under the financing credit line of no more than RMB300 million provided by CPC to the Company. Such resolution has been reviewed and approved by the the second extraordinary general meeting for 2021 of the Company. For details, please refer to the “Related party transaction announcement on provision of counter-guarantee to controlling shareholders by the Company” (P. 2021-037) disclosed in China Securities Journal, Shanghai Securities News, Securities Times and on www.sse.com.cn on 17 September 2021, and on www.hkexnews.hk on 16 September 2021.

As of 31 December 2021, the balance of counter-guarantee provided by the Company to China Petrochemical Corporation is RMB262,764,000.

(3) Entrusting others to manage cash assets

During the reporting period, no entrusted financing, entrusted loans, other investments and financing and derivatives investment items of the Company occurred.

(4) Other significant contract

During the reporting period, the Company did not enter into any other material contract which requires disclosure.

14. Other important matters that have a significant impact on investors’ value judgments and investment decisions

√ Applicable ☐ Not applicable

(1) After the settlement negotiation between the Brazilian Subsidiary and the Federal Tax Administration of Brazil, the two parties reached a settlement regarding the tax penalty on 22 December 2021 (Brazil time). The Federal Tax Administration of Brazil agreed to give a 67.2% discount on the total tax penalty amount (including tax, interest, penalty and tax legal service fee). The final tax penalty amounted to BRL27,296,700 (equivalent to approximately RMB30,985,200). On 29 December 2021 (Brazil time), the Brazilian Subsidiary paid the above-mentioned tax penalty to the Federal Tax Administration of Brazil with a total amount of BRL 27,296,700 (equivalent to approximately RMB30,985,200). For details, please refer to the “Announcement on the Settlement of Tax Penalty of an Indirect Wholly owned Overseas Subsidiary” (P. 2021-046) disclosed in China Securities Journal, Shanghai Securities News, Securities Times and on www.sse.com.cn on 31 December 2021, and on www.hkexnews.hk on 30 December 2021.

The Company expected to continue to conduct the relevant continuing connected transactions with Sinopec Group after 31 December 2021. For the Continuing Connected Transactions commencing from 1 January 2022, the Company entered into a series of continuing connected transactions agreements with CPC on 16 September 2021, including Mutual Products Supply Framework Agreement, General Services Framework Agreement, Engineering and Construction Services Framework Agreement, Financial Services Framework Agreement, Technology R&D Framework Agreement, Land Use Rights and Property Leasing Framework Agreement, Equipment Leasing Framework Agreement, Trademark License Framework Agreement, and SPI Fund Document. Terms and conditions of the 2021 Connected Transactions Framework Agreements are basically identical to those of the agreements signed in 2018 and 2020. These continuing connected transactions agreements will replace the former agreements signed with CPC respectively after entry into force.

Based on the needs of the production and operation, the continuing connected transactions between the Group and PipeChina include long-distance pipeline construction, natural gas stations construction, pipeline operation, maintenance and protection and relevant technology services. It is expected that the annual cap for the relevant continuing transactions from 1 January 2021 to 31 December 2021 is RMB4 billion.

The proposal of a series continuing connected transactions agreements with the annual cap from 2022 to 2024, and the provision of continuing connected transactions with PipeChina have been considered and approved by the sixth meeting of the tenth session of the board and the second extraordinary general meeting (if applicable). For details, please refer to the “Continuing connected transactions announcement” (P. 2021-036), “Continuing connected transactions and disclosable transactions with Sinopec Group” and “Continuing related transactions with PipeChina” disclosed in China Securities Journal, Shanghai Securities News, Securities Times and on www.sse.com.cn on 17 September 2021, and on www.hkexnews.hk on 16 September 2021.

Section VIII Report of the Supervisory Committee

Dear shareholders,

In 2021, all supervisors of the Company followed the relevant provisions of the Company Law, the Articles of Association and other requirements, supervised the production and operating activities, financial conditions, and the performance of duties by directors and senior management during the year. The 2021 work report of the Supervisory Committee is as follows:

I. Meetings of the Supervisory Committee

In 2021, the Supervisory Committee held seven meetings, with three meetings held on-site and four meetings held by written resolution, at which a total of 28 resolutions were deliberated and approved, and the review of the 2020 annual report and the 2021 first quarter, interim report and third quarter report of the Company, as well as the election of the Chairman of the Supervisory Committee and the consideration of proposals such as connected transactions, were successfully completed.

On 2 February 2021, the Supervisory Committee held the first meeting of the tenth session of the Supervisory Committee by way of on-site and live streaming, and elected Mr. Ma Xiang as the chairman of the tenth session of the Supervisory Committee.

The Company's 2nd meeting of the tenth session of the Supervisory Committee was held on 24 March 2021. This meeting deliberated and approved 7 resolutions, including 2020 Supervisory Committee Work Report; 2020 Financial Report; 2020 Annual Report; Resolution on 2020 Connected Transactions of the Company; 2020 Profit Distribution Plan; 2020 Internal Control Evaluation Report; and the proposal of revising Internal Control Evaluation Handbook in 2021.

The Company's 3rd meeting of the tenth session of the Supervisory Committee was held by written resolution on 27 April 2021. This meeting deliberated and approved the 2021 First Quarterly Report and the Resolution on Provision of Guarantee for wholly-owned Subsidiaries and Joint Venture.

The Company's 4th meeting of the tenth session of the Supervisory Committee was held by written resolution on 3 August 2021. This meeting deliberated and approved Resolution on the Agreement for the Transfer of One Set of Assembled Drilling and Production Platform (Including Conduit Frame) by the Company to China Petroleum & Chemical Corporation Shengli Oilfield Branch.

The Company's 5th meeting of the tenth session of the Supervisory Committee was held by way of on-site and live streaming on 25 August 2021. This meeting deliberated and approved resolutions, including 2021 Interim Report and its abstract; 2021 Interim Financial Report; and the Resolution to Undistributed 2021 Interim Dividend.

The Company's 6th meeting of the tenth session of the Supervisory Committee was held by written resolution on 16 September 2021. This meeting deliberated and approved 12 resolutions, including 8 agreements entered into between the Company and China Petrochemical Corporation, including Mutual Products Supply Framework Agreement, General Services Framework Agreement and Engineering and Construction Services Framework Agreement, the implementation of the SPI Fund Document and the annual caps on connected transactions under such agreements for the years 2022-2024, as well as Resolution on the Provision of Counter-guarantee for China Petrochemical Corporation and the Resolution on the Maximum Limit of Connected Transactions with China Oil & Gas Pipeline Network Corporation in 2021.

The Company's 7th meeting of the tenth session of the Supervisory Committee was held by written resolution on 28 October 2021. This meeting deliberated and approved the 2021 Third Quarterly Report and the Resolution on the Cancellation of the Share Options of the Third Exercise Period under the First Grant of the A Share Option Incentive Scheme.

II. Attendance of other meetings by the Supervisory Committee and works performed

In 2021, the Supervisors attended 5 general meetings and sat in on 3 Board meetings to perform their supervisory duties in accordance with the law and supervise the legal compliance of the agenda and decision-making procedures of the general meetings and Board meetings; meanwhile, the Supervisors attended relevant internal meetings of the Company to enhance communication and exchange with the management and relevant functional departments, and closely monitor the operation status of the Company and major decisions such as internal reforms. In addition, the Supervisory Committee also organises Supervisors to attend special training courses organised by the Beijing Listed Companies Association, activities of the Listed Companies Association and study the "What to Know and Remember about the Securities Law" to enhance the ability and competence of the Supervisory Committee members in performing their duties.

Ⅲ. Key matters of concern to the Supervisory Committee

1. Information on the standardised operations in accordance with the law

In 2021, the Company diligently complied with the relevant laws and regulations and regulatory and other provisions of China and the place of listing, and carried out all its work in accordance with the law. The meeting procedures, voting methods and meeting resolutions of the general meetings and the Board were legal and effective, and the external information disclosure was timely, accurate and complete, and no violation of laws, regulations, the Articles of Association or behavior that would damage the Company or the interests of shareholders by the directors and senior management of the Company was found.

2. Check the Company's financial situation

In 2021, the Company focused on cost and efficiency, paying close attention to the optimization of all processes, cost reduction of all elements and efficiency enhancement on all fronts, reducing management and operation costs, revitalizing "two assets" (inefficient assets and ineffective assets), strengthening the governance of loss-making enterprises, coordinating and optimizing the operation of domestic and foreign funds, vigorously reducing capital occupation, continuously carrying out "two funds The Company continued to carry out special treatment to reduce the "two payments" (accounts receivable and inventories), cleaned up bad and doubtful debts, actively expanded low-cost financing channels and continuously optimised its debt structure. The Company's financial reports for the Year were prepared in accordance with PRC Accounting Standards for Business Enterprises and International Financial Reporting Standards respectively, and the financial statements audited by BDO China Shu Lun Pan Certified Public Accountants LLP and BDO Hong Kong Limited truly reflected the financial position, results of operations and cash flows of the Company, and no breach of confidentiality by the persons preparing and reviewing the statements was found.

3. Information of connected transactions

In 2021, the Company strictly complied with national laws and regulations, diligently fulfilled the regulatory requirements on connected transactions of Hong Kong Stock Exchange and the Shanghai Stock Exchange and fully executed the agreements and contracts entered into with related parties. Such agreements and contracts were in line with the needs of the production and operation of the Company. The terms of the transactions were fair and reasonable and the amount of connected transactions were all controlled within the approved caps. No behavior that would damage the interests of the Company and the rights and interests of shareholders was found.

4. Establishment of internal control system

In 2021, the Company systematically promoted the establishment of system, internal control and compliance management system, strictly controlled risk prevention and control, continued to optimize and improve the internal control system, significantly enhanced the internal control evaluation, continuously improved the level of internal control informatisation, developed a sound and effective internal control system, and did not find any major deficiencies or omissions in internal control.

Ⅳ. Opinions of the Supervisory Committee on the Company's work

The Supervisory Committee is of the opinion that: in 2021, facing the opportunities and challenges of global energy transformation, the post-epidemic era, the gradual increase in international oil prices and the general increase in investment by domestic and foreign oil companies, the Company conscientiously implemented the resolutions and deployment of the general meetings and the Board. The Company has continued to build up its strength for "Four Improvements" and "Five Megatrends", accelerated breakthroughs in key core technologies, renewed and upgraded core equipment, optimized market structure and resource allocation, improved institutional mechanisms and a more efficient workforce. As a result, we significantly strengthened the resilience of the industrial chain, market competitiveness, comprehensive strength and quality of workforce style. During the Year, The Company made a good start to the 14th Five-Year Plan by achieving newly signed contracts with an amount of RMB70.9 billion and recording revenue and net profit of RMB69.53 billion and RMB180 million, respectively. The Supervisory Committee has no objection on supervision affairs in 2021.

In 2022, the Supervisory Committee and the supervisors will continue to perform their supervisory duties with dedication, good faith and diligence, and make every effort to safeguard the rights and interests of shareholders, in line with the objective of being responsible to all shareholders.

Chairman of the supervisory committee

Ma Xiang

Beijing, China

29 March 2022

1. Changes in Share Capital

(1) Changes in Share Capital

A. Changes in Share Capital

	Before the change		The increase or decrease on the change (+, −)					After the change	
	Amount	Percentage (%)	New shares issued	Bonus shares	Reserve transfer into shares	Others	Total	Amount	Percentage (%)
Shares with selling restrictions	4,122,504,543	21.7	–	–	–	-4,122,504,543	-4,122,504,543	–	–
1. State shareholding	–	–	–	–	–	–	–	–	–
2. State-owned legal person shareholding	1,503,568,702	7.9	–	–	–	-1,503,568,702	-1,503,568,702	–	–
3. Domestic capital shareholding	23,148,854	0.1	–	–	–	-23,148,854	-23,148,854	–	–
4. Foreign capital shareholding	2,595,786,987	13.7	–	–	–	-2,595,786,987	-2,595,786,987	–	–
Shares without selling restrictions	14,861,835,490	78.3	–	–	–	+4,122,504,543	+4,122,504,543	18,984,340,033	100.0
1. Ordinary shares in RMB	12,042,660,995	63.4	–	–	–	+1,526,717,556	+1,526,717,556	13,569,378,551	71.48
2. Domestically listed foreign shares	–	–	–	–	–	–	–	–	–
3. Overseas listed foreign shares	2,819,174,495	14.9	–	–	–	+2,595,786,987	+2,595,786,987	5,414,961,482	28.52
4. Others	–	–	–	–	–	–	–	–	–
Total of shares	18,984,340,033	100.0	–	–	–	–	–	18,984,340,033	100.0

B. Note for the changes in share capital of ordinary shares

√ Applicable ☐ Not applicable

During the reporting period, there was no change in the total number of shares of the Company, but the share structure had changed. On 25 January 2021, the lock-up period of the 1,503,568,702 shares and 23,148,854 A shares held by China Petrochemical Corporation and Qi Xin Gong Ying Scheme have ended and were listed for trading. For details, please refer to the "Announcement on the Listing and Circulation of Non-public A-share Restricted Shares" disclosed in China Securities Journal, Shanghai Securities News, Securities Times, and on www.sse.com.cn on 19 January 2021. (P.2021-001). The lock-up period for 2,595,786,987 new H shares held by Century Bright Company expired on 23 January 2021. For details, please refer to the announcement "End of the Lock-up Period for Shares issued under the Non-public Placement" disclosed on www.hkexnews.hk on 18 January 2021.

C. The effects of changes in Share Capital of Ordinary Shares on the financial indicators of the Company such as earnings per share and net assets per share, in the previous year and the latest period

☐ Applicable √ Not applicable

D. Other content that the Company deems necessary or required by the securities regulator

☐ Applicable √ Not applicable

(2) Changes in Shares with Selling Restrictions

√ Applicable ☐ Not applicable

Name of shareholder	Number of shares with selling restriction at the beginning of this year (shares)	Number of relieving shares with selling restriction during this year (shares)	The increase in number of shares with selling restriction during this year (shares)	Number of shares with selling restriction at the end of this year (shares)	Reasons for selling restriction	Release Date of selling restrictions
China Petrolchemical Corporation	1,503,568,702	1,503,568,702	0	0	Non-public issued and can't be transferred in 36 months from 25 January 2018	25 January 2021
Changjiang Pension Insurance Co., Ltd. – Changjiang Shengshi Huazhang No. 2 Community Pension Management Fund[1]	23,148,854	23,148,854	0	0	Non-public issued and can't be transferred in 36 months from 25 January 2018	25 January 2021
Total	1,526,717,556	1,526,717,556	0	0	–	–

Note: 1. Changjiang Pension Insurance Co., Ltd held it on behalf of Qi Xin Gong Ying Scheme of the Company.

2. Share issue and listing

(1) Share issue at the end of the reporting period

During the reporting period, the Company did not issue any shares, convertible corporate bonds, convertible bonds, corporate bonds or other derivative securities, nor did it enter into any equity-linked agreements.

(2) Changes in total ordinary shares and share structure and changes in the structure of assets and liabilities

☐ Applicable √ Not applicable

(3) Internal employee shares

The Company did not have any internal employee shares as of the end of the reporting period.

3. Information on Shareholders and the de facto Controller

(1) Number of shareholders

Number of holders of ordinary shares at the end of reporting period	137,746
Number of holders of ordinary shares at the end of last month before the annual report's disclosure date	138,806
Number of holders of preferred shares whose voting rights had been restored at the end of reporting period	0
Number of holders of preferred shares whose voting rights had been restored at the end of last month before the annual report's disclosure date	0

As at 31 December 2021, the number of shareholders of the Company was 137,746, including 137,408 holders of A shares and 338 registered holders of H shares. The minimum public float of the Company satisfied the requirements of the Listing Rules.

(2) The shareholdings of the top ten shareholders and the shareholdings of the top ten tradable shareholders (or shareholders of shares without selling restrictions) of the Company

Shareholdings of the top ten shareholders Names of shareholders	Nature of shareholders	Changes of shareholdings[1] (shares)	Number of shares held at the end of the reporting period (shares)	Percentage to total share capital (%)	Number of shares with selling restrictions (shares)	Number of shares pledged or frozen
China Petrochemical Corporation[2]	State-owned legal person	0	10,727,896,364	56.51	0	0
Hong Kong Securities Clearing Company (Nominees) Limited ("HKSCC (Nominees) Limited")[3]	Overseas legal person	91,000	5,402,063,694	28.46	0	0
CITIC Corporation Limited	State-owned legal person	-359,843,400	675,156,600	3.56	0	0
Hong Kong Securities Clearing Company Limited[4]	Others	101,934,261	122,292,629	0.64	0	0
Zhou Guoqun	Domestic natural person	14,787,077	14,787,077	0.08	0	0
Changjiang Pension Insurance Co., Ltd. – Changjiang Shengshi Huazhang No. 2 Community Pension Management Fund[5]	Others	-11,574,427	11,574,427	0.06	0	0
Shanghai Tongneng Investment Holdings Co., Ltd.	Others	0	11,516,200	0.06	0	0
Agricultural Bank of China – China Securities 500 Trading Open Index Securities Investment Fund	Others	10,597,000	10,597,000	0.06	0	0
Li Feng	Domestic natural person	10,406,700	10,406,700	0.05	0	0
Hu Xiao	Domestic natural person	9,920,000	9,920,000	0.05	0	0

Shareholdings of top ten tradable shareholders of shares without selling restrictions Name of shareholders	Number of shares without selling restrictions held at the end of the reporting period (shares)	Types of shares
China Petrochemical Corporation	10,727,896,364	A Share
Hong Kong Securities Clearing Company (Nominees) Limited ("HKSCC (Nominees) Limited")	5,402,063,694	H Share
CITIC Corporation Limited	675,156,600	A Share
Hong Kong Securities Clearing Company Limited	122,292,629	A Share
Zhou Guoqun	14,787,077	A Share
Changjiang Pension Insurance Co., Ltd. – Changjiang Shengshi Huazhang No. 2 Community Pension Management Fund	11,574,427	A Share
Shanghai Tongneng Investment Holdings Co., Ltd.	11,516,200	A Share
Agricultural Bank of China – China Securities 500 Trading Open Index Securities Investment Fund	10,597,000	A Share
Li Feng	10,406,700	A Share
Hu Xiao	9,920,000	A Share
Statement on the connected relationship or activities in concert among the above-mentioned shareholders	The Company is not aware of any connected relationship or acting in concert among the above-mentioned shareholders.	
Statement on repurchasing of special accounts among top ten shareholders	No	
Statement on the entrustment and waiver of voting rights by the above mentioned shareholders	Not applicable	

Note:

1. As compared with the number of shares held as of 31 December 2020.
2. Apart from directly holding 10,727,896,364 A shares of the Company, China Petrochemical Corporation also held 2,595,786,987 H shares through its wholly-owned subsidiary, Century Bright Company. Therefore, China Petrochemical Corporation directly and indirectly holds 13,323,683,351 shares of the Company, which represents 70.18% of the total shares of the Company.
3. HKSCC (Nominees) Limited is a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited, acting as an agent to hold H shares of the Company on behalf of other companies or individual shareholders.
4. Hong Kong Securities Clearing Company Limited is a wholly-owned subsidiary of the Hong Kong Exchanges and Clearing Limited, acting as a nominal holder to hold A shares of the Company in the Shanghai Stock Exchange on behalf of the investors of the Hong Kong Stock Exchange.
5. Changjiang Pension Insurance Co., Ltd held it on behalf of Qi Xin Gong Ying Scheme.

Number of top ten shareholders of shares with selling restrictions and restrictions conditions:

☐ Applicable √ Not applicable

(3) Strategic investors or general legal person became top ten shareholders of the Company due to distribution and sales of new shares

☐ Applicable √ Not applicable

4. Information on Controlling Shareholders and De Facto Controller of the Company

(1) Information on controlling shareholder

A. Legal Representative

Name of the holding shareholder	China Petrochemical Corporation
Legal representative	Ma Yongsheng
Date of establishment	14 September 1983
Organization number	9111000010169286X1
Registered capital	RMB326.547 billion
Principal activities	Through reorganization in 2000, CPC injected its principal petroleum and petrochemical operations into Sinopec, and retained operations in certain smaller scale petrochemical facilities and refineries, provision of well drilling services, oil testing services, in-well operation services, manufacture and maintenance of production equipment, engineering construction, utility services and social services.

CPC's subsidiaries and associates listed in domestic and overseas during the reporting period	Name of company	Number of share held (shares)	Shareholding (%)
	Sinopec	82,709,227,393	68.31%
	SINOPEC Engineering (Group) Co., Ltd	2,907,856,000	65.67%
	Sinopec Oilfield Equipment Corporation	351,351,000	58.74%
	China Merchants Energy Shipping Co., LTD	912,886,426	15.05%

Note: China Petrochemical Corporation also held 588,150,000 H shares in Sinopec through its overseas wholly-owned subsidiary Century Bright Company. These shares are not included in the directly holding shares by China Petrochemical Corporation in Sinopec.

B. The block diagram of the property and control relationship between the Company and the controlling shareholder

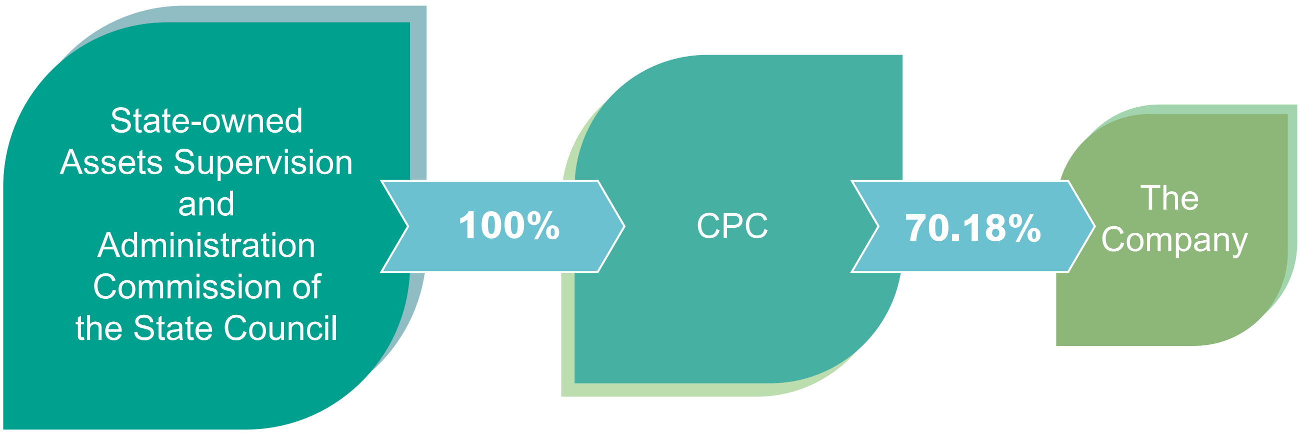
Note: Apart from directly holding 10,727,896,364 A-shares of the Company, CPC also held 2,595,786,987 H-shares through Century Bright Company. Therefore, CPC directly and indirectly holds 13,323,683,351 shares of the Company, which represents 70.18% of the total shares.

(2) The actual controller of the Company

A. Legal Representative

The actual controller is also China Petrochemical Corporation. See more information in this section relating to controlling shareholder.

B. The block diagram of the property and control relationship between the Company and the actual controller



(3) Other information about controlling shareholders and actual controller of the Company

☐ Applicable √ Not applicable

5. The cumulative number of pledged shares accounted for more than 80% of the number of shares of the Company held by controlling shareholders or the largest shareholder with its partner acting in concert

☐ Applicable √ Not applicable

6. Other Legal person shareholders that holding over 10% of the total shares of the Company

At the end of the reporting period, the Company has no other legal person shareholders that holding over 10% of the total shares of the Company.

7. Statement on shares reduced in restriction

☐ Applicable √ Not applicable

8. Execution of shares repurchase during the reporting period

☐ Applicable √ Not applicable

9. The interest or short position held by the substantial shareholders and other persons in the Company's shares or underlying shares

As at 31 December 2021, so far as the Directors, Supervisors and senior management of the Company are aware of, each of the following persons, not being a Director, Supervisor or senior management of the Company, had an interest in the Company's shares which is required to be disclosed to the Company and the HKSE under the provisions of Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance ("SFO").

Name of shareholder	Number of share held	Percent of shareholding in the Company's total issued share capital	Percent of shareholding in the Company's total issued domestic shares	Percent of shareholding in the Company's total issued H shares	Short position
	(shares)	(%)	(%)	(%)	
China Petrochemical Corporation	10,727,896,364 (A Share)	56.51	79.06	Not Applicable	–
	2,595,786,987 (H Share)[1]	13.67	Not Applicable	47.94	–

Note: 1. China Petrochemical Corporation held 2,595,786,987 H shares of the Company through its wholly owned subsidiary Century Bright Company. China Petrochemical Corporation is deemed to be interested in the H shares of the Company held by Century Bright Company.

Save as disclosed above and so far as the Directors, Supervisors and senior management of the Company are aware of, as at 31 December 2021, no other person had an interest or short position in the Company's shares or underlying shares (as the case may be) which are required to be disclosed to the Company and the HKSE under the provisions of Divisions 2 and 3 of Part XV of the SFO, or was otherwise a substantial shareholder (as such term is defined in the Hong Kong Listing Rules) of the Company.

Section X Financial Reports

Prepared in accordance with PRC Accounting Standards for Business Enterprises

Auditors' Report

PCPAR [2022] No. ZK10047

To all shareholders of Sinopec Oilfield Service Corporation,

I. OPINION

We have audited the accompanying financial statements of Sinopec Oilfield Service Corporation, (hereafter referred to as "SSC" or "the Group"), including the consolidated and company balance sheet as at December 31, 2021, the consolidated and company income statement, the consolidated and company cash flow statement, the consolidated statement of changes in shareholders' equity for the year then ended and the relevant notes to the financial statements.

In our opinion, the accompanying financial statements are prepared in accordance with Accounting Standards for Business Enterprises. The financial position of SSC for the year ended 31 December 2021, and the results of its operations and cashflows for the year ended 31 December 2021 are fairly presented in all material respects.

II. BASIS FOR OPINION

We conducted our audit in accordance with Chinese Certified Public Accountants Auditing Standards. Our responsibilities under those standards are further described in the auditors' responsibilities for the audit of the financial statements section of our report. We are independent of the Group in accordance with the Code of Professional Conduct and Ethics for Chinese Certified Public Accountants, and we have fulfilled our other ethical responsibilities. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

III. KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the current period. The response to these matters is based on the overall audit of the financial statements and the formation of audit opinions. We do not express our opinions on these matters separately.

The key audit matters identified in our audit are summarized below:

Description of the matter	How our audit addressed the Key Audit Matter
I. Recognition of revenue and cost Revenue related to rendering of services and construction contracts is derived from provision of petroleum engineering and technical services to PRC and overseas petroleum exploration and development companies, including geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction services. The Group's petroleum engineering and technical services income would be recognized over a period of time. The recognition of related labor income and profits depends on management's estimation of the estimated total revenue of the contract and performance of the contract. The management of the Group adopts the expected value method according to the contract or the most likely amount to estimate the estimated total revenue of the contract, and evaluates the estimated total cost of the contract according to historical information and construction plan. The significant accounting estimates of management will be continuously evaluated and revised during the execution of the contract. With the progress towards satisfaction of a performance obligation becomes certain, the Group should recognize revenue and costs in accordance with the progress of performance obligation being satisfied on the balance sheet date. The recognition of revenue and costs mainly depends on the management's critical estimation and judgments, including the estimated total revenue of the contract, estimated total cost, variable consideration, remaining contract costs, estimated progress and contract execution risk. Any alteration for the final progress billing or actual progress for performance obligation being satisfied, which would lead to the variance exists between the management's budgeted revenue and actual amount incurred. Therefore, we identified this matter as a key audit matter. Refer to Note 3.24 (Revenue) and Note 3.32.6 (Significant accounting estimates and judgements) for related disclosures of accounting policy, significant accounting judgment and estimate about revenue recognition, other detailed information are set out in Note 5.36 and Note 15.6.	Our audit procedures for the recognition of revenue and cost include: – We checked whether the accounting policies of recognizing revenue and costs are appropriately designed with relevant provisions of accounting standards in accordance with specific circumstances of the Group's business and contract terms. – We have understood, evaluated and tested the design and implementation of key internal controls used by management to determine estimated contract revenue, estimated contract costs, actual costs incurred and contract remaining costs, and the progress of contract performance to confirm the effectiveness of internal controls. – Through reviewing business contracts and interviews with management, we have understood and assessed the reasonableness of the basis and assumptions of estimated total revenue and estimated total cost. We have checked the consistency of the preparation and assumptions of various types of projects. We compared the cumulative cost as of December 31, 2021 to the estimated total cost, and checked the large cost recorded after the balance sheet date to analyze and evaluate the management's reasonableness of future workload and estimated residual cost of the contract. – Sampling tests were carried out for the determination of the progress of contract performance, and supporting documents, such as the main clauses in the relevant business contracts and the settlement statements or acceptance sheets and completion schedules issued by the customers, were checked. – The estimated revenue and estimated cost of the sub-projects were analyzed and calculated to confirm its reasonableness. In addition, the sample was tested for the amount and period of revenue and cost recognition to analyze whether it was accurately confirmed on the balance sheet date according to the progress of contract performance. The budgeted cost was compared with the accumulated costs incurred up to the end of the reporting period on a sampling basis to verify any existence of cost overrun.

Description of the matter	How our audit addressed the Key Audit Matter
II. Measurement of expected credit losses of accounts receivable and contract assets	
The accounts receivable and contract assets of the Group (hereinafter referred to as "receivables") mainly come from related parties and other PRC and overseas petroleum exploration and development companies. On December 31, 2021, the book value of accounts receivable of the Group was RMB10.57 billion, and the book value of contract assets was RMB13.65 billion, the accumulated expected credit losses for account receivables and impairment on contract assets amounted to RMB2.52 billion. The measurement of expected credit losses involves management's subjective judgment and is inherently uncertain. In determining the expected credit losses of receivables, the management needs to comprehensively assess the current credit rating of the counterparty, the experience of historical credit losses, and the current operating conditions, macroeconomic environment, external market environment, technical environment and changes in customer conditions, etc. Due to the inherent uncertainty of the expected credit loss measurement of the receivables, involving the subjective judgment of the management, and the amount of the receivables has a significant impact on the consolidated financial statements of the Group, we identified the measurement of expected credit losses of receivables as a key audit matter. Refer to Note 3.10 (Financial instruments – Measurement of expected credit losses) and Note 3.32.2 (Significant accounting estimates and judgments) for related disclosures of accounting policy, significant accounting judgment and estimate about Measurement of expected credit losses. Other detailed information is set out in Note 5.2 and Note 5.7.	Our audit procedures for the measurement of expected credit losses of accounts receivable and contract assets include: – We have understood and assessed the internal controls of the Group relating to the expected credit loss measurement. In addition, we tested the effectiveness of such internal controls. – We have reviewed the relevant considerations and objective evidence of the management's expected credit loss measurement, and evaluated the management's method and calculation which divide the receivables into several combinations by considering the actual amount of bad debts and the situation of similar receivables in the history, combined with factors such as customer credit and market environment. – For major customers whose balance of receivables is large or exceeds the credit period, we have gathered information about the debtor or its industry development status to identify whether there is any situation that affects the expected credit loss assessment results of receivables. – We have obtained ageing analysis of receivables as at 31 December 2021. We checked the supporting documents such as accounting vouchers and invoices. We also reviewed the key information such as aging analysis, overdue days, and relationship on sampling basis in order to ascertain the accuracy and classification on receivables. – We have arranged audit confirmation to those customers who have significant balance of accounts receivable, and compared the results for the returned confirmation with the Group's record. – We have recalculated the expected credit losses of the receivables and compared our calculations with the amount recorded by the Group. – We have evaluated the reasonableness of management's expected credit losses assessment by considering the customer's settlement subsequent to the reporting period.

IV. OTHER INFORMATION

The management of the Group (hereinafter referred to as the "Management") is responsible for other information. The other information comprises the information covered in the 2021 annual report of the Group but excludes the financial statements and our auditor's report.

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

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements, or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, 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.

V. RESPONSIBILITIES OF THE MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

The management of the Group (hereinafter referred to as "the Management") is responsible for preparing the financial statements in accordance with the requirements of Accounting Standards for Business Enterprises to achieve a fair presentation, and for designing, implementing, and maintaining internal control that is necessary to ensure that the financial statements are free from material misstatements, whether due to frauds or errors.

In preparing the financial statements, the Management is 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 management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

VI. AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the audit standards 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 based on these financial statements.

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

(1) Identify and assess the risks of material misstatement of the 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.

(2) Understand the internal control relevant to the audit to design audit procedures that are appropriate in the circumstances.

(3) Evaluate the appropriateness of accounting policies used by and the reasonableness of accounting estimates and related disclosures made by the Management.

(4) Conclude on the appropriateness of the Management's 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 auditors' report to the related disclosures in the 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 auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

(5) Evaluate the overall presentation (including the disclosures), structure and content of the financial statements, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

(6) We have acquired sufficient and proper audit evidence regarding financial information relating to entity or business activities of the Group to give the audit opinion on the 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 those charged with governance 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 those charged with governance 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 those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless these matters are forbidden by laws and regulations to be disclosed or in extremely rare circumstances, when the negative impact arising from the reasonable and expected communication about a certain matter in an auditor's report exceeds the public interest benefits arising therefrom, we determine that such matter should not be communicated in the auditor's report.

BDO CHINA Shu Lun Pan
Certified Public Accountants LLP

Certified Public Accountant of China:
(Engagement Partner)

Certified Public Accountant of China:

Shanghai, China

Date: March 29, 2022

This auditors' report and the accompanying notes to the financial statements are English translation of the Chinese auditors' report and statutory financial statements prepared under accounting principles and practices generally accepted in the People's Republic of China. In case of doubt as to the presentation of these documents, the Chinese version shall prevail.

CONSOLIDATED BALANCE SHEET

Sinopec Oilfield Service Corporation

As at December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Assets:	Note 5	Balance as at December 31, 2021	Balance as at December 31, 2020
Current assets:			
Cash and cash equivalents	5.1	2,508,224	1,551,458
Notes receivable			
Accounts receivable	5.2	8,151,019	9,358,385
Receivables at FVTOCI	5.3	1,295,971	1,323,425
Advances to suppliers	5.4	338,555	441,654
Other receivables	5.5	2,552,292	2,464,362
Inventories	5.6	1,088,304	1,033,678
Contract assets	5.7	13,546,895	11,610,888
Non-current assets maturing within one year			
Other current assets	5.8	2,238,006	1,995,808
Total current assets		31,719,266	29,779,658
Non-current assets:			
Long-term equity investments	5.9	47,048	43,046
Investment in other equity instruments	5.10	21,760	22,835
Other non-current financial assets			
Fixed assets	5.11	23,461,781	22,939,838
Construction in progress	5.12	668,364	284,292
Right-of-use assets	5.13	720,938	1,265,583
Intangible assets	5.14	506,596	504,966
Research and development expenditure			
Goodwill			
Long-term deferred expenses	5.15	6,595,930	5,855,143
Deferred tax assets	5.16	310,764	395,834
Other non-current assets			
Total non-current assets		32,333,181	31,311,537
Total assets		64,052,447	61,091,195

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	General Manager:	Accounting Principal:	Head of the Accounting Department:
Xikun CHEN	Jianqiang YUAN	Zhongyi CHENG	Yulong YANG

CONSOLIDATED BALANCE SHEET (Continued)

Sinopec Oilfield Service Corporation

As at December 31, 2021

(Amounts are expressed in RMB' thousand unless otherwise stated)

Liabilities and owners' equity	Note 5	Balance as at December 31, 2021	Balance as at December 31, 2020
Current liabilities:			
Short-term borrowings	5.17	17,520,091	19,370,520
Notes payable	5.18	8,334,086	6,305,228
Accounts payable	5.19	21,556,262	20,497,509
Advances from customers			
Contract liabilities	5.20	3,547,938	3,024,461
Employee compensation payable	5.21	644,026	498,071
Taxes and surcharges payable	5.22	737,725	724,389
Other payables	5.23	2,355,823	1,675,104
Non-current liabilities maturing within one year	5.24	296,045	356,747
Other current liabilities			
Total current liabilities		54,991,996	52,452,029
Non-current liabilities:			
Long-term borrowings	5.25	1,554,686	580,716
Lease liabilities	5.26	390,866	898,469
Long-term payables	5.27	28,885	26,812
Estimated liabilities	5.28	205,771	382,646
Deferred income	5.29	9,288	14,186
Deferred tax liabilities	5.16	9,438	13,471
Other non-current liabilities			
Total non-current liabilities		2,198,934	1,916,300
Total liabilities		57,190,930	54,368,329
Owners' equity:			
Share capital	5.30	18,984,340	18,984,340
Capital reserves	5.31	11,717,773	11,717,773
Other comprehensive income	5.32	-3,823	-2,014
Special reserves	5.33	219,182	258,523
Surplus reserves	5.34	200,383	200,383
Retained earnings	5.35	-24,256,338	-24,436,139
Total equity attributable to owners of the parent company		6,861,517	6,722,866
Non-controlling interests			
Total owners' equity		6,861,517	6,722,866
Total liabilities and owners' equity		64,052,447	61,091,195

The accompanying notes to the financial statements form an integral part of the financial statements.

General Manager:	Chairman:	Accounting Principal:	Head of the Accounting Department:
Jianqiang YUAN	*Xikun CHEN*	*Zhongyi CHENG*	*Yulong YANG*

PARENT COMPANY'S BALANCE SHEET

Sinopec Oilfield Service Corporation

As at December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Assets:	Note 16	Balance as at December 31, 2021	Balance as at December 31, 2020
Current assets:			
Cash at bank and on hand		147	159
Financial assets held for trading			
Derivative financial assets			
Notes receivable			
Accounts receivable			
Receivables financing			
Advances to suppliers			
Other receivables	16.1	4,380,622	4,396,431
Inventories			
Contract assets			
Assets held for sale			
Non-current assets maturing within one year			
Other current assets		278	167
Total current assets		4,381,047	4,396,757
Non-current assets:			
Creditor's right investment			
Other creditor's right investment			
Long-term receivables			
Long-term equity investments	16.2	27,891,662	27,891,662
Investment in other equity instruments			
Other non-current financial assets			
Investment properties			
Fixed assets			
Construction in progress			
Productive biological assets			
Oil and gas assets			
Right-of-use assets			
Intangible assets			
Development expenditures			
Goodwill			
Long-term deferred expenses			
Deferred income tax assets			
Other non-current assets			
Total non-current assets		27,891,662	27,891,662
Total assets		32,272,709	32,288,419

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	General Manager:	Accounting Principal:	Head of the Accounting Department:
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

PARENT COMPANY'S BALANCE SHEET (Continued)

Sinopec Oilfield Service Corporation

As at December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Liabilities and owners' equity	Note 16	Balance as at December 31, 2021	Balance as at December 31, 2020
Current liabilities:			
Short-term borrowings			
Financial liabilities held for trading			
Derivative financial liabilities			
Notes payable			
Accounts payable		8,500	11,800
Advances from customers			
Contract liabilities			
Employee compensation payable			
Taxes and surcharges payable		26,791	26,661
Other payables		14,284	13,306
Liabilities held for sale			
Non-current liabilities maturing within one year			
Other current liabilities			
Total current liabilities		49,575	51,767
Non-current liabilities:			
Long-term borrowings			
Bonds payable			
Including: preferred stock			
Perpetual bonds			
Lease liabilities			
Long-term payables			
Long-term employee compensation payable			
Estimated liabilities			
Deferred income			
Deferred income tax liabilities			
Other non-current liabilities			
Total non-current liabilities			
Total liabilities		49,575	51,767
Owners' equity:			
Share capital		18,984,340	18,984,340
Other equity instruments			
Including: preferred stock			
Perpetual bonds			
Capital reserves		14,568,016	14,568,016
Less: treasury stock			
Other comprehensive income			
Special reserves			
Surplus reserves		200,383	200,383
Undistributed profits		-1,529,605	-1,516,087
Total owners' equity		32,223,134	32,236,652
Total liabilities and owners' equity		32,272,709	32,288,419

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	General Manager:	Accounting Principal:	Head of the Accounting Department:
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

Section X Financial Reports

CONSOLIDATED INCOME STATEMENT

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021

(Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Note 5	Current period	Prior period
I. Total operating revenue		**69,533,053**	68,073,394
Including: operating revenue	5.36	**69,533,053**	68,073,394
Interest income			
II. Total operating costs		**69,557,989**	68,262,968
Including: operating costs	5.36	**64,520,925**	63,080,210
Interest expenses			
Taxes and surcharges	5.37	**238,021**	238,128
Selling and distribution expenses	5.38	**80,463**	71,047
General and administrative expenses	5.39	**2,184,739**	2,307,412
Research and development expenses	5.40	**1,669,706**	1,369,501
Financial expenses	5.41	**864,135**	1,196,670
Including: interest expenses	5.41	**726,760**	906,693
Interest income	5.41	**38,180**	59,576
Plus: other income	5.42	**265,296**	516,114
Investment income ("-" for losses)	5.43	**38,261**	59,927
Including: income from investment in associates and joint ventures	5.43	**7,280**	5,467
Losses from credit impairment ("-" for losses)	5.44	**-22,492**	-38,350
Losses from assets impairment ("-" for losses)	5.45	**2,826**	-70,743
Gains from disposal of assets ("-" for losses)	5.46	**88,723**	5,961
III. Operating profits ("-" for losses)		**347,678**	283,335
Plus: non-operating revenue	5.47	**168,697**	108,405
Less: non-operating expenses	5.48	**25,853**	43,686
IV. Total profits ("-" for total losses)		**490,522**	348,054
Less: income tax expenses	5.49	**310,731**	269,076
V. Net profit ("-" for net loss)		**179,791**	78,978
(I) Classified by operating sustainability			
1. Net profit from continued operation ("-" for net loss)		**179,791**	78,978
2. Net profit from discontinued operation ("-" for net loss)			
(II) Classified by ownership			
1. Net profit attributable to shareholders of the parent company ("-" for net loss)		**179,791**	78,978
2. Minority interest income ("-" for net loss)			
VI. Other comprehensive income, net of tax		**-1,799**	-8,461
Other comprehensive income, net of tax, attributable to owners of the parent company		**-1,799**	-8,461
(I) Other comprehensive income that cannot be reclassified into profit or loss		**-1,799**	-8,461
1. Changes in fair value of other equity instrument investment		**-1,799**	-8,461
(II) Other comprehensive income that will be reclassified into profit or loss			
Other comprehensive income, net of tax, attributable to minority shareholders			
VII. Total comprehensive income		**177,992**	70,517
Total comprehensive income attributable to owners of the parent company		**177,992**	70,517
Total comprehensive income attributable to minority shareholders			
VIII. Earnings per share:			
(I) Basic earnings per share (RMB/Share)	17.2	**0.009**	0.004
(II) Diluted earnings per share (RMB/Share)			

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	General Manager:	Accounting Principal:	Head of the Accounting Department:
Xikun CHEN	Jianqiang YUAN	Zhongyi CHENG	Yulong YANG

PARENT COMPANY'S INCOME STATEMENT

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Note 16	Current period	Prior period
I. Operating revenue			
Less: operating costs			
Taxes and surcharges			
Selling and distribution expenses			
General and administrative expenses		13,516	19,874
Research and development expenses			
Financial expenses		2	1
Including: interest expenses			
Interest income			1
Plus: other income			
Investment income ("-" for losses)			
Including: income from investment in associates and joint ventures			
Gains from derecognition of financial assets measured at amortized cost			
Gains from net exposure hedging ("-" for losses)			
Gains from changes in fair value ("-" for losses)			
Losses from credit impairment ("-" for losses)			
Losses from assets impairment ("-" for losses)			
Gains from disposal of assets ("-" for losses)			
II. Operating profits ("-" for losses)		-13,518	-19,875
Plus: non-operating revenue			
Less: non-operating expenses			
III. Total profits ("-" for total losses)		-13,518	-19,875
Less: income tax expenses			
IV. Net profit ("-" for net loss)		-13,518	-19,875
(I) Net profit from continued operation ("-" for net loss)		-13,518	-19,875
(II) Net profit from discontinued operation ("-" for net loss)			
V. Other comprehensive income, net of tax			
(I) Other comprehensive income that cannot be reclassified into profit or loss			
(II) Other comprehensive income that will be reclassified into profit or loss			
VI. Total comprehensive income		-13,518	-19,875
VII. Earnings per share:			
(I) Basic earnings per share (RMB/Share)			
(II) Diluted earnings per share (RMB/Share)			

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	*General Manager:*	*Accounting Principal:*	*Head of the Accounting Department:*
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

CONSOLIDATED STATEMENT OF CASH FLOWS

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Note 5	Current period	Prior period
I. Cash flows from operating activities			
Cash received from sales of goods and rendering of services		63,641,759	63,737,397
Refund of taxes and surcharges		194,673	351,304
Cash received from other operating activities	5.50	3,794,244	3,263,701
Sub-total of cash inflows from operating activities		67,630,676	67,352,402
Cash paid for purchase of goods and receipt of services		41,549,293	42,039,015
Cash paid to and on behalf of employees		15,106,616	15,484,300
Various taxes and surcharges paid		1,324,248	1,470,849
Cash paid for other operating activities	5.50	3,443,610	3,886,418
Sub-total of cash outflows from operating activities		61,423,767	62,880,582
Net cash flows from operating activities	5.51	6,206,909	4,471,820
II. Cash flows from investing activities			
Cash received from disinvestment		10	
Cash received from returns on investments		3,732	2,146
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		83,497	140,655
Net cash received from disposal of subsidiaries and other business units			
Cash received from other investing activities			
Sub-total of cash inflows from investing activities		87,239	142,801
Cash paid to acquire and construct fixed assets, intangible assets and other long-term assets		3,340,682	1,742,664
Cash paid for investments			9
Net increase in pledge loans			
Net cash paid to acquire subsidiaries and other business units			
Cash paid for other investing activities			
Sub-total of cash outflows from investing activities		3,340,682	1,742,673
Net cash flows from investing activities		-3,253,443	-1,599,872
III. Cash flows from financing activities			
Cash received from absorption of investments			
Including: cash received by subsidiaries from investment by minority shareholders			
Cash received from borrowings		60,848,383	53,601,812
Cash received from other financing activities			
Sub-total of cash inflows from financing activities		60,848,383	53,601,812
Cash paid for debt repayments		61,666,957	54,391,017
Cash paid for distribution of dividends and profits or payment of interest		611,439	827,362
Cash paid for other financing activities	5.50	518,194	1,263,535
Sub-total of cash outflows from financing activities		62,796,590	56,481,914
Net cash flows from financing activities		-1,948,207	-2,880,102
IV. Effect of fluctuation in exchange rate on cash and cash equivalents		-53,305	-119,226
V. Net increase in cash and cash equivalents	5.51	951,954	-127,380
Plus: beginning balance of cash and cash equivalents		1,523,352	1,650,732
VI. Ending balance of cash and cash equivalents	5.51	2,475,306	1,523,352

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman: *Xikun CHEN*　*General Manager:* *Jianqiang YUAN*　*Accounting Principal:* *Zhongyi CHENG*　*Head of the Accounting Department:* *Yulong YANG*

PARENT COMPANY'S STATEMENT OF CASH FLOWS

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Note 16	Current period	Prior period
I. Cash flows from operating activities			
Cash received from sales of goods and rendering of services			
Refund of taxes and surcharges			
Cash received from other operating activities			777
Sub-total of cash inflows from operating activities			777
Cash paid for purchase of goods and receipt of services			
Cash paid to and on behalf of employees			
Various taxes and surcharges paid			
Cash paid for other operating activities		12	788
Sub-total of cash outflows from operating activities		12	788
Net cash flows from operating activities		-12	-11
II. Cash flows from investing activities			
Cash received from disinvestment			
Cash received from returns on investments			
Net cash received from disposal of fixed assets, intangible assets and other long-term assets			
Net cash received from disposal of subsidiaries and other business units			
Cash received from other investing activities			
Sub-total of cash inflows from investing activities			
Cash paid to acquire and construct fixed assets, intangible assets and other long-term assets			
Cash paid for investments			
Net cash paid to acquire subsidiaries and other business units			
Cash paid for other investing activities			
Sub-total of cash outflows from investing activities			
Net cash flows from investing activities			
III. Cash flows from financing activities			
Cash received from absorption of investments			
Cash received from borrowings			
Cash received from other financing activities			
Sub-total of cash inflows from financing activities			
Cash paid for debt repayments			
Cash paid for distribution of dividends and profits or payment of interest			
Cash paid for other financing activities			
Sub-total of cash outflows from financing activities			
Net cash flows from financing activities			
IV. Effect of fluctuation in exchange rate on cash and cash equivalents			
V. Net increase in cash and cash equivalents		-12	-11
Plus: beginning balance of cash and cash equivalents		159	170
VI. Ending balance of cash and cash equivalents		147	159

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	General Manager:	Accounting Principal:	Head of the Accounting Department:
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

CONSOLIDATED STATEMENT OF CHANGES IN OWNERS' EQUITY

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021

(Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Current period													
	Equity attributable to owners of the parent company												Minority equity	Total owners' equity
	Share capital	Other equity instruments			Capital reserves	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Undistributed profits	Sub-total		
		Preferred stock	Perpetual bonds	Others										
I. Balance at the end of the last year	18,984,340				11,717,773		-2,014	258,523	200,383		-24,436,139	6,722,866		6,722,866
Plus: changes in accounting policies														
Others														
II. Balance at the beginning of the current year	18,984,340				11,717,773		-2,014	258,523	200,383		-24,436,139	6,722,866		6,722,866
III. Increases/decreases in current year ("-" for decreases)							-1,809	-39,341			179,801	138,651		138,651
(I) Total comprehensive income							-1,799				179,791	177,992		177,992
(II) Capital contributed or reduced by owners														
(III) Profit distribution														
(IV) Internal carry-forward of owners' equity							-10				10			
1. Carry-forward of other comprehensive income for retained earnings							-10				10			
(V) Special reserves								-39,341				-39,341		-39,341
1. Amount withdrawn in the current period								1,468,981				1,468,981		1,468,981
2. Amount used in the current period								1,508,322				1,508,322		1,508,322
(VI) Others														
IV. Balance at the end of the current period	18,984,340				11,717,773		-3,823	219,182	200,383		-24,256,338	6,861,517		6,861,517

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	*General Manager:*	*Accounting Principal:*	*Head of the Accounting Department:*
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

CONSOLIDATED STATEMENT OF CHANGES IN OWNERS' EQUITY (Continued)

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Prior period													
	Equity attributable to owners of the parent company													
		Other equity instruments												
	Share capital	Preferred stock	Perpetual bonds	Others	Capital reserves	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserves	General risk reserves	Undistributed profits	Sub-total	Minority equity	Total owners' equity
I. Balance at the end of the last year	18,984,340				11,714,581		6,447	373,238	200,383		-24,515,117	6,763,872		6,763,872
Plus: changes in accounting policies														
Others														
II. Balance at the beginning of the current year	18,984,340				11,714,581		6,447	373,238	200,383		-24,515,117	6,763,872		6,763,872
III. Increases/decreases in current year ("-" for decreases)					3,192		-8,461	-114,715			78,978	-41,006		-41,006
(I) Total comprehensive income							-8,461				78,978	70,517		70,517
(II) Capital contributed or reduced by owners					3,192							3,192		3,192
1. Amounts of share-based payments recognized in owners' equity					3,192							3,192		3,192
(III) Profit distribution														
(IV) Internal carry-forward of owners' equity														
(V) Special reserves								-114,715				-114,715		-114,715
1. Amount withdrawn in the current period								1,163,262				1,163,262		1,163,262
2. Amount used in the current period								1,277,977				1,277,977		1,277,977
(VI) Others														
IV. Balance at the end of the current period	18,984,340				11,717,773		-2,014	258,523	200,383		-24,436,139	6,722,866		6,722,866

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	*General Manager:*	*Accounting Principal:*	*Head of the Accounting Department:*
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

PARENT COMPANY'S STATEMENT OF CHANGES IN OWNERS' EQUITY

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Current period										
	Share capital	Other equity instruments: Preferred stock	Other equity instruments: Perpetual bonds	Other equity instruments: Others	Capital reserves	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserves	Undistributed profits	Total owners' equity
I. Balance at the end of the last year	18,984,340				14,568,016				200,383	-1,516,087	32,236,652
Plus: changes in accounting policies											
Others											
II. Balance at the beginning of the current year	18,984,340				14,568,016				200,383	-1,516,087	32,236,652
III. Increases/decreases in current year ("-" for decreases)										-13,518	-13,518
(I) Total comprehensive income										-13,518	-13,518
(II) Capital contributed or reduced by owners											
(III) Profit distribution											
(IV) Internal carry-forward of owners' equity											
(V) Special reserves											
(VI) Others											
IV. Balance at the end of the current period	18,984,340				14,568,016				200,383	-1,529,605	32,223,134

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	*General Manager:*	*Accounting Principal:*	*Head of the Accounting Department:*
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

PARENT COMPANY'S STATEMENT OF CHANGES IN OWNERS' EQUITY (Continued)

Sinopec Oilfield Service Corporation

For the Year Ended December 31, 2021 (Amounts are expressed in RMB' thousand unless otherwise stated)

Item	Prior period										
	Share capital	Other equity instruments: Preferred stock	Other equity instruments: Perpetual bonds	Other equity instruments: Others	Capital reserves	Less: treasury stock	Other comprehensive income	Special reserves	Surplus reserves	Undistributed profits	Total owners' equity
I. Balance at the end of the last year	18,984,340				14,564,824				200,383	-1,496,212	32,253,335
Plus: changes in accounting policies											
II. Balance at the beginning of the current year	18,984,340				14,564,824				200,383	-1,496,212	32,253,335
III. Increases/decreases in current year ("-" for decreases)					3,192					-19,875	-16,683
(I) Total comprehensive income										-19,875	-19,875
(II) Capital contributed or reduced by owners					3,192						3,192
1. Amounts of share-based payments recognized in owners' equity					3,192						3,192
(III) Profit distribution											
(IV) Internal carry-forward of owners' equity											
(V) Special reserves											
(VI) Others											
IV. Balance at the end of the current period	18,984,340				14,568,016				200,383	-1,516,087	32,236,652

The accompanying notes to the financial statements form an integral part of the financial statements.

Chairman:	General Manager:	Accounting Principal:	Head of the Accounting Department:
Xikun CHEN	*Jianqiang YUAN*	*Zhongyi CHENG*	*Yulong YANG*

Section X Financial Reports

NOTES TO THE FINANCIAL STATEMENTS

For the Year Ended December 31, 2021

(Amounts are expressed in RMB' thousand unless otherwise stated)

1 COMPANY PROFILE

1.1 Overview

Sinopec Oilfield Service Corporation (hereinafter referred to as the Company, including its subsidiaries referred to as the Group), formerly known as Sinopec Yizheng Chemical Fibre Company Limited, which was registered in the People's Republic of China ("PRC") and exclusively established by Yihua Group Corporation (hereinafter referred to as "Yihua") on December 31, 1993. The Company is headquartered at No. 22 Chaoyangmen North Street, Chaoyang District, Beijing.

The Company issued 1 billion H shares in March 1994, 200 million A shares in January 1995 and a further 400 million new H shares in April 1995. The Company's H shares, and new H shares were listed and commenced trading on the HKSE on March 29, 1994 and April 26, 1995 respectively. The Company's A shares were listed and commenced trading on the SSE on April 11, 1995.

Pursuant to the directives on the reorganization of certain companies involving the Company and Yihua as issued by the State Council and other government authorities of the PRC, China Eastern United Petrochemical (Group) Company Limited ("CEUPEC") became the largest shareholder of the Company on November 19, 1997, holding the 1,680,000,000 state-owned legal person shares (representing 42% of the Company's share capital issued) previously held by Yihua. CITIC Group Corporation ("CITIC", formerly "CITIC Group") continues to hold 720,000,000 A shares (representing 18% of the Company's share capital issued) it held prior to the reorganization, and the balance of 40% remains in public hands in the form of A shares and H shares, in total 1,600,000,000 shares.

Following the State Council's approval of the reorganization of China Petrochemical Corporation (hereinafter referred to as "Sinopec Group") on July 21, 1998, CEUPEC joined Sinopec Group. As a result of the reorganization, Yihua replaced CEUPEC as the holder of the 42% of the Company's share capital issued.

The reorganization of Sinopec Group was completed on February 25, 2000, and Sinopec Group set up a joint stock limited company, China Petroleum & Chemical Corporation (hereinafter referred to as "Sinopec Corp."), in the PRC. From that date, the 1,680,000,000 state-owned legal person shares (representing 42% of share capital issued by the Company), which were previously held by Yihua, were transferred to Sinopec Corp. and Sinopec Corp. became the largest shareholder of the Company.

On December 27, 2011, CITIC established CITIC Limited in PRC and a restructuring agreement was signed. Whereby 720,000,000 of the Company's non-public shares held by CITIC were transferred to CITIC Limited as part of its capital contributions on February 25, 2013, and CITIC Limited thus holds 18% of the Company's share capital.

Pursuant to the *Official Reply on A Share Reform Scheme of Sinopec Yizheng Chemical Fibre Company Limited* (GZCQ [2013] No. 442) issued by the State-owned Assets Supervision and Administration Commission ("SASAC") and the *Official Reply of the Ministry of Finance on A Share Reform Scheme of Sinopec Yizheng Chemical Fibre Company Limited* (CJH [2013] No. 61) issued by Ministry of Finance of the PRC, the Company implemented the A Share Reform in 2013, under which all non-circulating shareholders of the Company paid 5 shares for each 10 shares to the circulating A shares holders who were registered on August 16, 2013 (the registration date for share change, as agreed in the Share Reform Scheme). As a result, 100,000,000 shares were paid in total. After the payment, the shares held by Sinopec Corp. and CITIC Limited in the Company decreased from 42% and 18% to 40.25% and 17.25%, respectively. From August 22, 2013, the circulating right was granted to all enterprise legal person shares of the Company in the Shanghai Stock Exchange. However, in accordance with the agreed restricted conditions, 1,035,000,000 enterprise legal person shares held by CITIC Limited, the original non-circulating shareholder, were available for trading as at August 22, 2016. Pursuant to the resolutions of general meeting of shareholders of the Company, based on the total share capitals of H shares and A shares that were registered on November 13, 2013 and November 20, 2013, respectively, the Company added 5 shares per 10 shares from capital reserves, by which 700,000,000 H shares and 1,300,000,000 A shares were newly added and such transaction was completed on November 22, 2013.

Pursuant to the *Official Reply on Matters Concerning Assets Restructuring and Supporting Financing of Sinopec Yizheng Chemical Fibre Company Limited* (GZCQ [2014] No.1015) issued by the State-owned Assets Supervision and Administration Commission and the *Official Reply on the Material Asset Restructuring of Sinopec Yizheng Chemical Fibre Company Limited and the Issuance of Shares to China Petrochemical Corporation for Asset Acquisition and Supporting Fund Raising* (ZJXK [2014] No. 1370) issued by China Securities Regulatory Commission, the Company implemented the material asset restructuring in 2014, under which the Company sold all of its assets and liabilities (hereinafter referred to as the ''Assets Sold'') to repurchase and cancel the Company's equity held by Sinopec Corp., while it issued shares to Sinopec Group in order to acquire 100% of equity of Sinopec Oilfield Service Limited held by Sinopec Group (hereinafter referred to as the ''Assets Acquired'' or "SOSC", hereinafter collectively referred to as the "Material Asset Restructuring''). The Company executed the *Confirmation on Delivery of Assets Sold* with Sinopec Corp. and the *Confirmation on Delivery of Assets Acquired* with Sinopec Group on December 22, 2014, by which the Company delivered the Assets Sold to Sinopec Corp. and Sinopec Group delivered the Assets Acquired to the Company. On December 30, 2014, the Company repurchased 2,415,000,000 A shares from Sinopec Corp. for cancellation and issued 9,224,327,662 A shares to Sinopec Group as consideration. On February 13, 2015, the Company issued 1,333,333,333 A Shares to seven specific investors such as Darry Asset Management (Hangzhou) Co., Ltd.

As approved by the Official Reply on Approving Sinopec Oilfield Service Corporation to Make the Non-public Offering of Shares (ZJXK [2018] No. 142) issued by the China Securities Regulatory Commission, the Company made the non-public offering of 1,526,717,556 A shares to China Petrochemical Corporation and Changjiang Pension Insurance Co., Ltd. – Changjiang Shengshihuazhang Community Pension Management Product Portfolio 2 at a price of RMB2.62 per share; as approved by the Official Reply on Approving Sinopec Oilfield Service Corporation to Additionally Issue Overseas-listed Foreign Shares (ZJXK [2018] No. 130) issued by the China Securities Regulatory Commission, the Company made the non-public offering of 3,314,961,482 H shares to Sinopec Century Bright Capital Investment Limited and China Structural Reform Fund.

The business scope of the Group includes rendering of petroleum engineering technology services, such as geophysical exploration, drilling, logging and special downhole operations, for the production of onshore and offshore oil and natural gas, and contracting of domestic and overseas petroleum engineering, natural gas engineering, chemical engineering, bridge engineering, road engineering, housing construction engineering, water resources and hydropower engineering, municipal utility engineering, municipal public works, and industrial installation engineering.

The financial statements and the notes to the financial statements have been approved for issue by the 8th meeting of the 10th Board of Directors of the Company on March 29, 2022.

1 COMPANY PROFILE (Continued)

1.2 Scope of the consolidated financial statement

The consolidated financial statements of the Group cover the Company and its subsidiaries, see "Note 6 Changes in the scope of consolidation" and "Note 7 Equities in other entities" for details.

2 BASIS OF PREPARATION FOR THE FINANCIAL STATEMENTS

2.1 Basis of preparation

The Company prepares financial statements in accordance with the *Accounting Standards for Business Enterprises – Basic Standards* and all the specific accounting standards, Application Guidance to the Accounting Standards for Business Enterprises, the interpretation of the Accounting Standards for Business Enterprises and other relevant provisions (hereinafter referred to as the "Accounting Standards for Business Enterprises"), as well as the *Rules for the Compilation and Submission of Information Disclosure by Companies Offering Securities to the Public No. 15 – General Requirements for Financial Reports* issued by the China Securities Regulatory Commission.

2.2 Going Concern

The financial statements are prepared based on going concern.

As at December 31, 2021, the Group's accumulated loss amounted to RMB24,256,338,000, the current liabilities exceeded the current assets by about RMB23,272,730,000 (In 2020, the current liabilities exceeded the current assets by about RMB22,672,371,000), and the committed capital expenditure amounted to RMB74,473,000. Directors of the Company have made the assessment, by which the sufficient cash flows for operating activities are likely to generate in the future 12 months; as the Group's borrowings mainly come from Sinopec Group and its subsidiaries and the Group has maintained a long-term and good relationship with them, the Group is able to obtain adequate financial support from Sinopec Group and its subsidiaries. In December 2021, the Company obtained a credit line of RMB16 billion and an equivalence of USD593 million as well as a credit line of RMB11.8 billion for acceptance bill issuance from subsidiaries of Sinopec Group. Management and those charged with governance believe that these credit lines are sufficient to guarantee the Company's going-concern ability. The Company will broaden the channel for financing and develop good relationships with all listed and state-owned financial institutions to obtain the more sufficient credit line. As directors of the Group believe that the above-mentioned measures are enough to meet the Group's fund requirement for debts repayment and commitment, the Group prepared the financial statements for this reporting period on a going concern basis.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

Tips for specific accounting policies and accounting estimates:

The following disclosures have covered the specific accounting policies and accounting estimates formulated by the Company according to the characteristics of its actual production and operation. For more details, please see Note 3.14 Fixed assets, Note 3.17 Intangible assets, Note 3.19 Long-term deferred expenses and Note 3.24 Revenue.

3.1 Statement on compliance with the Accounting Standards for Business Enterprises

The financial statements meet the requirements of the Accounting Standards for Business Enterprises issued by the Ministry of Finance, and truly and completely reflect the consolidated and the parent company's financial position of the Company as at December 31, 2021, and the consolidated and the parent company's operating results and cash flows for the year ended.

3.2 Accounting period

The accounting year is from January 1 to December 31 in calendar year.

3.3 Operating cycle

The Company's operating cycle is 12 months.

3.4 Functional currency

RMB is the functional currency of the Company and its domestic subsidiaries. The currency used by the Group is RMB when preparing the financial statements.

The Company's subsidiaries, joint ventures and associates determine their functional currencies by themselves in accordance with the main economic environment in which they operate and convert the accounts into the amount in RMB upon preparation of financial statements.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.5 Accounting treatment methods for business combinations under common control and not under common control

Business combination under common control: for the assets and liabilities acquired from business combination by the combining party (including the goodwill formed by the acquisition by the final controller of the combinee), they are measured are measured at book value of assets and liabilities in the consolidated financial statements of the final controller on the combination date. The share premium in capital reserves is adjusted according to the difference between the book value of net assets acquired through combination and the book value of consideration paid for the combination (or total par value of shares issued). If the share premium in capital reserves is insufficient to cover the difference, the remaining amount will be charged against retained earnings.

Business combination not under common control: the combination costs are the fair value, on the acquisition date, of any assets acquired, any liabilities incurred or assumed, and any equity securities issued by the acquirer, in exchanges for the right of control over the acquiree. The Company shall recognize the difference of the combination costs in excess of the fair value of the identifiable net assets acquired from the acquiree as goodwill. The Company shall recognize the difference of the combination costs in short of the fair value of the identifiable net assets acquired from the acquiree in the current profit or loss. The identifiable assets, liabilities and contingent liabilities of the acquiree that are obtained by the acquirer from combination and conform to the recognition criteria shall be measured at the fair value on the acquisition date.

Direct relevant expenses arising from the business combination are included in the current profit or loss upon occurrence. Trading expenses on issuing equity securities or debt securities for the business combination are included in the initially recognized amount of the equity securities or the debt securities.

3.6 Preparation method of consolidated financial statements

3.6.1 Scope of consolidation

The scope of consolidation for the consolidated financial statements is determined based on control. The Company and all its subsidiaries are included in the scope of consolidation thereof. Control means the power owned over the investee by the Company which enjoys the variable return through participating in activities related to the investee and has the ability to affect the return by using the power over the investee.

3.6.2 Consolidation procedures

The Company treats the enterprise group as a whole accounting entity and prepares the consolidated financial statements with uniform accounting policies, to reflect the overall financial position, operating results and cash flows of the enterprise group. Effect of internal transactions between the Company and subsidiaries and among subsidiaries will be offset. If the internal transaction indicates that the relevant assets have impairment losses, the losses shall be fully recognized. Where accounting policies and accounting periods adopted by subsidiaries are inconsistent with those of the Company, necessary adjustments should be made according to the accounting policies and accounting periods of the Company when preparing the consolidated financial statements.

Subsidiary's owners' equity, net profit or loss and the share of comprehensive income in the current period attributable to minority shareholders will be separately listed under the owners' equity in the consolidated balance sheet, net profit in the consolidated income statement and total comprehensive income. If the current losses shared by the minority shareholder of a subsidiary exceed the balances arising from the shares enjoyed by the minority shareholder in the owners' equity of the subsidiary at the beginning of the period, minority equity will be written down accordingly.

(1) Increase of subsidiaries or business

During the reporting period, where the Company acquired subsidiaries or business from the business combination under common control, the operating results and cash flows of the newly acquired subsidiaries or business from the beginning of the period for business combination to the end of the reporting period are included in the consolidated financial statements; the beginning amount of the consolidated financial statements and relevant items in the comparative statements are adjusted accordingly, as if the reporting entity after the business combination exists as of the time when the ultimate controller has the control.

Where control can be exercised on the investee under common control for additional investment or other reasons, the equity investments held before the control over the combinee is obtained, the related gains and losses, other comprehensive income as well as other changes in net assets recognized from the later of the date when the original equity is obtained or the date when the combining party and the combined party are under the same control, to the combination date will respectively write down the retained earnings or current profit or loss in the comparative statements.

During the reporting period, the Company has acquired the subsidiaries or business from the business combination not under common control, they are included in the consolidated financial statements based on the fair values of various identifiable assets, liabilities and contingent liabilities recognized on the acquisition date.

Where the Company can control the investee not under common control for additional investments, it shall re-measure equity of the acquiree held before the acquisition date at the fair value of such equity on the acquisition date and include the difference between the fair value and book value in the current investment income. Other comprehensive income reclassified into profits or losses later and other changes in the owner's equity under the equity method involved in the equity of acquiree held by the Company before the purchase date shall be transferred to the current investment income for the purchase date.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.6 Preparation method of consolidated financial statements (Continued)

3.6.2 Consolidation procedures (Continued)

(2) Disposal of subsidiaries

① General method of disposal

For the remaining equity investments after the disposal, the Company will re-measure the same at the fair value on the date when it loses control over the investee due to disposal of partial equity investment or other reasons. The difference of total amount of the consideration from disposal of equities plus the fair value of the remaining equities less the shares calculated at the original shareholding ratio in net assets and goodwill of the original subsidiary which are continuously calculated as of the acquisition date or combination date is included in the investment income of the period at the loss of control. Other comprehensive incomes reclassified into profits or losses later and other changes in the owner's equity under the equity method, associated with the equity investments of the original subsidiary, are transferred into investment income of the period when control is lost.

② Disposal of subsidiaries by stages

If the control is lost due to disposal of the equity investments in subsidiaries through multiple transactions by stages, and the terms, conditions and economic impact of the transactions related to the disposal of equity investments in subsidiaries meet one or more of the following circumstances, it usually indicates that multiple transactions will be treated a package deal:

i. These transactions are concluded at the same time or under the consideration of mutual effect;

ii. These transactions as a whole can reach a complete business result;

iii. The occurrence of a transaction depends on that of at least one other transactions; and/or

iv. A single transaction is uneconomical but it is economical when considered together with other transactions.

Where various transactions belong to a package deal, accounting treatment shall be made by the Company on the transactions as a transaction to dispose subsidiaries and lose the control; the difference between each disposal cost and net asset share in the subsidiaries corresponding to each disposal of investments before loss of the control should be recognized as other comprehensive income in the consolidated financial statements and should be transferred into the current profit or loss at the loss of the control.

When these transactions belong to a package of transactions, before the control loses, the partial disposal of equity investments in subsidiaries without losing control shall be subject to the accounting treatments; at the loss of the control, accounting treatment shall be made according to general treatment methods for disposal of subsidiaries.

(3) Purchase of minority interest of subsidiaries

The share premium in the capital reserves under the consolidated balance sheet will be adjusted at the difference between the long-term equity investment acquired by the Company for the purchase of minority interest and the share of net assets calculated constantly from the acquisition date (or combination date) according to the newly increased shareholding ratio. If the share premium thereof is insufficient to offset, retained earnings will be adjusted.

(4) Partial disposal of equity investments in subsidiaries without losing control

The share premium in the capital reserves under the consolidated balance sheet will be adjusted at the difference between the disposal price and the share of net assets of subsidiaries calculated from the acquisition date or the combination date corresponding to the disposal of long-term equity investments; if the share premium thereof is insufficient, the retained earnings will be adjusted.

3.7 Classification of joint venture arrangements and accounting treatment methods of joint operation

Joint venture arrangements are classified into joint operation and joint venture.

Joint operation refers to joint arrangement where the joint venturer may have assets thereof and undertake liabilities thereof.

The Company confirms the following items relating to the interests share in joint operation:

(1) Assets it solely holds and its share of jointly-held assets based on its percentage;

(2) Liabilities it solely assumes and its share of jointly-assumed liabilities based on its percentage;

(3) Revenue from sale of output enjoyed by it from the joint operation;

(4) Revenue from sale of output from the joint operation based on its percentage; and

(5) Separate costs and costs for the joint operation based on its percentage.

See Note 3.13 Long-term equity investments for the Company's investment in joint ventures accounted for under the equity method.

3.8 Recognition criteria of cash and cash equivalents

Cash refers to the Company's cash on hand and the unrestricted deposits. Cash equivalents refer to short-term and highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.9 Foreign currency transactions and translation of foreign currency statements

3.9.1 Foreign currency transactions

Foreign currency transactions shall be translated at the exchange rate similar to the spot exchange rate on the transaction date determined in accordance with the systematic and reasonable method.

The balance of foreign currency monetary items as at the balance sheet date are translated at the spot exchange rate on the balance sheet date and the exchange differences arising therefrom shall be included in the current profit or loss, except those exchange differences arising from the special borrowings of foreign currency related to the acquired and constructed assets qualified for capitalization that will be capitalized at the borrowing expenses.

3.9.2 Translation of foreign currency financial statements

Assets and liabilities in the balance sheet shall be translated at the spot exchange rates on balance sheet date; owners' equity items, except for the item of "undistributed profits", shall be translated at the spot exchange rates on the dates when the transactions occur. Revenue and expense items in the income statement shall be translated at the exchange rate similar to the spot exchange rate on the transaction date determined in accordance with the systematic and reasonable method.

Where the Company disposes of an overseas business, it shall transfer the exchange difference relating to the business disposed of from the owners' equity to the current profit or loss.

3.10 Financial instruments

When the Company becomes a party to a financial instrument, it shall recognize a financial asset or financial liability.

3.10.1 Classification of financial instruments

According to the business model of financial assets and contractual cash flow characteristics of the same, which are subject to the management of the Company, financial assets are classified at the initial recognition as: financial assets measured at the amortized cost, financial assets measured at fair value through other comprehensive income and financial assets measured at fair value through the current profit or loss.

Financial assets not designated to be measured at fair value through the current profit or loss in line with the following conditions will be reclassified into the financial assets measured at amortized cost:

– Where the business model is to collect contractual cash flows; and

– Where the contractual cash flow that is only used for the payment for the principal and the interest based on the outstanding principal amount.

Financial assets that meet both the following conditions and have not been designated as financial assets measured at fair value through current profit or loss will be classified as financial assets (debt instruments) measured at fair value through other comprehensive income:

– The business model aims at gathering the contractual cash flow and selling such financial assets; and

– Where the contractual cash flow that is only used for the payment for the principal and the interest based on the outstanding principal amount.

At the initial recognition, the Company irrevocably designates the non-trading equity instrument investments as financial assets (equity instruments) measured at fair value through the other comprehensive income. The designation is made based on a single investment and the relevant investment is in line with the definition of the equity instrument from the issuer's perspective.

Except for the financial assets measured at amortized cost and the financial assets measured at fair value through other comprehensive income mentioned above, all the remaining financial assets are classified as financial assets measured at fair value through the current profit or loss. At the initial recognition, in order to eliminate or obviously reduce accounting mismatch, the Company may irrevocably designates the financial assets that shall be classified to be measured at amortized cost or measured at fair value through other comprehensive income as financial assets measured at fair value through the current profit or loss.

At the initial recognition, financial liabilities are classified as: financial liabilities measured at fair value through the current profit or loss and financial liabilities measured at the amortized cost.

At the initial recognition, financial liabilities meeting one of the following conditions can be designated as the financial liabilities measured at fair value through the current profit or loss:

1) This designation can eliminate or significantly reduce the accounting mismatch.

2) Management and performance evaluation of the financial liability portfolio or portfolio of financial assets and financial liabilities on a fair value basis in accordance with the enterprise risk management or investment strategy as set out in a formal written document, and reporting to key officers on this basis within the Company.

3) The financial liabilities contain embedded derivative needed to be separated.

The financial guarantee contract other than the financial liability designated to be measured at the fair value through the current profit or loss are measured at initial recognition but be subsequently measured at the higher of the loss reserves of estimated liabilities determined under the expected credit loss model and initially recognized amount less accumulated amortization.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.2 Recognition basis and measurement methods of financial instruments

(1) Financial assets measured at amortized cost

Financial assets measured at amortized cost include notes receivable and accounts receivable, other receivables, long-term receivables, and creditors' investment, etc., of which initial measurement is made at fair value, and relevant transaction costs are included in the initially recognized amount; exclude accounts receivable with significant financing component and accounts receivable with the financing component not exceeding one year and not considered by the Company, of which initial measurement is made at the contractual transaction price.

During the holding period, the interest calculated under the effective interest method is included in the current profit or loss.

At recovery or disposal, the difference between the purchase price obtained and the book value of such financial assets is included in the current profit or loss.

(2) Financial assets (debt instruments) measured at fair value through other comprehensive income

Financial assets (debt instruments) measured at fair value through other comprehensive income include receivables financing and other creditors' investment, of which initial measurement is made at fair value, and relevant transaction costs are included in the initially recognized amount. The subsequent measurement of such financial assets is made at fair value. Changes in fair value are included in other comprehensive income except for interest, impairment losses or gains and exchange gains or losses calculated under the effective interest method.

At derecognition, the accumulated gains or losses previously included in other comprehensive income will be transferred from other comprehensive income to the current profit or loss.

(3) Financial assets (equity instruments) measured at fair value through other comprehensive income

Financial assets (equity instruments) measured at fair value through other comprehensive income include other equity instrument investment, and are initially measured at fair value. Relevant transaction costs are included in the initially recognized amount. The subsequent measurement of such financial assets is made at fair value, and the changes in fair value are included in other comprehensive income. Dividends obtained are included in the current profit or loss.

At derecognition, the accumulated gains or losses previously included in other comprehensive income will be transferred from the other comprehensive income to the retained earnings.

(4) Financial assets measured at fair value through the current profit or loss

Financial assets measured at fair value through the current profit or loss include the financial assets held for trading, derivative financial assets and other non-current financial assets, etc., of which initial measurement is made at fair value, and relevant transaction costs are included in the current profit or loss. The subsequent measurement of such financial assets is made at fair value, and changes in fair value are included in the current profit or loss.

(5) Financial liabilities measured at fair value through the current profit or loss

Financial liabilities measured at fair value through the current profit or loss include the financial liabilities held for trading and derivative financial liabilities, of which initial measurement is made at fair value, and relevant transaction costs are included in the current profit or loss. The subsequent measurement of such financial liabilities is made at fair value, and changes in fair value are included in the current profit or loss.

At derecognition, the difference between the book value and the consideration paid of such financial liabilities is included in the current profit or loss.

(6) Financial liabilities measured at amortized cost

Financial liabilities measured at the amortized cost include short-term borrowings, notes payable and accounts payable, other payables, long-term borrowings, bonds payable and long-term payables, of which initial measurement is made at fair value, and related transaction costs are included in the initially recognized amount.

During the holding period, the interest calculated under the effective interest method is included in the current profit or loss.

At derecognition, the difference between the consideration paid and the book value of such financial liabilities is included in the current profit or loss.

3.10.3 Derecognition and transfer of financial assets

Where one of the following conditions is met, the Company shall derecognize financial assets:

– The contractual right of collecting cash flows of financial assets is terminated;

– The financial assets have been transferred, and nearly all of the risks and rewards related to the ownership of the financial assets have been transferred to the transferee;

– The financial assets have been transferred, and the Company does not retain the control over the financial assets through it has neither transferred nor retained nearly all risks and rewards related to the ownership of the financial assets.

In case of transfer of financial assets, the Company shall not derecognize the financial asset if nearly all the risks and rewards associated with the ownership of the financial assets are retained.

When determining whether the transfer of a financial asset meets the above derecognition criteria of financial assets, the Company adopts the principle of substance over form.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.3 Derecognition and transfer of financial assets (Continued)

The Company divides the transfer of financial assets into overall transfer and partial transfer. Where the entire transfer of financial assets meets the derecognition conditions, the difference of the following two amounts shall be included in the current profit or loss:

(1) The book value of the transferred financial asset;

(2) The sum of consideration received from the transfer, and the accumulated change amount of fair value originally recorded in owners' equity (the financial assets involved in the transfer are financial assets (debt instruments) measured at fair value through the other comprehensive income).

Where the partial transfer of a financial asset meets the derecognition criteria, the entire book value of the financial asset transferred shall be allocated between the derecognized part and the recognized part based on the relative fair value, and the difference between the following two amounts shall be included in the current profit or loss:

(1) The book value of the derecognized part;

(2) The sum of the consideration for the derecognized part and the amount corresponding to the derecognized part in the accumulated change amount of fair value originally and directly included in owners' equity (where the financial assets transferred are the financial assets (debt instruments) measured at fair value through other comprehensive income).

Where the transfer of financial assets does not meet the derecognition criteria, the financial assets shall continue to be recognized, and the consideration received shall be recognized as a financial liability.

3.10.4 Derecognition of financial liabilities

Where the present obligations of a financial liability are wholly or partly dissolved, such financial liability or part thereof will be derecognized. Where the Company enters into an agreement with a creditor so as to substitute the existing financial liability with any new financial liability, and the new financial liability is substantially different from the existing one in terms of contractual terms, it shall derecognize the existing financial liability, and shall at the same time recognize new financial liability.

Where substantive changes are made to the contract terms of existing financial liabilities in whole or in part, the existing financial liabilities shall be derecognized in whole or in part, and the financial liabilities of which terms have been modified shall be recognized as the new financial liabilities.

Where financial liabilities are derecognized is whole or in part, the difference between the book value of the financial liabilities derecognized and the consideration paid (including non-cash assets surrendered and the new financial liabilities assumed) shall be included in the current profit or loss.

Where the Company redeems part of its financial liabilities, it shall, on the redemption date, allocate the entire book value of whole financial liabilities according to the comparative fair value of the part that continues to be recognized and the derecognized part. The difference between the book value allocated to the derecognized part and the considerations paid (including non-cash assets surrendered and the new financial liabilities assumed) shall be included in the current profit or loss.

3.10.5 Method of determining the fair value of financial assets and financial liabilities

The fair value of a financial instrument having an active market is determined on the basis of quoted prices in the active market. Where there is no active market, the fair value of the same shall be determined by using valuation techniques. At the time of valuation, the Company shall adopt the valuation technique that is applicable to the current circumstance and is supported by sufficient available data and other information to select the input values consistent with the assets or liabilities characteristics that are taken into account by market participants in transactions of relevant assets and liabilities and shall give goals priority in use of observable input values. And the unobservable input values may be used only when the observable input values are unable or unpractical to be obtained.

3.10.6 Test method and accounting treatment of depreciation of financial assets

The Company estimates the expected credit losses of financial assets measured at amortized cost, financial assets (debt instruments) measured at fair value through other comprehensive income and financial guarantee contracts in a single or combined manner.

The Company recognizes expected credit losses by calculating the probability-weighted amount of the present value of the difference between the cash flows receivable under the contract and the cash flows expected to be received, considering reasonable and substantiated information about past events, current conditions and forecasts of future economic conditions, weighted by the risk of default.

If the credit risk of the financial instrument has increased significantly since the initial recognition, the Company measures its loss provision at the expected credit losses for the whole duration of the financial instrument; if the credit risk of the financial instrument has not significantly increased since the initial recognition, the Company measures its loss provision at the expected credit losses of the financial instrument within the next 12 months. Amount increased or reversed of provision for loss arising therefrom will be included in the current profit or loss as impairment loss or gain.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Test method and accounting treatment of depreciation of financial assets (Continued)

The Company determines the relative change of default risk of the financial instrument during the expected duration by comparing the risk of default of the financial instrument on the balance sheet date with the risk of default on the initial recognition date to assess whether there is a significant increase in the credit risk of the financial instrument from initial recognition. Generally, the Company believes that the credit risk of the financial instrument has significantly increased over 30 days after the due date, unless there is solid evidence that the credit risk of the financial instrument has not increased significantly since initial recognition.

The Group believes that financial assets are subject to default in the following circumstances:

(1) It is unlikely that the borrower will pay in full the amount it owes to the Group and the assessment does not consider the recourse actions by the Group such as realization of collateral (if held); or

(2) Where the financial assets were overdue for more than 90 days.

If the credit risk of the financial instrument is low on the balance sheet date, the Company will immediately consider that there is no obvious increase in credit risk of such financial instrument following the initial recognition.

If there is objective evidence that any financial asset has had credit impairment, the Company will make the provision for impairment for such financial asset individually.

For accounts receivable and contract assets formed by the transaction in the *Accounting Standard for Business Enterprises No. 14 – Revenue* (2017), regardless of whether there is a significant financing component, the Company always measures their provision for loss according to the amount of expected credit losses for the entire duration.

For accounts receivable, the Company always measures their provision for loss according to the amount of expected credit losses for the entire duration.

When individual financial assets cannot assess the expected credit loss at a reasonable cost, the Group divides the notes receivable and accounts receivable into several portfolios based on the credit risk characteristics and calculates the expected credit losses on a portfolio basis. The basis for determining the portfolios is as follows:

A. Notes receivable

☐ Notes receivable portfolio 1: bank acceptance bill

☐ Notes receivable portfolio 2: commercial acceptance bill

B. Accounts receivable

☐ Accounts receivable portfolio 1: receivable from related parties

☐ Accounts receivable portfolio 2: receivable from other clients

The Group classifies the contract assets into portfolios based on the credit risk characteristics and calculates the expected credit losses on a portfolio basis. The basis for determining the portfolio is as follows:

☐ Contract assets portfolio 1: engineering service

☐ Contract assets portfolio 2: others

For the notes receivable and contract assets classified into a portfolio, the Group, by referring to the historical credit loss experience and in combination with the current situation and the forecast of future economic conditions, calculates the expected credit losses through risk exposure at default and the expected credit loss rate for the entire duration.

For the accounts receivable classified into a portfolio, the Group, by referring to the historical credit loss experience and in combination with the current situation and the forecast of future economic conditions, prepares a comparison table of the aging of accounts receivable and the expected credit loss rate for the entire duration to calculate expected credit losses.

The Group classifies other receivables into several portfolios based on the credit risk characteristics and calculates the expected credit losses on a portfolio basis. The basis for determining the portfolio is as follows:

☐ Other receivables portfolio 1: reserve funds

☐ Other receivables portfolio 2: deposits or security deposits receivable

☐ Other receivables portfolio 3: other receivables

For other receivables classified as a portfolio, the Group calculates the expected credit loss through the default risk exposure and the expected credit loss rate over the next 12 months or the entire duration.

For creditor's right investment and other creditor's right investment, the Group calculates the expected credit loss according to the nature of the investment, various types of counterparties and risk exposures, through default risk exposure and expected credit loss rate in the next 12 months or the entire duration.

If the Company no longer reasonably expects that the contractual cash flow of the financial asset can be fully or partially recovered, the book balance of the financial asset will be directly written down.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.11 Inventories

3.11.1 Classification and cost of inventories

Inventories are classified as raw materials, goods in progress, stock commodities, revolving materials and contract performance costs, etc..

Inventories are initially measured at cost, and the inventory cost includes the procurement cost, processing cost and other expenses arising from making the inventory at their present location and condition.

3.11.2 Measurement method of dispatched inventories

Inventories of the Group are measured at actual costs when acquired. Raw materials, stock commodities and others are measured by using the weighted average method upon outward delivery.

3.11.3 Recognition basis of net realizable value of different types of inventories

On the balance sheet date, inventories shall be measured at the cost or the net realizable value, whichever is lower. Where the inventory costs are higher than the net realizable values, the provision for inventory depreciation reserves shall be made. During routine activities, net realizable values of inventories refer to the amounts of the estimated selling prices of inventories minus the estimated costs to completion, estimated selling expenses and relevant taxes and surcharges. For inventories held to execute sales contract or service contract, their net realizable values are calculated on the basis of contract price.

After the provisions for the inventory depreciation are made, the factors causing any write-down of inventory value have disappeared, leading to the net realizable values of inventories higher than its book value, the amount of write-down shall be resumed and be reversed from the original provision for inventory devaluation with the reversal being included in the current profit or loss.

3.11.4 Inventory system

The perpetual inventory system is adopted.

3.11.5 Amortization method for low-cost consumables

Low-cost consumables are amortized at lump-sum method.

3.12 Contract assets

3.12.1 Recognition method and criteria for contract assets

The Company presents contract assets or contract liabilities in the balance sheet based on the relationship between its performance of fulfillment obligations and customer payments. The right of the Company to the charge of consideration via goods transfer or service rendering to the customer (and the right depends on other factors except for the time lapses) shall be presented as contractual asset. Contractual assets and contractual liabilities under the same contract shall be presented at net amount. The unconditional (only depending on the time lapses) right to the charge of consideration from the customer, possessed by the Company, is presented as receivables.

3.12.2 Determination method and accounting treatment for the expected credit loss of contract assets

See “3.10.6 Test method and accounting treatment for the impairment of financial assets”, for the determination method and accounting treatment for the expected credit loss of contract assets.

3.13 Long-term equity investments

3.13.1 Judgment criteria for joint control and significant influence

Joint control refers to the control shared over an arrangement in accordance with the relevant stipulations, and the decision-making of related activities of the arrangement should not be made before the party sharing the control right agrees the same. Where the Company exercises common control over the investee together with other parties to the joint venture, and enjoys the right on the investee’s net assets, the investee shall be a joint venture of the Company.

Significant influence refers to the power to participate in making decisions on the financial and operating policies of the investee, but not the power to control, or jointly control, the formulation of such policies with other parties. Where the Company is able to exert significant influence over the investee, the investee is its associate.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.13 Long-term equity investments (Continued)

3.13.2 Determination of initial investment costs

(1) Long-term equity investments acquired through business combination

For long-term equity investments in subsidiaries acquired from business combinations under common control, the initial investment cost thereof shall be recognized at the share of book value of the owner's equity of the combinee in the consolidated financial statements of the ultimate controller on the acquisition date. The share premium in the capital reserve is adjusted according to the difference between the initial investment cost of long-term equity investment and the book value of the consideration paid; if there is no sufficient share premium in the capital reserve for write-downs, the retained earnings are adjusted. If it is available to exercise control over an investee under the common control due to additional investment, etc., the difference between the initial investment cost of the long-term equity investment recognized in accordance with the above principle and the sum of the book value of the long-term equity investment before reaching combination date plus the book value of the new consideration paid for further acquisition of shares at the date of combination shall be used to adjust the stock premium; and if the share premium is insufficient to be offset, retained earnings will be offset.

For long-term equity investments in subsidiaries acquired from business combinations not under common control, the initial investment cost thereof shall be recognized at the combination costs determined on the acquisition date. Where the Company can control the investee not under common control due to additional investments or other reasons, the initial investment cost should be the sum of the book value of equity investments originally held and newly increased investment cost.

(2) For long-term equity investments obtained by means other than business combination

For long-term equity investments acquired through making payments in cash, its initial investment cost is the actually paid purchase cost.

For long-term equity investments acquired from issuance of equity securities, its initial investment cost is the fair value of the issued equity securities.

3.13.3 Subsequent measurements and recognition of profit or loss

(1) Long-term equity investments accounted for under the cost method

Long-term equity investments of the Company in its subsidiaries are accounted for under the cost method, unless those investments satisfy the conditions of holding for sale. Under the cost method, except for the actual price paid for acquisition of investment or the cash dividends or profits contained in the consideration which have been declared but not yet distributed, the Company recognizes the proportion it shall enjoy in the cash dividends or profits declared by the investee as its investment income.

(2) Long-term equity investments accounted for under equity method

Long-term equity investments of the Company in associates and joint ventures are accounted for by the equity method. If the initial investment cost is in excess of the share of fair value of the net identifiable assets in the investee when the investment is made, the difference will not be adjusted to the initial cost of long-term equity investment; if the initial investment cost is in short of the share of the fair value of the net identifiable assets in the investee when the investment is made, the difference will be included in the current profit or loss, and will be adjusted to the initial cost of long-term equity investment.

The Company shall, based on its attributable share of the net profit or loss and other comprehensive income realized by the investee, respectively recognize the investment income and other comprehensive income, and simultaneously adjust the book value of the long-term equity investment. The Company shall, in the light of the profits or cash dividends that the investee declares to distribute, reduce the book value of the long-term equity investment correspondingly. As to other changes in owners' equity of the investee other than net profit or loss, other comprehensive income and profit distribution (hereinafter referred to as "Other Changes in Owners' Equity"), the Company shall adjust the book value of the long-term equity investment and include such change in the owners' equity.

The Company shall, based on the fair value of net identifiable assets of the investee when the investment is made, recognize its attributable share of the net profits or losses, other comprehensive income and other changes in owners' equity of the investee after the adjustment made to the net profit and other comprehensive income of the investee according to the accounting policies and accounting period adopted by the Company.

The Company calculates its attributable but not realized profit or loss from internal transactions between the Company and its associates or joint ventures based on its attributable percentage and offset such profit or loss, and recognizes the investment income on that basis; however, businesses formed by assets invested or sold are excluded. Unrealized losses from internal transactions between the Company and any investee shall be recognized in full if they belong to the losses from asset impairment.

For net losses on joint ventures or associates, apart from the obligation of assuming the extra loss, the Company shall write down such losses with the book value of long-term equity investments and the long-term equity where net investments in joint ventures or associates have been formed substantially; and the maximum of such losses shall be the sum of the book value and long-term equity mentioned above. Where any joint venture or associate realize net profit in the future, the Company shall recognize the income sharing amount when the unrecognized loss sharing amount is offset with the income sharing amount.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.13 Long-term equity investments (Continued)

3.13.3 Subsequent measurements and recognition of profit or loss (Continued)

(3) Disposal of long-term equity investments

For the disposal of long-term equity investments, the difference between the book value and the actual purchase price is included in the current profit or loss.

For long-term equity investments with partial disposal accounting by the equity method, where the remaining equity is still accounted for by the equity method, other comprehensive income recognized originally upon the accounting by the equity method shall be carried forward at the corresponding proportion on the basis same with that for the direct disposal of relevant assets or liabilities by the investee, and other changes in owners' equity shall be carried forward to the current profit or loss in proportion.

Where the Company loses the common control over or significant influence on the investee on account of the disposal of equity investment and any other reason, when the accounting by the equity method is terminated, other comprehensive income recognized upon the accounting by the equity method from the original equity investment shall be subject to the accounting treatment which is made on the basis same with that for the direct disposal of relevant assets or liabilities by the investee, and other changes in owners' equity shall be transferred to the current profit or loss in full.

Where the Company loses the control over the investee on account of the disposal of partial equity and any other reason, at the preparation of any single financial statements, if the remaining equity has the common control over or significant influence on the investee, the accounting shall be made by the equity method, and an adjustment shall be made as if the remaining equity was accounted for by the equity method at acquisition; other comprehensive income recognized before the control over the investee is obtained shall be carried forward on the basis same with that for the direct disposal of relevant assets or liabilities by the investee, and other changes in owners' equity recognized on account of the accounting by the equity method shall be carried forward to the current profit or loss in proportion; if the remaining equity has no common control over or significant influence on the investee, relevant financial assets shall be recognized, the difference between the fair value on the day of losing control of such remaining equity and the book value of the same shall be included in the current profit or loss, and other comprehensive income and other changes in owners' equity which have been recognized before the control over the investee is obtained shall be carried forward in full.

Where the disposal of subsidiaries' equity investments till the loss of control by stages through multiple transactions belongs to a package deal, the accounting treatment shall be made by taking each transaction as the transaction where the subsidiaries' equity investments are disposed and the corresponding control is lost; before the loss of control, the difference between the disposal price and the book value of the long-term equity investment corresponding to the equity disposed shall be firstly recognized as other comprehensive income in the individual financial statements, and at the loss of control, all transferred to the profit or loss for the period when the control is lost. Where the aforesaid disposal does not belong to a package deal, the accounting treatment shall be made respectively for each transaction.

3.14 Fixed assets

3.14.1 Recognition and initial measurement of fixed assets

Fixed assets are tangible assets that are held for the purpose of producing goods, providing services, leasing or operating management, and having a life span of more than one fiscal year. Fixed assets are recognized when they simultaneously meet the following conditions:

(1) It is probable that the economic benefits relating to the fixed assets will flow into the Company; and

(2) The costs of the fixed assets can be measured reliably.

The initial measurement of fixed assets is made at cost (and by taking the impact of expected disposal costs).

The subsequent expenditures relating to fixed assets are included in the costs of fixed assets when relevant economic benefits are likely to flow in the Company and their costs can be measured reliably; as for the party replaced, the book value thereof is derecognized; all other subsequent expenditures are included in the current profit or loss when they occur.

3.14.2 Depreciation method

Depreciation of the fixed assets is made on a category basis using the straight-line method. The depreciation rates are determined according to the categories, estimated useful lives and estimated net residual rates of fixed assets. For fixed assets where the provision for impairment has been made, the depreciation amount in the future will be determined at the book value of the fixed assets where the provision for impairment has been deducted, based on the remaining useful life. Where the fixed assets have the components with different useful lives or bring economic benefits for the enterprise in different ways, then the Company should choose different depreciation rates or methods to separately make the provision for depreciation.

The depreciation methods, depreciation years, residual value rates and annual depreciation rates of fixed assets are presented by categories as follows:

Category	Depreciation method	Depreciation life (year)	Residual value rate (%)	Annual depreciation rate (%)
Buildings and constructions	Straight-line method	12-50	3	8.08-1.94
Machinery equipment and others	Straight-line method	4-30	3	24.25-3.23

Specifically, for fixed assets of which provision for impairment has been made, the depreciation rate shall be determined based on the fixed assets deducting the accumulated amount of provision for impairment withdrawn.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.14 Fixed assets (Continued)

3.14.3 Disposal of fixed assets

When the fixed assets are disposed, or they are expected not to bring any economic interest via use or disposal, such fixed assets will be derecognized. When the fixed asset is sold, transferred, scrapped or damaged, the Company will include such disposal revenue, deducting the book value and related taxes and surcharges thereof, in the current profit or loss.

3.15 Construction in progress

Construction in progress is measured at the actual cost incurred. The actual costs includes building costs, installation costs, borrowing costs eligible for capitalization and other necessary expenditures before making the construction in progress achieve the working condition for its intended use. Constructions in progress are transferred to fixed assets when they reach the condition for its intended use, and the provision of depreciation will be provided since the next month.

3.16 Borrowing costs

3.16.1 Recognition criteria of capitalization of borrowing costs

The borrowing costs incurred to the Company and directly attributable to the acquisition and construction or production of assets eligible for capitalization should be capitalized and recorded into relevant asset costs; other borrowing costs should be recognized as costs according to the amount incurred and be included into the current profit or loss.

Assets eligible for capitalization refer to fixed assets, investment properties, inventories and other assets which may reach their intended use or sale status only after long-time acquisition and construction or production activities.

3.16.2 Capitalization period for borrowing costs

Capitalization period refers to the period from the beginning of capitalization to the cease of capitalization, excluding the period of capitalization suspension of borrowing costs.

Capitalization shall start when the following conditions are satisfied simultaneously:

(1) Asset expenditures, which include those incurred by cash payment, the transfer of non-cash assets or the undertaking of interest-bearing debts for acquiring and constructing or producing assets eligible for capitalization, have already been incurred;

(2) Borrowing costs have already been incurred; and

(3) The acquisition and construction or production activities which are necessary to prepare the assets for their intended use or sale have been in progress.

Capitalization of borrowing costs should be ceased when the acquired and constructed or produced assets eligible for capitalization have reached their intended use or sale status.

3.16.3 Period of capitalization suspension

If the acquisition and construction or production activities of assets eligible for capitalization are abnormally interrupted and such condition lasts for more than three months, the capitalization of borrowing costs should be suspended; if the interruption is necessary procedures for the acquired, the constructed or produced assets eligible for capitalization to reach the working conditions for its intended use or sale, the borrowing costs continue to be capitalized. Borrowing costs incurred during the interruption are recognized as the current profit or loss and continue to be capitalized until the acquisition, construction or production of the assets restarts.

3.16.4 Measurement of capitalization rate and capitalized amounts of borrowing costs

As for special borrowings borrowed for acquiring and constructing or producing assets eligible for capitalization, borrowing costs of special borrowing actually incurred in the current period less the interest income of the borrowings unused and deposited in bank or return on temporary investment should be recognized as the capitalization amount of borrowing costs.

As for general borrowings used for acquiring and constructing or producing assets eligible for capitalization, the interest of general borrowings to be capitalized should be calculated by multiplying the weighted average of asset disbursements of the part of accumulated asset disbursements exceeding special borrowings by the capitalization rate of used general borrowings. The capitalization rate is calculated by weighted average actual interest rate of general borrowings.

During the capitalization period, the exchange difference between the principal and interest of special loans in foreign currency is capitalized and included in the cost of assets that meet the capitalization conditions. Exchange differences arising from the principal and interest of foreign currency loans other than special loans in foreign currency are included in the current profit or loss.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.17 Intangible assets

3.17.1 Measurement method of intangible assets

(1) The Company initially measures intangible assets at cost on acquisition;

The costs of externally purchased intangible assets include purchase prices, relevant taxes and surcharges and other directly attributable expenditures incurred to prepare the assets for their intended uses.

(2) Subsequent measurement

The useful lives of the intangible assets are analyzed and determined on their acquisition.

Intangible assets with definite useful lives are amortized over the period during which they can bring economic benefits to an enterprise; if the period during which intangible assets can bring economic benefits to the enterprise cannot be predicted, the intangible assets will be deemed as intangible assets with indefinite useful lives and will not be amortized.

3.17.2 Estimate of useful lives for intangible assets with definite useful lives

Item	Estimated useful life	Amortization method	Note
Land use right	50 years	Straight-line method	
Software	5 years	Straight-line method	
Patent use right	10 years	Straight-line method	
Right to use technologies	10 years	Straight-line method	
Contract usufruct	/	Output method	

3.17.3 Specific criteria for classifying research and development stages

The Company's expenses for its internal research and development projects are classified into research expenses and development expenses.

Research phase: Research phase is the stage when creative and planned investigation and research activities are conducted to acquire and understand new scientific or technological knowledge.

Development phase: Development phase is the stage when the research achievements and other knowledge are applied to a plan or design, prior to the commercial production or use, to produce any new or substantially improved material, device or product.

The research and development projects of the Group enter the development stage after the technical feasibility and economic feasibility studies and project establishment.

3.17.4 Specific criteria for qualifying expenditure on the development phase for capitalization

Expenditures at the research phase should be included in the current profit or loss when they are incurred. Expenditures in the development stage that meet the following conditions at the same time shall be recognized as intangible assets, and those expenditures that fail to meet the following conditions shall be included in the current profit or loss:

(1) In respect of the technology, it is feasible to finish the intangible asset for use or sale;

(2) It is intended to finish and use or sell the intangible assets;

(3) The ways how the intangible assets generate economic benefits include the way where it is able to prove that the products made by using the intangible assets exist a market or that the intangible assets themselves have the market, and the way where the serviceability of the intangible assets can be proved in case they are used internally;

(4) It is able to finish the development of the intangible assets and to use or sell the same with the support of sufficient technologies, financial resources and other resources; and

(5) The expenditure attributable to the intangible assets during its development phase can be measured reliably.

Where the research expenditures and the development expenditures are indistinguishable, the Company shall include research expenditures and development expenditures incurred in THE current profit or loss.

3.18 Impairment of long-term assets

Where there are indications of impairment on long-term equity investments, fixed assets, construction in progress, right-of-use assets and intangible assets with definite useful lives and other long-term assets on the balance sheet date, the impairment test should be made. If the result of the impairment test shows that the recoverable amount of the asset is lower than its book value, the provision for impairment shall be made and included in impairment loss. The recoverable amount of the asset is the higher of the net amount of its fair value less disposal expenses or the present value of its estimated future cash flows. Provision for assets impairment is made on individual asset basis. If it is difficult to estimate the recoverable amount of the individual asset, the Company shall estimate the recoverable amount of the asset group that the individual asset belongs to. Asset group is the smallest asset group that can independently generate cash inflows.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.18 Impairment of long-term assets (Continued)

Impairment tests for goodwill formed through business combination, intangible assets with uncertain useful lives and intangible assets not reaching serviceable condition shall be conducted every year, whether there are any sign of impairment or not.

The Company conducts an impairment test for the goodwill. The book value of goodwill arising from business combinations is amortized to relevant asset groups with a reasonable method since the date of acquisition; or amortized to relevant combination of asset groups if it is difficult to be amortized to relevant asset groups. Relevant asset group or portfolio of asset groups refers to the asset group or portfolio of asset groups which is able to benefit from the synergistic effect of business combination.

When making an impairment test on the relevant asset groups or combination of asset groups containing goodwill, if any indication shows that the asset groups or combinations of asset groups related to the goodwill may be impaired, the Company shall first conduct an impairment test on the asset groups or combinations of asset groups not containing goodwill, calculate the recoverable amount and compare it with the relevant book value to recognize the corresponding impairment loss. Then, the Company shall test the impairment of the asset group or portfolio of asset groups with goodwill, and compare the book value thereof with said recoverable amount; if the said recoverable amount is lower than the book value thereof, the amount of impairment losses should be firstly used to deduct book value of goodwill allocated to the asset group or the portfolio of asset group, and then deduct book value of other assets according to the proportion of the book value of other assets other than the goodwill in the asset group or the portfolio of asset group.

The above losses from asset impairment shall not be reversed in subsequent accounting periods once recognized.

3.19 Long-term deferred expenses

The Group's long-term deferred expenses mainly include oil construction specific drilling equipment, logging equipment, cables and catalyst and evenly amortized on straight-line basis over the expected beneficial period or over operation capacity. If an item of long-term deferred expense cannot bring any benefit in future accounting periods, the amortized value thereof shall all be transferred to the current profit or loss.

3.20 Contract liabilities

According to the relationship between the performance of obligations and the customer payment, the Company presents contract assets or contract liabilities in the balance sheet. The obligation of transferring goods or providing services to customers for the consideration received or receivable from customers shall be presented as contract liabilities. Contract assets and contract liabilities under the same contract shall be presented at net amount.

3.21 Employee compensation

3.21.1 Accounting treatment of short-term compensation

During the accounting period when employees serve the Company, the actual short-term compensation is recognized as liabilities and included in the current profit or loss or costs associated with assets.

The social insurance premiums and the housing provident fund paid by the Company for its employees, together with the labor union expenditures and employee education fund drew as required are used to calculate and determine the relevant employee compensation amount based on the prescribed accrual basis and accrual proportion during the accounting period in which the employees provide services to the Company.

The employee welfare expenses incurred by the Company are included in the current profit or loss or related asset costs based on the actual amount when they actually occur. Among them, non-monetary benefits are measured at fair value.

3.21.2 Accounting treatment of post-employment benefits

Post-employment benefit plans include defined contribution plans and defined benefit plans. Defined contribution plan refers to a post-employment benefit plan in which the enterprise no longer undertakes further payment obligations after paying a fixed fee to an independent fund; Defined benefit plan refers to a post-employment benefit plan other than the defined contribution plan. During the reporting period, the Group's post-employment benefits were mainly basic pension insurance.

The employees of the Group participated in the basic social pension insurance organized and implemented by the local labor and social security department. The Group pays endowment insurance premiums to the local social basic endowment insurance agency monthly based on the payment base and proportion of the local social basic endowment insurance. After employees retire, local labor and social security departments are responsible for paying basic social pensions to retired employees.

Enterprise Annuity Plan: In addition to the basic endowment insurance, the Group has established an enterprise annuity plan ("annuity plan") in accordance with the relevant policies of the national enterprise annuity system, and employees can voluntarily participate in the annuity plan. Apart from this, the Group has no other significant employee social security commitments. During the accounting period in which the employee provides services, the amount to be paid calculated according to the defined contribution plan is recognized as a liability and included in the current profit and loss or related asset costs.

3.21.3 Accounting treatment of dismissal benefits

Where the Company provides employees with dismissal benefits, the Company shall recognize the employee compensation liability incurred from dismissal welfare at the earlier of the following dates and include such liability in the current profit or loss: the date when the Company is unable to unilaterally revoke the dismissal benefits provided for the termination of labor relation or the proposal for layoffs; the date when the Company determines the cost or expense related to the restructuring involving payment of dismissal benefits.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.21 Employee compensation (Continued)

3.21.4 Accounting treatment of other long-term employee benefits

Where the Group provides employees with other long-term employee benefits which meets the conditions for defined contribution plans, the relevant provisions on the aforesaid defined contribution plans shall apply.

3.22 Estimated liabilities

When an obligation relating to a contingency meets all the following conditions at the same time, it will be recognized as an estimated liability by the Company:

(1) The obligation is a present obligation of the Company;

(2) The performance of this obligation may very probably lead to the flow of economic interests out of the Company; and

(3) The amount of the obligation can be measured reliably.

The estimated liabilities are initially measured as the best estimate of expenses required for the performance of relevant present obligations.

The Company, when determining the best estimate, has had a comprehensive consideration of risks with respect to contingencies, uncertainties and the time value of money. If the time value of money is significant, the best estimates shall be determined after discount of relevant future cash outflows.

If there is continuous range for the necessary expenses, and probabilities of occurrence of all the outcomes within this range are equal, the best estimates will be determined at the average amount of upper and lower limits within the range; under other circumstances, the best estimates shall be treated as follows in different circumstances:

- If the contingency involves a single item, it shall be determined at the most likely outcome; or
- If a contingency involves multiple items, it shall be recognized base on various possible results and the dependent probability.

When all or some of the expenses necessary for the liquidation of estimated liabilities of the Company are expected to be compensated by a third party, the compensation should be separately recognized as an asset only when it is virtually certain that the reimbursement will be obtained. The amount recognized for the reimbursement should not exceed the book value of estimated liabilities.

On the balance sheet date, the book value of estimated liabilities shall be reviewed. If there is conclusive evidence that the best estimate cannot be reflected truthfully, the book value shall be adjusted based on the current best estimate.

3.23 Share-based payment

The Company's share-based payments are transactions in which the Company grants equity instruments or undertakes equity-instrument-based liabilities in return for services from employees or other parties. The Company's share-based payments include equity-settled share-based payments and cash-settled share-based payments.

3.23.1 Equity-settled share-based payment and equity instruments

The equity-settled share-based payment in return for services from employees shall be measured at the fair value of the equity instruments granted to the employees. As to the share-based payment that can be exercised immediately after the grant, it should be included in the relevant costs or expenses at the fair value of the equity instrument on the date of grant. The capital reserves should be increased accordingly. As to an equity-settled share-based payment, after grant, if the right cannot be exercised until the services within the vesting period come to an end or until the prescribed performance conditions are met, the services obtained in the current period shall be included in the relevant costs or expenses and the capital reserves shall be increased accordingly, based on the best estimate of the equity instruments with exercisable rights on each balance sheet date within the vesting period and according to the fair value on the grant date.

If the terms of the equity-settled share-based payments were modified, the services received should be recognized at least in accordance with the unmodified terms. Moreover, the modification of fair value of equity instruments granted from any increase, or beneficial changes to the employee on the modification date should be recognized as increases in services obtained.

If the Company canceled equity instruments granted during the waiting period, it shall treat such cancellation as acceleration of the exercisable rights and shall immediately include the amount that should be recognized during the remaining waiting period in the current profit or loss. Capital reserves should be also recognized. However, if new equity instruments are granted, which are recognized as the replacement of the canceled equity instrument on the grant data, the granted equity instrument for replacement shall be handled in the same way with the disposal of revision of provisions on the original equity instrument and conditions.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.23 Share-based payment (Continued)

3.23.2 Cash-settled share-based payment and equity instruments

The cash-settled share-based payments shall be measured at the fair value of liabilities calculated and recognized based on the shares or other equity instruments undertaken by the Company. As to the share-based payment that can be exercised immediately after the grant, it should be included in the relevant costs or expenses at the fair value of the liabilities assumed on the date of grant. The liabilities should be increased accordingly. As to an equity-settled share-based payment, after grant, if the right cannot be exercised until the services within the vesting period come to an end or until the prescribed performance conditions are met, the services obtained in the current period shall be included in the relevant costs or expenses and included in liabilities accordingly, based on the best estimate of exercisable rights on each balance sheet date within the vesting period and according to the fair value of liabilities assumed by the Company. The Company shall, on each balance sheet date and on each account date prior to the settlement of the relevant liabilities, re-measure the fair values of the liabilities and include the changes into the current profit or loss.

3.24 Revenue

3.24.1 Accounting policies for revenue recognition and measurement

If the Company fulfills its performance obligations in a contract, it will recognize revenue when relevant customer obtains right of control over relevant goods or services. Obtaining the right of control over relevant goods or services means that the customer is able to make decisions on the use of the goods or the rendering of the services, and can obtain almost all of the economic benefits therefrom.

If two or more performance obligations are covered in the contract, on the contract commencement date, the transaction price will be amortized to individual performance obligation based on the relative proportion of the individual selling price of goods or services involved in the individual performance obligation. The Company measures revenue at the transaction price amortized to individual performance obligation.

The transaction price refers to the amount of consideration the Company is expected to have the right to take on account of the transfer of goods or services to the customer, excluding the payments charged by any third party and the payments expected to be refunded to the customer. The Company determines the transaction price according to the contract terms and in light of its previous regular practice, in the meantime, factors such as variable consideration, significant financing composition existing in the contract, non-cash consideration, and consideration payable to customers will be taken into account. The Company determines the transaction price involving the variable consideration at the amount that should not exceed the amount of accumulatively recognized revenue that is highly unlikely to have a major reversal when relevant uncertainty is eliminated. If the significant financing component in covered in the contract, the Company will determine the transaction price based on the amount of cash payable at once by the customer when the customer acquires the right of control over goods or services, as assumed, and amortize the difference between such transaction price and the contract price by the effective interest method during the contract period. (Tip: If the interval between the transfer of control rights and the payment of the customer's price is less than one year, the enterprise may not consider the financing component. The enterprise should make disclosure based on actual conditions.)

The obligation performance belongs to certain period in case one of the following conditions is met; otherwise, it belongs to certain time-point:

- The customer obtains and consumes the economic benefits brought by the performance of the Company while the Company is performing the obligation.
- Customers are able to control the goods under construction by the Company in the course of performing obligations.
- The Goods produced in the course of performing obligations have irreplaceable uses, and the Company has the right to receive payments for the portion of the performance that has been completed to date.

For a performance obligation to be performed within a certain period, the Company recognizes the revenue according to the performance progress during such period, except for the case that the performance progress cannot be reasonably determined. The Company may determine the performance progress by the output method or input method based on the nature of goods or service. When the performance progress cannot be reasonably determined, if the cost incurred is expected to be compensated, the revenue will be recognized by the Company at the amount of the cost incurred until the performance progress can be reasonably determined.

The revenue from obligation performance belonging to certain time-point is recognized by the Company when the customer has acquired the right of control over relevant goods or services. The Company will consider the following signs when judging whether the customer has acquired the right of control over relevant goods or services:

- The customer has the current payment obligation for such goods or service, i.e. the Company enjoys the current right to collect the payment for such goods or service.
- The Company has transferred the legal ownership of such goods to the customer, i.e. the customer possesses the legal ownership of such goods.
- The Company has transferred goods to the customer in kind, i.e. the customer has possessed such goods in kind.
- The substantial risks and rewards of the ownership of such goods have been transferred by the Company to the customer, i.e. the customer has acquired the substantial risks and rewards of the ownership of such goods.
- The customer has accepted such goods or services.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.24 Revenue (Continued)

3.24.2 Specific methods

Specific methods of the Group for recognition of revenue:

Provision of drilling engineering and geophysical prospecting services: The Group recognizes revenue in the process of providing drilling engineering and geophysical prospecting services. The progress of completed performance obligations is determined by the proportion of the executed projects to the total contract value. If the contract contains two or more performance obligations, the Group will allocate the transaction price to each service based on the relative proportion of the individual selling price of each individual service on the date of contract commencement. The individual selling price of each service is determined based on the price of each service sold separately by the Group.

The revenue related to the day work drilling contract is recognized when the labor service is provided.

Borehole operations and logging, well cementation and other engineering services: relevant revenues are recognized during the accounting period when the services are provided, and the relevant accounts receivable are settled.

Provision of construction services: The Group recognizes revenue in the process of providing construction services. The progress of completed performance obligations of construction services is determined by the input method. The progress of completed performance obligations of construction services is based on the proportion of the incurred construction cost in the estimated total contract costs. If the contract contains two or more performance obligations, the Group will allocate the transaction price to each service based on the relative proportion of the individual selling price of each individual service on the date of contract commencement. The individual selling price of each service is determined based on the price of each service sold separately by the Group.

When the performance progress of performance obligations cannot be reasonably determined, if the cost incurred is expected to be compensated, the revenue shall be recognized at the amount of the cost incurred until the performance progress can be reasonably determined. Sales of good: When the goods are delivered to the customer, the customer has accepted the goods and the customer obtains control of the goods, the Group recognizes revenue.

For the sales of goods with sales return clauses, revenue recognition is limited to the amount of accumulated recognized revenue that is unlikely to be significantly reversed. The Group recognizes the liabilities according to the expected return amount, and at the same time, recognizes the balance after deducting the estimated cost of recovering the goods (including the impairment of the value of the returned goods) according to the estimated book value of the returned goods at the time of transfer as an asset.

3.25 Contract costs

The contract costs include contract performance costs and contract acquisition costs.

The costs incurred by the Company to perform a contract that are not regulated by the accounting standards for inventories, fixed assets or intangible assets, are recognized as an asset as contract performance costs when the following conditions are met:

- The costs are directly related to a current or expected contract obtained.
- The costs increase the resources of the Company to fulfill its performance obligations in the future.
- The costs are expected to be recovered.

If the incremental cost incurred by the Company for obtaining the contract is expected to be recovered, the contract acquisition cost is recognized as an asset.

The assets related to contract costs are amortized on the same basis as revenue recognition for goods or services related to the asset; however, if the amortization period of contract acquisition costs does not exceed one year, the Company will include them in the current profit or loss when it occurs.

If the assets related to contract costs whose carrying amount is higher than the difference between the following two items, the Company will make provision for impairment for the excess part and recognize it as loss from asset impairment:

1. The remaining consideration expected to be obtained due to the transfer of goods or services related to the asset;
2. The estimated costs that will occur for transfer of the relevant goods or services.

If there is a subsequent change in the impairment factors in previous periods, such that the aforementioned difference is higher than the carrying amount of the asset, the Company reverses the provision for impairment and recognizes it in the current profit or loss, provided that the book value of the reversed asset does not exceed the book value of the asset at the date of reversal recorded by assuming no impairment provision had been made.

3.26 Government grants

3.26.1 Type

Government grants refer to monetary or non-monetary assets obtained from the government for free and are classified into asset-related government grants and income-related government grants.

The asset-related government grants refer to government grants obtained by the Company for forming long-term assets by acquisition, construction or other manners. The income-related government grants refer to government grants other than asset-related government grants.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.26 Government grants (Continued)

3.26.2 Timing of recognition

Government grants are recognized when the Company is eligible for and is capable of receiving the government grants.

3.26.3 Accounting treatment

Asset-related government grants shall be used to offset the book value of relevant assets or recognized as deferred income. Where such grants are recognized as the deferred income, they will be included in the current profit or loss by reasonable and systematic methods within useful lives of related assets (Where such grants are related to the routine activities of the Company, they will be included in other income; where such grants are not related to the routine activities of the Company, they will be included in non-operating revenue);

The income-related government grants used to compensate for relevant costs, expenses or losses to be incurred to the Company in subsequent periods shall be recognized as the deferred income, and, during the period when relevant costs, expenses or losses are recognized, be included in the current profit or loss (where the income-related government grants are relevant to routine activities of the Company, they shall be included in other income; where the income-related government grants are irrelevant to daily activities of the Company, they shall be included in the non-operating revenue) or used to offset relevant costs, expenses or losses. The income-related government grants used to compensate for relevant costs, expenses or losses already incurred to the Company shall be included in the current profit or loss (where the income-related government grants are relevant to routine activities of the Company, they shall be included in other income; where the income-related government grants are irrelevant to daily activities of the Company, they shall be included in the non-operating revenue) or used to offset relevant costs, expenses or losses.

3.27 Deferred income tax assets and deferred income tax liabilities

Income taxes include the current income tax and deferred income tax. The Company recognizes current income tax and deferred income tax in the current profit or loss, except for the income tax arising from business combinations and transactions or events directly recognized in owners' equity (including other comprehensive income).

Deferred income tax assets and deferred income tax liabilities are recognized based on the difference (temporary difference) between the tax basis of the assets and liabilities and their book values.

Deferred income tax assets are recognized for deductible temporary differences to the extent of the taxable income probably obtained in future period that can be used for deducting the deductible temporary differences. For deductible losses and tax credits that can be carried forward to subsequent periods, deferred income tax assets arising therefrom are recognized to the extent of the taxable income probably obtained in future period that can be used for deducting the deductible losses and tax credits.

Taxable temporary differences are recognized as deferred income tax liabilities except in special circumstances.

Special circumstances in which deferred income tax assets or deferred income tax liabilities shall not be recognized include:

- Initial recognition of goodwill;
- A transaction or event that is neither a business combination nor, when it occurs, affects accounting profit and taxable income (or deductible loss).

Deferred income tax liabilities arising from taxable temporary differences related to the investments in subsidiaries, associates and joint ventures shall be recognized, unless the Company can control the time when the temporary differences are reversed and the temporary differences will probably not be reversed in the foreseeable future. Deferred income tax assets arising from deductible temporary differences related to the investments in subsidiaries, associates and joint ventures shall be recognized when the temporary differences may be reversed in the foreseeable future and can be used to offset the taxable income of deductible temporary differences in the future.

On the balance sheet date, according to the tax law, deferred income tax assets and deferred income tax liabilities are measured at the future tax rate applicable to the period of recovery of relevant assets and repayment of relevant liabilities.

On the balance sheet date, the Company reviews the book values of its deferred income tax assets. If it is unlikely to obtain sufficient taxable income taxes to offset against the benefit of deferred tax assets, the book value of deferred tax assets shall be written down. The amount written down may be reversed when the taxable income obtained may be sufficient.

If the Company has the legal right to settle in net amounts and intends to settle in net amount or to obtain assets and discharge liabilities simultaneously, the current tax assets and current tax liabilities of the Company shall be presented based on the net amount after offset.

On the balance sheet date, the deferred income tax assets and deferred income tax liabilities are presented at net of offsetting amounts when both of the following conditions are met:

- The taxpayer has the legal right to settle current income tax assets and current income tax liabilities on a net basis;
- The deferred income tax assets and deferred income tax liabilities are related to the income tax which are imposed on the same taxpayer by the same tax collection authority or on different taxpayers, but, in each important future period in connection with the reverse of deferred income tax assets and liabilities, the involved taxpayer intends to balance income tax assets and liabilities for the current period with net settlement at the time of obtaining assets and discharging liabilities.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.28 Leases

Lease refers to a contract in which a lessor assigns the right to use an asset to a lessee within a certain period in order to obtain consideration. On the contract commencement date, the Company evaluates whether the contract is a lease or includes a lease. If a party to a contract transfers the right to control the use of one or more identified assets within a certain period in exchange for consideration, the contract shall be a lease or include a lease.

If the contract contains multiple individual leases, the Company will split the contract and make accounting treatment over each individual lease. If the contract contains both leased and non-leased parts, the lessee and lessor will split the leased and non-leased parts.

3.28.1 The Company as the lessee

(1) Right-of-use assets

On the commencement date of the lease term, the Company recognizes the leases other than short-term leases and leases of low-value assets as the right-of-use assets. The right-of-use assets are initially measured at costs. Such costs include:

- the initial measurement amount of lease liabilities;
- in case of any lease incentives, relevant amount of the lease incentives enjoyed shall be deducted from the lease payment paid on or before the commencement date of the lease term;
- the initial direct costs incurred to the Company;
- the costs to be incurred to the Company for demolishing and removing leased assets, restoring the site where the leased assets are located, or restoring the leased assets to the state agreed in the lease terms, not including those incurred for production of inventories.

The Company adopts the straight-line-method to accrue depreciation of the right-of-use assets. If there is a reasonable assurance that the ownership of a leased asset can be acquired when the lease term expires, the depreciation of the right-of-use asset will be made over the remaining useful life of such lease asset; otherwise, the depreciation of such leased asset is made over the shorter of the lease term or the remaining useful life of the leased asset.

The Company determines whether a right-of-use asset is impaired and accounts for the identified impairment loss in accordance with the principles described in the Note “3.18 Impairment of long-term assets”.

(2) Lease liabilities

On the commencement date of the lease term, the Company recognizes the leases other than short-term leases and leases of low-value assets as lease liabilities. Lease liabilities are initially measured at the present value of the lease payments that have not been paid. Lease payments include:

- fixed payments (including substantial fixed payments), and if there is any lease incentive, the relevant amount of the lease incentive shall be deducted;
- variable lease payments depending on the index or ratio;
- the payments expected to be payable based on the residual value of the guarantee provided by the Company;
- exercise price of purchase option, provided that the Company reasonably determines that it will exercise the option;
- the amount to be paid to exercise the lease termination option, provided that it is reflected that the Company will exercise the lease termination option during the lease term;

The Company adopts the implicit rate of lease as the discount rate, but if the implicit rate of lease cannot be reasonably determined, the incremental borrowing rate will be adopted as the discount rate.

The Company calculates the interest expense of the lease liability in each period of the lease term according to the fixed periodic interest rate, and records it into the current profit or loss or the cost of related assets.

The variable lease payments not included in the measurement of lease liabilities shall be included in the current profit or loss or the costs of related assets when they actually occur.

After the commencement of the lease term, the Company shall re-measure the lease liability and adjust corresponding right-of-use assets based on the following situations: If the book value of the right-of-use assets has been reduced to zero and further reduction of lease liabilities is still required, the Company will include the remaining amount in the current profit or loss.

- If the Company’s assessment results of call options, lease renewal options or lease termination options have changed, or the actual exercise of the said options is inconsistent with the original assessment results, the Company remeasures its lease liabilities based on the lease payments after change and the present value calculated at revised discount rate;
- When there is a change in the substantive fixed payment amount, a change in the amount expected to be payable for the guaranteed residual value, or a change in the index or rate used to determine the lease payment amount, the Company remeasures lease liabilities based on the lease payments after change and the present value calculated at original discount rate. However, if the changes in lease payments result from changes in floating interest rates, the present value is calculated using the revised discount rate.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.28 Leases (Continued)

3.28.1 The Company as the lessee (Continued)

(3) Short-term lease and lease of low-value assets

The Company chooses not to recognize right-of-use assets and lease liabilities for short-term leases and leases of low-value assets, and the relevant lease payments are included in the current profit or loss or the cost of related assets by straight-line method over each period within the lease period. Short-term leases refer to leases that do not exceed 12 months on the commencement date of the lease period and do not include any purchase option. Low-value asset lease refers to the lease of a single lease asset with lower value when it is brand new. For the lease asset subleased by the Company subleases or expected to be subleased, the original lease is not a lease of low-value assets.

(4) Lease changes

If the lease changes and the following conditions are met at the same time, the Company will carry out accounting treatment over the lease change as a separate lease:

- where the lease change expands the scope of the lease by adding the right to use one or more leased assets; and
- where the increase of the consideration is equivalent to the adjusted individual price of the expanded part of the lease scope according to the contract.

Where the lease change is not accounted for as a separate lease, on the effective date of the lease change, the Company will re-distribute the consideration of the contract after the change, re-determine the lease period, and re-measure lease liabilities according to the present value calculated by the changed lease payments and the revised discount rate.

If a lease change results in a reduction in the scope of the lease or a shortening of the lease term, the Company reduces the book value of the right-of-use asset accordingly and recognizes gains or losses related to partial or complete termination of the lease in the current profit or loss. If the lease liabilities are remeasured due to other lease changes, the Company adjusts the book value of the right-of-use asset accordingly.

(5) Rent concessions related to the COVID-19 epidemic

For rent reductions, exemptions, deferred payments, and other rental reductions directly caused by the COVID-19 epidemic and reached on existing lease contracts, if the following conditions are met at the same time, the company adopts a simplified method for all lease selections, and does not evaluate whether there is a lease change, also lease classification is not reassessed:

- The lease consideration after the concession is reduced or basically unchanged from that before the concession. The lease consideration may be undiscounted or discounted at the discount rate before the concession;
- The concession is only for lease payments payable before June 30, 2022, an increase in lease payments payable after June 30, 2022 does not affect the satisfaction of this condition, and a decrease in lease payments payable after June 30, 2022 does not satisfy this condition; as well as
- No significant change in other terms and conditions of the lease after comprehensive consideration of qualitative and quantitative factors.

For the adoption of simplified methods of rent concession related to the COVID-19 epidemic, the Company will not evaluate whether the lease change has occurred, it will continue to calculate the interest expense of the lease liabilities according to the same discount rate as before the concession and include it in the current profit or loss, and continue to accrue the depreciation for the right-to-use assets according to the same method as before the concession. In the event of rent reduction or exemption, the Company will treat the reduced rent as variable lease payments. When the original rent payment obligation is relieved by reaching a concession agreement, the undiscounted amount or the discounted amount at the discount rate before the concession is used to offset the cost or expenses of related assets, and the lease liabilities will be adjusted accordingly; if the rent payment is delayed, the Company will offset the lease liabilities recognized in the previous period at the time of actual payment.

For short-term lease and low-value asset lease, the Company continues to include the rent in the original contract in the costs or expenses of related assets according to the method consistent with that before concession. In case of any rent reduction or exemption, the Company will treat the reduced rent as variable lease payments to offset the costs or expenses of related assets during the reduction or exemption period; In case of any deferred payment of rent, the Company will recognize the payable rent as payables during the original payment period, and offset the payables recognized in the previous period at the time of actual payment.

3.28.2 The Company as the lessee

Leases of the Company are classified as finance lease and operating lease on the lease commence date. Lease under which almost all the risks and rewards relevant to the ownership of leased assets are materially transferred is recognized as finance lease, regardless of whether the ownership is ultimately transferred. Operating lease refers to the leases other than finance lease. When the Company is a sub-lessor, it classifies the sub-leases based on the right-of-use assets generated by the original lease.

(1) Accounting treatment of operating lease

Rental from the operating lease in each stage during the rental period should be recognized as the rental income by the straight-line method. Initial direct costs relating to operating lease incurred by the Company are capitalized, and shall be included in the current profit or loss on the same basis as the recognition of lease income during the lease period. The variable lease payable that is not included in the lease receivable shall be included in the current profit or loss at the time of actual occurrence. If an operating lease is changed, the Company accounts for it as a new lease from the effective date of the change, and the amount of lease payments received in advance or receivable in connection with the lease before the change is considered to be the amount of payments for the new lease.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.28 Leases (Continued)

3.28.2 The Company as the lessee (Continued)

(2) Accounting treatment of finance lease

On the lease commencement date, the Company recognizes finance leases as finance lease receivables and derecognizes finance lease as assets. When the Company makes initial measurement of finance lease receivables, the net lease investment is used as the recorded value of the finance lease receivables. The net investment in leases is the sum of the unguaranteed residual value and the present value of the lease payments not yet received at the beginning of the lease term discounted at the interest rate embedded in the lease.

The Company calculates and recognizes interest income for each period of the lease term based on a fixed periodic interest rate. Derecognition and impairment of finance lease receivables are accounted for in accordance with Note "3.10 Financial instruments".

Variable lease payments not included in the net lease investment are recognized in the current profit or loss when they are actually incurred.

When a change in a finance lease occurs and both of the following conditions are met, the Company will account for the change as a separate lease:

- where the change expands the scope of the lease by adding the right to use one or more leased assets; and
- where the increase of the consideration is equivalent to the adjusted individual price of the expanded part of the lease scope according to the contract.

If the change in a finance lease cannot be accounted for as a separate lease, the Company treats the changed lease separately in the following circumstances.

- If the change becomes effective on the lease commencement date and the lease would have been classified as an operating lease, the Company accounts for it as a new lease from the effective date of the lease change and uses the net investment in the lease prior to the effective date of the lease change as the book value of the leased asset;
- If the change becomes effective on the lease commencement date and the lease is classified as a finance lease, the Company accounts for the lease in accordance with the policy on modification or renegotiation of contracts as described in Note "3.10 Financial instruments".

3.28.3 Sale-and-leaseback transactions

The Company assesses whether the transfer of assets in sale-and-leaseback transactions is a sale in accordance with the principles described in the Note "3.24 Revenue".

(1) The Company as the lessee

If the transfer of an asset in a sale-and-leaseback transaction is a sale, the Company, as the lessee, measures the right-of-use asset resulting from the sale-and-leaseback at the portion of the original asset's book value that relates to the right of use acquired by the lease back and recognizes a gain or loss related to the right transferred to the lessor only; if the transfer of an asset in a sale-and-leaseback transaction is not a sale, the Company, as the lessee, continues to recognize the transferred asset and at the same time recognizes a financial liability equal to the transfer proceeds. For details of the accounting treatment of financial liabilities, please refer to the Note "3.10 Financial instruments".

(2) The Company as the lessor

If the transfer of assets in a sale-and-leaseback transaction is a sale, the Company accounts for the purchase of the assets as a lessor in accordance with the aforementioned policy stated in "2. The Company as the lessee; if the transfer of assets in a sale-and-leaseback transaction is not a sale, the Company, as the lessor, does not recognize the transferred asset, but recognizes a financial asset equal to the transfer proceeds. For details of the accounting treatment of financial assets, please refer to the Note "3.10 Financial instruments".

3.29 Work safety expenses

In accordance with national regulations, the Company withdraws work safety expenses for high-risk industries, and includes them both in the production costs of relevant products in the current period and in the special reserves. When withdrawn safe production costs are used within the prescribed range and belong to expenses, such costs shall be directly deducted from the special reserves. Where fixed assets form, incurred expenses are accumulated under the item "construction in progress" and are recognized as fixed assets when the safe project is completed and reaches the working conditions for its intended; meanwhile, special reserves shall be offset according to the costs of fixed assets and the accumulated depreciation of the same amount shall be recognized. Provision for depreciation of fixed assets will be no longer made in subsequent periods.

3.30 Share repurchases

The shares repurchased by the Company are managed as treasury stocks until they are canceled or transferred, and all expenses for the repurchased shares are transferred to the costs of treasury stocks. The consideration and transaction costs paid in share repurchases reduce owners' equity, and no gain or loss is recognized upon the repurchase, transfer or cancellation of the Company's shares.

The difference between the actual amount received and the book value of treasury stocks is credited to the capital surplus. If the capital surplus is not sufficient for offsetting, the surplus reserves and undistributed profits will be reduced. Upon cancellation of treasury stocks, the share capital is reduced by the par value of the shares and the number of shares canceled. The difference between the book value of the canceled treasury stocks and the par value is used to reduce capital surplus, and if the capital surplus is not sufficient for offsetting, the surplus reserves and undistributed profits will be reduced.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.31 Segment reporting

The Company determines operating segments based on its internal organizational structure, management requirements and internal reporting system, and determines reportable segments and disclose segment information by operating segments.

The operating segments refer to the Company's components that simultaneously meet the following conditions: (1) the components can generate income and incur expenses in daily activities; (2) The Management of the Company can regularly evaluate the operating results of this component to decide the allocatable resources and assess its performance; (3) The Company can obtain relevant accounting information such as the financial positions, operating results and cash flows of this component. If two or more operating segments have similar economic characteristics and meet certain conditions, they can be merged into one operating segment.

3.32 Significant accounting estimates and judgments

The Group evaluates the significant accounting estimates and key assumptions used on an ongoing basis, based on historical experience and other factors, including reasonable expectations of future events. Significant accounting estimates and critical assumptions that have a significant risk of causing a material adjustment to the book values of assets and liabilities within the next accounting year are presented below.

3.32.1 Classification of financial assets

The significant judgments involved in determining the classification of the Group's financial assets include analysis of the business model and contractual cash flow characteristics, etc.

The Group determines the business model for managing financial assets at the level of the financial asset portfolio, taking into account factors such as the manner in which the performance of financial assets is evaluated and reported to key management personnel, the risks affecting the performance of financial assets and the manner in which they are managed, and the manner in which the relevant business management personnel are compensated.

In assessing whether the contract cash flow of financial assets is consistent with the basic lending arrangements, the Group has the following judgments: whether the principal's time distribution or amount may change during the lifetime for early repayment and other reasons; whether the interest only includes the time value of money, credit risk, other basic lending risks and the consideration of cost and profit. For example, does the amount of advance payment only reflect the unpaid principal and interest based on the unpaid principal, and reasonable compensation paid for the early termination of the contract.

3.32.2 Measurement of expected credit loss of receivables

The Group calculates the expected credit losses of accounts receivable by default risk exposure and expected credit losses rate of accounts receivable and determines the expected credit losses rate based on default probability and default loss rate. In determining the expected credit losses rate, the Group uses internal historical credit loss and other data and adjusts the historical data with current situation and forward-looking information. In considering forward-looking information, the indicators used by the Group include the risks of economic downturn, external market environment, technological environment, and changes in customer conditions. The Group regularly monitors, and reviews assumptions related to the calculation of expected credit losses.

3.32.3 Provision for inventory depreciation

The net realizable value of inventories is under the Group's regular review, and as a result, the provision for inventory depreciation is recognized at the excess part of inventories' book values over their net realizable value. When making estimates of net realizable value, the Company takes into consideration the use of inventories held on hand and other information available to form the underlying assumptions, including the inventories' market prices and the Company's historical operating costs. The actual selling price, cost of completion, and selling expenses and taxes of inventories may change in response to changes in market sales conditions, production technology processes or the actual use of inventories, etc. Therefore, the amount of provision for inventory depreciation may change in response to the above reasons. The adjustment to the provision for inventory depreciation will affect the profit or loss of the current period in which the estimate is changed.

3.32.4 Depreciation and amortization of fixed assets, intangible assets and long-term deferred expenses

The Group depreciates and amortizes fixed assets, intangible assets and long-term deferred expenses over their useful lives after taking into account their residual values. The Group periodically reviews the useful lives and amortization period of the related assets to determine the amount of depreciation and amortization expense to be charged to each reporting period. The useful lives of the assets are determined by the Group based on past experience with similar assets and in conjunction with expected technological changes, and the amortization period of long-term deferred expenses is determined by the Group based on the expected benefit period of each expense. Depreciation and amortization expense is adjusted in future periods if there is a significant change in previous estimates.

3.32.5 Development expenses

In determining the amount to be capitalized, management must make assumptions about the expected future cash generation from the asset, the discount rate to be used, and the expected period of benefit.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.32 Significant accounting estimates and judgments (Continued)

3.32.6 Revenue recognition

Revenue related to the Group's provision of petroleum engineering services is recognized over a period of time. The recognition of revenue and profit from the related labor services depends on the Group's estimate of the contractual outcome and the progress of performance. The Group estimates the expected total contract revenue using the expected value method or the most likely-to-occur amount based on the contract, and assesses the expected total contract cost based on historical experience and the construction program. Given that the contract cycle for engineering services may span multiple accounting periods, the Group periodically reviews and revises the estimated contract revenue and contract cost in the budget as the contract completion progresses. If the actual amount of total revenue and total costs incurred is higher or lower than the management's estimates, it will affect the amount of revenue and profit recognized by the Group in future periods.

3.32.7 Pending litigations

For the legal proceedings and claims, the Group, after making reference to the opinions of its legal advisors and understanding the progress of the case and the settlement solution, judges the expected losses to be borne based on the best estimate of the expenses required to fulfill the relevant present obligations. The estimated losses will change during the development of the legal proceedings and claims.

3.32.8 Deferred income tax assets

To the extent that it is very likely that there will be enough taxable profits to offset the losses, the Group should recognize deferred income tax assets for all unused tax losses. This requires the management to use significant judgment in estimating the timing and amount of future taxable profit, combined with tax planning strategies, to determine the amount of deferred tax assets to be recognized. If the taxable revenue to be earned in future accounting periods is lower than expected or the effective income tax rate is higher than expected, the deferred tax assets recognized will be reversed and included in the income statement in the period of reversal.

3.32.9 Taxation

There is uncertainty about the interpretation of complex tax legislation, including provisions relating to tax benefits, and the amount and timing of future taxable revenue. Given the complexity of extensive international business relationships and existing contractual agreements, differences between actual results of operations and assumptions made, or future changes in such assumptions, may require future adjustments to the recognized tax income and expense. The Group accrues tax expense based on reasonable estimates of the probable outcome of audits by the tax authorities where the Group operates. The amount of tax expenses accrued is based on various factors, such as prior tax audit experience, and different tax regulation interpretations from taxable entities and relevant tax authorities. Since the Group operates in different tax regions, different interpretation may be resulted from various events.

3.33 Changes in significant accounting policies and accounting estimates

3.33.1 Changes in significant accounting policies

(1) Implementation of the Interpretation No. 14 to the Accounting Standards for Business Enterprises

On February 2, 2021, the Ministry of Finance issued the *Interpretation No. 14 to the Accounting Standards for Business Enterprises* (CS [2021] No. 1, hereinafter referred to as the "Interpretation No. 14"), effective from the date of promulgation. Relevant operations newly added from January 1, 2021 to the effective date shall be adjusted according to the Interpretation No. 14.

① Government and social capital cooperation (PPP) project contract

Interpretation No. 14 is applicable to PPP project contracts that meet both the "dual features" and "dual control" mentioned in this interpretation. The relevant PPP project contracts that have been implemented before December 31, 2020 and have not been completed until the implementation date shall be retrospectively adjusted If retrospective adjustment is not feasible, it shall be applied from the beginning of the earliest period of retrospective adjustment, the retained earnings at the beginning of the year and other related items of the financial statement on the effective date of the cumulative impact adjustment, and the comparable period information will not be adjusted.

The adoption of Interpretation No. 14 had no material impact on the Company's financial position and operating results.

② Reform on benchmark interest rate

The Interpretation No. 14 provides simplified accounting for situations where the reform of benchmark interest rate results in a change in the basis for determining cash flows related to financial instrument contracts and lease contracts.

According to the provisions of the Interpretation No. 14, operations related to the reform of benchmark interest rate occurring before December 31, 2020 should be retroactively adjusted, except where the retroactive adjustment is not practicable, and no adjustment to prior period comparative financial statement data is required. On the effective date of the Interpretation No. 14, the difference between the original and new book values of financial assets and financial liabilities is recognized in opening retained earnings or other comprehensive income for the annual reporting period in which the Interpretation is effective.

The adoption of Interpretation No. 14 had no material impact on the Company's financial position and operating results.

3 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.33 Changes in significant accounting policies and accounting estimates (Continued)

3.33.1 Changes in significant accounting policies (Continued)

(2) Implementation of the Circular on adjusting the Application Scope of the Provisions on Accounting Treatment of Rent Concessions Related to Epidemic in Covid-19

On June 19, 2020, the Ministry of Finance issued the *Provisions on Accounting Treatment of Rent Concessions Related to Epidemic in Covid-19* (CK (2020) No.10). According to the provisions, for rent concessions such as rent reductions and deferred rent payments that directly triggered by Covid-19, the Company can choose simplified method for accounting.

On May 26, 2021, the Ministry of Finance issued the *Circular on adjusting the Application Scope of the Provisions on Accounting Treatment of Rent Concessions Related to Epidemic in Covid-19* (CK [2021 No. 9]), which takes effect from May 26, 2021 and changes the scope of application of *Provisions on Accounting Treatment of Rent Concessions Related to Epidemic in Covid-19* is adjusted, from "the concessions are only for lease payments payable before June 30, 2021" to "the concessions are only for lease payments payable before June 30, 2022", with other applicable conditions unchanged.

The Company has elected to adopt the simplified accounting for all eligible leases prior to the scope of application adjustment and for all similar leases that qualify after the scope of application adjustment, and retroactively adjusts the relevant lease contracts that have been accounted for using lease changes prior to the issuance of the Circular, but do not adjust the comparative financial statement data for the prior period; the relevant rent reductions that occurred between January 1, 2021 and the effective date of the Circular that were not accounted for in accordance with the provisions of the Circular are adjusted in accordance with the Circular.

(3) Implementation of the Interpretation No. 15 to the Accounting Standards for Business Enterprises on the presentation of centralized management of funds

On December 30, 2021, the Ministry of Finance issued the *Interpretation No. 15 to the Accounting Standards for Business Enterprises* (CS [2021] No. 35, hereinafter referred to as the "Interpretation No. 15"), effective from the date of promulgation. The financial statement data of the comparable period shall be adjusted accordingly.

Interpretation No. 15 clearly stipulates how the balance involved in the centralized and unified management of the funds of the parent company and member units through internal settlement centers, financial companies, etc., should be presented and disclosed in the balance sheet.

The adoption of Interpretation No. 15 had no material impact on the Company's financial position and operating results.

(4) Implementation of Q&A on the implementation of the fifth batch of accounting standards for enterprises in 2021 issued by the Accounting Department of the Ministry of Finance

The Accounting Department of the Ministry of Finance issued the *fifth batch of Q&As for the implementation of the Accounting Standards for Business Enterprises in 2021*. According to the implementation Q&A, 1) For the daily repair expenses of fixed assets that do not meet the conditions for subsequent expenditures for capitalization of fixed assets, the Group will adjust the repair expenses of the production department that meet the conditions originally included in the general and administration expenses into the operating costs and adjust the comparative figures for the same period. 2) For transportation activities engaged in the performance of revenue contracts, if the transportation activities do not constitute a single performance obligation, the relevant transportation costs shall be regarded as contract performance costs, when the contract performance costs are amortized and included in the profit and loss, they are listed in the income statement and adjusted. In this year, the qualified sales and freight expenses that were originally included in the selling and distribution expenses were adjusted to the operating costs, and the comparative figures for the same period were adjusted.

The Company has changed the relevant accounting policies and carried out a retrospective restatement of the comparative financial statements. The restated consolidated income statement is as follows:

Item	Prior period amount	Restated amount	Difference
Operating costs	62,605,007	63,080,210	475,203
Selling and distribution expenses	72,604	71,047	-1,557
General and administrative expenses	2,781,058	2,307,412	-473,646

3.33.2 Changes in significant accounting estimates

The Company has no significant changes in accounting estimates this year.

3.33.3 Correction of prior accounting errors

The Company has no correction of prior accounting errors this year.

3.34 Others

The Company had no other adjustments this year.

4 TAXATION

4.1 Major tax types and tax rates

Tax type	Tax basis	Legal tax rate (%)
Value-added tax	Levied at the difference between the output tax (calculated based on the revenue from sales of goods and rendering of services according to tax law) and the deductible input tax for the period	3, 6, 9, 10 or 13
Urban maintenance and construction tax	Levied based on the actual VAT and consumption tax paid	1, 5 or 7
Educational surtax	Levied based on the actual VAT and consumption tax paid	5
Enterprise income tax	Levied based on the taxable income	25

Disclosure of information about taxpayers applying different enterprise income tax rates

Taxpayer name	Income tax rate
Sinopec Shengli Petroleum Engineering Corporation	15
Sinopec Zhongyuan Petroleum Engineering Corporation	15
Sinopec Jianghan Petroleum Engineering Corporation	15
Sinopec Zhongyuan Oil Engineering Design Company Limited	15
Sinopec Oil Engineering Design Company Limited	15
Sinopec Geophysical Corporation	15
Sinopec Jianghan Oil Engineering Design Company Limited	15
Sinopec Henan Oil Engineering Design Company Limited	15
Sinopec Huabei Petroleum Engineering Corporation	15
Sinopec Pipeline Technical Service Co., Ltd.	15
SinoFTS Petroleum Services Ltd.	15

4.2 Tax preference

4.2.1 Consumption tax refund of self-used refined oil

According to the Circular on the Refund of Consumption Tax on the Self-use Refined Oil Produced by Oil (Gas) Field Enterprises (CS [2011] No. 7), since January 1, 2009, the full amount of consumption tax contained in the internally purchased refined oil consumed by oil (gas) field enterprises during the extraction of crude oil will be temporarily refunded according to the actual amount of consumption tax paid.

4.2.2 Enterprise income tax

Sinopec Shengli Petroleum Engineering Corporation, Sinopec Zhongyuan Petroleum Engineering Corporation, Sinopec Jianghan Petroleum Engineering Corporation, Sinopec Zhongyuan Oil Engineering Design Company Limited, Sinopec Oil Engineering Design Company Limited, Sinopec Geophysical Corporation, Sinopec Jianghan Oil Engineering Design Company Limited, Sinopec Henan Oil Engineering Design Company Limited, Sinopec Huabei Petroleum Engineering Corporation, Sinopec Pipeline Technical Service Co., Ltd., SinoFTS Petroleum Services Ltd. have obtained the certification of high-tech enterprise and are subject to a reduced enterprise income tax rate of 15% in accordance with the *Enterprise Income Tax Law of the People's Republic of China and the Circular of the State Administration of Taxation on Issues Related to the Implementation of High and New Technology Enterprise Income Tax Preference"* (GSX [2009] No. 203), the enterprise income tax will be paid at a reduced rate of 15%.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

5.1 Cash and cash equivalents

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Cash on hand	5,230	8,517
Cash at banks	908,850	774,312
Cash in finance companies	1,593,669	757,540
Other monetary funds	475	11,089
Total	2,508,224	1,551,458
Including: Amount deposited abroad:	1,290,784	1,245,494

As at December 31, 2021, the Group's monetary funds restricted for use due to mortgage, pledge or freezing, or placed overseas with restrictions on fund repatriation are as follows:

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Guarantee deposit	7,352	3,772
L/C deposit	88	14,096
Frozen and pledged deposits	22,478	7,238
Time deposit	3,000	3,000
Total	32,918	28,106

As at December 31, 2021, the Group had not pledged deposit with any bank for the issuance of bank acceptance bill.

5.2 Accounts receivable

5.2.1 Disclosure of accounts receivable by aging

Aging	Balance as at December 31, 2021	Balance as at December 31, 2020
Within 1 year	7,475,672	8,296,681
Including: Not overdue	4,678,622	7,147,826
Overdue – Within 1 year	2,797,050	1,148,856
1 – 2 years	577,083	832,651
2 – 3 years	314,236	737,894
3 – 4 years	452,920	339,558
4 – 5 years	186,582	638,449
Over 5 years	1,560,021	987,690
Sub-total	10,566,514	11,832,923
Less: provision for bad debts	2,415,495	2,474,538
Total	8,151,019	9,358,385

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.2 Accounts receivable (Continued)

5.2.2 Disclosure of accounts receivable by category based on the method for provision for bad debts

	Balance as at December 31, 2021					Balance as at December 31, 2020				
	Book balance		Provision for bad debts			Book balance		Provision for bad debts		
Category	Amount	Proportion (%)	Amount	Expected credit loss ratio (%)	Book value	Amount	Proportion (%)	Amount	Expected credit loss ratio (%)	Book value
Provision made on an individual basis	955,589	9.04	955,589	100.00		983,589	8.32	983,589	100.00	
Provision for bad debts made by portfolio	9,610,925	90.96	1,459,906	23.81	8,151,019	10,849,334	91.68	1,490,949	20.94	9,358,385
Including:										
Related-party portfolio	3,293,119	31.17	48,184	1.46	3,244,935	3,282,821	27.74	71,948	2.19	3,210,873
Non-related-party portfolio	6,317,806	59.79	1,411,722	22.35	4,906,084	7,566,513	63.94	1,419,001	18.75	6,147,512
Total	10,566,514	100.00	2,415,495		8,151,019	11,832,923	100.00	2,474,538		9,358,385

Provision made on an individual basis:

	Balance as at December 31, 2021			
Item	Book balance	Provision for bad debts	Proportion of provision (%)	Reason for provision
Entity A	873,848	873,848	100.00	The debtor is short of funds and the funds have not been recovered for a long time.
Entity B	42,469	42,469	100.00	The debtor is short of funds and the funds have not been recovered for a long time.
Entity C	24,530	24,530	100.00	The debtor is short of funds and the funds have not been recovered for a long time.
Total of other sporadic units	14,742	14,742	100.00	The debtor is short of funds and the funds have not been recovered for a long time.
Total	955,589	955,589		

Provision for bad debts made by portfolio:

Provision by portfolio:

	Balance as at December 31, 2021		
Item	Accounts receivable	Provision for bad debts	Proportion of provision (%)
Accounts receivable from related-party clients	3,293,119	48,184	1.46
Accounts receivables from non-related-party clients	6,317,806	1,411,722	22.35
Total	9,610,925	1,459,906	

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.2 Accounts receivable (Continued)

5.2.2 Disclosure of accounts receivable by category based on the method for provision for bad debts (Continued)

Provision by portfolio: Accounts receivable from related-party clients

	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for bad debts		Book balance	Provision for bad debts	
Category	Amount	Amount	Expected credit loss ratio (%)	Amount	Amount	Expected credit loss ratio (%)
Within 1 year	3,025,701	11,896	0.39	2,841,134	10,041	0.35
Including:						
Not overdue	2,333,468	7,000	0.30	2,624,432	7,874	0.30
Overdue – Within 1 year	692,233	4,896	0.71	216,702	2,167	1.00
1 – 2 years	128,378	5,810	4.53	237,034	12,449	5.25
2 – 3 years	79,747	5,666	7.10	115,193	11,865	10.30
3 – 4 years	30,219	4,602	15.23	52,495	13,077	24.91
4 – 5 years	11,768	6,185	52.56	17,980	9,328	51.88
Over 5 years	17,306	14,025	81.04	18,985	15,188	80.00
Total	3,293,119	48,184	1.46	3,282,821	71,948	2.19

Provision by portfolio: Accounts receivable from non-related-party clients

	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for bad debts		Book balance	Provision for bad debts	
Category	Amount	Amount	Expected credit loss ratio (%)	Amount	Amount	Expected credit loss ratio (%)
Within 1 year	4,449,971	107,739	2.42	5,531,474	60,406	1.09
Including:						
Not overdue	2,345,154	7,035	0.30	4,599,324	13,798	0.30
Overdue – Within 1 year	2,104,817	100,704	4.78	932,150	46,608	5.00
1 – 2 years	448,706	115,929	25.84	532,550	139,574	26.21
2 – 3 years	234,489	123,406	52.63	435,280	229,215	52.66
3 – 4 years	340,961	258,484	75.81	280,400	227,155	81.01
4 – 5 years	174,815	137,298	78.54	177,970	153,812	86.43
Over 5 years	668,864	668,866	100.00	608,839	608,839	100.00
Total	6,317,806	1,411,722	22.35	7,566,513	1,419,001	18.75

5.2.3 Provision, reversal, or recovery of provision for bad debts in the current period

Category	Balance as at December 31, 2020	Changes in the current period: Provision	Recovery or reversal	Write-off or charge-off	Other decreases	Balance as at December 31, 2021
Provision for bad debts	2,474,538	93,248	91,906	28,736	31,649	2,415,495
Total	2,474,538	93,248	91,906	28,736	31,649	2,415,495

5.2.4 Accounts receivable actually charged off in the current period

The amount of accounts receivable actually written off during the period was RMB28,736 thousand.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.2 Accounts receivable (Continued)

5.2.5 Top 5 of accounts receivable as at December 31, 2021, presented by debtor

Company name	Balance as at December 31, 2021		
	Accounts receivable	Proportion in total accounts receivable (%)	Provision for bad debts
Entity 1	2,019,382	19.11	34,215
Entity 2	953,266	9.02	38,561
Entity 3	873,848	8.27	873,848
Entity 4	867,826	8.21	1,321
Entity 5	521,344	4.93	12,617
Total	5,235,666	49.54	960,562

5.3 Receivables at FVTOCI

5.3.1 Breakdowns of receivables at FVTOCI

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Notes receivable	**1,295,971**	1,323,425
Total	**1,295,971**	1,323,425

Some subsidiaries of the Group discounted and transferred via endorsement a part of bank acceptance bills and commercial acceptance bills based on its routine funds management demand and derecognized the discounted and endorsed notes receivable based on the situation that almost all risks and remuneration have been transferred to relevant counterparties. As at December 31, 2021, the notes receivable endorsed or discounted but not matured amounted to RMB4,714,670 thousand (As at December 31, 2020, RMB8,659,126 thousand). As relevant subsidiaries manage notes receivable with the purpose of collecting contractual cash flows and selling such financial assets, the Company classifies these subsidiaries' bank acceptance bills and commercial acceptance bills as the financial assets measured at fair value through other comprehensive income.

The Group had no bank acceptance bill or commercial acceptance bill with the provision for impairment made individually. As at December 31, 2021, the Group believed that the bank acceptance bills and commercial acceptance bills it held had not significant credit risk as they were accepted by the banks or finance companies with higher credit levels, and it would not be subjected to the significant loss caused by the default of these banks and finance companies. The Group had not made the provision for losses from credit impairment of receivables financing.

5.4 Advances to suppliers

5.4.1 Presentation of advances to suppliers by aging

Aging	Balance as at December 31, 2021		Balance as at December 31, 2020	
	Amount	Proportion (%)	Amount	Proportion (%)
Within 1 year	**242,449**	**71.61**	359,258	81.34
1 – 2 years	**66,669**	**19.69**	78,464	17.77
2 – 3 years	**28,127**	**8.31**	2,165	0.49
Over 3 years	**1,310**	**0.39**	1,767	0.40
Total	**338,555**	**100.00**	441,654	100.00

5.4.2 Top 5 of advances to suppliers as at December 31, 2021, collected by supplier

The sum amount of top 5 of accounts receivable as at December 31, 2021, presented by debtor was RMB171,588 thousand, accounting for 50.67% of the total ending balance of advances to suppliers.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.5 Other receivables

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Dividends receivable	548	502
Other receivables	2,551,744	2,463,860
Total	2,552,292	2,464,362

5.5.1 Dividends receivable

(1) Details of dividends receivable

Project (or investee)	Balance as at December 31, 2021	Balance as at December 31, 2020
Qianjiang Hengyun Motor Vehicle Comprehensive Performance Inspection & Testing Co., Ltd.	548	502
Sub-total	548	502
Less: provision for bad debts		
Total	548	502

5.5.2 Other receivables

(1) Disclosure of other receivables by aging

Aging	Balance as at December 31, 2021	Balance as at December 31, 2020
Within 1 year	1,892,581	1,739,780
1 – 2 years	175,623	690,443
2 – 3 years	582,805	118,067
3 – 4 years	72,611	111,146
4 – 5 years	97,489	197,912
Over 5 years	535,874	363,660
Sub-total	3,356,983	3,221,008
Less: provision for bad debts	805,239	757,149
Total	2,551,744	2,463,859

(2) Disclosure of other receivables by category based on the method for provision for bad debts

	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for bad debts	Book value	Book balance	Provision for bad debts	Book value
Category	Amount	Amount	Amount	Amount	Amount	Amount
Imprest	3,304	124	3,180	11,907	338	11,569
Security deposit	1,247,723	121,125	1,126,598	1,326,522	173,435	1,153,087
Advance money for the Company	870,202	165,960	704,242	833,797	151,599	682,198
Suspense payment	697,197	473,246	223,951	622,405	394,479	227,926
Escrow payment	6,430	1,727	4,703	4,688	2,975	1,713
Deposit	127,035	8,611	118,424	44,539	8,540	35,999
Export rebates receivable	21,405	70	21,335	22,213	3,305	18,908
Others	383,687	34,376	349,311	354,938	22,478	332,460
Total	3,356,983	805,239	2,551,744	3,221,009	757,149	2,463,860

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.5 Other receivables (Continued)

5.5.2 Other receivables (Continued)

(3) Details of provision for bad debts

Provision for bad debts at stage I as at December 31, 2021

Category	Book balance	Expected credit loss ratio in future 12 months (%)	Provision for bad debts	Book value
Provision for bad debts made by portfolio	2,651,010	4.96	131,563	2,519,447
– Imprest	3,304	3.75	124	3,180
– Margin and deposit	1,272,362	4.03	51,276	1,221,086
– Other receivables	1,375,344	5.83	80,163	1,295,181
Total	2,651,010		131,563	2,519,447

As at December 31, 2021, the Company had no interest receivable, dividends receivable and other receivables at stage II.

Provision for bad debts at stage III as at December 31, 2021:

Category	Book balance	Expected credit loss ratio in future 12 months (%)	Provision for bad debts	Book value
Provision for bad debts made by portfolio	705,973	95.43	673,676	32,297
– Imprest				
– Margin and deposit	102,396	76.62	78,460	23,936
– Other receivables	603,577	98.61	595,216	8,361
Total	705,973		673,676	32,297

(4) Provision, reversal or recovery of provision for bad debts in the current period

Provision for bad debts	Stage I Expected credit loss in future 12 months	Stage II Expected credit loss in the whole duration (without credit impairment)	Stage III Expected credit loss in the whole duration (with credit impairment)	Total
Balance as at December 31, 2020	113,020		644,129	757,149
Balance as at December 31, 2020 in the current period				
– Transferred in Stage II				
– Transferred in Stage III				
– Reversal from Stage II				
– Reversal from Stage I				
Provision in the current period	69,980		52,096	122,076
Reversal in the current period	51,437		49,489	100,926
Write-off in the current period				
Charge-off in the current period			4,151	4,151
Other changes			31,091	31,091
Balance as at December 31, 2021	131,563		673,676	805,239

(5) Other receivables actually charged off in the current period

Item	Amount
Other receivables actually charged off	4,151

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.5 Other receivables (Continued)

5.5.2 Other receivables (Continued)

(6) Top 5 of other receivables as at December 31, 2021, presented by debtor

Company name	Nature	Balance as at December 31, 2021	Aging	Proportion in the total balance of other receivables as at December 31, 2021 (%)	Balance of provision for bad debts as at December 31, 2021
Entity A	Advance money for the Company	503,088	Within 1 year and 1 – 2 years	14.99	37,059
Entity B	Suspense payment	302,470	1 – 5 years and over 5 years	9.01	278,272
Entity C	Security deposits Advance payment	354,843	1 – 5 years and over 5 years	10.57	7,396
Entity D	Suspense payment	166,339	Over 5 years	4.96	166,339
Entity E	Security deposits Advance payment	144,356	Within 1 year	4.30	7,115
Total		1,471,096		43.83	496,181

5.6 Inventories

5.6.1 Classification of inventories

Item	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for inventory depreciation/ Provision for impairment of contract performance cost	Book value	Book balance	Provision for inventory depreciation/ Provision for impairment of contract performance cost	Book value
Raw materials	**919,795**	**24,610**	**895,185**	916,768	38,827	877,941
Revolving materials	**13,604**		**13,604**	15,079		15,079
Goods in process	**5,567**	**1,671**	**3,896**	66,577	1,671	64,906
Stock commodities	**96,481**		**96,481**	68,039		68,039
Contract performance cost	**79,138**		**79,138**	7,713		7,713
Total	**1,114,585**	**26,281**	**1,088,304**	1,074,176	40,498	1,033,678

5.6.2 Provision for inventory depreciation and provision for impairment of contract performance cost

Item	Balance as at December 31, 2020	Increase in the current period		Decrease in the current period		Balance as at December 31, 2021
		Provision	Others	Reversal or write-off	Others	
Raw materials	38,826			13,176	1,040	24,610
Goods in process	1,671					1,671
Total	40,497			13,176	1,040	26,281

The provision for inventory depreciation is made at the difference of the inventory cost in excess of its net realizable value. During routine activities, net realizable values of inventories refer to the amounts of the estimated selling prices of inventories minus the estimated costs to completion, estimated selling expenses and relevant taxes and surcharges.

5.6.3 Notes to the capitalized amounts of borrowing costs included in the ending balance of inventories

As at 31 December 2021 and 31 December 2020, the Group had no capitalized borrowing costs included in the year-end balance of inventories. The inventories were not used for collateral or guarantee.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.7 Contract assets

5.7.1 Breakdowns of contract assets

Item	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Contract assets	13,647,488	100,593	13,546,895	11,715,335	104,447	11,610,888
Total	13,647,488	100,593	13,546,895	11,715,335	104,447	11,610,888

The petroleum engineering technology services provided by the Group are usually settled in stages according to the completion schedule agreed in the contract, and the project payment will be collected 30-180 days after the settlement via making out an invoice. Engineering construction business will reserve quality guarantee as 5% of progress billings, and have an unconditional right to receive the guarantee after guarantee period.

5.7.2 Amounts with and reasons for significant changes in book values during the reporting period

During the current period, there was no significant change in contract assets caused by the accumulated and additional adjustment to revenues.

5.7.3 Disclosure by category of contract assets based on the provision method for impairment

Category	Balance as at December 31, 2021					Balance as at December 31, 2020				
	Book balance		Provision for impairment			Book balance		Provision for impairment		
	Amount	Proportion (%)	Amount	Proportion of provision (%)	Book value	Amount	Proportion (%)	Amount	Proportion of provision (%)	Book value
Provision for impairment made by portfolios	13,647,488	100.00	100,593	0.74	13,546,895	11,715,335	100.00	104,447	0.89	11,610,888
Including:										
Petroleum Engineering	7,627,792	55.89	82,495	1.08	7,545,297	5,996,377	51.18	87,600	1.46	5,908,777
Construction and Engineering	6,019,696	44.11	18,098	0.30	6,001,598	5,718,958	48.82	16,847	0.30	5,702,111
Total	13,647,488	100.00	100,593		13,546,895	11,715,335	100.00	104,447		11,610,888

5.8 Other current assets

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Value-added tax retained	1,281,654	981,684
Input VAT to be certified	22,671	247,610
Value-added tax prepaid	931,596	761,948
Enterprise income tax prepaid	2,085	4,566
Total	2,238,006	1,995,808

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.9 Long-term equity investments

Investee	Balance as at December 31, 2020	Increase/decrease in the current period								Balance as at December 31, 2021	Ending balance of provision for impairment
		Additional investment	Negative investment	Profit or loss on investments recognized by the equity method	Adjustment to other comprehensive income	Other changes in equity	Cash dividends or profits declared to be distributed	Provision for impairment made	Others		
1. Joint ventures											
Zhong Wei Energy Services Co., Ltd. (A Sinopec – Weatherford Joint Venture)	8,316			58						8,374	
Sinopec Gulf Petroleum Engineering Services, LLC	13,075			607			-548			13,134	
Qianjiang HengYun Comprehensive Vehicle Performance Inspecting Company Limited	1,613			-36						1,577	
EBAPAN,S.A.DEC.V	200			837						1,037	
Sub-total	23,204			1,466			-548			24,122	
2. Associates											
Hua Bei Ruida Oil Service Company Limited ("Ordos North")	6,654			2,893			-1,296			8,251	
Xinjiang North China Tianxiang Oil Service Company Limited ("Xinjiang North")	3,201			1,062						4,263	
Zhenjiang Huajiang Oil and Gas Engineering Technology Service Co., Ltd	2,180			360			-187			2,353	
Henan Zhongyuan Oil & Gas Technology Service Co., Ltd	3,236			65			-744			2,557	
Henan Zhongyou Oil & Gas Technology Service Co., Ltd	4,571			1,434			-503			5,502	
Sub-total	19,842			5,814			-2,730			22,926	
Total	43,046			7,280			-3,278			47,048	

Other descriptions: There is no restriction on sale of the long-term equity investments held by the Group. For the information on the Group's joint ventures and associates, see Note 7.2 Equity in joint ventures or associates.

5.10 Investment in other equity instruments

5.10.1 Details of investment in other equity instruments

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Sinopec & Tharwa Drilling Company	13,352	14,229
Dongying Kewei Intelligent Technology Co., Ltd.	116	115
Shengli Oilfield Niuzhuang Petroleum Development Co., Ltd.	8,292	8,491
Total	21,760	22,835

As the investments in other equity instruments involving Sinopec & Tharwa Drilling Company are investments held as planned for a strategic purpose in a long term, the Group designated these investments as the financial assets measured at fair value through other comprehensive income.

5.10.2 Details of investment in non-trading equity instruments

Item	Dividend revenue recognized in the current period	Accumulated gains	Accumulated losses	Amount of other comprehensive income transferred to retained earnings	Reason for being designated as the item measured at fair value through the other comprehensive income	Reason for transferring the other comprehensive income to retained earnings
Sinopec & Tharwa Drilling Company	1,077		9,697			
Dongying Kewei Intelligent Technology Co., Ltd.			300			
Shengli Oilfield Niuzhuang Petroleum Development Co., Ltd.	500	6,292				

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.11 Fixed assets

5.11.1 Fixed assets and disposal of fixed assets

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Fixed assets	**23,428,943**	22,917,438
Disposal of fixed assets	**32,838**	22,400
Total	**23,461,781**	22,939,838

5.11.2 Breakdowns of fixed assets

Item	Buildings and constructions	Equipment and others	Total
1. Original book value			
(1) Balance as at December 31, 2020	1,633,344	62,186,310	63,819,654
(2) Increase in the current period	38,258	3,537,602	3,575,860
– Purchase		128,437	128,437
– Transferred from construction in progress	38,258	3,409,165	3,447,423
(3) Decrease in the current period	27,483	1,791,511	1,818,994
– Disposal or retirement	27,483	1,791,511	1,818,994
(4) Balance as at December 31, 2021	1,644,119	63,932,401	65,576,520
2. Accumulated depreciation			
(1) Balance as at December 31, 2020	598,862	38,974,988	39,573,850
(2) Increase in the current period	53,812	2,883,830	2,937,642
– Provision	53,812	2,883,830	2,937,642
(3) Decrease in the current period	12,083	1,599,555	1,611,638
– Disposal or retirement	12,083	1,599,555	1,611,638
(4) Balance as at December 31, 2021	640,591	40,259,263	40,899,854
3. Provision for impairment			
(1) Balance as at December 31, 2020	8,436	1,319,930	1,328,366
(2) Increase in the current period			
– Provision			
(3) Decrease in the current period	7,782	72,861	80,643
– Disposal or retirement	7,782	72,861	80,643
(4) Balance as at December 31, 2021	654	1,247,069	1,247,723
4. Book value			
(1) Book value as at December 31, 2021	1,002,874	22,426,069	23,428,943
(2) Book value as at December 31, 2020	1,026,046	21,891,392	22,917,438

As at December 31, 2021, the Group had no fixed assets under pledge.

5.11.3 Fixed assets with pending certificates of title

There had been a total amount of 25 premises without qualified ownership certificates up to 31 December 2021, totaling amount in cost of RMB167,225 thousand in accumulated depreciation of RMB42,872 thousand and net book value of RMB124,353 thousand.

5.11.4 Disposal of fixed assets

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Equipment	**32,838**	22,400
Total	**32,838**	22,400

Remark: As at December 31, 2021, there was no disposal of fixed assets lasting for over one year.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.12 Construction in progress

5.12.1 Construction in progress and project materials

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Construction in progress	668,364	284,292
Total	668,364	284,292

5.12.2 Details of construction in progress

Item	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Infrastructure improvement expenditure	8,731	3,502	5,229	15,101	3,502	11,599
Major Materials and equipment procurement projects	655,232		655,232	303,274	68,232	235,042
Other construction projects	7,903		7,903	37,652		37,652
Total	671,866	3,502	668,364	356,027	71,734	284,293

5.12.3 Changes in important construction in progress in the current period

Project name	Budget amount	Balance as at December 31, 2020	Increase in the current period	Amount transferred to fixed assets in the current period	Other decreases in the current period	Balance as at December 31, 2021	Proportion of accumulated project investments in budget amount (%)	Project progress	Accumulated capitalized amount of interest	Including: capitalized amount of interest in the current period	Capitalization rate of interest in the current period (%)	Source of funds
Purchase of construction drilling rigs in Uganda in 2021	157,610		157,610			157,610	100.00	100.00				Self-financing in full
Project of Updating 12,000 HP Multipurpose Workboat	127,500		119,069			119,069	93.39	93.39				Self-financing in full
Project of 2021 Fracturing Equipment Renewal Purchase	58,270		54,855	3,528		51,327	94.14	94.14				Self-financing in full
2021 80 Rig Acquisition Project	49,560		43,219	7,847		35,372	87.21	87.21				Self-financing in full
2021 80 Rig Acquisition Project	44,130		44,130	9,683		34,447	100.00	100.00				Self-financing in full
2021 70 Rig Acquisition Project	49,890		49,691	15,719		33,972	99.60	99.60				Self-financing in full
ZJ70DB drilling rig reconstruction project in 2021	45,139		45,139	18,460		26,679	100.00	100.00				Self-financing in full
SICP system construction	21,800	1,745	18,777			20,522	94.14	94.14				Self-financing in full
Upgrading of Type 70 Drilling Rig in Chongqing Shale Gas Market in 2021	23,880		23,867	4,710		19,157	99.95	99.95				Self-financing in full
Upgrading of Type 70 Drilling Rig in Sichuan Shale Gas Market in 2021	23,900		23,867	4,710		19,157	99.86	99.86				Self-financing in full
Total		1,745	580,224	64,657		517,312						

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.13 Right-of-use assets

Item	Land	Buildings	Equipment and others	Total
1. Original book value				
(1) Balance as at January 1, 2021	229,773	940,784	960,589	2,131,146
(2) Increase in the current period	74,075	164,808	98,626	337,509
– Newly-added leases	72,824	149,791	98,219	320,834
– Adjustment of lease liabilities	1,251	15,017	407	16,675
(3) Decrease in the current period	139,818	393,593	33,054	566,465
– Adjustment of lease liabilities	20	8,061	6	8,087
– Write-off or early termination	139,798	385,532	33,048	558,378
(4) Balance as at December 31, 2021	164,030	711,999	1,026,161	1,902,190
2. Accumulated depreciation				
(1) Balance as at January 1, 2021	99,134	379,609	386,820	865,563
(2) Increase in the current period	55,691	253,644	226,503	535,838
– Depreciation	55,691	253,644	226,503	535,838
– Others				
(3) Decrease in the current period	42,539	145,397	32,213	220,149
– Write-off or early termination	42,539	145,397	32,213	220,149
(4) Balance as at December 31, 2021	112,286	487,856	581,110	1,181,252
3. Provision for impairment				
(1) Balance as at January 1, 2021				
(2) Balance as at December 31, 2021				
4. Book value				
(1) Book value as at December 31, 2021	51,744	224,143	445,051	720,938
(2) Book value as at January 1, 2021	130,639	561,175	573,769	1,265,583

Other description: As at December 31, 2021, the lease expenses recognized by the Group and relevant to the short-term lease and low-value assets lease amounted to RMB1,055,154 thousand.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.14 Intangible assets

5.14.1 Breakdowns of intangible assets

Item	Land use right	Software use right	Contract income right	Others	Total
1. Original book value					
(1) Balance as at December 31, 2020	136,660	178,160	618,962	77,364	1,011,146
(2) Increase in the current period	1,216	28,502	87,181		116,899
– Purchase	1,216	28,502			29,718
– Transferred from construction in progress			87,181		87,181
(3) Decrease in the current period					
(4) Balance as at December 31, 2021	137,876	206,662	706,143	77,364	1,128,045
2. Accumulated amortization					
(1) Balance as at December 31, 2020	28,305	138,599	315,804	23,472	506,180
(2) Increase in the current period	3,105	14,856	80,714	16,594	115,269
– Provision	3,105	14,856	80,714	16,594	115,269
(3) Decrease in the current period					
(4) Balance as at December 31, 2021	31,410	153,455	396,518	40,066	621,449
3. Provision for impairment					
4. Book value					
(1) Book value as at December 31, 2021	106,466	53,207	309,625	37,298	506,596
(2) Book value as at December 31, 2020	108,355	39,561	303,158	53,892	504,966

① As at December 31, 2021, there were no intangible assets generating from the internal research and development.

② As at December 31, 2021, there were no intangible assets under pledge or guarantee.

5.14.2 Land use right with pending certificate of title

As at December 31, 2021, there were 3 land use right with pending certificates of title and the original book value thereof amounted to RMB16,569 thousand. The provision for accumulated amortization made amounted to RMB6,283 thousand, and the net book value was RMB10,286 thousand.

5.15 Long-term deferred expenses

Item	Balance as at December 31, 2020	Increase in the current period	Amortization in the current period	Other decreases	Balance as at December 31, 2021
Special tools for petroleum engineering	4,774,398	2,258,301	1,635,493	4,880	5,392,326
Other tools for petroleum engineering	509,220	333,086	317,938	599	523,770
Camping house	550,548	319,686	188,997	21,352	659,885
Other long-term deferred expenses	20,977	8,384	9,411		19,949
Total	5,855,143	2,919,457	2,151,839	26,831	6,595,930

Other description: The Group's long-term deferred expenses mainly represent special drilling and logging tools of petroleum engineering, geophysical special tools, camping house etc.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.16 Deferred tax assets and deferred tax liabilities

5.16.1 Deferred tax assets without offset

Item	Balance as at December 31, 2021		Balance as at December 31, 2020	
	Deductible temporary differences	Deferred income tax assets	Deductible temporary differences	Deferred income tax assets
Provision for asset impairment and impact of depreciation	1,009,924	166,865	1,423,786	230,850
Provision for bad debts	788,394	142,073	934,484	163,328
Deferred income	2,478	372	3,284	493
Others	9,697	1,454	7,744	1,163
Total	1,810,493	310,764	2,369,298	395,834

5.16.2 Deferred tax liabilities before offset

Item	Balance as at December 31, 2021		Balance as at December 31, 2020	
	Taxable temporary differences	Deferred income tax liabilities	Taxable temporary differences	Deferred income tax liabilities
Revaluation of assets	14,220	3,555	59,459	11,519
Depreciation of fixed assets	26,656	4,310	2,194	329
Changes in fair value through other comprehensive income	6,292	1,573	6,490	1,623
Total	47,168	9,438	68,143	13,471

5.16.3 Details of unrecognized deferred tax assets

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Deductible temporary differences	2,760,502	2,366,618
Deductible losses	14,146,311	15,801,608
Total	16,906,813	18,168,226

Remark: Present the deductible temporary differences and deductible losses of deferred income tax assets which have not been recognized on account that it is uncertain whether the taxable income can be obtained in the future.

5.16.4 Deductible losses from unrecognized deferred tax assets will be expired in the following years

Year	Balance as at December 31, 2021	Balance as at December 31, 2020	Remark
Year 2021		2,205,450	
Year 2022	1,460,055	1,486,858	
Year 2023	246,170	264,513	
Year 2024	136,050	156,593	
Year 2025	555,618	555,618	
Year 2026 and later	11,748,418	11,132,576	
Total	14,146,311	15,801,608	

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.17 Short-term borrowings

5.17.1 Classification of short-term borrowings

Item	Currency	Balance as at December 31, 2021	Balance as at December 31, 2020
Credit loans from related parties	RMB	15,550,000	17,400,000
	USD	1,970,091	1,970,520
Total		17,520,091	19,370,520

Description:

As at December 31, 2021, no assets of the Group were pledged.

As at December 31, 2021, the Group has no overdue short-term borrowings.

As at December 31, 2021, the interest rate interval for short-term borrowings was from 1.42% to 3.92% (As at December 31, 2020: 1.42%-3.92%).

5.18 Notes payable

Category	Balance as at December 31, 2021	Balance as at December 31, 2020
Bank acceptance bill	8,334,086	6,305,228
Total	8,334,086	6,305,228

Other descriptions:

Remark: At the end of the current period, there were neither notes payable due but not paid, nor notes payable with bank deposits pledged.

5.19 Accounts payable

5.19.1 Presentation of accounts payable

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Payables for materials	5,012,775	5,287,323
Payables for construction	5,625,361	5,029,663
Payable for labour cost	6,862,711	6,316,880
Payables for equipment	3,358,143	3,200,662
Others	697,272	662,981
Total	21,556,262	20,497,509

5.19.2 Significant accounts payable with aging over one year

Item	Balance as at December 31, 2021	Reason for no payment or carry-forward
Entity 1	53,893	Quality guarantee deposit, unsettled payment
Entity 2	20,037	Quality guarantee deposit, unsettled payment
Entity 3	28,783	Quality guarantee deposit, unsettled payment
Entity 4	23,652	Quality guarantee deposit, unsettled payment
Entity 5	13,903	Quality guarantee deposit, unsettled payment
Total	140,268	

5.20 Contract liabilities

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Petroleum Engineering	1,179,692	1,163,124
Construction Engineering	2,368,246	1,861,337
Total	3,547,938	3,024,461

In the current period, revenue recognized based on the contract liabilities at the beginning of the current period amounted to RMB2,765,332 thousand.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.21 Employee compensation payable

5.21.1 Presentation of employee compensation payable

Item	Balance as at December 31, 2020	Increase in the current period	Decrease in the current period	Balance as at December 31, 2021
Short term employee benefits	497,747	14,914,917	14,769,218	643,446
Post-employment benefits	324	2,060,770	2,060,514	580
Termination benefits		25,991	25,991	
Total	498,071	17,001,678	16,855,723	644,026

5.21.2 Presentation of short-term compensation

Item	Balance as at December 31, 2020	Increase in the current period	Decrease in the current period	Balance as at December 31, 2021
(1) Wages or salaries, bonuses, allowances and subsidies	326,102	10,269,646	10,121,720	474,028
(2) Staff welfare		1,120,869	1,120,869	
(3) Social security contributions	648	1,035,293	1,035,131	810
Including: 1. Basic medical insurance	402	901,813	901,986	229
2. Supplementary medical insurance				
3. Work-related injury insurance	13	70,368	70,371	10
4. Birth insurance	19	29,360	29,359	20
5. Other insurance	214	33,752	33,415	551
(4) Housing funds	2,031	1,028,610	1,028,907	1,734
(5) Labor union and employee education funds	162,574	300,402	302,432	160,544
(6) Others	6,392	1,160,097	1,160,159	6,330
Total	497,747	14,914,917	14,769,218	643,446

5.21.3 Presentation of defined contribution plans

Item	Balance as at December 31, 2020	Increase in the current period	Decrease in the current period	Balance as at December 31, 2021
Basic pension insurance	196	1,329,452	1,329,248	400
Unemployment insurance	10	56,154	56,151	13
Annuity	118	675,164	675,115	167
Total	324	2,060,770	2,060,514	580

The in-service employees of the Group are subject to basic pension and medical insurance, which are extracted and paid according to regulated rates and set up and governed by local government. In addition, the Company provides a supplementary defined contribution retirement plan for its employees at rates not exceeding 8% of their salaries. Employees who have served the Group for more than one year may participate in this plan. The assets of this plan are held separately from those of the Group in an independent fund administered by a committee consisting of representatives from the employees and the Group. A member of the above plans is entitled to a pension amount equal to a fixed proportion of the salary prevailing at his or her retirement date. The Group has no other material obligation for the payment of pension benefit associated with the basic and supplementary pension plans beyond the annual contributions described above.

During this report, the Group paid RMB25,991 thousand compensation to the resigning employee for terminating labor relation.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.22 Taxes and surcharges payable

Taxes and surcharges	Balance as at December 31, 2021	Balance as at December 31, 2020
VAT	209,114	187,632
Corporate income tax	211,513	266,628
Urban maintenance and construction tax	35,705	31,800
House property tax	1,637	1,543
Land use tax	12,209	8,718
Individual income tax	159,739	127,584
Education surtax	21,021	18,386
Other taxes	86,787	82,098
Total	737,725	724,389

5.23 Other payables

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Interest payable	19,476	17,458
Other payables	2,336,347	1,657,646
Total	2,355,823	1,675,104

5.23.1 Interest payable

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Interest payable of long term loan which interest paid by installment and principal paid at maturity date	112	864
Interest payable of short term loan	19,364	16,594
Total	19,476	17,458

At the end of the current period, the Group had no interest overdue but unpaid.

5.23.2 Other payables

(1) Presentation of other payables by nature

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Guarantee	617,945	489,083
Deposit	138,024	126,570
Amount paid on behalf	671,505	558,073
Temporary receipts	224,384	117,080
Escrow payments	38,852	43,776
Withheld payments	56,341	54,411
Others	589,296	268,653
Total	2,336,347	1,657,646

As at December 31, 2021, other payables with aging over one year amounted to RMB439,815 thousand (As at December 31, 2020: RMB401,514 thousand), mainly including the project quality guarantee deposit, deposit and security fund which are payable. As the project guarantee period has not been matured, or the settlement period has not been due, such payables have not been settled.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.24 Non-current liabilities maturing within one year

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Long-term payables within one year	5,700	5,700
Lease liabilities within one year	290,345	351,047
Total	296,045	356,747

5.24.1 Long-term payables maturing within one year

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Loans of sale-leaseback	5,700	5,700
Total	5,700	5,700

5.25 Long-term borrowings

Classification of long-term borrowings:

Item	Balance as at December 31, 2021	Interest rate period	Balance as at December 31, 2020	Interest rate period
Loans on credit	1,554,686	2.37%-2.92%	580,716	2.37%-2.92%
Sub-total	1,554,686		580,716	
Less: Long-term loans within one year				
Total	1,554,686		580,716	

The Group has no long-term borrowings due but not repaid.

5.26 Lease liabilities

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Land and housing	251,416	676,252
Equipment and others	429,795	573,264
Sub-total	681,211	1,249,516
Less: Lease liabilities within one year	290,345	351,047
Total	390,866	898,469

The interest expenses of lease liabilities accrued for the year ended December 31, 2021 were RMB55,962 thousand, which were included in the “financial expenses – interest expenses”.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.27 Long-term payables

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Long-term payables	28,885	26,812
Total	28,885	26,812

5.27.1 Long-term payables

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Loans payable	5,600	11,200
Others	28,985	21,312
Sub-total	34,585	32,512
Less: Long-term payables within one year	5,700	5,700
Total	28,885	26,812

5.28 Estimated liabilities

Item	Balance as at December 31, 2021	Balance as at December 31, 2020	Forming reason
Outstanding litigation	4,000	889	
Expected loss of judicial restructuring	158,233	330,676	Estimated payment costs of judicial restructuring
Executory onerous contracts	25,004	51,081	Expected loss of construction contract
Estimated foreign tax expenses	18,534		Estimated tax expense
Total	205,771	382,646	

For details of expected loss of judicial restructuring, please see Note 12.2.1 Significant contingencies existing on balance sheet date.

5.29 Deferred income

Item	Balance as at December 31, 2020	Increase in current period	Decrease in current period	Balance as at December 31, 2021	Forming reason
Government grants	14,186	293,635	298,533	9,288	Government grants received
Total	14,186	293,635	298,533	9,288	

Remarks: For details of government grants included in deferred income, please refer to Note 14.6 Government grants.

5.30 Share capital

Current Year

Item	Balance as at December 31, 2020	Changes in current period ("+" for increase and "-" for decrease)					Balance as at December 31, 2021
		New shares issued	Share donation	Conversion of reserves into shares	Others	Sub-total	
Legal person share held by domestic capital	11,786,046						11,786,046
RMB social public shares (A-share)	1,783,333						1,783,333
Foreign shares listed overseas (H-share)	5,414,961						5,414,961
Total	18,984,340						18,984,340

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.30 Share capital (Continued)

Prior Year

Item	Balance as at December 31, 2019	Changes in current period ("+" for increase and "-" for decrease)					Balance as at December 31, 2020
		New shares issued	Share donation	Conversion of reserves into shares	Others	Sub-total	
Legal person share held by domestic capital	11,786,046						11,786,046
RMB social public shares (A-share)	1,783,333						1,783,333
Foreign shares listed overseas (H-share)	5,414,961						5,414,961
Total	18,984,340						18,984,340

5.31 Capital reserves

Current Year

Item	Balance as at December 31, 2020	Increase in current period	Decrease in current period	Balance as at December 31, 2021
Share premium	11,629,142	20,662		11,649,804
Other capital reserves	88,631		20,662	67,969
Total	11,717,773	20,662	20,662	11,717,773

Prior Year

Item	Balance as at December 31, 2019	Increase in current period	Decrease in current period	Balance as at December 31, 2020
Share premium	11,629,142			11,629,142
Other capital reserves	85,439	3,192		88,631
Total	11,714,581	3,192		11,717,773

5.32 Other comprehensive income

Item	Balance as at December 31, 2020	Current period						Balance as at December 31, 2021
		Pre-tax amount incurred in current period	Less: the amount included in other comprehensive income in prior period and transferred to current profits or losses	Less: amount previously included in the other comprehensive income and currently transferred to the retained earnings	Less: income tax expenses	Amount after tax attributable to the parent company	Amount after tax attributable to minority shareholders	
1. Other comprehensive income that cannot be reclassified into profit or loss	-2,014	-2,142		10	-343	-1,809		-3,823
Including: changes in the fair value of other equity instruments investment	-2,014	-2,142		10	-343	-1,809		-3,823
Total of other comprehensive income	-2,014	-2,142		10	-343	-1,809		-3,823

Remarks: The net amount of other comprehensive income after tax incurred in the current period was RMB -1,809 thousand. Among them, the after-tax net amount of other comprehensive income attributable to shareholders of the parent company occurred in the current period of RMB -1,809 thousand.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.33 Special reserves

Item	Balance as at December 31, 2020	Increase in current period	Decrease in current period	Balance as at December 31, 2021
Safety costs	258,523	1,468,981	1,508,322	219,182
Total	258,523	1,468,981	1,508,322	219,182

Note: In accordance with PRC regulations, the Group appropriated production safety fund of RMB1,468,981 thousand to specific reserve for the year ended 31 December 2021, which was recognised in the cost of related products and the Specific reserve. For the year ended 31 December 2021, the Group utilised production safety fund amounting to RMB1,580,322 thousand which was of expenditure nature.

5.34 Surplus reserves

Item	Balance as at December 31, 2020	Increase in current period	Decrease in current period	Balance as at December 31, 2021
Statutory surplus reserves	200,383			200,383
Total	200,383			200,383

5.35 Retained earnings

Item	Current period	Prior period	Withdrawal or distribution proportion
Retained earnings as at the beginning of the period	-24,436,139	-24,515,117	
Plus: net profit attributable to owners of the parent company in the period	179,791	78,978	
Other comprehensive income carried forward to retained earnings	10		
Less: Withdrawal of statutory surplus reserve			10%
Retained earnings as at the end of the period	-24,256,338	-24,436,139	
Including: Surplus reserve attributable to parent company extracted by subsidiaries	25,961	20,950	

5.36 Revenue and cost of sales

5.36.1 Revenue and cost of sales

Item	Current period		Prior period	
	Revenue	Cost	Revenue	Cost
Major business	**68,215,016**	**63,685,095**	67,057,480	62,549,826
Other business	**1,318,037**	**835,830**	1,015,914	530,384
Total	**69,533,053**	**64,520,925**	68,073,394	63,080,210

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.36 Revenue and cost of sales (Continued)

5.36.2 Revenue from contracts

The Group has six reportable segments, they are geophysics, drilling engineering, logging and mud logging, special down-hole operations, engineering construction and others. The Group expects that classify and disclose revenue according to customer type, major business area and revenue recognition time can reflect the impact of relevant economic factors on the nature, amount, time distribution and uncertainty of enterprise income and cash flow.

The current revenue breakdown information is as follows:

Contract classification	Geophysics	Drilling engineering	Logging and mud logging	Special down-hole operations	Engineering construction	Others	Total
Main business premise							
Mainland China	4,132,095	26,262,565	3,157,754	8,576,238	15,781,767	783,901	58,694,320
Other countries or regions	531,251	6,819,285	49,795	807,959	932,953	379,453	9,520,696
Total	4,663,346	33,081,850	3,207,549	9,384,197	16,714,720	1,163,354	68,215,016
Client type							
Related parties	3,973,896	23,040,408	2,790,639	7,462,334	12,821,190	385,325	50,473,792
Third party	689,450	10,041,442	416,910	1,921,863	3,893,530	778,029	17,741,224
Total	4,663,346	33,081,850	3,207,549	9,384,197	16,714,720	1,163,354	68,215,016
Recognition time of revenue							
Goods (recognised at a certain time)		2,481	13,271	466	13,969	137,778	167,965
Service (recognised over time)	4,663,346	33,079,369	3,194,278	9,383,731	16,700,751	1,025,576	68,047,051
Total	4,663,346	33,081,850	3,207,549	9,384,197	16,714,720	1,163,354	68,215,016

5.36.3 Notes to performance obligations

The Group's accounting policies for revenue is set out in Note 3.24. The Group signs petroleum engineering technical service contracts or construction engineering contracting contracts with customers to provide geophysical, drilling engineering, logging and mud logging, special down-hole operations and engineering construction, and usually completes labor services or delivers construction within the agreed period. The customer settles the completed workload in installments during the contract performance period, and pays the progress payment within 30-180 days after settlement. The final settlement and payment are made after the completion of the project and the completion acceptance.

According to the contractual stipulations and legal provisions, etc., the Group's engineering construction business provides quality assurance for the construction. This type of quality assurance is a guarantee quality assurance to the customer that the construction meet the established standards and does not constitute an individual performance obligation. The Group accounts in accordance with the accounting policies described in Note 3.24.

The Group determines whether the Group's identity is the major principal or agent when engaging in a transaction based on whether it has control over the goods or services before transferring the goods or services to the customers. If the Group is able to control the goods or services before transferring goods or services to customers, the Group is the major principal and recognizes revenue according to the total amount received or receivable; otherwise, the Group is an agent and recognizes revenue in accordance with the amount of commission or poundage expected to be recognized. The amount is determined by the net amount of deducting to the payable of other related parties from the total amount received or receivable, or according to the established commission amount or proportion.

5.36.4 Transaction price allocated to the remaining performance obligations

The Group signs engineering service contracts with several customers to provide petroleum engineering technical services and construction engineering contracting services, and will perform them in a certain period of time. These contracts usually constitute an individual performance obligation. As at 31 December 2021, some of the Group's petroleum engineering technical services and construction projects are still in the course of performance, and the total transaction price allocated to the unfulfilled obligations is approximately RMB27,459,000 thousand. The amount is related to performance of each contract and will be recognized as revenue based on the progress of the performance in the future performance period of each contract.

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.37 Taxes and surcharges

Item	Current period	Prior period
Urban maintenance and construction tax	49,450	34,134
Educational surcharges	38,010	26,749
Overseas taxes and surcharges	22,927	53,437
Property taxes	9,553	9,310
Land use taxes	55,507	60,186
Vehicle and vessel usage tax	7,839	7,619
Stamp duty	49,435	41,956
Others	5,300	4,737
Total	238,021	238,128

5.38 Selling and distribution expenses

Item	Current period	Prior period
Staff costs	58,894	51,572
Depreciation cost	367	305
Expenses for business trips	4,774	3,976
Business promotion expenses	84	117
Rental expenses	2,923	3,069
Office expenses	2,570	2,863
Others	10,851	9,145
Total	80,463	71,047

5.39 General and administrative expenses

Item	Current period	Prior period
Repair and maintenance	43,965	32,048
Staff costs	1,458,349	1,298,800
Integrated service	454	389,047
The information system runs maintenance fees	50,493	49,584
Business entertainment	25,667	19,464
Travel expenses	46,350	37,409
Rental expenses	35,058	13,075
Depreciation and amortization	106,160	96,691
Consultation	14,888	24,174
Property insurance	2,622	2,260
Others	400,733	344,860
Total	2,184,739	2,307,412

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.40 Research and development expenses

Item	Current period	Prior period
Staff costs	**682,076**	523,710
Materials costs	**642,424**	525,895
Technical collaboration fee	**166,194**	180,004
Experimental expenses	**49,247**	23,128
Depreciation	**44,688**	33,865
Others	**85,077**	82,899
Total	**1,669,706**	1,369,501

5.41 Financial expenses

Item	Current period	Prior period
Interest expenses on borrowings	**670,798**	835,850
Interest expenses on lease liabilities	**55,962**	70,843
Less: capitalization of interest		
Interest income	**-38,180**	-59,576
Exchange losses/(gains)	**127,419**	289,068
Less: capitalization of exchange gains and losses		
Bank charges and others	**48,136**	60,485
Total	**864,135**	1,196,670

5.42 Other income

Grant items (sources of other income)	Current period	Prior period	Assets-related/ Income-related
National research grants	**6,405**	104,862	Income-related
Subsidies of enterprise development	**27,585**	30,598	Income-related
Subsidies of stable post	**19,701**	131,283	Income-related
Government incentives	**4,151**	1,994	Income-related
Subsidies of assets replacement	**1,176**	896	Income-related
Self-use consumption tax refund	**172,939**	217,526	Income-related
Others	**1,103**	159	Asset-related
National research grants	**1,228**	1,267	Asset-related
Additional input VAT credit	**27,358**	22,625	Income-related
Return of individual income tax fee	**3,650**	4,904	Income-related
Total	**265,296**	516,114	

5.43 Investment income

Item	Current period	Prior period
Investment income from long-term equity	**7,280**	5,467
Dividend income from other equity instrument investments	**1,577**	500
Gains from derecognition of financial assets measured at amortised cost	**29,404**	53,960
Total	**38,261**	59,927

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.44 Impairment of credit losses

Item	Current period	Prior period
Losses form impairment of accounts receivable	22,492	38,350
Total	22,492	38,350

5.45 Impairment of assets

Item	Current period	Prior period
Losses from impairment of contract assets	-2,826	65,897
Losses from decline in value of inventories		4,846
Total	-2,826	70,743

5.46 Gains from disposal of assets

Item	Current period	Prior period
Gain on disposal of fixed assets ("-" for losses)	84,972	935
Others	3,751	5,026
Total	88,723	5,961

5.47 Non-operating income

Item	Current period	Prior period	Amount included in the current non-recurring profit or loss
Waived payables	31,145	81,208	31,145
Compensation received	7,790	3,059	7,790
Penalty income	2,313	2,779	2,313
Gains from assets counts	140	4,327	140
Insurance compensation	6,959	8,215	6,959
Gains from disposal of non-current assets	38,300	3,118	38,300
Government grants	35,178		35,178
Relocation compensation	37,900		37,900
Others	8,972	5,699	8,972
Total	168,697	108,405	168,697

5.48 Non-operating expenses

Item	Current period	Prior period	Amount included in the current non-recurring profit or loss
Donation	830	5,623	830
Expected losses on pending claims	-79	-2,424	-79
Compensation	5,683	12,844	5,683
Penalty	6,376	8,220	6,376
Non-current assets written off	24,762	7,147	24,762
"Three categories personnel" fees	37,698	10,656	37,698
Expected judicial restructuring losses	-69,049		-69,049
Others	19,632	1,620	19,632
Total	25,853	43,686	25,853

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.49 Income tax expenses

5.49.1 Table of income tax expenses

Item	Current period	Prior period
Current tax in accordance with tax laws and related regulations	229,351	250,738
Deferred income tax	81,380	18,338
Total	310,731	269,076

5.49.2 Adjustment process of accounting profits and income tax expenses

Item	Current period
Total profits	490,522
Income tax expenses calculated at statutory tax rate	122,631
Effect of other tax rates used by certain subsidiaries	90,528
Adjustments of current tax in previous years	-747
Profits and losses of joint ventures and associates accounted for by the equity method	-1,278
Effect of non-deductible costs, expenses, and losses	72,803
Effect of unrecognized deferred income tax assets in prior periods	-23,741
Effect of deductible temporary differences or losses from deferred income tax assets unrecognized in current period	178,256
Tax effect of additional deduction of research and development expenses	-127,721
Income tax expenses	310,731

5.50 Items of statement of cash flows

5.50.1 Cash received from other operating activities

Item	Current period	Prior period
Amount paid on behalf	1,008,365	845,914
Government grants	263,585	215,659
Temporary receipt and payment	855,134	741,798
Guarantee	1,084,786	1,010,101
Compensation	119,868	32,542
Deposit	77,920	99,337
Others	384,586	318,350
Total	3,794,244	3,263,701

5.50.2 Cash paid for other operating activities

Item	Current period	Prior period
Temporary receipt and payment	181,633	220,287
Guarantee	1,350,783	1,368,614
Integrated service	54,034	505,707
Repair and maintenance expenses	409,998	389,047
Other period expenses	1,381,062	1,323,465
Others	66,100	79,298
Total	3,443,610	3,886,418

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.50 Items of statement of cash flows (Continued)

5.50.3 Cash paid for other financing activities

Item	Current period	Prior period
Finance lease expense	496,440	1,227,045
Notes acceptance fee	1,593	129
Payment of guarantee and commitment fees	20,161	36,361
Total	518,194	1,263,535

5.51 Supplementary information to the statement of cash flows

5.51.1 Supplementary information to the statement of cash flows

Supplementary information	Current period	Prior period
1. Net profits adjusted to cash flows from operating activities		
Net profit	179,791	78,978
Plus: Impairment of credit losses	22,492	38,350
Impairment losses on assets	-2,826	70,743
Depreciation of fixed assets	2,937,642	2,962,674
Depreciation of right-of-use assets	535,838	520,553
Amortization of intangible assets	115,269	119,319
Amortization of long-term deferred expenses	2,151,839	2,182,941
Losses on disposal of fixed assets, intangible assets and other long-term assets ("-" for gains)	-88,723	-5,961
Losses from scrapping of fixed assets ("-" for gains)	-10,181	7,147
Financial expenses ("-" for gains)	837,280	1,232,251
Investment loss ("-" for gains)	-38,261	-5,967
Decreases in deferred income tax assets ("-" for increases)	85,070	22,332
Increases in deferred income tax liabilities ("-" for decreases)	-4,033	-3,995
Decreases in inventories ("-" for increases)	-40,410	146,980
Decreases in operating receivables ("-" for increases)	-147,664	404,313
Increases in operating payables ("-" for decreases)	-286,873	-3,187,316
Work safety expenses	-39,341	-114,714
Payment of outstanding shares		3,192
Net cash flows from operating activities	6,206,909	4,471,820
2. Significant investing and financing activities not involving cash receipts and payments		
3. Net change in cash and cash equivalents		
Ending balance of cash and cash equivalents	2,475,306	1,523,352
Less: beginning balance of cash and cash equivalents	1,523,352	1,650,732
Net increase in cash and cash equivalents	951,954	-127,380

5.51.2 Breakdowns of cash and cash equivalents

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
I. Cash	2,475,306	1,523,352
Including: Cash on hand	5,230	8,517
Unrestricted bank deposits	2,469,601	1,511,398
Other unrestricted monetary funds	475	3,437
II. Cash equivalents		
III. Ending balance of cash and cash equivalents	2,475,306	1,523,352
Including: Restricted cash and cash equivalents by the parent company or its subsidiary subsidiaries		

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.52 Assets with restrictions on the ownership or use right

Item	Book value as at December 31, 2021	Reason for restriction
Cash at bank and on hand	**32,918**	Guarantee and funds that are blocked frozen
Total	**32,918**	

5.53 Foreign currency monetary items

5.53.1 Foreign currency monetary items

Item	Balance in foreign currency as at December 31, 2021	Exchange rate for conversion	RMB amount translated as at December 31, 2021
Monetary funds			1,248,297
Including: USD	108,083	6.3757	689,107
KWD	10,796	21.0419	227,162
SAR	27,579	1.6983	46,836
DZD	710,251	0.0459	32,613
Others			252,579
Accounts receivable			3,885,773
Including: USD	444,625	6.3757	2,834,745
KWD	24,609	21.0419	517,813
SAR	143,527	1.6983	243,746
DZD	7,035	0.0459	323
Others			289,146
Other receivables			1,532,901
Including: USD	137,645	6.3757	877,578
KWD	8,868	21.0419	186,608
SAR	200,150	1.6983	339,905
DZD	29,113	0.0459	1,337
Others			127,473
Accounts payable			741,742
Including: USD	57,383	6.3757	365,868
KWD	3,429	21.0419	72,152
SAR	131,936	1.6983	224,061
DZD	241,899	0.0459	11,108
Others			68,553
Other payables			361,806
Including: USD	32,888	6.3757	209,682
KWD	2,493	21.0419	52,449
SAR	7,425	1.6983	12,610
DZD	616,338	0.0459	28,301
Others			58,764
Interest payable			115
Including: USD	18	6.3757	115
Short-term borrowings			1,970,091
Including: USD	309,000	6.3757	1,970,091
Long-term borrowings			554,686
Including: USD	87,000	6.3757	554,686

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.54 Government grants

Grant item	Category	Balance as at January 1, 2021	New grants in current period	Amount carried forward and included in profit or loss in current period	Balance as at December 31, 2021	Presented items carried forward and included in profit or loss in current period	Assets-related/ Income-related
Refunds of consumption tax related to self-use refined oil	Financial allocations	–	172,939	172,939	–	Other income	Income-related
Withholding tax fee refund	Financial allocations	–	3,650	3,650	–	Other income	Income-related
Special funds for national scientific research	Financial allocations	10,827	2,633	6,405	7,055	Other income	Income-related
Special funds for national scientific research	Financial allocations	3,359	–	1,228	2,131	Other income	Asset-related
Subsidy for job stabilization	Financial allocations	–	19,803	19,701	102	Other income	Income-related
Grants for enterprise development	Financial allocations	–	27,585	27,585	–	Other gains	Income-related
Others	Financial allocations	–	1,103	1,103	–	Other gains	Income-related
Subsidy from asset replacement	Financial allocations	–	1,176	1,176	–	Other gains	Income-related
Government incentives	Financial allocations	–	4,151	4,151	–	Other gains	Income-related
Additional VAT deduction	Financial allocations	–	27,358	27,358	–	Other income	Income-related
Relocation compensation	Financial allocations	–	35,178	35,178	–	Non-operating revenue	Income-related
Total		14,186	295,576	300,474	9,288		

5.55 Lease

5.55.1 As the lessee

Item	Current period
Interest expenses on lease liabilities	**55,962**
Expense on short-term lease under simplified treatment and included in relevant asset costs or the current profit or loss	**1,055,154**
Total cash outflows relevant to lease	**1,627,717**

The Company's future potential cash outflows not included in the lease liabilities for measurement mainly come from leases where the lease has committed but not started yet.

The estimated annual cash outflows in the future of leases where the lease has committed but not started are as below:

Remaining lease term	Lease payment undiscounted
Within 1 year	85,775
1-2 years	69,239
2-3 years	67,760
Total	222,774

5 NOTES TO THE ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5.55 Lease (Continued)

5.55.2 As the lessor

(1) Operating lease

	Current period
Revenue from operating lease	**49,713**
Including: Revenue relevant to variable lease payment not included in lease receipts	

Undiscounted lease receipts that will be collected after December 31, 2021:

Remaining lease term	Undiscounted lease receipts
Within 1 year	53,130
1-2 years	44,982
2-3 years	22,478
3-4 years	6,187
4-5 years	5,779
Over 5 years	11,191
Total	143,747

5.55.3 Effect on implementation of the Accounting Treatment of Rent Concessions Related to the COVID-19 Epidemic

For rent concessions such as rent reductions and deferred payment for rent concessions that meet the conditions and are directly triggered by the COVID-19 *epidemic*, the Company chose to adopt the simplified method of accounting in accordance with the *Accounting Treatment of Rent Concessions Related to the COVID-19 Epidemic*.

The Company, as the leasee, disposed of relevant rent concessions under the above simplified method, offsetting the operating costs, general and administrative expenses and selling and distribution expenses in the current period, totaling RMB460 thousand; offsetting the operating costs, general and administrative expenses and selling and distribution expenses in the prior period, totaling RMB585 thousand.

6 CHANGE OF CONSOLIDATION SCOPE

6.1 Changes in consolidation scope for other reasons

The Company newly established a third-tier subsidiary Sinopec Jingwei Co., Ltd., which was included in the scope of consolidation.

7 EQUITY IN OTHER ENTITIES

7.1 Equity in the subsidiaries

7.1.1 Structure of enterprise group

Name of subsidiary	Principal place of business	Registration place	Business nature	Shareholding ratio (%) Direct	Shareholding ratio (%) Indirect	Way of acquisition
Sinopec Oilfield Service Corporation	China	Beijing	Oilfield technical service	100		Business combination under the common control
Sinopec Shengli Petroleum Engineering Corporation	China	Dongying, Shandong	Oilfield technical service	100		Business combination under the common control
Sinopec Zhongyuan Petroleum Engineering Corporation	China	Puyang, Henan	Oilfield technical service	100		Business combination under the common control
Sinopec Jianghan Petroleum Engineering Corporation	China	Qianjiang, Hubei	Oilfield technical service	100		Business combination under the common control
Sinopec East China Petroleum Engineering Corporation	China	Nanjing, Jiangsu	Oilfield technical service	100		Business combination under the common control
Sinopec North China Petroleum Engineering Corporation	China	Zhengzhou, Henan	Oilfield technical service	100		Business combination under the common control
Sinopec South West Petroleum Engineering Corporation	China	Chengdu, Sichuan	Oilfield technical service	100		Business combination under the common control
Sinopec Geophysical Corporation	China	Beijing	Geophysical exploration	100		Business combination under the common control
Sinopec Petroleum Engineering and Construction Corporation	China	Beijing	Engineering construction	100		Business combination under the common control
Sinopec Offshore Petroleum Engineering Corporation	China	Shanghai	Offshore oilfield technical service	100		Business combination under the common control
Sinopec International Petroleum Service Corporation	China	Beijing	Oilfield technical service	100		Business combination under the common control
Sinopec Jingwei Co., Ltd.	China	Qingdao, Shandong	Specialized mining and ancillary activities	100.00		Business combination under the common control

7.2 Equity in joint venture arrangements or associates

7.2.1 Major joint ventures or associates

Name of joint ventures or associates	Principal place of business	Registered place	Business nature	Shareholding ratio (%) Direct	Shareholding ratio (%) Indirect	Accounting treatment method for investments in joint ventures or associates
Zhong Wei Energy Service Co. Ltd. (A Sinopec – Weatherford Joint Venture)	China	Beijing	Oilfield technical services	50.00		Equity method

7 EQUITY IN OTHER ENTITIES (Continued)

7.2 Equity in joint venture arrangements or associates (Continued)

7.2.2 Principal financial information of major joint ventures

	Zhong Wei Energy Services Co., Ltd.	
	Balance as at December 31, 2021	As at December 31, 2020
Current assets	**31,934**	24,570
Including: cash and cash equivalents	**5,949**	7,231
Non-current assets	**3,817**	4,487
Total assets	**35,751**	29,057
Current liabilities	**19,002**	12,425
Non-current liabilities		
Total liabilities	**19,002**	12,425
Net assets	**16,749**	16,632
Equity attributable to shareholders of the Company	**8,374**	8,316
Adjusted matters		
– Goodwill		
Carrying amount of equity investment in joint ventures	**8,374**	8,316
Fair value of investments in joint ventures which have quoted market price		
Revenue	**26,207**	25,651
Financial expenses	**-70**	-33
Income tax expenses		
Net profit	**118**	26
Other comprehensive income		
Total comprehensive income	**118**	26
Dividends received from joint ventures		

7.2.3 Summary of financial information on insignificant joint ventures or associates

	Balance as at December 31, 2021/ Current period	Balance as at December 31, 2020/ Prior period
Joint ventures:		
Total book value of investments	**15,748**	14,887
Total amount calculated based on the following shareholding proportions		
– Net profit	**1,408**	20
– Other comprehensive income		
– Total comprehensive income	**1,408**	20
Associates:		
Total book value of investments	**22,926**	19,843
Total amount calculated based on the following shareholding proportions		
– Net profit	**5,814**	21,020
– Other comprehensive income		
– Total comprehensive income	**5,814**	21,020

8 RISKS RELATED TO FINANCIAL INSTRUMENTS

The major financial instruments of the Group include cash at bank and on hand, bills receivable, accounts receivable financing, accounts receivable, other receivables, non-current assets due within one year, other current assets, trading financial assets, debt investments, other debt investments, other equity instrument investments, other non-current financial assets, long-term receivables, bills payable, accounts payable, other payables, short-term loans, financial liabilities at fair value through profit or loss, non-current liabilities due within one year, long-term loans, lease liabilities, long-term payables. The details of these financial instruments are disclosed in the respective notes. The financial risk of these financial instruments and financial management policies used by the Group to minimize the risk are disclosed as below. The management manages and monitors the exposure of these risks to ensure the above risks are controlled in the limited range.

Risk management objectives and policies

The Group's objective in risk management is to obtain an appropriate equilibrium between risk and return. It also focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance. Based on the objectives of financial risk management, certain policies are made to recognize and analyze risk and internal control is designed according to proper acceptable in order to monitor the risk position of the Group. Both the policies and internal control will be reviewed and revised regularly to adapt the changes of the market and business activities of the Group. The performance of internal control will be reviewed regularly or randomly in accordance with the financial management policies.

The Group's financial instrument risks mainly include credit risk, liquidity risk and market risk. (Including currency risk and interest rate risk.)

The board of directors is responsible for planning and establishing the risk management structure of the Group, formulating the Group's risk management policies and related guidelines, supervising the implementation of risk management measures. The Group has established risk management policies to identify and analyze the risks faced by the Group. These risk management policies clearly define specific risks, covering market risk, credit risk and liquidity risk. The Group regularly assesses changes in the market environment and the Group's operating activities to determine whether update risk management policies and systems. The risk management of the Group is carried out by the Risk Management Committee in accordance with the policies approved by the Board of Directors. The Risk Management Committee identifies, evaluates and circumvents related risks through close cooperation with other departments of the Group. The internal audit department of the Group reviews regularly on risk management controls and procedures, then reports the audit results to the audit committee of the Group.

The Group diversifies the risk of financial instruments through appropriate diversified investments and business combinations, and reduces the risk of concentration in a single industry, a specific region or a specific counterparty by developing appropriate risk management policies.

8.1 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.

Credit is managed on the grouping basis. Credit risk is mainly arising from cash at bank, bills receivable, accounts receivable, other receivables, contract assets, long-term receivables etc.

The Group expects that there is no significant credit risk associated with cash at bank since it is deposited or will be accepted by the sate-owned banks and other medium or large size listed banks.

In addition, the Group has policies to limit the credit risk exposure on bills receivable and accounts receivable, other receivables, contract assets and long-term receivables. The Group assesses the credit quality of and sets credit limits on its customers by taking into account their financial position, the availability of guarantee from third parties, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, or shorten or cancel credit periods, to ensure the overall credit risk of the Group is limited to a controllable extent.

The highest credit risk exposed to the Group is limited to the carrying amount of each financial instrument illustrated in the balance sheet. The Group would not provide any guarantee that might cause credit risk to the Group.

Among the bills receivable and accounts receivable of the Group, the bills receivable and accounts receivable of the top five customers accounted for 49.54% (in 2020: 43.14%); among the other receivable of the Group, the other receivable of the top five customers accounted for 43.83% (2020: 40.44%).

8.2 Liquidity risk

Liquidity risk refers to the risks that the Group will not be able to meet its obligations associated with its financial liabilities that are settled by delivering cash or other financial assets.

Cash flow forecasting is performed by Group's finance department. The Group's finance management monitors cash and cash equivalents to meet operational needs and reduce the effect of floating cash flow. The department monitors the usage of bank loan so that the Group does not breach borrowing limits or covenants while maintaining sufficient headroom on its undrawn committed borrowing facilities from Sinopec Finance Co., LTD and major financial institute to meet the short-term and long-term liquidity requirements. In addition, the Group will also consider negotiating with suppliers to reduce the amount of debt to reduce the company's cash flow pressure.

The Group raises working capital from its operations, bank and other borrowings. As at 31 December 2021, the amount of bank loans not yet used by the Group is RMB15,937,997 thousand. (as at December 31, 2020: RMB12,044,420 thousand).

8 RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)

Risk management objectives and policies (Continued)

8.2 Liquidity risk (Continued)

As at the end of the period, the financial assets, financial liabilities and off-balance sheet guarantee items held by the Company are analyzed based on the maturity of remaining undiscounted contractual cash flows as follows (unit: RMB'000):

Item	Balance as at December 31, 2021				
	Within 1 year	**1 – 2 years**	**2 – 5 years**	**Over 5 years**	**Total**
Financial assets:					
Cash and cash equivalents	**2,508,224**				**2,508,224**
Accounts receivable	**8,151,019**				**8,151,019**
Receivables at FVTOCI	**1,295,971**				**1,295,971**
Other receivables	**2,552,292**				**2,552,292**
Other current assets	**2,238,006**				**2,238,006**
Total financial assets	**16,745,512**				**16,745,512**
Financial liabilities:					
Short-term loans	**17,878,057**				**17,878,057**
Bills payable	**8,334,086**				**8,334,086**
Accounts payable	**21,556,262**				**21,556,262**
Other payables	**2,355,823**				**2,355,823**
Non-current liabilities due within 1 year	**337,691**				**337,691**
Long-term borrowings		**1,639,014**			**1,639,014**
Lease liabilities		**224,724**	**195,470**	**10,835**	**431,029**
Total financial liabilities and contingent liabilities	**50,461,919**	**1,863,738**	**195,470**	**10,835**	**52,531,962**

Item	Balance as at December 31, 2020				
	Within 1 year	1 – 2 years	2 – 5 years	Over 5 years	Total
Financial assets:					
Cash and cash equivalents	1,551,458				1,551,458
Bills receivable					
Accounts receivable	9,358,385				9,358,385
Receivables at FVTOCI	1,323,425				1,323,425
Other receivables	2,464,362				2,464,362
Long-term receivables					
Other current assets	1,995,808				1,995,808
Total financial assets	16,693,438				16,693,438
Financial liabilities:					
Short-term loans	19,771,907				19,771,907
Bills payable	6,305,228				6,305,228
Accounts payable	20,497,509				20,497,509
Other payables	1,675,104				1,675,104
Non-current liabilities due within 1 year	372,537				372,537
Long-term borrowings	13,794	594,510			608,304
Lease liabilities		171,597	637,027	331,542	1,140,166
Long-term payables		27,033			27,033
Total financial liabilities and contingent liabilities	48,636,079	793,140	637,027	331,542	50,397,788

8 RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)

Risk management objectives and policies (Continued)

8.3 Market risk

Market risk, includes interest rate risk and foreign currency risk, refers to the risk that the fair value or future cash flow of a financial instrument will fluctuate because of the changes in market price.

8.3.1 Interest rate risk

Interest rate risk refers to the risk that the fair value or future cash flow of a financial instrument will fluctuate because of the floating rate. Interest rate risk arises from recognized interest-bearing financial instrument and unrecognized financial instrument (e.g. loan commitments).

The Group's interest rate risk arises from long-term bank loans and other interest-bearing liabilities. Financial liabilities issued at floating rate expose the Group to cash flows interest rate risk. Financial liabilities issued at fixed rate expose the Group to fair value interest rate risk. The Group determines the relative proportions of its fixed rate and floating rate contracts depending on the prevailing market conditions. At the same time, the Group monitors and maintains the combined financial instruments of fixed rate and floating rate.

The Group closely monitors the impact of changes in interest rates on the Group's interest rate risk. The Group currently does not adopt an interest rate hedging policy. However, management is responsible for monitoring interest rate risk and will consider hedging significant interest rate risk when it will be needed. Increase in interest rates will increase the cost of new borrowing and the interest expenses with respect to the Group's outstanding floating rate borrowings, and therefore could have a material adverse effect on the Group's financial position. The Group's management will make decisions with reference to the latest market conditions. The Group may enter into interest swap agreement to mitigate its exposure to the interest rate risk. For the year ended 31 December 2020 and 31 December 2019, the Company did not enter into any interest rate swap arrangements. The fair value interest rate risk of the deposit with bank was not principal because the fixed term deposits are short-term deposits etc.

The interest-bearing financial instruments held by the Group are as follows:

As at December 31, 2021, if the borrowing interest rate calculated at the floating interest rate rises or falls by 50 basis points, while other factors remain unchanged, the Group's net profit and shareholders' equity will decrease or increase by approximately RMB13,218 thousand (as at December 31, 2020: RMB9,567 thousand).

The financial instruments held by the Group at the date of balance sheet expose the Group to fair value interest rate risk. Under the hypothesis of a floating interest rate at the date of balance sheet, the effect to the net profit and shareholder's equity illustrated in the sensitivity analysis as above is arised from the recalculation of these financial instrument issued at new interest rates. The non-derivative tools issued at floating interest rate held by the Group at the date of balance sheet expose the Group to cash ow interest rate risk. The effect to the net profit and shareholder's equity illustrated in the sensitivity analysis as above is arised from the effect to the annual estimate amount of interest expenses or revenues at the floating interest rate. The analysis of the previous period is based on the same hypothesis and method.

Item	**Balance as at December 31, 2021**	Balance as at December 31, 2020
Fixed interest rate financial instruments		
Financial assets:	**3,000**	6,210
Monetary funds	**3,000**	6,210
Long-term receivables		
Financial liabilities:	**16,236,811**	18,660,716
Short-term borrowings	**15,550,000**	17,400,000
Lease liabilities	**681,211**	1,249,516
Long-term payables	**5,600**	11,200
Floating interest rate financial instruments		
Financial assets:	**2,505,224**	1,545,248
Monetary funds	**2,505,224**	1,545,248
Financial liabilities:	**3,524,777**	2,551,236
Short-term borrowings	**1,970,091**	1,970,520
Long-term borrowings	**1,554,686**	580,716

8 RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)

Risk management objectives and policies (Continued)

8.3 Market risk (Continued)

8.3.2 Exchange rate risk

Foreign currency risk refers to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign currency rates. Foreign currency risk arises from the functional currency denominated financial instrument measured at individual entity.

The Group's major operational activities are carried out in Mainland China and a majority of the transactions are denominated in RMB. The Group is exposed to foreign currency risk arising from the recognized assets and liabilities, and future transactions denominated in foreign currencies, primarily with respect to US dollars, Saudi riyals and Kuwait dinars.

As at December 31, 2021, the foreign currency financial assets and liabilities held by the Group were converted to RMB. The amounts are listed as follows:

Item	Foreign currency liabilities		Foreign currency assets	
	Amount as at December 31, 2021	Amount as at January 1, 2021	**Amount as at December 31, 2021**	Amount as at January 1, 2021
USD	**3,100,442**	3,149,773	**4,401,430**	4,672,781
SAR	**236,671**	204,400	**630,487**	675,033
KWD	**124,601**	171,614	**931,583**	920,504
Other foreign currencies	**166,726**	276,935	**703,471**	941,375
Total	**3,628,440**	3,802,722	**6,666,971**	7,209,693

The Group closely monitors the impact of changes in interest rates on the Group's interest rate risk. The Group's management is responsible for monitoring the amount of assets and liabilities, and transactions denominated in foreign currencies. The Group may consider entering into forward exchange agreements or currency swap agreements to mitigate the foreign currency risk.

Under the circumstance that other variables remain unchanged, the after-tax effects of possible reasonable changes in the exchange rate of foreign currencies against RMB this year on the Group's current profit or loss are as follows:

Increase (decrease) in after-tax profit	**Current year**		Prior year	
USD exchange rate rises	**5%**	**48,787**	5%	57,113
USD exchange rate declines	**-5%**	**-48,787**	-5%	-57,113
SAR exchange rate rises	**5%**	**14,768**	5%	17,649
SAR exchange rate declines	**-5%**	**-14,768**	-5%	-17,649
KWD exchange rate rises	**5%**	**30,262**	5%	28,083
KWD exchange rate declines	**-5%**	**-30,262**	-5%	-28,083

9 DISCLOSURE OF FAIR VALUE

The input value used for measuring fair value is divided into three levels:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access on the measurement date.

Level 2 inputs are directly or indirectly observable inputs of relevant assets or liabilities other than first-level inputs;

Level 3 inputs refer to unobservable inputs of relevant assets or liabilities.

The fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

9.1 Fair value of assets and liabilities measured at fair value as at December 31, 2021

Item	Fair value as at December 31, 2021			
	Measurement of fair value at level 1	Measurement of fair value at level 2	Measurement of fair value at level 3	Total
9.1.1 Continuous measurement at fair value				
◆Receivables at FVTOCI			1,295,971.00	1,295,971.00
◆Other equity instrument investments			21,760.00	21,760.00
Total assets with continuous measurement at fair value			1,317,731.00	1,317,731.00

9.2 Nature and quantitative information of valuation techniques and key parameters adopted for items measured at the fair value of Level 3 on a going and non-going concern

Item	Fair value as at December 31, 2021	Valuation techniques	Unobservable input values	Range (weighted average value)
Receivables at FVTOCI	**1,295,971**	Asset-based valuation or Discounted Cash Flow Model	N/A	N/A
Other equity instrument investments	**21,760**	Net value of assets	N/A	N/A

9.3 Analysis on the measurement items measured at fair value of level 3 on a going concern, adjustment information between the book value as at the end of the last year and the book value as at the end of last period and sensitivity of unobservable parameters

9.3.1 Adjustment information on the continuous measurement project of fair value at level 3

Item	Balance as at December 31, 2020	Total gains or losses in the current period		Purchase, issue, sales and settlement				Balance as at December 31, 2021	For the assets held at the end of the reporting period, the current unrealized gains or changes included in profit or loss
		Included in the profit or loss	Included in the other comprehensive income	Purchase	Issue	Sales	Settlement		
◆Other equity instrument investments	22,835		-2,152.00	1,077.00				**21,760.00**	
Total	22,835		-2,152.00	1,077.00				**21,760.00**	

9.4 Fair value of financial assets and financial liabilities not measured at fair value

The Group's financial assets and financial liabilities measured at amortized cost mainly include: monetary funds, notes receivable, accounts receivable, other receivables, short-term borrowings, notes payable, accounts payable, other payables, long-term payables and long-term borrowings.

Except for the above-mentioned financial assets and financial liabilities, the book value and fair value of other financial assets and financial liabilities not measured at fair value have a very small difference.

10 RELATED PARTIES AND RELATED-PARTY TRANSACTIONS

10.1 Parent company of the Company

Name of parent company	Registration place	Business nature	Registered capital (RMB100 million)	Shareholding ratio of the parent company in the Company (%)	Voting ratio of the parent company in the Company (%)
China Petrochemical Corporation	22 Chaoyangmen North Street, Chaoyang District Beijing	Petroleum and natural gas exploration, exploitation and sales; petroleum refining; production, sales, storage and transportation of petrochemical, chemical fiber and other chemical products; pipeline transportation of oil and natural gas; research, development, and application of technology and information.	3,265.47	56.51	70.18

The ultimate controller of the Company is China Petrochemical Corporation.

China Petrochemical Corporation directly holds 56.51% of the Company's equity and holds 13.67% of the Company's equity its wholly-owned subsidiary Sinopec Century Bright Capital Investment Limited, with a total voting ratio of 70.18%.

10.2 Information on subsidiaries of the Company

See "Note 7 Equity in other entities" for details of subsidiaries of the Company.

10.3 Joint ventures and associates of the Company

See "Note 7 Equity in other entities" for the details of significant joint ventures or associates of the Company.

Other joint ventures and associates that conduct related-party transactions with the Company in the current period or have a balance arising from the related transactions with the Company occurred in the prior period are follows:

Name of joint venture or associate	Relationship with the Company
Sinopec Bayshore Petroleum Service Co., LTD	Joint venture
Qianjiang Hengyun Motor Vehicle Performance Testing Corporation	Joint venture
Huabei Ruida Oil Service Company Limited	Associate
Xinjiang North China Tianxiang Oil Service Company Limited	Associate
Zhenjiang Huajiang Oil & Gas Engineering Technology Service Co., Ltd	Associate
Henan Zhongyuan Oil & Gas Engineering Technology Service Co., Ltd	Associate
Oil & Gas Engineering Technology Service Co., Ltd	Associate

10 RELATED PARTIES AND RELATED-PARTY TRANSACTIONS (Continued)

10.4 Other related parties

Name of other related parties	Relationship between other related parties and the Company
China Petroleum &Chemical Corporation	Under the common control of Sinopec Group
Sinopec Shengli Petroleum Administrative Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Zhongyuan Petroleum Exploration Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Jianghan Petroleum Administrative Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Henan Petroleum Exploration Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Jiangsu Petroleum Prospecting Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Star Co., Ltd.	Under the common control of Sinopec Group
Sinopec East China Petroleum Bureau	Under the common control of Sinopec Group
Sinopec North China Petroleum Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Southwest Petroleum Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Northeast Petroleum Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Pipeline Storage and Transportation Company	Under the common control of Sinopec Group
Sinopec Offshore Petroleum Bureau Co., Ltd.	Under the common control of Sinopec Group
Sinopec Finance Co., Ltd.	Under the common control of Sinopec Group
Sinopec Century Bright Capital Investment Limited	Under the common control of Sinopec Group
Sinopec Assets Operation and Management Co., Ltd.	Under the common control of Sinopec Group
China CITIC Group Co., Ltd.	Shareholder holding more than 5% of the Company's voting right in previous year. As of December 31, 2021, holding 3.56% equity of the Company
CITIC Bank	Subsidiaries of China CITIC Group Co., Ltd.
Taiping & Sinopec Financial Leasing Co., Ltd.	Joint venture of Sinopec
Sinopec International Petroleum Exploration and Production Corporation	Associate of Sinopec
China Oil & Gas Pipeline Network Group	Associate of Sinopec
Directors, managers, chief accountant and secretary of the Board of Directors	Key management personnel

10.5 Related-party transactions

10.5.1 Related-party transaction on purchase and sales of goods, and rendering and receipt of services

10.5.1.1 Purchase of goods

Related party	Content of related transaction	Pricing and decision-making process of related transactions	**Current period**	Prior period
Sinopec Group and its subsidiaries	Purchase of materials and equipment	According to normal commercial terms or related agreements	**11,446,329**	10,364,984
Joint ventures and associates of the Group	Purchase of materials and equipment	According to normal commercial terms or related agreements	**232,535**	201,258

10.5.1.2 Sales of goods

Related party	Content of related transaction	Pricing and decision-making process of related transactions	**Current period**	Prior period
Sinopec Group and its subsidiaries	Sales of products	According to normal commercial terms or related agreements	**13,546**	110,473
Joint ventures and associates of Sinopec Group	Sales of products	According to normal commercial terms or related agreements	**13**	

10 RELATED PARTIES AND RELATED-PARTY TRANSACTIONS (Continued)

10.5 Related-party transactions (Continued)

10.5.1 Related-party transaction on purchase and sales of goods, and rendering and receipt of services (Continued)

10.5.1.3 Rendering of services

Related party	Content of related transaction	Pricing and decision-making process of related transactions	Current period	Prior period
Sinopec Group and its subsidiaries	Petroleum engineering technology service	According to normal commercial terms or related agreements	46,780,540	40,745,639
Joint ventures and associates of the Group	Petroleum engineering technology service	According to normal commercial terms or related agreements	3,498,968	2,509,490
Joint ventures and associates of the Group	Petroleum engineering technology service	According to normal commercial terms or related agreements	180,725	5,580

10.5.1.4 Receipt of labor services

Related party	Content of related transaction	Pricing and decision-making process of related transactions	Current period	Prior period
Joint ventures and associates of the Group	Receipt of labor services	According to normal commercial terms or related agreements	1,944,794	1,932,918

10.5.1.5 Rendering of comprehensive services services

Related party	Content of related transaction	Pricing and decision-making process of related transactions	Current period	Prior period
Sinopec Group and its subsidiaries	Rendering of comprehensive services services	According to normal commercial terms or related agreements	29,578	95,987

10.5.1.6 Receipt of comprehensive services services

Related party	Content of related transaction	Pricing and decision-making process of related transactions	Current period	Prior period
Sinopec Group and its subsidiaries	Receipt of community comprehensive services	According to normal commercial terms or related agreements	54,034	389,047
Sinopec Group and its subsidiaries	Receipt of others comprehensive services	According to normal commercial terms or related agreements	514,949	351,306
Joint ventures and associates of the Group	Receipt of others comprehensive services	According to normal commercial terms or related agreements	542	

10.5.1.7 Rendering sci-tech R&D services

Related party	Content of related transaction	Pricing and decision-making process of related transactions	Current period	Prior period
Sinopec Group and its subsidiaries	Rendering sci-tech R&D services	According to normal commercial terms or related agreements	95,956	79,300

10.5.2 Related-party lease

The Company as the lessor:

Name of lessee	Type of leased assets	Pricing and decision-making process of related transactions	Lease revenue recognized in the current period	Lease revenue recognized in the previous period
Sinopec Group and its subsidiaries	Equipment	According to normal commercial terms or related agreements	808	
Sinopec Group and its subsidiaries	Housing	According to normal commercial terms or related agreements	1,920	2,225

10 RELATED PARTIES AND RELATED-PARTY TRANSACTIONS (Continued)

10.5 Related-party transactions (Continued)

10.5.2 Related-party lease (Continued)

The Company as the lessee:

Name of the lessor	Type of leased assets	Pricing and decision-making process of related transactions	Current period	Prior period
Sinopec Group and its subsidiaries	Land and real estate	According to normal commercial terms or related agreements	114,253	208,038
	Including: short-term lease	According to normal commercial terms or related agreements	58,576	18,620
	Right-of-use assets	According to normal commercial terms or related agreements	55,678	189,418
Joint ventures and associates of the Group	Land and real estate	According to normal commercial terms or related agreements		1,000
	Including: short-term lease	According to normal commercial terms or related agreements		1,000
	Right-of-use assets	According to normal commercial terms or related agreements		
Sinopec Group and its subsidiaries	Equipment	According to normal commercial terms or related agreements	33,715	27,461
	Including: short-term lease	According to normal commercial terms or related agreements	29,911	24,099
	Right-of-use assets	According to normal commercial terms or related agreements	3,805	3,362
Joint ventures and associates of the Group	Equipment	According to normal commercial terms or related agreements	353,253	237,184
	Including: short-term lease	According to normal commercial terms or related agreements	25,071	27,345
	Right-of-use assets	According to normal commercial terms or related agreements	328,182	209,839

10.5.3 Related-party guarantees

The Company acted as guarantor:

The guaranteed	Guarantee type	Guarantee amount	Guarantee commencement date	Guarantee expiry date	Guarantee performance completed or not
Sinopec Group	Anti-guarantee	RMB300,000 thousand	September 2021	September 2024	No
Sinopec International Petroleum Service Corporation	Performance guarantee	USD61,830 thousand	September 2015	December 2024	No
Sinopec International Petroleum Service Corporation	Performance guarantee	USD588,000 thousand	December 2015	December 2022	No
Sinopec International Petroleum Service Corporation	Performance guarantee	THB 3,142,900 thousand; USD103,929 thousand	April 2017	October 2022	No
Sinopec International Petroleum Service Corporation	Performance guarantee	USD4,079 thousand	April 2019	December 2022	No
Sinopec International Petroleum Service Corporation	Performance guarantee	USD67,000 thousand	April 2019	November 2022	No
Sinopec International Petroleum Service Corporation	Performance guarantee	USD611,000 thousand	June 2021	June 2030	No

10.5.4 Loans to and from related parties

Related party	Content of related-party transaction	Pricing and decision-making process of related-party transactions	Current period	Prior period
Sinopec Group and its subsidiaries	Revenue from deposit interest	Based on normal commercial terms	1,008	1,407
	Loan interest expense	Based on normal commercial terms	597,814	753,965
	Obtaining the borrowing	Based on normal commercial terms	60,848,383	52,974,382
	Payment of the loan	Based on normal commercial terms	61,654,200	54,391,017
Joint ventures and associates of Sinopec Group	Finance lease interest expenses	Based on normal commercial terms	509	29,099

10 RELATED PARTIES AND RELATED-PARTY TRANSACTIONS (Continued)

10.5 Related-party transactions (Continued)

10.5.5 Assets transfer and debt restructuring of related parties

Related party	Content of related-party transaction	Pricing and decision-making process of related-party transactions	Current period	Prior period
Sinopec Group	Security fund expenditure	Based on normal commercial terms or relevant agreements	**75,600**	76,160
	Return on security fund	Based on normal commercial terms or relevant agreements	**132,145**	107,168

10.5.6 Remuneration of key management personnel

The Group has 15 key management personnel for the year ended 31 December 2021 and 15 for the prior period. The remuneration payment is as follows

Item	Current period	Prior period
Remuneration	**9,799**	8,358
Retirement scheme contribution	**585**	443
Share options		85

10.6 Receivables from and payables to related parties

10.6.1 Receivables

Item	Related party	Balance as at December 31, 2021 Book balance	Balance as at December 31, 2020 Book balance
Bank deposits	Sinopec Finance Co., Ltd.	**902,678**	107,564
	Sinopec Century Bright Capital Investment Limited	**690,991**	649,976
	CITIC Bank		1
Accounts receivable	Sinopec Group and its subsidiaries	**2,361,677**	2,364,781
	Joint ventures of the Group	**31,673**	5,249
	Joint ventures and associates of Sinopec Group	**899,769**	912,791
Contract assets	Sinopec Group and its subsidiaries	**5,604,733**	4,798,350
	Joint ventures and associates of Sinopec Group	**1,769,973**	1,131,659
Prepayments	Sinopec Group and its subsidiaries	**88,584**	136,002
	Joint ventures and associates of Sinopec Group	**143**	
Other receivables	Sinopec Group and its subsidiaries	**200,891**	82,176
	Joint ventures and associates of the Group	**246**	189
	Joint ventures and associates of Sinopec Group	**384,649**	294,411

10 RELATED PARTIES AND RELATED-PARTY TRANSACTIONS (Continued)

10.6 Receivables from and payables to related parties (Continued)

10.6.2 Payables

Item	Related party	Balance as at December 31, 2021	Balance as at December 31, 2020
Short-term borrowings	Sinopec Finance Co., Ltd.	**4,550,000**	6,400,000
	Sinopec Century Bright Capital Investment Limited	**1,970,091**	1,970,520
	Sinopec Group and its subsidiaries	**11,000,000**	11,000,000
Accounts payable	Sinopec Group and its subsidiaries	**1,242,578**	1,146,343
	Joint ventures and associates of the Group	**52,175**	18,322
	Joint ventures and associates of Sinopec Group	**12,054**	7,204
Other payables	Sinopec Group and its subsidiaries	**47,788**	26,233
	Joint ventures and associates of the Group	**468**	2,688
	Joint ventures and associates of Sinopec Group	**23,410**	
Contract liabilities	Sinopec Group and its subsidiaries	**2,127,395**	2,185,979
	Joint ventures and associates of Sinopec Group	**433,982**	55,226
Interest payable	Sinopec Group and its subsidiaries	**19,364**	16,594
Non-current liabilities maturing within one year	Joint ventures and associates of Sinopec Group	**5,600**	
Lease liabilities	Sinopec Group and its subsidiaries	**40,504**	441,190
	Joint ventures and associates of Sinopec Group	**16,453**	547,271
Long-term borrowings	Sinopec Finance Co., Ltd.	**1,000,000**	
Long-term payables	Joint ventures and associates of Sinopec Group		11,200

10.7 Centralized management of funds

10.7.1 The main contents of the centralized management of funds that the company participates in and implements are as follows:

In order to regulate the capital operation of its subsidiaries, accelerate capital turnover, improve capital operation efficiency, improve internal control mechanism, and ensure the maximization of the group's overall benefits, China Petrochemical Corporation (hereinafter referred to as "Sinopec Group") implemented centralized and unified management of the funds of the Sinopec Group and its member units through Sinopec Finance Co., Ltd. ("Sinopec Finance") and Sinopec Century Bright Capital Investment Limited. ("Century Bright") according to relevant laws and regulations.

10.7.2 Funds collected by the Company to the Group

Funds deposited by the Group is directly deposited into the Sinopec Finance and Century Bright without being collected into the account of the parent company of the Group:

As of December 31, 2021, the total amount deposited by the Group in Sinopec Finance and Century Bright was RMB1,593,669 thousand (December 31, 2020: RMB757,540 thousand), which was listed as "Cash at bank and on hand", and there was no withdrawal restriction or impairment.

10.7.3 Funds borrowed by the Company from the parent company or member units of the group

As of December 31, 2021, the balance of funds borrowed by the Group from Sinopec Finance and Century Bright was RMB6,520,091 thousand (December 31, 2020: RMB8,370,520 thousand), and the balance of funds borrowed by the Group from the parent company Sinopec Group was RMB12,000,000 thousand (December 31, 2020: 11,000,000 thousand).

11 SHARE-BASED PAYMENT

The Company held the 14th Meeting of the 8th Session of the Board of Directors on November 1, 2016 and considered and passed the *Resolution on Adjusting the List of Incentive Subjects and the Number of Grants for the First Grant of the Sinopec Oilfield Service Corporation A Share Stock Option Incentive Plan* and the *Resolution on Implementing the Grant of the First Phase of the Stock Option Incentive Plan*.

According to the Company's stock option incentive plan, the stock option grant date was November 1, 2016, and a total of 49.05 million stock options (0.3469% of the total number of common shares) were granted to 477 incentive recipients. Each stock option has the right to purchase one A share of the Company's RMB common stock at an exercise price of RMB5.63 per share and determined exercise conditions on the exercise date. Stock options that meet the following exercise conditions are exercisable two years after the date of grant:

I. The Company's compound growth rate for 2017, 2018 and 2019 shall not be less than 6% (on the base of the Company's total profit for 2015);

II. The Company's EOE for 2017, 2018 and 2019 shall not be less than 32%;

The performance conditions of item I and II are no less than the 75 performance level of the target enterprise.

III. The Economic Value Added ("EVA") for 2017, 2018 and 2019 is more than 0 and reaches the performance objective set by China Petrochemical Corporation.

As at December 31, 2017, the exercise date and exercise price of the share options to expire 12 months after the exercise date are as follows:

Exercise date	Exercise price (RMB per share)	Number of share options
November 1, 2018	5.63	14,715,000
November 1, 2019	5.63	14,715,000
November 1, 2020	5.63	19,620,000

The Company held the 7th Meeting of the 10th Session of the Board of Directors and the 7th Meeting of the 10th Session of Board of Supervisors on October 28, 2021 and passed the *Registration on Cancellation of the Company's First Grant of A Share Option Incentive Plan for the Third Exercise Period Shares*, agreeing that the Company will not exercise the third exercise period that has expired in accordance with the relevant regulations of the "*Administrative Measures for Equity Incentives for Listed Companies*" and "*Sinopec Petroleum Engineering Technology Services Co., Ltd. A-Share Stock Option Incentive Plan*". A total of 17.084 million stock options held by 423 incentive objects were cancelled. In the current period, the Company transferred the accumulated amount of equity-settled share-based payment in the capital reserve of RMB20,662 thousand from other capital reserves to share capital premium.

12 COMMITMENTS AND CONTINGENCIES

12.1 Significant commitments

12.1.1 Significant commitments existed on the balance sheet date

Capital commitments contracted for but not yet necessary to be recognized on the balance sheet	As at December 31, 2021	As at December 31, 2020
Construction of long-term assets commitments	**74,473**	180,023
Investment commitments	**129,625**	129,625

12.1.2 Performance of prior commitments

The Group has fulfilled the capital and operating lease commitments as at 31 December 2021.

12 COMMITMENTS AND CONTINGENCIES (Continued)

12.2 Contingencies

12.2.1 Significant contingencies existed on the balance sheet date

(1) Pending litigation and arbitration matters

The Group might involve in disputes, litigations and claims for compensation with customers, sub-contractors, and suppliers in the ordinary course of business. The Management has assessed the possibility of adverse results of these contingencies, litigations or other proceedings and believes that any resulting liabilities will not have material adverse effect on the financial position, operating results, or cash flow of the Group, and thus accrues no provision.

1. China National Chemical Engineering No.11 Construction Co., Ltd. ("No.11 Chemical Construction") as a subcontractor of the Group undertook the construction of the "Package C project" of "Saudi Yanbu-Medina Phase III Pipeline Project" in August 2012. On May 29, 2018, No.11 Chemical Construction submitted an arbitration application to the China International Economic and Trade Arbitration Commission for contract dispute, requesting the Group to pay RMB456,810 thousand for the project fee and the accrued interest, RMB145,968 thousand for the loss due to stoppage of work and the accrued interest, RMB38,018 thousand for the advance payment under the letter of guarantee and the accrued interest, and RMB500 thousand for attorney fee and the arbitration fees for the case. The China International Economic and Trade Arbitration Commission accepted the case on June 15, 2018. The arbitration commission has selected a cost consultant institution to conduct cost appraisal on the disputed expenses related to this case, As of now, the arbitral tribunal in this case has extended the deadline for the award to June 24, 2022 As the case is still under trial, the impact on the current or future profits of the Group is currently unpredictable. In this year, only the estimated litigation costs incurred in the arbitration process have been accrued in accordance with the SWCC arbitration agency agreement of RMB4 million, and other than that, no estimated liabilities have been accrued for. The Group will make active response and safeguard the legitimate rights and interests of the Company.
2. On October 8, 2014, Sinopec Group International Petroleum Engineering Banyaduli Company, a subsidiary of the Company, signed a service contract with Petroecuador (hereinafter referred to as "PAM") to provide obligatory workload operations such as capacity optimization, recovery enhancement and exploration operations for the three oil fields of I-L-Y to enhance oil field production. Due to different interpretations of the supplemental clauses by both parties during project operation, two parties had disputes over the identification of oilfield production and payment amount from 2016 to 2017, and repeated negotiations were unsuccessful. In October 2018, the Company initiated an international legal arbitration plan. In April 2019, in accordance with the relevant regulations of the I-L-Y oilfield project contract, the company submitted a "Notice of Application for Legal Arbitration" to PAM for contract disputes to initiate legal arbitration procedures. In May 2020, the Company filed a statement of claim for arbitration for approximately USD80 million, including the amount of claims and interest. On February 22, 2022, Banyaduli Company has received the international arbitration award on the dispute over the payment of oil production increase for the I-L-Y oilfield comprehensive service project issued by the arbitral tribunal. The verdict is overall in favor of the Banyaduli Company. However, since the place of arbitration is Chile, the parties to the arbitration have the right to apply for annulment of the arbitral award according to the relevant laws of Chile, and there is still uncertainty as to whether the other party will perform the arbitral award. The company will actively respond and safeguard the legitimate rights and interests of the company.

(2) Judicial reorganization of the Brazil subsidiary and its financial impact

On August 16, 2018, Sinopec (Brazil) Co., Ltd., an indirectly wholly-owned overseas subsidiary of the Company (the "Brazil Subsidiary") applied for judicial reorganization to the Third State Court of Commercial Enterprises in Rio de Janeiro, Brazil (the "Court of Rio") according to the relevant local laws in Brazil. On August 31, 2018, the Brazil subsidiary received ruling from Court of Rio, approved Brazil Subsidiary's entering judicial reorganization and the law firm Nascimento & Rezende Advogados was appointed as the judicial reorganization manager by Court of Rio.

According to the relevant laws of Brazil, the Brazil Subsidiary is required to prepare a reorganization plan upon the Court of Rio has approved that the Brazil Subsidiary enters the legal reorganization procedure. Such legal reorganization is conditional upon the approval of the reorganization plan from the creditors' meeting and the Court of Rio.

In order to obtain approval from creditors' meeting and the Court of Rio in Brazil, the Brazil Subsidiary's reorganization plan shall include full settlement of the amount due to employees in respect of the Project, repaying a proportion of debt due to Three Suppliers, and paying legal fees, fees on judicial authorities and other services fees in relation to the implementation of legal reorganization procedure. Such payments amount is estimated to be approximately RMB475,276 thousand.

During the implementation of the judicial restructuring plan, the Brazilian subsidiary actively fulfilled its judicial restructuring obligations, and the restructuring work was progressing smoothly. Because of the fact that the Brazilian third fertilizer plant project lawsuit has obtained favorable expert appraisal opinions for the Brazilian subsidiary, the devaluation of the Brazilian currency due to the epidemic and the effective reduction of the cost of reorganization and operation, the Company expects that the total expenses actually paid by the Brazilian subsidiary due to the reorganization plan will be USD58.42 million (equivalent to approximately RMB389 million). Therefore, at the end of 2021, the Company reversed the estimated liabilities of USD10.83 million (equivalent to approximately RMB69 million). As of December 31, 2021, the remaining balance of estimated liabilities was RMB158,233 thousand.

12 COMMITMENTS AND CONTINGENCIES (Continued)

12.2 Contingencies (Continued)

12.2.1 Significant contingencies existed on the balance sheet date (Continued)

(3) Contingent liabilities arising from overseas tax penalties and their financial impacts

On August 3, 2021, the Ghana subsidiary of Sinopec Group International Petroleum Engineering Co., Ltd. (referred to as the "Ghana subsidiary") received a tax audit notification letter from the Large Enterprise Taxation Department of the Ghana Taxation Bureau, requesting for an income tax audit of the Ghana subsidiary's execution of the Ghana Gas Engineering EPCC project for the period 2012-2020. After receiving the income tax audit letter, the Ghana subsidiary sorted out the relevant business according to the audit requirements of the Ghana Tax Bureau and analyzed the future risks of the audit matters. The Ghana subsidiary conducted a business self-inspection on the provisions of Ghana's 2015 Income Tax Act concerning resident institutions. Due to the long implementation cycle of the project and frequent personnel exchanges during the implementation of the project, there may be relevant personnel working in Ghana exceeding the 90-day requirement. This results in a permanent establishment mechanism being touched, and therefore a tax risk. The Ghana subsidiary has made provision for estimated liabilities based on the best estimate of relevant income tax and penalty interest. As of December 31, 2021, the balance of estimated liabilities was RMB18,534 thousand.

(4) Contingent liabilities arising from guarantees provided for debt of other entities and their financial effects

As at December 31, 2021, there is no contingent liability from guarantee provided for other entities.

As at December 31, 2020, Sinopec Oilfield Service Limited, the subsidiary of the Company, has provided guarantee amount of USD1,435,838 thousand and THB3,142,900 thousand to its subsidiaries.

(5) Other contingent liabilities

With respect to uncertainties about enterprise income tax differences arising from 2006 and before as originated from a tax circular (GSH [200] No. 644) issued by the State Administrative of Taxation in June 2007, the Company has been informed the relevant tax authority to settle the enterprise income tax for 2007 at a rate of 33%. To date, the Company has not been requested to pay additional enterprise income tax in respect of any years prior to 2007. There is no further development of this matter as at December 31, 2021. No provision has been made in the financial statements for this uncertainty for tax year prior to 2007, because the management believes it cannot reliably estimate the amount of the obligation, if any, that might exist.

13 POST BALANCE SHEET EVENTS

As at March 29, 2022, there are no post balance sheet events to be disclosed by the Group.

14 CAPITAL MANAGEMENT

The objective of the Group's capital management policy is to safeguard the Group's ability to continue as a going concern, thereby providing returns to shareholders and benefits to other stakeholders, while maintaining an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the method of financing, adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares and other equity instruments or sell assets to reduce debt.

The Group monitors its capital using the debt-to-capital ratio, which is calculated as net debt divided by total capital. The net debt is total borrowings (including short-term borrowings, long-term borrowings maturing within one-year, long-term borrowings and long-term payables) less the cash balance shown in the statement of cash flows. Total capital is the sum of shareholders' equity and net debt as presented in the consolidated balance sheet. Total shareholders' equity includes the shareholders' equity attributable to the parent company and the minority interests.

As at the balance sheet date, the Group's debt-to-capital ratio is as follows:

Item	Balance as at December 31, 2021	As at December 31, 2020
Short-term borrowings	**17,520,091**	19,370,520
Lease liabilities maturing within one year	**290,345**	351,047
Long-term payables maturing within one year	**5,600**	5,700
Long-term borrowings	**1,554,686**	580,716
Lease liabilities	**390,866**	898,469
Long-term payables		5,500
Less: cash balances as shown in the statement of cash flows	**2,475,306**	1,523,352
Net debt	**17,286,282**	19,688,600
Shareholders' equity	**6,861,517**	6,722,866
Total capital	**24,147,799**	26,411,466
Debt-to-capital ratio	**71.59%**	75.55%

15 OTHER SIGNIFICANT EVENTS

15.1 Correction of prior accounting errors

There were no corrections of accounting errors in prior periods during the reporting period.

15.2 Debt restructuring

The Group restructured its debts with the creditors in the current period by modifying the debt principal. The total amount of profits recognized in the current period due to debt restructuring was RMB29,973 thousand. The amount of losses which cash back below the book value of the claims is RMB569 thousand. There is no individually significant debt restructuring during the current period.

15.3 Assets replacement

There were no asset replacement during the reporting period.

15.4 Annuity plan

For details about the main components of the annuity plans, please refer to the Note 3.21.3 Accounting treatment of dismissal benefits".

15.5 Discontinued operation

There is no discontinued operation during the reporting period.

15.6 Segment information

15.6.1 Determination criteria and accounting policies for reportable segments

The Group has identified five reportable segments based on its internal structure, management requirements and internal reporting policy. The reportable segments are: geophysics, drilling engineering, logging and mud logging, special down-hole operations, and engineering construction. The segment information is prepared based on the financial information of the Company's daily management requirements. The Group's management reviews reportable segments' financial information periodically for the purposes of allocating resources and assessing the performance.

The Group's reportable segments include:

(1) Geophysics, which provides geophysical exploration, development and technical services;

(2) Drilling engineering, which provides customers with drilling construction, technical services and drilling instrumentation;

(3) Logging and mud logging, which provides logging and mud logging technology services;

(4) Special down-hole operations, which provides oil engineering technical and construction, including oil (gas) testing, well repair, lateral drilling, fracturing, acidising and oil assignments;

(5) Engineering construction, which provides a package of services, including feasibility studies, design, procurement, construction for projects of onshore and offshore oil and gas fields, long-distance pipeline projects.

The segment information is disclosed in accordance with the accounting policies and measurement standards reported to management by each segment. These accounting policies and measurement standards are consistent with the accounting policies and measurement standards of preparation of the financial statements.

Inter-segment transfers are measured by reference to market price. The assets are allocated based on the operations of the segment and the physical location of the asset.

The resources related to long-term equity investment and investment (loss)/income on joint venture, income tax expenses as well as shared assets of all segments are centrally managed and accounted for by the Company, and thus are not allocated among segments.

15 OTHER SIGNIFICANT EVENTS (Continued)

15.6 Segment information (Continued)

15.6.2 Financial information of reportable segments

Current period or As at December 31, 2021	Geophysics	Drilling engineering	Logging and mud logging	Special down-hole operations	Engineering construction	Others	Offset	Total
Operating revenue	4,706,123	36,839,486	5,536,994	9,917,443	16,741,825	9,295,975	-13,504,793	69,533,053
Including: income from external transactions	4,663,346	33,081,850	3,207,549	9,384,197	16,714,720	2,481,391		69,533,053
Income from inter-segment transactions	42,777	3,757,636	2,329,444	533,246	27,104	6,814,586	-13,504,793	
Including: income from primary business	4,706,123	36,839,486	5,536,994	9,917,443	16,741,825	7,638,730	-13,165,585	68,215,016
Operating costs	4,468,662	35,275,582	4,918,847	9,211,862	15,345,615	8,805,150	-13,504,793	64,520,925
Including: costs of primary business	4,468,662	35,275,582	4,918,847	9,211,862	15,345,615	7,824,972	-13,360,445	63,685,095
Operating expenses	270,720	1,663,193	276,268	340,496	1,049,110	1,456,943		5,056,730
Operating profit (loss)	20,376	40,344	351,417	399,695	379,803	-843,957		347,678
Total assets	4,524,519	38,958,384	3,541,026	6,425,152	20,252,666	29,111,052	-38,760,352	64,052,447
Total liabilities	3,427,097	28,862,019	2,978,969	3,475,883	19,867,388	37,339,926	-38,760,352	57,190,930
Supplementary information:								
1. Capital expenditure	263,143	2,692,812	151,087	358,794	455,405	416,778		4,338,019
2. Depreciation and amortization expenses	474,909	3,572,429	381,248	758,853	291,091	262,058		5,740,588
3. Losses from impairment of assets	3,509	9,003	8,399	-47,890	23,800	22,845		19,666

Prior period or As at December 31, 2020	Geophysics	Drilling engineering	Logging and mud logging	Special down-hole operations	Engineering construction	Others	Offset	Total
Operating revenue	4,609,573	34,973,878	4,195,128	9,270,433	15,719,379	8,240,028	-8,935,025	68,073,394
Including: income from external transactions	4,599,371	34,199,657	2,728,760	8,596,355	15,683,065	2,266,186		68,073,394
Income from inter-segment transactions	10,202	774,221	1,466,368	674,078	36,314	5,973,842	-8,935,025	
Including: income from primary business	4,609,573	34,973,878	4,195,128	9,270,433	15,719,379	7,224,114	-8,935,025	67,057,480
Operating costs	4,274,824	32,894,138	3,702,489	8,873,265	14,484,977	7,785,542	-8,935,025	63,080,210
Including: costs of primary business	4,274,824	32,894,138	3,702,489	8,873,265	14,484,977	7,255,158	-8,935,025	62,549,826
Operating expenses	408,063	1,981,554	330,806	612,070	1,201,508	757,850		5,291,851
Operating profit (loss)	-38,559	502,398	168,808	-180,314	77,206	-246,204		283,335
Total assets	4,354,278	39,531,252	2,551,384	6,437,288	20,325,162	27,486,627	-39,594,796	61,091,195
Total liabilities	3,185,765	30,373,664	1,918,995	3,634,310	20,110,692	34,739,699	-39,594,796	54,368,329
Supplementary information:								
1. Capital expenditure	225,413	1,796,098	112,445	498,706	267,274	174,749		3,074,685
2. Depreciation and amortization expenses	482,748	3,597,389	287,587	889,835	262,637	265,291		5,785,487
3. Losses from impairment of assets	10,445	8,518	-2,476	29,264	62,138	1,204		109,093

15 OTHER SIGNIFICANT EVENTS (Continued)

15.6 Segment information (Continued)

15.6.3 Other segment information

15.6.3.1 Revenue from external transactions of products and services

Item	Current period	Prior period
Geophysics	4,663,346	4,599,371
Drilling engineering	33,081,850	34,199,657
Logging and mud logging	3,207,549	2,728,760
Special down-hole operations	9,384,197	8,596,355
Engineering construction	16,714,720	15,683,065
Others	2,481,391	2,266,186
Total	69,533,053	68,073,394

15.6.3.2 Area information

Current period or As at December 31, 2021	China	Other countries	Offset	Total
Operating revenue	59,869,980	9,663,073		69,533,053
Non-current assets	27,292,641	5,040,540		32,333,181

Prior period or As at December 31, 2020	China	Other countries	Offset	Total
Operating revenue	56,742,351	11,331,043		68,073,394
Non-current assets	26,827,268	4,484,269		31,311,537

15.6.3.3 Dependence to principal customers:

The Group obtained over 50% of the total geophysics, drilling engineering, logging, and mud logging, special down-hole operations and engineering construction revenue from a single customer.

16 NOTES TO MAIN ITEMS OF FINANCIAL STATEMENTS OF THE PARENT COMPANY

16.1 Other receivables

Item	Balance as at December 31, 2021	Balance as at December 31, 2020
Other receivables	4,380,622	4,396,431
Total	4,380,622	4,396,431

16.1.1 Other receivables

(1) Disclosure of other receivables by aging

Aging	Balance as at December 31, 2021	Balance as at December 31, 2020
Within 1 year	4,380,622	4,396,431
1 – 2 years		
2 – 3 years		
Over 3 years		
Sub-total	4,380,622	4,396,431
Less: provision for bad debts		
Total	4,380,622	4,396,431

16 NOTES TO MAIN ITEMS OF FINANCIAL STATEMENTS OF THE PARENT COMPANY (Continued)

16.1 Other receivables (Continued)

16.1.1 Other receivables (Continued)

(2) Details of provision for bad debts

Category	Balance as at December 31, 2021					Balance as at December 31, 2020				
	Book balance		Provision for bad debts			Book balance		Provision for bad debts		
	Amount	Proportion (%)	Amount	Expected credit loss rate in the next 12 months (%)	Book value	Amount	Proportion (%)	Amount	Expected credit loss rate in the next 12 months (%)	Book value
Provision for bad debts accrued on a combination basis	4,380,622	100.00			4,380,622	4,396,431	100.00			4,396,431
Including: Receivables from wholly-owned subsidiaries	4,380,622				4,380,622	4,396,431				4,396,431
Total	4,380,622	100.00			4,380,622	4,396,431	100.00			4,396,431

Provision for bad debts accrued on a combination basis:

Portfolio provision items:

Category	Balance as at December 31, 2021		
	Book balance	Provision for bad debts	Proportion (%)
Other receivables from related parties	4,380,622		
Total	4,380,622		

(3) Classification by nature

Category	Balance as at December 31, 2021	Balance as at December 31, 2020
Other receivables from wholly-owned subsidiaries	4,380,622	4,396,431
Total	4,380,622	4,396,431

(4) Top 5 of other receivables as at December 31, 2021, presented by debtor

Company	Nature	Balance as at December 31, 2021	Aging	Proportion in the total ending balance of other receivables (%)	Ending balance of provision for bad debts
Sinopec Oilfield Service Limited	Current account	4,380,622	Within 1 year	100.00	
Total		4,380,622		100.00	

16.2 Long-term equity investments

Item	Balance as at December 31, 2021			Balance as at December 31, 2020		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Investments in subsidiaries	27,891,662		27,891,662	27,891,662		27,891,662
Investments in associates and joint ventures						
Total	27,891,662		27,891,662	27,891,662		27,891,662

16 NOTES TO MAIN ITEMS OF FINANCIAL STATEMENTS OF THE PARENT COMPANY (Continued)

16.2 Long-term equity investments (Continued)

16.2.1 Investments in subsidiaries

Investee	Balance as at December 31, 2020	Increase in the current period	Decrease in the current period	Balance as at December 31, 2021	Provision for impairment made in the current period	Balance of provision for impairment as at December 31, 2021
Sinopec Oilfield Service Limited	27,891,662			**27,891,662**		
Total	27,891,662			**27,891,662**		

17 SUPPLEMENTARY INFORMATION

17.1 Breakdown of non-recurring profit or loss in the current period

Item	Amount	Remark
Profit or loss from disposal of non-current assets	88,723	
Government grants included in the current profit or loss (except for government grants closely related to the enterprise business, obtained by quota or quantity at unified state standards)	123,873	
Profit or loss from debt restructuring	29,404	
Other items of profit or loss subject to the definition of non-recurring profit or loss	107,666	
Sub-total	349,666	
Affected amount of income tax	69,612	
Total	280,054	

17.2 ROE and earnings per share

Profit during the reporting period	Weighted average ROE (%)	Earnings per share (RMB)	
		Basic earnings per share	Diluted earnings per share
Net profit attributable to ordinary shareholders of the Company	2.64	0.009	
Net profit attributable to ordinary shareholders of the Company after deducting the non-recurring profit or loss	-1.44	-0.005	

17.3 Accounting data difference between the domestic and overseas accounting standards

17.3.1 Reconciliation of differences between CASBE and IFRS financial statements

	Net profit		Net assets	
	Current period	Prior period	Balance as at December 31, 2021	Balance as at December 31, 2020
Based on CASBE	**179,791**	78,978	**6,861,517**	6,722,866
Adjusted items and amounts in accordance with IFRS:				
Special reserves	**-39,341**	-114,715		
Based on IFRS	**140,450**	-35,737	**6,861,517**	6,722,866

17 SUPPLEMENTARY INFORMATION (Continued)

17.3 Accounting data difference between the domestic and overseas accounting standards (Continued)

17.3.2 Related notes

In accordance to CASBE, provision of safety fund according to the PRC regulation is recognised to the profit or loss in the current period and at the same time included in the “special reserve” account. When safety costs and maintenance funds provided are used according to the specified scope, payment of expenses is directly offset against the special reserve; payment in formation of fixed assets is first imputed through “construction in progress” account, then recognised as fixed assets when the project is completed to its intended use state; meanwhile, offset the special reserve according to the cost in formation of the fixed assets and recognize the same amount of accumulated depreciation. The fixed assets will no longer depreciate in the subsequent accounting periods. According to IFRSs, expenditure in cost nature is recognised in the profit or loss and expenditure in capital nature is recognised as fixed assets when incurred and depreciate in the corresponding depreciation method.

Sinopec Oilfield Service Corporation

March 29, 2022

Prepared in accordance with International Financial Reporting Standards

BDO

Tel : +852 2218 8288
Fax: +852 2815 2239
www.bdo.com.hk

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

電話：+852 2218 8288
傳真：+852 2815 2239
www.bdo.com.hk

香港干諾道中111號
永安中心25樓

INDEPENDENT AUDITOR’S REPORT

To the Shareholders of Sinopec Oilfield Service Corporation

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

OPINION

We have audited the consolidated financial statements of Sinopec Oilfield Service Corporation (the “Company”) and its subsidiaries (together, the “Group”) set out on pages 168 to 239, which comprise the consolidated statement of financial position as at 31 December 2021, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (“IFRSs”) issued by the International Accounting Standards Board and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

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

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

Revenue recognition

Refer to note 2.22 (Revenue recognition), note 4(6) (Critical accounting judgement and estimates), note 5 (Revenue and segment information) and notes 23(a) & (b) (Contract assets and cost to fulfil contracts/contract liabilities) to the consolidated financial statements for related disclosures and accounting polices respectively.

Revenue related to rendering of services and construction contracts is derived from provision of petroleum engineering and technical services to the People's Republic of China (the "PRC") and overseas petroleum exploration and development companies, including geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction services. The contract revenue would be recognised over time, and the recognition of related revenue depends on management's estimation of the total budgeted costs and the progress towards satisfaction of a performance obligation. The management of the Group adopts either the expected value or most likely amount method to estimate the total amount of consideration to which the Group will be entitled, and evaluates the total budgeted costs according to historical information and construction plan, which are continuously evaluated and revised during the execution of the contract. These rely on management's critical accounting estimation.

When the progress towards satisfaction of a performance obligation can be reasonably measured, the Group should recognised revenue in accordance with the progress of performance obligation being satisfied at the end of reporting period. The recognition of revenue mainly depends on the management's critical estimation and judgement, including total amount of consideration to which the Group will be entitled, total budgeted costs, remaining contract costs and estimated progress completed-to-date. If there is any change on the final contract billing amount or actual execution progress, actual results may differ from the management's estimates. Hence, we have identified the revenue recognition related to rendering of services and construction contracts as a key audit matter.

Our response:

Our key procedures in relation to the revenue recognition related to provision of petroleum engineering and technical services included:

- evaluating the appropriateness of the application of accounting policies for recognising revenue associated with the rendering of services and construction contracts in light of business nature, contract terms and IFRS 15 "Revenue from contracts with customers";
- understanding, assessing and testing the design and implementation of internal controls about management's determination on the total budgeted contract revenue, the total budgeted contract costs, the actual contract costs incurred, remaining contract costs and progress of performance obligation being satisfied for contract to evaluate the operating effectiveness of such internal controls;
- reviewing contracts and interviewing with the management to understand and assess the reasonableness of the basis and assumptions of the total budgeted revenue and total budgeted contract costs, and checking the consistency of the preparation and assumptions of various types of projects;
- performing variance analysis by comparing the accumulated costs incurred as at 31 December 2021 with the budgeted contract costs, checking the significant costs incurred subsequent to the end of the reporting period and assessing the reasonableness of the management's estimation on workload forecast and remaining contract costs;
- testing, on a sample basis, the application of progress of performance obligation being satisfied by cross-checking the principal terms set out in the relevant contracts to supporting documents such as progress billing reports or acceptance certificates and progress reports being issued by customers;
- evaluating the reasonableness about budgeted revenue, budgeted costs and budgeted gross profit of sub-divisional contracts by analysis and calculation; and
- testing, on a sample basis, the amount and period of the aforesaid revenue recognised having regard to respective progress of performance obligation being satisfied at the end of the reporting period, and comparing, on a sample basis, the accumulated costs incurred up to the end of the reporting period with the budgeted costs to verify the existence of cost overrun.

We found that the management's judgment in determining the progress of performance obligation being satisfied and, the revenue recognition are supported by available evidence.

Expected credit losses ("ECL") on trade receivables and contract assets

Refer to note 2.9 (Financial instruments), note 4(2) (Critical accounting judgement and estimates), note 21 (Trade receivables) and note 23(a) (Contract assets and cost to fulfil contracts/contract liabilities) to the consolidated financial statements for related disclosures and accounting polices respectively.

During the year ended 31 December 2021, the Group's gross amount of trade receivables and contract assets are RMB10.567 billion and RMB13.647 billion respectively, representing 38% of total assets. As at 31 December 2021, the accumulated ECL allowance for trade receivables and contract assets amounted to RMB2.516 billion.

We have identified ECL measurement of trade receivables and contract assets as a key audit matter because the ECL measurement of trade receivables and contract assets is inherent uncertain as it requires the management's subjective judgment and the aforesaid balance has a significant impact on the Group's consolidated financial statements.

Our response:

Our key procedures in relation to the ECL on trade receivables and contract assets included:

– assessing and testing the related internal controls of the measurement of ECL established by the management, and testing the effectiveness of key control executions;

– evaluating the management's relevant considerations and objective evidences for ECL measurement of trade receivables and contract assets (including historical records and circumstances of bad debts of trade receivables and contract assets with similar characteristics, customer credit and market environment, etc.), and assessing the appropriateness of the methods being applied in grouping of the trade receivables and contract assets and calculation for the ECL;

– gathering public information about the customers whose balances of trade receivables and contract assets is material or exceeds the credit period, or their industry development status to identify any situations affecting the Group's ECL assessment results of trade receivables and contract assets;

– assessing the accuracy and classification on trade receivables by obtaining ageing analysis of the trade receivables as at 31 December 2021 and reviewing, on a sample basis, key information such as aging, overdue days, and relationship by checking supporting documents such as accounting vouchers and invoices;

– arranging audit confirmations to those customers with significant balance of trade receivables, and comparing the results to the returned confirmations with the Group's record;

– recalculating the ECL on trade receivables and contract assets and comparing the results with the amounts recorded by the Group; and

– evaluating the reasonableness of management's ECL assessment by considering the customer's settlement subsequent to the reporting period.

We found that that the management's judgment in determination and estimation in the measurement of ECL on trade receivables and contract assets is supported by available evidence.

Other Matter

The consolidated financial statements of the Group for the year ended 31 December 2020, were audited by another auditor who expressed an unmodified opinion on those statements on 24 March 2021.

Other information

The directors are responsible for the other information. The other information comprises all the information included in the Company's annual report, 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.

Director's responsibilities for the consolidated financial statements

The directors are responsible for the preparation of 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 consolidates 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 an auditor's report that includes our opinion. This 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, actions taken to eliminate threats or safeguards applied.

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

BDO Limited

Certified Public Accountants

Chan Tsz Hung

Practising Certificate no. P06693

Hong Kong, 29 March 2022

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended as at 31 December 2021

	Notes	2021 RMB'000	2020 RMB'000
Revenue	5	69,533,053	68,073,394
Cost of sales and taxes and surcharges		(64,798,287)	(62,957,850)
Gross profit		4,734,766	5,115,544
Selling expenses		(80,463)	(72,604)
General and administrative expenses		(2,184,739)	(2,781,058)
Research expenses		(1,669,706)	(1,369,501)
Finance expenses – net	6	(864,135)	(1,196,670)
Expected credit loss and write-down of inventories to net realisable value	7	(19,666)	(109,093)
Investment income	8	1,577	500
Share of profit/(loss) from joint ventures	19(a)	1,467	(94)
Share of profit from associates	19(b)	5,813	5,561
Other income	9	552,120	684,440
Other expenses, net	10	(25,853)	(43,686)
Profit before income tax	11	451,181	233,339
Income tax expense	12	(310,731)	(269,076)
Profit/(loss) for the year		140,450	(35,737)
Other comprehensive income for the year, net of tax			
Items that will not be reclassified subsequently to profit or loss:			
Net movement in fair value of financial assets at fair value through other comprehensive income (non-recycling) ("FVTOCI")		(1,799)	(8,461)
Total comprehensive income/(expense) for the year		138,651	(44,198)
Earnings/(loss) per share for profit/(loss) attributable to owners of the Company (presented in RMB per share)	13	**RMB**	**RMB**
Basic and diluted		0.007	(0.002)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2021

	Notes	2021 RMB'000	2020 RMB'000
Assets			
Non-current assets			
Property, plant and equipment	17	24,924,711	24,575,668
Other non-current assets	17	6,595,302	5,854,914
Intangible assets	18	400,130	396,611
Interests in joint ventures	19(a)	24,122	23,204
Interests in associates	19(b)	22,926	19,842
Financial assets at FVTOCI	20	21,760	22,835
Deferred tax assets	35	310,764	395,834
Total non-current assets		32,299,715	31,288,908
Current assets			
Inventories	24	1,009,166	1,025,965
Financial assets at FVTOCI	20	1,295,971	1,323,425
Trade receivables	21	8,151,019	9,358,385
Prepayments and other receivables	22	5,162,319	4,924,453
Contract assets and cost to fulfil contracts	23(a)	13,626,033	11,618,601
Restricted cash	25	32,917	28,106
Cash and cash equivalents	26	2,475,307	1,523,352
Total current assets		31,752,732	29,802,287
Total assets		64,052,447	61,091,195

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

As at 31 December 2021

	Notes	2021 RMB'000	2020 RMB'000
Equity			
Share capital	27	18,984,340	18,984,340
Reserves		(12,122,823)	(12,261,474)
Total equity		6,861,517	6,722,866
Liabilities			
Non-current liabilities			
Long-term borrowings	34	1,945,552	1,484,785
Deferred income	31	9,288	14,186
Deferred tax liabilities	35	9,438	13,471
Provisions	38	205,771	382,646
Total non-current liabilities		2,170,049	1,895,088
Current liabilities			
Notes and trade payables	32	29,890,348	26,802,737
Other payables	33	3,555,046	2,652,248
Contract liabilities	23(b)	3,547,938	3,024,461
Short-term borrowings	34	17,816,036	19,727,167
Current income tax payable		211,513	266,628
Total current liabilities		55,020,881	52,473,241
Total liabilities		57,190,930	54,368,329
Total equity and liabilities		64,052,447	61,091,195
Net current liabilities		(23,268,149)	(22,670,954)
Total assets less current liabilities		9,031,566	8,617,954

On behalf of the board of directors

Chairman of the Board:

CHEN Xikun

Executive director, General Manager:

YUAN Jianqiang

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2021

	Share capital	Share premium	Other capital reserve	Surplus reserve	Specific reserve	Other comprehensive income reserve (non-recycling)	Accumulated losses	Total equity
	RMB'000 (Note 27)	RMB'000 (Note 29(i))	RMB'000 (Note 29(i))	RMB'000 (Note 29(ii))	RMB'000 (Note 29(iii))	RMB'000 (Note 29(iv))	RMB'000	RMB'000
At 1 January 2020	18,984,340	11,622,283	92,298	200,383	373,238	6,447	(24,515,117)	6,763,872
Loss for the year	–	–	–	–	–	–	(35,737)	(35,737)
Other comprehensive income for the year:								
Net movement in fair value of financial assets at FVTOCI	–	–	–	–	–	(8,461)	–	(8,461)
Total comprehensive income	–	–	–	–	–	(8,461)	(35,737)	(44,198)
Transactions with owners:								
Appropriation of specific reserve	–	–	–	–	1,163,262	–	(1,163,262)	–
Utilisation of specific reserve	–	–	–	–	(1,277,977)	–	1,277,977	–
Equity-settled share-based transaction (Note 30)	–	–	3,192	–		–	–	3,192
Total transactions with owners	–	–	3,192	–	(114,715)	–	114,715	3,192
At 31 December 2020 and 1 January 2021	**18,984,340**	**11,622,283**	**95,490**	**200,383**	**258,523**	**(2,014)**	**(24,436,139)**	**6,722,866**
Profit for the year	**–**	**–**	**–**	**–**	**–**	**–**	**140,450**	**140,450**
Other comprehensive income for the year:								
Net movement in fair value of financial assets at FVTOCI	**–**	**–**	**–**	**–**	**–**	**(1,799)**	**–**	**(1,799)**
Total comprehensive income	**–**	**–**	**–**	**–**	**–**	**(1,799)**	**–**	**(138,651)**
Transactions with owners:								
Appropriation of specific reserve	**–**	**–**	**–**	**–**	**1,468,981**	**–**	**(1,468,981)**	**–**
Utilisation of specific reserve	**–**	**–**	**–**	**–**	**(1,508,322)**	**–**	**1,508,322**	**–**
Transfer of other comprehensive income reserve	**–**	**–**	**–**	**–**	**–**	**(10)**	**10**	**–**
Total transactions with owners	**–**	**–**	**–**	**–**	**(39,341)**	**(10)**	**39,351**	**–**
At 31 December 2021	**18,984,340**	**11,622,283**	**95,490**	**200,383**	**219,182**	**(3,823)**	**(24,256,338)**	**6,861,517**

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2021

	Notes	2021 RMB'000	2020 RMB'000
Cash flows from operating activities			
Cash flows generated from operations	37(a)	6,453,196	4,720,544
Interests received		38,180	59,576
Income tax paid		(284,466)	(308,300)
Net cash generated from operating activities		6,206,910	4,471,820
Cash flows from investing activities			
Purchases of property, plant and equipment		(3,224,999)	(1,729,607)
Proceeds from disposal of property, plant and equipment		83,497	140,655
Purchases of intangible assets		(115,683)	(13,057)
Increase in investments in joint ventures		–	(9)
Increase in investments in financial assets at FVTOCI		(1,077)	–
Dividends received from joint ventures		503	–
Dividends received from associates		2,729	1,646
Investment income received from financial assets at FVTOCI		1,587	500
Net cash used in investing activities		(3,253,443)	(1,599,872)
Cash flows from financing activities			
Proceeds from borrowings		60,848,383	53,601,812
Repayments of borrowings		(61,666,957)	(54,391,017)
Payment of lease liabilities		(516,092)	(1,227,045)
Interests paid		(613,541)	(863,852)
Net cash used in financing activities		(1,948,207)	(2,880,102)
Net increase/(decrease) in cash and cash equivalents		1,005,260	(8,154)
Effect of foreign exchange rate changes on cash and cash equivalents		(53,305)	(119,226)
Cash and cash equivalents at beginning of year		1,523,352	1,650,732
Cash and cash equivalents at end of year	26	2,475,307	1,523,352

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2021

1. GENERAL INFORMATION

Sinopec Oilfield Service Corporation (the "Company") is a joint stock company with limited liability established in the People's Republic of China (the "PRC"). The registered office is No. 22, Chaoyangmen North Street, Chaoyang District, Beijing, the PRC and the headquarter address is No. 9, Jishikou Road, Chaoyang District, Beijing, the PRC.

The immediate and ultimate holding company of the Company is China Petrochemical Corporation (hereinafter referred to as the "Sinopec Group") which is a state wholly-owned enterprise established in the PRC. The principal activities of the Group are the provision of onshore and offshore oil, natural gas and other mineral prospecting, exploration, drilling and exploitation and provision of general contracting, design and construction services for the oil and gas and other types of construction projects.

These consolidation financial statements are presented in Renminbi ("RMB"), unless otherwise stated. These consolidation financial statements have been approved and authorised for issue by the Board of Directors on 29 March 2022.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

2.1 Basis of preparation

(1) Statement of compliance

The consolidation financial statements set out in this report have been prepared in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board (the "IASB"). These consolidated financial statements also comply with the applicable disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (the "Listing Rules").

(2) Basis of preparation of the consolidated financial statements and going concern assumption

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

The preparation of consolidated financial statements in conformity with IFRSs 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 set out in Note 4.

As at 31 December 2021, the Group had net current liabilities of approximately RMB23,268,149,000 and capital commitments of approximately RMB74,473,000 (Note 36(a)). These conditions may cast significant doubt about the Group's ability to continue as a going concern. The directors of the Company have performed an assessment covering a period of 12 months from the year ended 31 December 2022, taking account of the following events and measures:

(i) In December 2021, the Group obtained a line of credit of RMB16 billion and USD0.6 billion (Total: approximately RMB20.9 billion), and a line of credit promissory note and letter of guarantee of RMB11.8 billion from the Sinopec Group's subsidiaries;

(ii) As disclosed in Note 34, the Group's borrowings amounted to approximately RMB18.5 billion are sourced from Sinopec Group and its subsidiaries, where the Group maintains ongoing good relationship with these companies, which enables the Group to secure sufficient financial support from these companies;

(iii) To obtain additional credits facilities, the Group will diversify its source of finance by exploring and developing good relationship with listed and state-owned financial institutions; and

(iv) The Group is expected to generate operating cash inflows in the next twelve months.

The directors of the Company are in the opinion that the above measures are sufficient to meet with the expected liquidity, daily operation and capital requirements and considered that going concern basis is appropriate for the preparation of these consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.2 Accounting for business combinations under common control and not under common control

(1) Business combination involving entities under common control

For the business combinations involving entities under common control, the assets and liabilities that are obtained in a business combination shall be measured at their original carrying amounts at the date of combination as recorded by the party being combined, except for the adjustments of different accounting policies. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination shall be adjusted to other capital reserve/share premium, if other capital reserve/share premium is not sufficient to absorb the difference, any excess shall be adjusted against accumulated losses.

(2) Business combination involving entities not under common control

For business combinations involving entities not under common control, the consideration for each combination is measured at the aggregate of the fair values, at the acquisition date, of assets given, liabilities incurred or assumed, and equity securities issued by the acquirer in exchange for control of the acquiree. At the acquisition date, the acquired assets, liabilities and contingent liabilities of the acquiree are generally measured at their fair values.

Where the consideration exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as goodwill, and is subsequently measured at costs less any accumulative impairment losses. Where the consideration is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised in profit or loss for the current period after reassessment.

Business combinations involving entities not under common control through step acquisition

In the consolidated financial statements, the carrying amount of equity interest of the acquiree held prior to acquisition date shall be re-measured at the fair value at acquisition date, the difference between the fair value and the carrying amount shall be recognised as investment income or loss for the current period. Amounts previously recognised in other comprehensive income in relation to that acquiree are accounted for on the same basis as would be required if the relevant assets or liabilities were disposed of.

(3) Transaction fees attributed during the business combination

The intermediary and other relevant administrative expenses such as audit, legal and valuation advisory for business combinations are recognised in profit or loss when incurred. Transaction costs of equity or debt securities issued as the considerations of business combination are included in the initial recognition amounts of the related equity or debt securities.

2.3 Basis of preparation of the consolidated financial statements

(1) Scope of consolidation

The scope of consolidation is on the basis of control. Control refers to the power over investee of the Group, exposure or rights to variable returns in participating in the investee's related activities and the ability to use the power to affect those variable returns. A subsidiary is the entity controlled by the Group (including severable part of the investee and the enterprise, structured body controlled by the enterprise, etc.)

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.

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 and are initially recognised at cost. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment loss.

The Group's shares of its associates' post-acquisition profits or losses is recognised in the consolidated statement of comprehensive income and its share of post acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amounts of the investments. When the Group's share of losses in an associate equals or exceeds its interest in the associates (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 obligations or made payments on behalf of the associates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.3 Basis of preparation of the consolidated financial statements (Continued)

(1) Scope of consolidation (Continued)

Joint Arrangements

A joint arrangement is an arrangement of which two or more parties have joint control. Joint arrangement is divided into joint operation and joint venture.

(1) Joint operations

A joint operation is a joint arrangement whereby the Group that has joint control of the arrangement has rights to the assets, and obligations for the liabilities.

A joint operator shall recognise in relation to its interest in a joint operation, which is followed by relevant accounting policies:

A. its assets, including its share of any assets held jointly;

B. its liabilities, including its share of any liabilities incurred jointly;

C. its revenue from the sale of its share of the output arising from the joint operation;

D. its share of the revenue from the sale of the output by the joint operation;

E. its expenses, including its share of any expenses incurred jointly.

(2) Joint ventures

A joint venture is a joint arrangement whereby the Group that has joint control of the arrangement has rights to the net assets of the arrangement.

The accounting treatment is in accordance with the provisions of long-term investment under equity method.

(2) Method of preparation of consolidated financial statements

The consolidated financial statements are based on the financial statements of the Company and its subsidiaries, and are prepared by the Company in accordance with other relevant information. In preparing the consolidated financial statements, the Company and its subsidiaries are required to apply consistent accounting policy and accounting period, intra-group transactions and balances shall be offset.

A subsidiary acquired through a business combination involving entities under common control in the reporting period shall be included in the scope of the consolidation from the beginning of the date on which the businesses are under common control, the subsidiary's income, expenses and profits are included in the consolidated results of operations, and cash flows are included in the consolidated statement of cash flow from earliest date presented or since the businesses first came under common control, whichever is later.

Where a subsidiary has been acquired through a business combination involving entities not under common control, the subsidiary's income, expenses and profits are included in the consolidated results of operations, and cash flows are included in the consolidated statement of cash flow from the acquisition date to the end of the reporting date.

(3) Treatment of loss of control of subsidiaries

When there is a loss of control over investee because of disposing part of equity investment or other reasons, the remaining part of the equity investment should be re-measured at fair value at the date when losing control over the investee; the cash received in disposal of the equity investment and the fair value of remaining part of the equity investment, deducting net assets proportion calculated by original share percentage since the acquisition date shall be recorded in profit or loss for current period of disposal.

Amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for on the same basis as would be required if the relevant assets or liabilities were disposed of.

2.4 Segment reporting

The Group has identified several operating segments based on the internal structure, management requirements and internal reporting policy. The segment information is prepared based on the financial information of the Company's daily management requirements, which are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The Company's executive management reviews operating segments' financial information regularly for the purposes of resources allocation and performance assessment.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.5 Foreign currency transactions and translation of foreign currency statements

(1) Foreign currency transactions

When foreign currency transactions occur, they are translated into the reporting currency at spot exchange rate at the dates of the transactions.

At the reporting date, foreign currency monetary items are translated using the spot exchange rate at the reporting date. Exchange differences arising from the differences between the spot exchange rate prevailing at the reporting date and those spot rates used on initial recognition or at the previous reporting date are recognised in profit or loss in current period; foreign currency non-monetary items carried at historical cost continue to be measured at the amounts using the spot exchange rates at the dates of the transactions; foreign currency non-monetary items carried at fair value are translated using the spot exchange rates at the date when the fair value was determined. Differences arising from retranslation are included in profit or loss in current period except for differences arising on retranslation of non-monetary items in respect of which gains and losses are recognised in other comprehensive income, in which case, the exchange differences are also recognised in other comprehensive income.

(2) Translation of foreign currency statements

At the reporting date, when translating the foreign currency financial statements of overseas subsidiaries, the assets and liabilities of the statement of financial position are translated using the spot exchange rate at the reporting date.

The revenue and expenses in the consolidated statement of comprehensive income are translated using at spot rates with reasonable approximation of the exchange rates prevailing on the transaction dates.

All items in the statement of cash flows are translated using at spot rates with reasonable approximation of the exchange rates prevailing on the transaction dates. The impact of exchange rate changes on cash amount is reflected separately in the cash flow as “Effect of foreign exchange rate changes on cash and cash equivalents”.

Differences arising from the translation of foreign currency financial statements are separately reflected in “other comprehensive income”.

When there is a loss of control in overseas operations, the exchange reserve related to overseas operations presented in the shareholders’ equity in the consolidated statement of financial position shall be transferred to profit or loss in current period.

2.6 Property, plant and equipment (including other non-current assets)

(1) Recognition and initial measurement

The Group’s property, plant and equipment and other non-current asset are tangible assets that are held for use in production, rendering of services, for rentals, or for administrative purposes and have useful lives of more than one accounting year.

Property, plant and equipment and other non-current asset shall be recognised only when it is probable that economic benefit associated with the asset will flow into the entity and the cost of the asset can be measured reliably.

Property, plant and equipment and other non-current asset of the Group are stated at cost less accumulated depreciation and accumulated impairment loss.

(2) Depreciation methods, estimated useful lives and residual value

The Group uses the straight-line method for depreciation. Depreciation of the property, plant and equipment and other non-current asset (other than right-of-use assets as described in Note 2.23) begins when they achieved the condition for their intended use, and stop being depreciated when derecognised or classified as non-current assets held for sale. For those property, plant and equipment without considering impairment provision, the Group’s annual depreciation rates are shown as follows according to the category, expected useful lives and estimated net residual values rates.

Buildings	12 – 50 years
Oil engineering equipment and others	4 – 30 years

Among these, property, plant and equipment which have been impaired should deduct the cumulative amount of impairment provision to determine the depreciation rate. Other non-current assets, such as specific drilling and logging equipment, were depreciated over their estimated useful life or units of production. Other non-current assets that cannot generate future benefits are recognised in the profit or loss in the period of relevant cost being incurred.

The method of impairment test and impairment provision of property, plant and equipment are set out in Note 2.8.

The Group reviews the useful life and estimated residual value of a property, plant and equipment and other non-current assets and the depreciation method applied annually at each of the period end.

The estimated useful lives and residual values of property, plant and equipment and other non-current assets are adjusted if they are different from the original estimates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.6 Property, plant and equipment (including other non-current assets) (Continued)

(3) Overhaul costs

The overhaul costs occurred in regular inspection of property, plant and equipment and other non-current assets are recognised in the cost of property, plant and equipment and other non-current assets if there is undoubted evidence to confirm that they meet the recognition criteria, otherwise, the overhaul costs are recognised in profit or loss for the current period. Property, plant and equipment and other non-current assets are depreciated during the intervals of the regular overhaul.

(4) Construction in progress

The cost of construction in progress is determined according to the actual expenditure incurred for the construction, including all necessary construction expenditures incurred during the construction period, borrowing costs that shall be capitalised before the construction reaches the condition for intended use and other relevant expenses.

Construction in progress is transferred to other classes of property, plant and equipment when the assets are ready for their intended use.

For provision for impairment of construction in progress, refer to Note 2.8.

2.7 Intangible assets

Intangible assets include software, etc.

The Group initially measures the intangible asset at cost, and analyses and judges its useful life when it is acquired. An intangible asset with a finite useful life is amortised using the method which can reflect the expected realisation of economic benefits related to the asset over its expected useful life since the asset is available for use; an intangible asset which expected realisation cannot be reliably measured is amortised using straight-line method; an intangible asset with an indefinite useful life is not amortised.

Amortisation of an intangible asset with finite useful life is as follows:

Software	5 years
Others	10 years/unit of production method

For an intangible asset with a finite useful life, the Group reviews the useful life and amortisation method at the end of each financial year, if it is different from the previous estimate, adjustment is made at previous estimates and accounted for according to changes in accounting estimates.

The carrying amount of an intangible asset should be transferred to profit or loss in current period when it is estimated that no further economic benefits can be brought to the Group as at the reporting date.

For the impairment method of intangible assets, refer to Note 2.8.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.8 Impairment of non-financial assets

Assets that have an indefinite useful life (e.g. goodwill) are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non financial assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

The impairment of non-financial assets such as subsidiaries, associates, joint ventures, property, plant and equipment (including right-of-use assets and other non-current assets) and intangible assets are determined as follows:

At the reporting date, the Group determines whether there may be evidence of impairment, the Group will estimate the recoverable amount for impairment and then perform impairment test if there is any such evidence. For goodwill arising from business combination, intangible assets with identified useful life and the intangible assets that have not yet ready for use are tested for impairment annually regardless of whether such evidence exists.

The recoverable amount of an asset is determined by the higher amount of fair value deducting disposal costs and net present value of future cash flows expected from the assets. The Group estimates the recoverable amount based on individual asset; for the recoverable amount of individual asset which is difficult to estimate, the recoverable amount of the asset group is determined based on the asset group which involved in the asset. The identification of the asset group is based on whether the cash flow generated from the asset group is independent of the major cash inflows from other assets or asset groups. When the asset or asset group's recoverable amount is lower than its carrying amount, the Group reduces its carrying amount to its recoverable amount. The reduced amount is included in profit or loss, while the provision for impairment of assets is recognised.

2.9 Financial instruments

Financial assets and financial liabilities are recognised in the consolidated statement 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 comprehensive income. A trade receivable without a significant financing component is initially measured at the transaction price.

(1) Classification and measurement of financial assets

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

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

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

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

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

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.9 Financial instruments (Continued)

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

Financial assets: Business model assessment

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

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

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

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

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

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument.

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

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

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

(iii) prepayment and extension features; and

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

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

Financial assets: Subsequent measurement and gains and losses

Financial assets at amortised cost

Trade receivables, other receivables, restricted cash 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 – equity investments

They are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the other comprehensive income 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 other comprehensive income reserve (non-recycling).

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

Financial assets at FVTOCI – debt investments

Notes receivables held by the Group are classified as at FVTOCI. Notes receivables are initially measured at fair value plus transaction costs. Subsequently, changes in their carrying amount as a result of foreign exchange gains and losses, impairment gains or losses, and interest income calculated using the effective interest method are recognised in profit or loss. The amounts that are recognised in profit or loss are the same as the amounts that would have been recognised in profit or loss if these notes receivables had been measured at amortised cost. All other changes in their carrying amount are recognised in other comprehensive income and accumulated under the heading of other comprehensive income (recycling). When these notes receivables are derecognised, the cumulative gains or losses previously recognised in other comprehensive income are reclassified to profit or loss.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.9 Financial instruments (Continued)

(2) 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.

When 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.

(3) Impairment of financial assets

The Group recognises loss allowances for expected credit losses ("ECL") on financial assets measured at amortised cost and debt instruments that are measured at FVTOCI. The Group has the following types of assets that are subject to IFRS 9's ECL model:

- notes and trade receivables
- contract assets
- cash and cash equivalents
- restricted cash
- other receivables

The Group generally measures loss allowances at an amount equal to lifetime ECL, except that the credit risk of a financial assets has not been increased significantly since initial recognition, in which case, measured at 12-month ECL. 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. Lifetime ECL are the ECL that result from all possible default events over the expected life of a financial instrument. In contrast, 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.

For notes and trade receivables, and contract assets, the Group applies the simplified approach to provide for ECL as prescribed by IFRS 9 and has calculated ECL based on lifetime ECL, using provision matrix.The provision matrix is determined based on historical observed default rates over the expected life of the notes and trade receivables 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.

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, 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.9 Financial instruments (Continued)

(3) Impairment of financial assets (Continued)

Credit-impaired financial assets

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

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

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

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

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

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

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

The Group recognises an impairment loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade receivables, other receivables, contract assets, restricted cash and cash and cash equivalents etc., where the corresponding adjustment is recognised through a loss allowance account. For investments in debt instruments that are measured at FVTOCI, the loss allowance is recognised in OCI and accumulated in the other comprehensive income reserve (recycling) without reducing the carrying amounts of these debt instruments.

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.

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

(4) Classification and measurement of financial liabilities

The Group's financial liabilities include notes and trade payables, other payables, long-term borrowings and short-term borrowings. 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. Accounting policies for lease liability are set out in Note 2.23.

(5) 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.9 Financial instruments (Continued)

(6) Offsetting

Financial assets and financial liabilities are offset and the net amount is 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.

2.10 Fair value measurement

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.

A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability or in the absence of a principal market, in the most advantageous market for the asset or liability. The Group shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

If an active market exists for the financial assets or financial liabilities, the Group uses the quotation on the active market at its fair value. For those in the absence of active market, the Group uses valuation technique to recognise its fair value.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, in priority to use relevant observable inputs and only use unobservable inputs when observable inputs cannot be obtained.

The fair value measurement of the assets and liabilities measured at fair value is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability.

At each reporting date, the Group reassesses the assets and liabilities measured at fair value to ensure any transfer between the levels of the fair value hierarchy.

2.11 Inventories

(1) Classification

Inventories include raw materials, work in progress, consumables and finished goods.

(2) Determination of cost

Inventories are recognised at its actual cost when acquired. Inventories are calculated by weighted average method when issued.

(3) Write down to net realisable value

Net realisable value is based on the estimated selling price deducting the estimated costs to be, the estimated selling expenses and related taxes amount incurred when it is completed. Recognition of the net realisable value is based on the verified evidences and considers the purpose of holding inventories and the effect of post balance sheet events to the extent that such events confirm conditions existing at the end of the reporting period.

At the reporting date, if the cost of inventory of the Group exceeds its net realisable value, the inventories is write down to their net realisable value, if the factors caused the inventory previously written-down have disappeared, the amount of write down is reversed to the extent that the new carrying amount is the lower of the cost and the net realisable value.

(4) Inventory system

The Group adopts perpetual inventory system.

(5) Amortisation methods of consumables

Consumables include low-value consumables that are amortised in full when used.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.12 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 are 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 notes and trade receivables.

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

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

2.13 Cash and cash equivalents

Cash comprises cash on hand and deposits that can be readily drawn on demand. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

2.14 Share capital

Ordinary share are classified as equity. Share capital is recognised at the amount of consideration of shares issued, after deducting any transaction costs associated with the issuing of shares (net of any related income tax benefit) to the extent that they are incremental costs directly attributable to the equity transaction.

2.15 Borrowing costs

(1) Recognition principle of capitalisation of borrowing costs

For borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset, they shall be capitalised and included in the cost of related assets; other borrowing costs are recognised as expenses and included in profit or loss when incurred. Capitalisation of such borrowing costs can commence only when all of the following conditions are satisfied:

(1) Capital expenditures for the asset are being incurred, which includes the expenditure in the form of cash payment, transfer of non-cash assets or the interest bearing liabilities for the purpose of acquiring or constructing assets eligible for capitalisation;

(2) Borrowing costs are being incurred; and

(3) Activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced.

(2) Capitalisation period of borrowing costs

Capitalisation of such borrowing costs ceases when the qualifying assets being acquired, constructed or produced become ready for their intended use or sale. The borrowing cost incurred after that is recognised as an expense in the period in which they are incurred and included in profit or loss for the period incurred.

Capitalisation of borrowing costs is suspended during the periods in which the acquisition, construction or production of a qualifying asset is interrupted abnormally and when the interruption is for a continuous period of more than 3 months; the borrowing costs in the normally interrupted period are continued to be capitalised.

(3) Calculation of rate and amount of borrowing costs to be capitalised

Interest expenses for specific borrowings incurred in the period, less interest income of unused specific borrowings deposited with bank or investment income arising from temporary investment are capitalised. The capitalisation rate of the general borrowing is determined by reference to the weighted average effective interest rate of general borrowings. The amount of capitalisation of general borrowings is determined by reference to the weighted average of the amount of cumulative expenditures of the asset over the amount of specific borrowings and the capitalisation rate of general borrowings.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.16 Deferred tax assets and deferred tax liabilities

Tax expense comprises current tax expense and deferred tax expense. Current tax and deferred tax are included in profit or loss for the current period as tax expense, except for deferred tax related to transactions or events that are recognised in other comprehensive income or directly recognised in shareholders' equity, which are recognised in other comprehensive income or directly in shareholders' equity, and deferred tax arising from a business combination, which is adjusted against the carrying amount of goodwill.

Temporary differences arising from the difference between the carrying amount of an asset or liability and its tax base are recognised as deferred tax using the balance sheet liability method.

All the taxable temporary differences are recognised as deferred tax liabilities except for those incurred in the following transactions:

(1) The initial recognition of goodwill, and the initial recognition of an asset or liability in a transaction which is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;

(2) The taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, and the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The Group recognised deductible temporary differences, deductible tax losses as deferred tax assets to the extent that they are available for set-off future taxable income unless such timing difference was arised from the following transactions:

(1) The transaction is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;

(2) The deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, the corresponding deferred tax asset is recognised when both of the following conditions are satisfied: it is probable that the temporary difference will reverse in the foreseeable future, it is probable that taxable profits will be available in the future, against which the temporary difference can be utilised.

At the reporting date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, and their tax effect is reflected.

At the reporting date, the Group reviews the carrying amount of a deferred tax asset. If it is probable that sufficient taxable profits will not be available in future periods to allow the benefit of the deferred tax asset to be utilised, the carrying amount of the deferred tax asset is reduced. Any such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

2.17 Employee benefits

(1) Scope of employee benefits

Employee benefits are all forms of consideration and compensation given by the Group in exchange for service rendered by employees or the termination of employment. Employee benefits include short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. Employee benefits include benefits provided to employees' spouses, children, and other dependants, survivors of the deceased employees or to other beneficiaries.

(2) Short-term employee benefits

Wages, bonuses, contribution to the social welfare (including medical insurance, injury insurance, birth insurance, etc.) and house funding are recognised as liability and to the profit of loss or cost of related assets in the period of relevant costs being incurred. If related liabilities in which the employees render their services are not expected to be wholly payable within twelve months after the financial period of relevant expenses being incurred and the financial impact is significant, relevant liabilities will be measured at discounted values.

(3) Post employment benefits

Post-employment comprised of defined contribution plan. The Group's obligations under the defined contribution plan are limited to the fixed amount of contribution to the independent trustee.

Defined contribution plans

Defined contribution plans include the basic pension insurance, unemployment insurance and annuity scheme.

In addition to the basic social pension insurance, the Group sets up annuity scheme according to the relevant policies of annuity system, employees may voluntarily participate in the annuity scheme. The Group has no other significant commitments of social security of employees.

The Group recognised the contribution payable under the defined contribution plan as liabilities with corresponding amount recognised in the profit or loss of the financial period of services rendered by employees.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.17 Employee benefits (Continued)

(4) Termination benefits

The Group recognises termination benefits liabilities and profit or loss in the period in the earlier date of the followings: (i) The Group cannot unilaterally withdraws the termination plan or reduce the termination benefits under the proposal, or (ii) The Group recognises the payment of the termination benefits costs and expenses.

For the implementation of internal retirement plan for employees, the economic compensation before the official retirement date is termination benefit.

From the date when the employee stops providing the service to the normal retirement date, the amount for wages and social insurance expenses to be paid for the internal retired employee would be recognised in profit or loss when incurred.

(5) Other long-term employee benefits

Other long-term employee benefits provided by the Group to its employees who meet with the conditions of defined contribution plan were treated in accordance with the relevant provisions of defined contribution plans as set out above.

2.18 Share-based payment

(1) Category of share-based payment

The term "share-based payment" refers to equity-settled share-based payment and cash-settled share-based payment. The Group's share option incentive plans are equity-settled share-based payments.

(2) Fair value of equity instrument

For the existence of an active market for options and other equity instruments granted by the Group, the fair value is determined at the active market quotations. For options and other equity instruments with no active market, option pricing model shall be used to estimate the fair value of the equity instruments. Factors as follows shall be taken into account using option pricing models: (a) the exercise price of the option (b) the validity period of the option (c) the current market price of the share (d) the expected volatility of the share price (e) predicted dividend of the share and (f) risk-free rate of the option within the validity period.

(3) Recognition of vesting of equity instrument based on the best estimate

During the vesting period at each reporting period, the Group shall make the best available estimate of the number of equity instruments expected to vest and shall revise that estimate, if necessary, if subsequent information indicates that the number of equity instruments expected to vest differs from previous estimates. On vesting date, the entity shall revise the estimate to equal the number of equity instruments that ultimately vested.

(4) Accounting treatment of implementation, modification and termination of share-based payment

Equity-settled share-based payment is measured at the fair value of the equity instruments granted to employees. For those equity instruments that vested immediately after the grant, the fair value of equity instrument at the grant date is recognised in the relevant costs or expenses with corresponding increase in other capital reserve accordingly. Within the vesting period, the Group will recognise the received service-related costs or expense and other capital reserves for each reporting date based on the best estimate of the number of vested equity instruments and the grant date's equity instruments value. After the vesting period, no adjustment will be made on the relevant costs or expenses recognised and total shareholders' equity.

When there is modification in Group's share-based payment plans, and if the modification increases the fair value of the equity instruments granted, the increase in the fair value of the equity instruments is recognised over the remaining vesting period; if the modification increases the number of equity instruments granted, the increase in fair value of the equity instruments is recognised as a corresponding increase in service received. Increase in the fair value of equity instruments refer to the difference between the fair values of the modified equity instruments and the original equity instruments, measured at the modified date. If the modification reduces the total fair value of equity instruments or not otherwise beneficial to the employee, the Group will continue to account for the services received, as if the modification had not occurred, unless the Group cancelled some or all of the equity instruments granted.

During the vesting period, if the equity instruments is cancelled (except for failure to meet the conditions of the non-market vesting conditions, such as length of service performance conditions or market conditions are cancelled), the cancellation of the equity instruments granted shall be accounted for as accelerated vesting of the remaining period and recognised immediately in profit or loss, with corresponding increase in the other capital reserve. When the Group or employees can choose whether to meet non-vesting conditions, the Group shall treat the failure to meet that non-vesting condition during the vesting period as a cancellation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.19 Provision

An obligation for additional losses of investees related to a contingency is recognised as a provision when all of the following conditions are satisfied:

1. The obligation is a present obligation of the Group;
2. It is probable that an outflow of economic benefits will be required to settle the obligation;
3. The amount of the obligation can be measured reliably.

Provisions are initially measured at the best estimate of the payment to settle the associated obligations and consider the relevant risk, uncertainty and time value of money. If the impact of time value of money is significant, the best estimate is determined as its present value of future cash outflow. The Group reviews the carrying amount of provisions at the reporting date and adjusts the carrying amount to reflect the best estimate.

If the expenses for clearing of predictive liability is fully or partially compensated by a third party, and the compensated amount can be definitely received, it is recognised separately as an asset. The compensated amount shall not be greater than the carrying amount of the predictive liability.

2.20 Research and development expenditure

Expenditure on an internal research and development project is classified into expenditure on the research phase and expenditure on the development phase.

Expenditure on the research phase is related to theories of oil-gas exploration and development, oil-gas exploration and development experiments, pilot tests for oil-gas exploration, researches of softwares, etc.; Expenditure on the development phase is related to applications of oil-gas exploration and development technology, pilot tests of oil-gas development, adaptability of technologies in a development process, software developments, etc.

Expenditure on the research phase is recognised in profit or loss when incurred.

Expenditure on the development phase is capitalised only when the Group can satisfy all of the following conditions: the technical feasibility of completing the intangible asset so that it will be available for use or sale; its intention to complete the intangible asset is to use or sell it; how the intangible asset will generate economic benefits. Among other things, the Group can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; the availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; its ability to measure reliably the expenditure attributable to the intangible asset during its development phase. Otherwise, it is charged to profit or loss.

The research and development projects of the Group will enter into the development stage after meeting the above conditions and passing through the technical feasibility and economic feasibility studies and the formation of the project.

Capitalised expenditure on the development phase is presented as “development costs” in the statement of financial position and shall be transferred to intangible assets when the project is completed to its intended use state.

2.21 Government grants

Grants from the government are recognised only when there is a reasonable assurance that the grant will be received and the Group can comply with the attached conditions.

If a government grant is in the form of a transfer of a monetary asset, the item is measured at the amount received or receivable. Where there is undoubted evidence that the grants can meet the relevant conditions of financial support policy and is expected that the financial support fund is receivable, they can be measured in accordance with the receivable amount, and otherwise, they shall be measured according to the amount actually received. If a government grant is in the form of a transfer of a non-monetary asset, the item is measured at fair value. When fair value is not reliably determinable, the item is measured at nominal amount.

Government grant related to assets represents the government grant received for acquisition, construction of long-term assets. Except for these, all government grant are related to income.

Regarding to the government grant not clearly defined in the official documents and can be used for long-term assets, the part of government grant which can be referred to the value of the assets is classified as government grant related to assets and the remaining part is government grant related to income. For the government grant that is difficult to distinguish, the entire government grant is classified as government grant related to income.

A government grant related to an asset is recognised as deferred income, and evenly amortised to profit or loss over the useful life of the related asset. For a government grant related to income, if the grant is a compensation for related expenses or losses already incurred, the grant is recognised immediately in profit or loss for the current period; if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognised as deferred income, and then recognised in profit or loss over the periods in which the costs are recognised.

When recognised government grants need to be returned, the repayment is offset against book balance of deferred income and the excess is recognised in profit or loss for the current period; if there is no related deferred income, it is directly recognised in profit or loss for the current period.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.22 Revenue recognition

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services, excluding those amounts collected on behalf of third parties. Revenue excludes value added taxes or other sales taxes and is after deduction of any trade discounts.

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

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

In all cases, the total transaction price for a contract is allocated amongst the various performance obligations based on their relative stand-alone selling prices.

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.

Cost to fulfil contracts

If the costs incurred in fulfilling a contract with a customer are not within the scope of an accounting standard other than IFRS 15, the Group shall recognise an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria:

(a) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify;

(b) the costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and

(c) the costs are expected to be recovered.

A recognised asset shall be subsequently amortised on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. The assets shall be subjected to impairment review.

Capitalised cost to fulfil contracts is stated at cost less accumulated amortisation and impairment losses. Impairment losses are recognised to the extent that the carrying amount of the contract cost asset exceeds the net of (i) remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates, less (ii) any costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

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

(1) Sales of products

Revenue from sales of products is recognised when control of the products has been 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.22 Revenue recognition (Continued)

(2) Revenue from construction contracts and service contracts

Drilling engineering and geophysics

Revenues from drilling engineering and geophysics service contracts are recognised progressively over time using the output method, based on total value of contract work performed as a percentage of total contract sum, as customer simultaneously receives and consumes benefits provided by the Group's performance as the Group performs.

For contracts included two or more performance obligations, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis, an entity shall determine the stand-alone selling price at contract inception of the distinct service underlying each performance obligation in the contract.

Engineering construction

Revenue from engineering construction contracts is recognised progressively over time using the input method, based on the contract costs incurred to date as a percentage of total forecast costs, as the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced.

For contracts included two or more performance obligations, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis, an entity shall determine the stand-alone selling price at contract inception of the distinct service underlying each performance obligation in the contract.

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.

Special downhole operations and Logging and mud logging

Revenue from special downhole operation and logging and mud logging service contract is recognised when services are rendered as customer simultaneously receives and consumes benefits provided by the Group's performance as the Group performs.

(3) Dividend income

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

(4) 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.

2.23 Leases

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

For entering any new contracts, 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:

(i) the contracts contains 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;

(ii) 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

(iii) 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 a contract 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 component on the basis of the relative stand-alone selling price of the lease component and the aggregate stand-alone selling price of the non-lease components.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.23 Leases (Continued)

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

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 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. The Group also assesses the right-of-use asset for impairment when such indicator exists.

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

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

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

The Group remeasures lease liabilities whenever:

– there are changes in lease term or in the assessment of exercise of a purchase option, 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.

– there are changes in lease payments due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case a revised discount rate is used).

– a lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured 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 the 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.

The Group presents right-of-use assets in "property, plant and equipment", the same line item as that within which the corresponding underlying assets would be presented if they were owned.

(2) 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.24 Shares repurchase

Prior to the cancellation or transfer of repurchased shares from the Group's share option incentive plan, the repurchased shares were classified as treasury shares. Costs of treasury shares comprised of cost incurred for the repurchase of shares. Costs incurred for repurchase of shares were deducted from equity and no profit or loss will be recognise upon repurchase or cancellation of shares.

Upon transfer of treasury shares, the differences between the considerations received and the nominal value of treasury shares were deducted from other capital reserve and share premium, any residual will be deducted from surplus reserves and accumulated losses. Upon cancellation of treasury shares, share capital will be deducted by reference to number of shares and its nominal value, any difference between the nominal value of treasury shares will be deducted from the other capital reserve and share premium, any residual will be deducted from surplus reserves and accumulated losses.

2.25 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 (if the Group is itself such a plan) and the sponsoring employers are also 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); or
- (viii) the entity, or any member of a group of which it is a part, provide key management personnel services to the Group or to the parent of the Group.

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

3. NEW AND AMENDED IFRSs

3.1 Application of new and amendments to IFRSs

The IASB has issued a number of amended IFRSs. The Group has adopted all these amended IFRSs, which are relevant to the Group's operations and effective for the Group's consolidated financial statements for the accounting period beginning on or after 1 January 2021:

Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	Interest Rate Benchmark Reform – Phase 2
Amendments to IFRS 16	COVID-19-Related Rent Concessions beyond 30 June 2021 (early adopted)

Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16, Interest Rate Benchmark Reform – Phase 2

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate is replaced with an alternative nearly risk-free interest rate. The amendments include the following practical expedients:

- A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest
- Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued
- Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component

These amendments had no impact on the consolidated financial statements of the Group. The Group intends to use the practical expedients in future periods if they become applicable.

Amendment to IFRS 16, COVID-19-Related Rent Concessions beyond 30 June 2021

On 28 May 2020, the IASB issued COVID-19-Related Rent Concessions – amendment to IFRS 16 Leases. The amendments provide relief to lessees from applying IFRS 16 guidance on lease modification accounting for rent concessions arising as a direct consequence of the COVID-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a COVID-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the COVID-19 related rent concession the same way it would account for the change under IFRS 16, if the change were not a lease modification.

The amendment was intended to apply until 30 June 2021, but as the impact of the COVID-19 pandemic is continuing, on 31 March 2021, the IASB extended the period of application of the practical expedient to 30 June 2022. The amendment applies to annual reporting periods beginning on or after 1 April 2021. However, the Group has not received COVID-19-related rent concessions, but plans to apply the practical expedient if it becomes applicable within allowed period of application.

3.2 New or amended IFRSs that have been issued but are not yet effective and not early adopted

The new and amended accounting standards issued but not yet effective for the accounting period ended 31 December 2021 which are relevant to the Group but the Group has not early adopted are set out below:

Amendments to IAS 16	Property, Plant and Equipment – Proceeds before Intended Use[1]
Amendments to IAS 37	Onerous Contracts – Cost of Fulfilling a Contract[1]
Amendments to IFRS 3	Reference to the Conceptual Framework[1]
Amendments to IFRSs	Annual Improvements to IFRS Standards 2018-2020[1]
IFRS 17 and amendments to IFRS 17	Insurance Contracts and related amendments[2]
Amendments to IAS 1	Classification of Liabilities as Current or Non-current[2]
Amendments to IAS 8	Definition of Accounting Estimates[2]
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies[2]
Amendments to IAS 12	Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction[2]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

1 Effective for annual periods beginning on or after 1 January 2022
2 Effective for annual periods beginning on or after 1 January 2023
3 The amendments shall be applied prospectively to the sale or contribution of assets occurring in annual periods beginning on or after a date to be determined

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

4. CRITICAL ACCOUNTING JUDGEMENT AND ESTIMATES

The Group continually evaluates the critical accounting estimates and key assumptions based on its historical experience and other factors, including expectation of future events that are believed to be reasonable under the circumstances.

The critical accounting estimates and key assumptions that are likely to have significant risks of causing material adjustments to the carrying amounts of assets and liabilities in the next financial year are set out as below:

(1) Classification of financial assets

The Group's critical judgements on determining the classification of financial assets, including the business model and analysis of contractual cash flow characteristics.

The Group's assessment of the business model is performed on a financial assets portfolio basis, taking into consideration of the way for how the performance of the financial assets are evaluated and reported to the Group's key management personnel, the way for how the risks for being affected by the performance of the financial assets are evaluated and managed, and the way for how managers are compensated and etc.

The Group's critical judgements on whether the cash flows are consistent with the loan arrangement include whether principal amount may change (including future cash flow and amount) over the life of the financial asset (for example, if there are early repayments of principal) and whether interest only consists of consideration for the time value of money, for the credit risk, and for other basic lending risks and costs, as well as a profit margin. For examples, whether the amount for early repayment solely reflects the outstanding principal and related interest and the reasonable compensation for the early termination of agreement.

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

The Group makes allowances on trade receivables (Note 21) and contract assets (Note 23) based on assumptions about risk of default and expected loss rates. The Group applies judgment in making these assumptions and selecting the inputs to the ECL calculation, based on the Group's past collection history, existing market conditions as well as forward looking estimates at the end of each reporting period. During the year ended 31 December 2021, ECL allowance on trade receivables of RMB1,342,000 (2020: reversal of ECL allowance of RMB35,742,000) and reversal of ECL allowance on contract assets of RMB2,826,000 (2020: ECL allowance of RMB65,897,000) respectively are recognised in profit or loss.

(3) Write down of inventories

The Group regularly reviews the net realisable value of inventories and inventories write-down is recognised at the excess of the carrying amounts of inventories over their net realisable value. When making estimation of the net realisable value of inventories, the Group considers the purpose of the inventories held on hand and other information available to form the underlying assumptions, including the market prices of inventories and the Group's historical operating costs. The actual selling price, costs of completion, selling expenses and taxes may vary according to the changes in market conditions, manufacturing technology or the actual use of the inventories. The profit or loss for the period will be affected by the adjustment in carrying amount of inventories. The carrying amount of inventories is set out in Note 24.

(4) Research and development costs

Research costs are expensed as incurred. Costs incurred on development projects relating to the design and testing of new or improved products are recognised as an intangible asset where the technical feasibility and intention of completing the product under development has been demonstrated and the resources are available to do so, costs are identifiable and there is an ability to sell or use the asset that will generate probable future economic benefit. Significant judgement is required in determining the capitalisation of development costs. Development costs that are recognised as assets are amortised on the straight-line basis to reflect the pattern in which the related economic benefits are recognised. Development costs that do not meet the above criteria are expensed as incurred.

(5) Depreciation and amortisation of property, plant and equipment, intangible assets and other non-current assets

The Group takes into account of residual value before calculating the depreciation and amortisation of property, plant and equipment, intangible assets and other non-current assets. The Group regularly review the estimated useful lives of the assets to determine the depreciation and amortisation charged in each reporting period. The useful lives of the assets are determined based on historical experiences of similar assets and the estimated technical changes, the amortisation periods for other non-current assets are determined by the Group in accordance with the expected benefit period of each assets. Depreciation and amortisation charges is revised if there is material effect on the previous estimation.

Carrying amount of property, plant and equipment and other non-current asset as well as intangible assets is set out in Notes 17 and 18.

(6) Revenue recognition

The contract revenue of petroleum engineering and technical services provided by the Group is recognised over time. The recognition of related revenue depends on the total budgeted costs and the estimation of progress towards satisfaction of a performance obligation by the Group. The management of the Group adopts either the expected value or most likely amount method to estimate the total amount of consideration to which the Group will be entitled, and evaluates the total budgeted costs according to historical information and construction plan. In view of the fact that the construction service contract cycle may span multiple accounting periods, the Group will continuously and periodically review and revise the estimated amount of consideration to which the Group will be entitled, estimated contract costs and the progress towards satisfaction of a performance obligation. If the total amount of consideration to which the Group will be entitled, and total contract costs are actually higher or lower than the management's estimated value, the amount of revenue recognised will be affected in the future.

4. CRITICAL ACCOUNTING JUDGEMENT AND ESTIMATES (Continued)

(7) Provision for litigation claims

For the legal proceedings and claims, the Group derives the best estimate of the expenditure required to settle the related current obligations based on the legal advices consulted and according to the process and solutions of the legal proceedings and claims. The estimated losses will change according to the progress of the legal proceedings. The related information is set out in Note 39.

(8) Deferred tax assets

Deferred tax assets are recognised for all unused tax losses when the Group is likely to have sufficient taxable profits to offset those losses. The management estimates the timing and amount in relation to the future taxable profits, including the availability of tax planning strategy to recognise the appropriate amount of deferred tax assets. If the taxable profits in future accounting period is lower than the expected amount or the actual tax rate is lower than the expected tax rate, the deferred tax assets recognised will be reversed and included in the consolidated statement of comprehensive income. The related information is set out in Note 35.

(9) Taxation

There are various uncertainties on interpretation of the complicated tax regulations (including related tax incentive regulations) and timing and extent of the future taxable profits. Regarding to various international business and complexity of current contract, there may be adjustment to the recognised taxable income and expenses in the future. The Group has reasonably estimated the provision of taxation in the countries where the Group operates. Such provision of taxation is based on different factors, such as previous tax audit experience and interpretation by related tax authorities. Since the Group operates in different tax regions, different interpretations may be resulted from various events. Relevant information is set out in Notes 12 and 39(d).

(10) Going concern basis

These consolidated financial statements have been prepared on a going concern basis, the validity of which depends upon the financing plan assessed as detailed in note 2.1 to these consolidated financial statements. However, because not all future events or conditions can be predicted, this assumption is not a guarantee as to the Group's and Company's ability to continue as a going concern.

5. REVENUE AND SEGMENT INFORMATION

The Group's revenue is as follows:

	2021 RMB'000	2020 RMB'000
Geophysics	**4,663,346**	4,599,371
Drilling engineering	**33,081,850**	34,199,657
Logging and mud logging	**3,207,549**	2,728,760
Special downhole operations	**9,384,197**	8,596,355
Engineering construction	**16,714,720**	15,683,065
Others	**2,481,391**	2,266,186
	69,533,053	68,073,394

5. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information

The Group identifies its operating segments based on the internal organisation structure, senior executive management requirements and internal reporting system. The Group has identified five operating segments including geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction. These operating segments are identified based on the regular internal financial information reported to the senior executive management. Senior executive management of the Company regularly reviews the segment information for their decision about the resources allocation and performance assessment.

Five reportable operating segments are as follows:

– Geophysics, which provides terrestrial and marine geophysical exploration, development and technical services;

– Drilling engineering, which provides customers with land and ocean drilling design, construction, technical services and drilling instrumentation;

– Logging and mud logging, which provides land and ocean project contracting and technical services for collection, monitoring, transmission, processing and interpretation and evaluation of wellbore oil and gas, geology and engineering information;

– Special downhole operations, which provides oil engineering technical and construction, including oil (gas) testing, well repair, lateral drilling, fracturing, acidising and oil assignments; and

– Engineering construction, which provides a package of services, including feasibility studies, design, procurement, construction for projects of onshore and offshore oil and gas fields, long-distance pipeline projects, oil and gas transporting process projects, storage and transportation projects, petrochemical supporting projects, building construction, water resources and hydropower, ports and waterways, electricity transmission and distribution projects, manufacturing of pressure vessels, LNG projects, coal chemical engineering, geothermal utilisation, energy saving and municipal roads and bridges.

Inter-segment transfers are measured by reference to market price. The assets are allocated based on the operations of the segment and the physical location of the asset.

All assets are allocated to reportable segments other than certain property, plant and equipment, certain intangible assets, certain other non-current assets, certain inventories, certain contract assets and cost to fulfil contracts, certain notes and trade receivables, certain prepayment and other receivables, certain cash and cash equivalents, and certain deferred tax assets.

All liabilities are allocated to reportable segments other than certain borrowings, certain deferred income, certain deferred tax liabilities, certain notes and trade payables, certain other payables, certain contract liabilities, and certain current income tax payable.

The resources related to interest income, interest expenses, interests in joint ventures, interests in associates, gain on investment, income tax expense as well as shared assets of all segments are centrally managed and accounted for by the Company, and thus are not allocated among segments.

Segment information of each reportable segment were reported and disclosed to the senior executive management in accordance with the accounting policies and the respective measurement bases. These accounting policies and measurement bases were the same as those used in for the preparation of the consolidated financial statements.

Information regarding each reportable segment provided to the senior executive management was as follows:

5. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

(a) Segment results, assets and liabilities

For the year ended 31 December 2021 and as at that date, the segment results, assets and liabilities were as follows:

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Eliminated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
During the year ended 31 December 2021								
Segment revenue and results								
Revenue from external customers	4,663,346	33,081,850	3,207,549	9,384,197	16,714,720	2,481,391	–	69,533,053
Inter-segment revenue	42,777	3,757,636	2,329,444	533,246	27,104	6,814,586	(13,504,793)	–
Segment revenue	4,706,123	36,839,486	5,536,993	9,917,443	16,741,824	9,295,977	(13,504,793)	69,533,053
Reportable segment (loss)/profit	(28,969)	(222,536)	357,206	443,739	344,629	(969,155)	–	(75,086)
Other income	58,795	210,017	12,832	35,222	106,933	128,321	–	552,120
Other expenses	(12,685)	(36,792)	(5,706)	(9,316)	42,969	(4,323)	–	(25,853)
Profit/(loss) before income tax	17,141	(49,311)	364,332	469,645	494,531	(845,157)		451,181
Income tax expense								(310,731)
Profit for the year								140,450
Supplementary information								
Depreciation and amortisation								
– Property, plant and equipment	361,919	1,871,291	232,520	497,354	269,981	243,520	–	3,476,585
– Other non-current assets	112,955	1,614,113	143,835	253,542	11,737	14,310	–	2,150,492
– Intangible assets	37	89,129	1,440	7,957	9,373	4,228	–	112,164
During the year ended 31 December 2021								
Capital expenditure								
– Property, plant and equipment	262,098	2,602,257	151,087	357,807	433,975	415,114	–	4,222,338
– Intangible assets	1,045	90,555	–	987	21,432	1,664	–	115,683
Provision for/(Reversal of provision for) ECL on trade receivables, net	1,636	21,093	7,976	(31,501)	(1,183)	3,321	–	1,342
Provision for/(Reversal of provision for) ECL on other receivables, net	389	2,766	(85)	(167)	22,322	(4,075)	–	21,150
Provision for/(Reversal of provision for) ECL on contract assets, net	1,556	4,758	911	541	1,252	(11,844)	–	(2,826)
As at 31 December 2021								
Assets								
Segment assets	4,524,519	38,958,384	3,541,026	6,425,152	20,252,666	29,111,052	(38,760,352)	64,052,447
Liabilities								
Segment liabilities	3,427,097	28,862,019	2,978,969	3,475,883	19,867,388	37,339,926	(38,760,352)	57,190,930

5. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

(a) Segment results, assets and liabilities (Continued)

For the year ended 31 December 2020 and as at that date, the segment results, assets and liabilities were as follows:

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Eliminated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
During the year ended 31 December 2020								
Segment revenue and results								
Revenue from external customers	4,599,371	34,199,657	2,728,760	8,596,355	15,683,065	2,266,186	–	68,073,394
Inter-segment revenue	10,202	774,221	1,466,368	674,078	36,314	5,973,842	(8,935,025)	–
Segment revenue	4,609,573	34,973,878	4,195,128	9,270,433	15,719,379	8,240,028	(8,935,025)	68,073,394
Reportable segment (loss)/profit	(75,959)	12,542	161,833	(214,901)	9,107	(300,037)	–	(407,415)
Other income	58,964	456,066	7,679	35,275	67,926	58,530	–	684,440
Other expenses	(12,448)	(664)	(5,413)	(4,094)	(14,720)	(6,347)	–	(43,686)
Profit before income tax	(29,443)	467,944	164,099	(183,720)	62,313	(247,854)	–	233,339
Income tax expense								(269,076)
Loss for the year								(35,737)
Supplementary information								
Depreciation and amortisation								
– Property, plant and equipment	383,106	1,826,826	202,039	570,515	244,119	259,717	–	3,486,322
– Other non-current assets	99,623	1,671,571	84,163	311,492	10,869	3,437	–	2,181,155
– Intangible assets	19	97,206	1,385	7,828	7,649	2,137	–	116,224
Capital expenditure								
– Property, plant and equipment	225,407	1,576,109	112,015	497,805	259,047	172,964	–	2,843,347
– Intangible assets	6	219,989	430	901	8,227	1,785	–	231,338
Provision for/(Reversal of provision for) ECL on trade receivables, net	11,772	(55,448)	(3,203)	27,674	(15,109)	(1,428)	–	(35,742)
(Reversal of provision for)/Provision for ECL on other receivables, net	(2,218)	(4,294)	437	883	76,682	2,602	–	74,092
Provision for ECL on contract assets	891	63,414	290	707	565	30	–	65,897
Write down of inventories to net realisable value	–	4,846	–	–	–	–	–	4,846
As at 31 December 2020								
Assets								
Segment assets	4,354,278	39,531,252	2,551,384	6,437,288	20,325,162	27,486,627	(39,594,796)	61,091,195
Liabilities								
Segment liabilities	3,185,765	30,373,664	1,918,995	3,634,310	20,110,692	34,739,699	(39,594,796)	54,368,329

5. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

(b) Geographical information

The following table presents the geographical information. Revenue is based on the location at which revenue were derived. Specified non-current assets include property, plant and equipment, other non-current assets, intangible assets, interests in joint ventures and interests in associates, which are based on the physical location of the assets.

	Revenue from external customers	
	2021	2020
	RMB'000	RMB'000
The PRC	**59,869,980**	56,742,351
Middle East	**6,804,288**	8,636,854
Other countries	**2,858,785**	2,694,189
	69,533,053	68,073,394

	Specified non-current assets	
	2021	2020
	RMB'000	RMB'000
The PRC	**26,965,860**	26,420,314
Other countries	**5,001,331**	4,449,925
	31,967,191	30,870,239

(c) Major customer

For the years ended 31 December 2021 and 2020, revenue from customers which individually contributed over 10% of the Group's revenue is as follows:

	2021	2020
	RMB'000	RMB'000
Customer A	**46,922,348**	41,033,624

Revenue from this customer was derived from the operating segments of geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction accounted for more than 50% of the Group's revenue.

5. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

(d) Analysis on revenue from contracts

For the years ended 31 December 2021 and 2020, 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 geophysics, drilling engineering, logging and mud logging, special downhole operations and engineering construction service:

	Geophysics	Drilling engineering	Logging and mud logging	Special downhole operations	Engineering construction	Unallocated	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
During the year ended 31 December 2021							
Timing of revenue recognition:							
– At a point in time	–	2,481	13,271	466	13,969	759,138	789,325
– Over time	4,663,346	33,079,369	3,194,278	9,383,731	16,700,751	1,722,253	68,743,728
Total	4,663,346	33,081,850	3,207,549	9,384,197	16,714,720	2,481,391	69,533,053
During the year ended 31 December 2020							
Timing of revenue recognition:							
– At a point in time	–	23,259	6,670	–	24,252	588,283	642,464
– Over time	4,599,371	34,176,398	2,722,090	8,596,355	15,658,813	1,677,903	67,430,930
Total	4,599,371	34,199,657	2,728,760	8,596,355	15,683,065	2,266,186	68,073,394

(e) Performance obligation of contracts with customers

The Group enters into petroleum engineering technical service contracts or construction contracts with customers to provide geophysical exploration, drilling, logging and mud logging, special downhole operations and surface engineering construction services of which rendering of services and construction contracts is completed according to the agreed schedule. When value of the completed work is confirmed and is certified, customers pay progress payments within 30-180 days after billing. Final billing and payment is made upon the completion and acceptance of the work.

In accordance with contracts and relevant legal requirement, the Group's engineering construction business provides quality assurance for the constructed assets. This type of quality assurance is an assurance-type warranty that ensures that the constructed assets fulfil the established quality standards, which does not constitute a single performance obligation.

6. FINANCE EXPENSES – NET

	2021	2020
	RMB'000	RMB'000
Finance income		
Interest income		
– Sinopec Group's subsidiaries	1,008	1,407
– Third-parties and other financial institutions	37,172	58,169
	38,180	59,576
Finance expenses		
Interest expenses on loans wholly repayable within 5 years		
– Sinopec Group and its subsidiaries	(597,814)	(753,965)
– Third-party and other financial institutions	(72,475)	(52,785)
Interest expenses on lease liabilities		
– Sinopec Group and its subsidiaries	(21,752)	(25,699)
– Associates and joint ventures of Sinopec Group	(20,410)	(59,303)
– Third-parties	(14,309)	(14,941)
Exchange losses, net	(127,419)	(289,068)
Bank and other charges	(48,136)	(60,485)
	(902,315)	(1,256,246)
	(864,135)	(1,196,670)

7. EXPECTED CREDIT LOSS ("ECL") AND WRITE DOWN OF INVENTORIES TO NET REALISABLE VALUE

	2021	2020
	RMB'000	RMB'000
ECL on trade and other receivables, net	22,492	38,350
(Reversal of ECL)/ECL on contract assets, net	(2,826)	65,897
Write down of inventories to net realisable value	–	4,846
	19,666	109,093

8. INVESTMENT INCOME

	2021	2020
	RMB'000	RMB'000
Investment income from financial assets at FVTOCI	1,577	500

9. OTHER INCOME

	2021	2020
	RMB'000	RMB'000
Gain on disposal of property, plant and equipment, net	84,972	935
Gain on disposal of other non-current assets, net	3,751	5,026
Gain on debt restructuring	29,404	53,960
Government grants (Note)	300,474	511,210
Waived payables	31,145	81,208
Penalty income	2,313	2,779
Compensation received	7,790	3,059
Insurance claims	6,959	8,215
Asset surplus	38,440	4,327
Others	46,872	13,721
	552,120	684,440

Note:

For the years ended 31 December 2021 and 2020, government grants primarily represent financial appropriation income and non-income tax refunds received from respective government agencies without conditions or other contingencies attached to the receipts of the grants.

10. OTHER EXPENSES, NET

	2021	2020
	RMB'000	RMB'000
Loss on scarps of assets	24,762	7,147
Penalty	6,376	8,220
Donation	830	5,623
Compensation	5,683	12,844
Reversal of provision for expected loss on pending litigations	(79)	(2,424)
Reversal of expected loss on judicial reorganisation (Note 38)	(69,049)	–
Others	57,330	12,276
	25,853	43,686

11. PROFIT BEFORE INCOME TAX

Profit before income tax is stated after (crediting)/charging the followings:

	2021 RMB'000	2020 RMB'000
Staff costs, including directors and supervisors emoluments (Note 16)	**16,999,677**	15,733,882
Retirement benefit plan contribution (including in the above mentioned staff costs)		
－Municipal retirement scheme costs	**1,329,452**	899,329
－Supplementary retirement scheme costs	**675,163**	645,597
Share options granted to directors and employees (including in the above mentioned staff costs)	**–**	3,192
Changes in inventories of finished goods and work in progress	**(32,567)**	72,575
Raw materials and consumables used	**29,033,824**	28,133,529
Depreciation and amortisation		
－Property, plant and equipment	**3,476,585**	3,486,322
－Other non-current assets	**2,150,492**	2,181,155
－Intangible assets	**112,164**	116,224
Short-term leases and leases with lease term of 12 months or less	**1,055,154**	996,480
ECL, net:		
－Trade and other receivables	**22,492**	38,350
－Contract assets	**(2,826)**	65,897
Impairment of assets:		
－Write down of inventories to net realisable value	**–**	4,846
Rental income from property, plant and equipment after relevant expenses	**(13,915)**	(20,704)
Gain on disposal of property, plant and equipment, net	**(84,972)**	(935)
Gain on disposal of other non-current assets, net	**(3,751)**	(5,026)
Auditors' remuneration	**7,200**	9,800
Exchange loss, net	**127,419**	289,068
COVID-19 related rent concessions	**460**	585

12. INCOME TAX EXPENSE

	2021 RMB'000	2020 RMB'000
Current tax		
PRC enterprise income tax	**98,907**	50,750
Overseas enterprise income tax	**130,444**	199,988
	229,351	250,738
Deferred tax		
Origination and reversal of temporary difference (Note 35)	**81,380**	18,338
Income tax expense	**310,731**	269,076

According to the Corporate Income Tax Law of the PRC, the applicable income tax of the years ended 31 December 2021 and 2020 is 25%.

According to the normal statutory PRC corporate income tax and relevant rules, apart from a certain subsidiaries of the Company subjected to the relevant development zone policy or participation in technology development and the PRC's western development project can enjoy 15% preferential tax rate during the years ended 31 December 2021 and 2020, the majority of the companies of the Group are subject to 25% income tax rate.

Taxes in other countries are calculated according to the tax laws where the related companies of the Group operate.

12. INCOME TAX EXPENSE (Continued)

Reconciliation between income tax expenses and profit before income tax calculated at the statutory tax rate is as follows:

	2021 RMB'000	2020 RMB'000
Profit before income tax	**451,181**	233,339
Taxation calculated at the statutory tax rate	**112,795**	58,335
Income tax effects of:		
Difference in overseas profits tax rates	**90,528**	204,580
Non-deductible expenses	**82,639**	97,333
Effect of utilization of unrecognized tax losses and deductible temporary differences	**(23,741)**	(112,838)
Effect of unrecognized tax losses and deductible temporary differences	**178,256**	193,158
Adjustment of current tax in previous years	**(747)**	(21,353)
Equity method accounting for the joint ventures and associates' profit or loss	**(1,278)**	(766)
Effect on opening deferred tax balances arising from change in tax rates during the year	**–**	15,013
Tax effect on research and development expenses	**(127,721)**	(164,386)
Income tax expense	**310,731**	269,076

13. EARNINGS/(LOSS) PER SHARE

(a) Basic

For the years ended 31 December 2021 and 2020, the basic earnings/(loss) per share is calculated by dividing the profit/(loss) attributable to owners of the Company.

	2021	2020
Profit/(loss) for the period attributable to owners of the Company (RMB'000)	**140,450**	(35,737)
Weighted average number of ordinary shares in issue (Shares)	**18,984,340,033**	18,984,340,033
Basic earnings/(loss) per share (RMB)	**0.007**	(0.002)

(b) Diluted

For the years ended 31 December 2021 and 2020, the diluted earnings/(loss) per share was the same as the basic earnings/(loss) per share as the exercise price of those share options is higher than the average market price for shares in the both years.

14. DIVIDENDS

The Board of Directors of the Company did not recommend the payment of any dividends for the years ended 31 December 2021 and 2020.

15. DIRECTORS', SUPERVISORS', AND FIVE HIGHEST INDIVIDUALS' EMOLUMENTS

Directors', supervisors' and highest individuals' emoluments, disclosed pursuant to the Listing Rules and the Hong Kong Companies Ordinance is as follows:

(a) Directors' and supervisors' emoluments

Details of directors and supervisors of the Company are as follows:

(I) For the year ended 31 December 2021

	Fee	Salary, allowance and bonus	Contributions to pension plans	Share-based payment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Executive directors:					
CHEN Xikun	–	923	52	–	975
YUAN Jianqiang	–	923	52	–	975
	–	1,846	104	–	1,950
Non-executive directors:					
LU Baoping	–	–	–	–	–
FAN Zhonghai	–	–	–	–	–
WEI Ran	–	–	–	–	–
ZHOU Meiyun (i)	–	–	–	–	–
	–	–	–	–	–
Independent non-executive directors:					
JIANG Bo (ii)	17	–	–	–	17
CHEN Weidong	200	–	–	–	200
DONG Xiucheng	200	–	–	–	200
ZHENG Weijin (i)	183	–	–	–	183
	600	–	–	–	600
Supervisors:					
MA Xiang	–	842	52	–	894
DU Jiangbo	–	–	–	–	–
ZHANG Jianbo	–	–	–	–	–
ZHANG Qin	–	–	–	–	–
SUN Yongzhuang (i)	–	755	33	–	788
ZHANG Bailing (i)	–	724	33	–	757
DU Guangyi (i)	–	765	48	–	813
ZHAI Yalin (ii)	–	–	–	–	–
ZHANG Hongshan (ii)	–	60	3	–	63
	–	3,146	169	–	3,315
	600	4,992	273	–	5,865

Notes:

(i) Appointed on 2 February 2021.
(ii) Resigned on 2 February 2021.

For the year ended 31 December 2021, Mr. YUAN Jianqiang is also the general manager of the Company and his emoluments disclosed above included his remuneration of serving as the general manager.

15. DIRECTORS', SUPERVISORS', AND FIVE HIGHEST INDIVIDUALS' EMOLUMENTS (Continued)

(a) Directors' and supervisors' emoluments (Continued)

Details of directors and supervisors of the Company are as follows: (Continued)

(II) For the year ended 31 December 2020

	Fee	Salary, allowance and bonus	Contributions to pension plans	Share-based payment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Executive directors:					
CHEN Xikun	–	860	48	–	908
YUAN Jianqiang	–	839	48	–	887
	–	1,699	96	–	1,795
Non-executive directors:					
LU Baoping	–	–	–	–	–
FAN Zhonghai	–	–	–	–	–
WEI Ran	–	–	–	–	–
	–	–	–	–	–
Independent non-executive directors:					
JIANG Bo	200	–	–	–	200
CHEN Weidong	200	–	–	–	200
DONG Xiucheng	200	–	–	–	200
PAN Ying (i)	50	–	–	–	50
	650	–	–	–	650
Supervisors:					
ZHANG Qin	–	–	–	–	–
DU Jiangbo	–	–	–	–	–
ZHANG Hongshan	–	721	32	–	753
ZHANG Jianbo	–	–	–	–	–
CHEN Weiguo (ii)	–	566	18	–	584
ZHAI Yalin	–	–	–	–	–
MA Xiang	–	818	48	–	866
	–	2,105	98	–	2,203
	650	3,804	194	–	4,648

Notes:

(i) Resigned on 2 April 2020.
(ii) Resigned on 6 August 2020.

For the year ended 31 December 2020, Mr. YUAN Jianqiang is also the general manager of the Company and his emoluments disclosed above included his remuneration of serving as the general manager.

15. DIRECTORS', SUPERVISORS', AND FIVE HIGHEST INDIVIDUALS' EMOLUMENTS (Continued)

(b) Five highest paid individuals

The number of director or supervisor and non-director or supervisor included in the five highest paid individuals for the years ended 31 December 2021 and 2020 are as follows:

	2021	2020
Director or supervisor	2	2
Non-director or non-supervisor	3	3
	5	5

The aggregate of the emoluments in respect of the highest paid non-director or non-supervisor are as follows:

	2021	2020
Salaries, allowances and bonus	2,618	2,490
Contributions to pensions plans	156	144
Share-based payments	–	40
	2,774	2,674

The emoluments of the three (2020: three) highest paid individuals who are non-director or non-supervisor are within the following bands:

	2021	2020
Nil to HK$1,000,000	–	1
HK$1,000,001 to HK$1,500,000	3	2

16. EMPLOYMENT BENEFITS

	2021 RMB'000	2020 RMB'000
Salaries, wages and other benefits	14,995,062	14,185,764
Contribution to pension plans (Note)		
—Municipal retirement scheme costs	1,329,452	899,329
—Supplementary retirement scheme costs	675,163	645,597
Share options granted to directors and employees (Note 30)	–	3,192
	16,999,677	15,733,882

Note:

Retirement benefits

As stipulated by the regulations of the PRC, the Group participates in basic defined contribution retirement schemes organised by respective municipal government under which it is governed. As at 31 December 2021, the Group and the employees pay 16% and 8% (31 December 2020: 16% and 8%) of salary respectively to basic defined contribution plan.

In addition, the Group provides a supplementary defined contribution retirement plan for its staff at rates not exceeding 8% (31 December 2020: 8%) of the salaries. Employees who have served the Group for one year or more are entitled to participating in this plan. The funds of this plan are held separately from the Group in an independent fund administered by a committee consisting of representatives from the employees and the Group.

Those employees who involved supplementary retirement scheme are entitled to receive the pension in accordance with a certain percentage of the pre-retirement salary after retirement. The Group has no other material obligation for the payment of retirement benefits associated with these plans beyond Municipal retirement scheme and Supplementary retirement scheme.

17. PROPERTY, PLANT AND EQUIPMENT AND OTHER NON-CURRENT ASSETS

(a) Property, Plant and Equipment

For the year ended 31 December 2021

	Buildings	Oil engineering equipment and others	Land	Prepaid land leases	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost						
At 1 January 2021	2,574,128	63,146,900	229,773	136,660	356,026	66,443,487
Additions	149,791	226,656	72,824	1,216	3,763,263	4,213,750
Remeasurement of leases	6,956	401	1,231	–	–	8,588
Expiration of or early termination of contract	(385,532)	(33,048)	(139,798)	–	–	(558,378)
Disposals/Write-off	(27,483)	(1,791,511)	–	–	–	(1,818,994)
Transferred from construction in progress	38,258	3,409,165	–	–	(3,447,423)	–
At 31 December 2021	2,356,118	64,958,563	164,030	137,876	671,866	68,288,453
Accumulated depreciation						
At 1 January 2021	978,471	39,361,809	99,134	28,305	–	40,467,719
Depreciation	307,456	3,110,333	55,691	3,105	–	3,476,585
Expiration of or early termination of contract	(145,397)	(32,213)	(42,539)	–	–	(220,149)
Disposals/Write-off	(12,083)	(1,599,555)	–	–	–	(1,611,638)
At 31 December 2021	1,128,447	40,840,374	112,286	31,410	–	42,112,517
Accumulated impairment loss						
At 1 January 2021	8,436	1,319,930	–	–	71,734	1,400,100
Disposals/Write-off	(7,782)	(72,861)	–	–	(68,232)	(148,875)
At 31 December 2021	654	1,247,069	–	–	3,502	1,251,225
Carrying amounts						
At 31 December 2021	1,227,017	22,871,120	51,744	106,466	668,364	24,924,711

17. PROPERTY, PLANT AND EQUIPMENT AND OTHER NON-CURRENT ASSETS (Continued)

(a) Property, Plant and Equipment (Continued)

For the year ended 31 December 2020

	Buildings	Oil engineering equipment and others	Land	Prepaid land leases	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost						
At 1 January 2020	2,410,301	61,847,590	211,535	136,660	285,553	64,891,639
Additions	215,146	1,536,609	20,700	–	1,099,748	2,872,203
Remeasurement of leases	281	(28,775)	(362)	–	–	(28,856)
Expiration of or early termination of contract	(40,022)	(10,032)	(2,100)	–	–	(52,154)
Disposals/Write-off	(11,578)	(1,227,767)	–	–	–	(1,239,345)
Transferred from construction in progress	–	1,029,275	–	–	(1,029,275)	–
At 31 December 2020	2,574,128	63,146,900	229,773	136,660	356,026	66,443,487
Accumulated depreciation						
At 1 January 2020	723,997	37,286,864	46,447	25,210	–	38,082,518
Depreciation	288,263	3,140,177	54,787	3,095	–	3,486,322
Expiration of or early termination of contract	(26,819)	(6,903)	(2,100)	–	–	(35,822)
Disposals/Write-off	(6,970)	(1,058,329)	–	–	–	(1,065,299)
At 31 December 2020	978,471	39,361,809	99,134	28,305	–	40,467,719
Accumulated impairment loss						
At 1 January 2020	8,436	1,353,320	–	–	71,734	1,433,490
Disposals/Write-off	–	(33,390)	–	–	–	(33,390)
At 31 December 2020	8,436	1,319,930	–	–	71,734	1,400,100
Carrying amounts						
At 31 December 2020	1,587,221	22,465,161	130,639	108,355	284,292	24,575,668

Notes:

(i) Recognised depreciation is analysed as follows:

	2021	2020
	RMB'000	RMB'000
Cost of sales	**3,349,140**	3,376,642
Selling expenses	**364**	302
General and administrative expenses	**91,040**	86,892
Research expenses	**36,041**	22,486
	3,476,585	3,486,322

(ii) As at 31 December 2021, right-of-use assets with carrying amounts of RMB827,404,000 are included in property, plant and equipment (2020: right-of-use assets with carrying amounts of RMB1,373,939,000). Details of which are as follows:

	Carrying amounts		**Depreciation**
	As at 31 December 2021	**As at 1 January 2021**	**During the year 31 December 2021**
	RMB'000	**RMB'000**	**RMB'000**
Buildings	**224,143**	**561,175**	**253,645**
Oil engineering equipment and others	**445,051**	**573,770**	**226,503**
Land	**51,744**	**130,639**	**55,691**
Prepaid land leases	**106,466**	**108,355**	**3,105**
	827,404	**1,373,939**	**538,944**

(iii) For the year ended 31 December 2021, the total increase in the right-of-use assets included in property, plant and equipment was RMB322,050,000.

17. PROPERTY, PLANT AND EQUIPMENT AND OTHER NON-CURRENT ASSETS (Continued)

(b) Other non-current assets

For the year ended 31 December 2021

	Special tools of petroleum engineering	Other tools of Petroleum engineering	Camping house	Other long-term deferred expenses	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost					
At 1 January 2021	11,938,311	1,609,042	1,823,188	44,576	15,415,117
Additions	2,258,301	333,086	319,686	6,638	2,917,711
At 31 December 2021	14,196,612	1,942,128	2,142,874	51,214	18,332,828
Accumulated depreciation					
At 1 January 2021	7,163,913	1,099,821	1,272,641	23,828	9,560,203
Amortisation	1,635,493	317,938	188,997	8,064	2,150,492
Other decrease	4,880	599	21,352	–	26,831
At 31 December 2021	8,804,286	1,418,358	1,482,990	31,892	11,737,526
Carrying amounts					
At 31 December 2021	5,392,326	523,770	659,884	19,322	6,595,302

For the year ended 31 December 2020

	Buildings	Oil engineering equipment and others	Land	Prepaid land leases	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost					
At 1 January 2020	9,799,930	1,344,446	1,574,427	35,309	12,754,112
Additions	2,138,381	264,596	248,761	9,267	2,661,005
At 31 December 2020	11,938,311	1,609,042	1,823,188	44,576	15,415,117
Accumulated depreciation					
At 1 January 2020	5,635,999	621,387	1,101,807	17,457	7,376,650
Amortisation	1,527,914	478,434	170,834	3,973	2,181,155
Other decrease	–	–	–	2,398	2,398
At 31 December 2020	7,163,913	1,099,821	1,272,641	23,828	9,560,203
Carrying amounts					
At 31 December 2020	4,774,398	509,221	550,547	20,748	5,854,914

18. INTANGIBLE ASSETS

For the year ended 31 December 2021

	Computer softwares	Others	Total
	RMB'000	RMB'000	RMB'000
Cost			
At 1 January 2021	**178,160**	**696,328**	**874,488**
Additions	**28,502**	**87,181**	**115,683**
Disposals/Write-off	**–**	**–**	**–**
At 31 December 2021	**206,662**	**783,509**	**990,171**
Accumulated amortisation			
At 1 January 2021	**138,599**	**339,278**	**477,877**
Amortisation	**14,856**	**97,308**	**112,164**
Disposals/Write-off	**–**	**–**	**–**
At 31 December 2021	**153,455**	**436,586**	**590,041**
Carrying amounts			
At 31 December 2021	**53,207**	**346,923**	**400,130**

For the year ended 31 December 2020

	Computer softwares	Others	Total
	RMB'000	RMB'000	RMB'000
Cost			
At 1 January 2020	170,597	475,999	646,596
Additions	11,011	220,327	231,338
Disposals/Write-off	(3,448)	–	(3,448)
At 31 December 2020	178,160	696,326	874,486
Accumulated amortization			
At 1 January 2020	131,437	233,662	365,099
Amortisation	10,610	105,614	116,224
Disposals/Write-off	(3,448)	–	(3,448)
At 31 December 2020	138,599	339,276	477,875
Carrying amounts			
At 31 December 2020	39,561	357,050	396,611

Recognised amortisation is analysed as follows:

	2021	2020
	RMB'000	RMB'000
Cost of sales	**99,286**	104,269
Selling expenses	**3**	2
General and administrative expenses	**11,536**	9,795
Research expenses	**1,339**	2,158
	112,164	116,224

19. INTERESTS IN JOINT VENTURES AND ASSOCIATES

(a) Interests in joint ventures

	2021	2020
	RMB'000	RMB'000
At 1 January	**23,204**	23,791
Increase in investments	**–**	9
Share of total comprehensive income	**1,467**	(94)
Dividend	**(549)**	(502)
At 31 December	**24,122**	23,204

The interests in each joint venture are as follows:

	2021	2020
	RMB'000	RMB'000
Qiangjiang HengYun Comprehensive Vehicle Performance Inspecting Company Limited ("Qiangjiang HengYun")	**1,671**	1,613
Sinopec Gulf Petroleum Engineering Services, LLC ("Gulf Petroleum Engineering")	**13,039**	13,075
Zhong Wei Energy Service Co. Limited ("Zhong Wei")	**8,374**	8,316
EBAPAN, S.A. DE C.V ("EBAPAN")	**1,038**	200
	24,122	23,204

The details of joint ventures, unlisted and established as limited companies, of the Group are as follows:

Name	Place of incorporation/ registration	Registered capital		Actual interest held indirectly	Principal activities and place of operation
		RMB'000	MXN'000		
Qianjiang HengYun	The PRC	2,100 (2020: 2,100)	–	49.10% (2020: 49.10%)	Transportation services/The PRC
Gulf Petroleum Engineering	Kuwait	27,312 (2020: 27,312)	–	49.00% (2020: 49.00%)	Oilfield service/Kuwait
Zhong Wei	The PRC	305,000 (2020: 305,000)	–	50.00% (2020: 50.00%)	Oilfield technical service/The PRC
EBAPAN	Mexico	–	50 (2020: 50)	50.00% (2020: 50.00%)	Oil and gas extraction professional and auxiliary activities/Mexico

The above joint ventures are accounted for using equity method.

Notes:

(i) The decision of financial and operating strategies requires unanimous consent from the Group and other ventures as stated in the contracts signed by the both parties. The equities of joint ventures are measured by the joint ventures.

(ii) Commitments and contingent liabilities of the joint ventures

As at 31 December 2021 and 2020, there is no material contingent liability and commitment between the Group and its joint ventures or the joint ventures itself.

The summarised financial information of other non-major joint ventures of the Group is as follows:

	2021	2020
	RMB'000	RMB'000
Profit for the year and total comprehensive income for the year	**2,954**	120

19. INTERESTS IN JOINT VENTURES AND ASSOCIATES (Continued)

(b) Interest in associates

	2021 RMB'000	2020 RMB'000
At 1 January	**19,842**	15,927
Share of total comprehensive income	**5,813**	5,561
Dividend paid	**(2,729)**	(1,646)
At 31 December	**22,926**	19,842

The details of associates, unlisted and established as limited companies, of the Group are as follows:

Name	Place of incorporation/ registration	Registered capital		Actual interest held indirectly	Principal activities and place of operation
		RMB'000	USD'000		
Ordos North China Ruida Oil Service Company Limited ("Ordos North")	The PRC	10,000 (2020: 10,000)	–	35.00% (2020: 35.00%)	Oil and natural gas exploration/The PRC
Xinjiang North China Tianxiang Oil Service Company Limited ("Xinjiang North")	The PRC	10,000 (2020: 10,000)	–	20.00% (2020: 20.00%)	Oil and natural gas exploration/The PRC
Zhenjiang Huajiang Oil Service Company Limited ("Huajiang Oil")	The PRC	5,000 (2020: 5,000)	–	37.00% (2020: 37.00%)	Oil and natural gas exploration/The PRC
Henan Zhongyuan Petroleum Technology Service Company Limited ("Henan Zhongyuan")	The PRC	10,000 (2020: 10,000)	–	20.00% (2020: 20.00%)	Oil and natural gas exploration/The PRC
Henan Zhongyou Petroleum Technology Service Company Limited ("Henan Zhongyou")	The PRC	10,000 (2020: 10,000)	–	20.00% (2020: 20.00%)	Oil and natural gas exploration/The PRC

The above associates are accounted for using equity method.

Note:

Commitments and contingent liabilities of the associates

As at 31 December 2021 and 2020, there is no material contingent liability and commitment between the Group and its associates or associates themselves.

20. FINANCIAL ASSETS AT FVTOCI

	2021 RMB'000	2020 RMB'000
Non-current asset:		
Financial assets at FVTOCI (non-recycling)		
Unlisted securities: Equity securities – the PRC	**21,760**	22,835
Current assets:		
Financial assets at FVTOCI		
Notes receivables	**1,295,971**	1,323,425

Notes:

(i) Unlisted investments represent the Groups' equity interests in the unlisted entities in the PRC. They are mainly engaged in drilling and technical services operations.

The Group designated its investment in unlisted investment as financial assets at FVTOCI (non-recycling), as the investment is held for strategic purpose.

(ii) As at 31 December 2021 and 2020, note receivables were classified as financial assets at FVTOCI, as the Group's business model is achieved both by collecting contractual cash flows and by selling of these assets.

(iii) Financial assets at FVTOCI are measured at fair value. Refer to Note 41.4 for details. All financial assets at FVTOCI are denominated in RMB.

21. TRADE RECEIVABLES

	2021 RMB'000	2020 RMB'000
Trade receivables		
– Sinopec Group and its subsidiaries	**2,361,677**	2,364,781
– Joint ventures of the Group	**31,673**	5,249
– Joint ventures and associates of Sinopec Group	**31,943**	912,791
– Third parties	**8,141,221**	8,550,102
	10,566,514	11,832,923
Less: ECL allowance	**(2,415,495)**	(2,474,538)
Trade receivables – net	**8,151,019**	9,358,385

As at 31 December 2021 and 2020, the Group's trade receivables were approximately their fair values.

The Group usually provides customers with a credit term between 90 to 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 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 do not hold any collateral as security.

Ageing analysis of trade receivables net of ECL allowance based on invoice date is as follows:

	2021 RMB'000	2020 RMB'000
Within 1 year	**7,356,037**	8,302,161
1 to 2 years	**455,345**	617,561
2 to 3 years	**185,164**	309,393
Over 3 years	**154,473**	129,270
	8,151,019	9,358,385

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

	2021 RMB'000	2020 RMB'000
Balance at beginning of the year	**2,474,538**	2,513,990
ECL allowance	**93,248**	363,655
Reversal	**(91,906)**	(399,397)
Others	**(31,649)**	(1,976)
Receivables written-off as uncollectible	**(28,736)**	(1,734)
At 31 December	**2,415,495**	2,474,538

22. PREPAYMENTS AND OTHER RECEIVABLES

	2021 RMB'000	2020 RMB'000
Prepayments (Note (i))	**342,419**	445,518
Other receivables (Note (ii))		
Petty cash funds	**3,304**	11,907
Guarantee deposits	**1,247,723**	1,326,522
Disbursement of funds	**870,202**	833,797
Temporary payment	**697,197**	622,405
Escrow payments	**6,430**	4,688
Deposits	**127,035**	44,539
Export tax refund receivables	**21,405**	22,213
Excess value-added tax paid	**1,281,654**	981,684
Value added tax to be certified	**22,671**	247,610
Prepaid value-added tax	**931,596**	761,948
Prepaid income tax	**2,085**	4,566
Dividend receivable	**548**	502
Others	**417,153**	377,567
	5,971,422	5,685,466
Less: ECL allowance	**(809,103)**	(761,013)
Prepayments and other receivables – net	**5,162,319**	4,924,453

Notes:

(i) As at 31 December 2021, the prepayments included related party balances: Sinopec Group and its subsidiaries amounting at RMB88,584,000 (2020: RMB136,002,000) and associates and the joint ventures of Sinopec Group amounting at RMB143,000 (2020: Nil).

(ii) As at 31 December 2021, the other receivables included related party balances: Sinopec Group and its subsidiaries amounting at RMB200,891,000 (2020: RMB82,176,000), the joint ventures of the Group amounting at RMB246,000 (2020: RMB189,000) and associates and the joint ventures of Sinopec Group amounting at RMB29,806,000 (2020: RMB294,411,000).

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

(iv) The carrying amounts of the Group's prepayments and other receivables as at 31 December 2021 and 2020 approximate their fair values.

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

	2021 RMB'000	2020 RMB'000
Balance at the beginning of the year	**761,013**	710,685
ECL allowance	**122,076**	153,910
Reversal	**(100,926)**	(79,818)
Receivables write-off as uncollectible	**(4,151)**	–
Others	**31,091**	(23,764)
At 31 December	**809,103**	761,013

23. CONTRACT ASSETS AND COST TO FULFIL CONTRACTS/CONTRACT LIABILITIES

(a) Contract assets and cost to fulfil contracts

	2021	2020
	RMB'000	RMB'000
Contract assets arising from construction and service contracts (Note (a))	**13,647,488**	11,715,335
Cost to fulfil contracts (Note(b))	**79,138**	7,713
Less: ECL allowance	**(100,593)**	(104,447)
	13,626,033	11,618,601

Notes:

(a) Typical payment terms which impact on the amount of contract assets recognised are as follows:

The Group's construction and service contracts include payment schedules which require progress payments over the construction period once certain specified milestones are reached. Approximate 5% of progress billings of engineering construction service would be retained as quality guarantee. This amount is included in contract assets and the Group's entitlement to this final payment until the end of guarantee period.

The amount of contract assets that is expected to be recovered after more than one year is RMB350,834,000 (31 December 2020: RMB185,358,000).

(b) Cost to fulfil contracts represented costs directly related to existing contracts or to specifically identifiable anticipated contracts, including direct labor, direct materials, cost allocation, costs clearly payable by the customer, and costs to enter contracts. Managements consider the cost to fulfil contracts is recoverable and the cost is deferred and amortised in the profit or loss when relevant contract revenue is recognised.

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

	2021	2020
	RMB'000	RMB'000
Balance at the beginning of the year	**104,447**	39,182
ECL allowance	**(2,826)**	65,897
Others	**(1,028)**	(632)
At 31 December	**100,593**	104,447

(b) Contract liabilities

	2021	2020
	RMB'000	RMB'000
Contract liabilities arising from construction and service contracts	**3,547,938**	3,024,461

Note:

When the Group received the deposits in advance to the commencement of construction period/provision of services, the amount will be recognised as contract liabilities at contract inception until the amount of recognised revenue is greater than the deposits.

The balance of contract liabilities as at 1 January 2021 is RMB3,024,461,000 (2020: RMB3,575,654,000), in which RMB2,765,332,000 (2020: RMB2,721,655,000) was recognised as revenue during the period.

Unsatisfied performance obligation:

The group has signed engineering service contracts with several customers to provide petroleum engineering and technical service and construction engineering contracts, which will be completed within the agreed period and regarded as a single performance obligation as a whole. As at 31 December 2021, part of the Group's petroleum engineering and technical service and construction engineering contracts were still in the process, and the total transaction price apportioned to the unsatisfied performance obligation was RMB27.46 billion (2020: RMB21.53 billion), the amount of which was related to the progress of the performance of each contract, and will be recognised as revenue in accordance with the percentage of work performed in the future, which is expected to be completed in the coming 60 months.

24. INVENTORIES

	2021	2020
	RMB'000	RMB'000
Raw materials	919,795	916,767
Finished goods	96,481	68,039
Work in progress	5,567	66,577
Turnover materials	13,604	15,079
	1,035,447	1,066,462
Less: Inventories write-down	(26,281)	(40,497)
	1,009,166	1,025,965

For the years ended 31 December 2021 and 2020, cost of inventories recognised as expenses and included in "cost of sales" amounting to RMB29,001,257,000 and RMB28,206,104,000 respectively. During the year ended 31 December 2021, no additional provision for inventories was made to write down inventories to their net realisable values (2020: RMB4,846,000) and inventories of RMB14,216,000 previously written down were written off (2020: RMB19,124,000).

25. RESTRICTED CASH

	2021	2020
	RMB'000	RMB'000
Letter of credit guarantee deposits	87	14,096
Guarantee deposits	32,830	14,010
	32,917	28,106

As at 31 December 2021 and 2020, restricted cash represents the deposits in banks with initial maturity due for six months.

As at 31 December 2021 and 2020, the annual interest rates on restricted cash are determined in accordance with the annual interest rates of bank current account.

At the end of the respective reporting periods, the maximum exposure to credit risk approximates to carrying amounts of the Group's restricted cash.

26. CASH AND CASH EQUIVALENTS

	2021	2020
	RMB'000	RMB'000
Cash on hand	**5,230**	8,517
An initial term of less than three months:		
– Sinopec Finance Company Limited	**902,678**	107,564
– Sinopec Century Bright Capital Investment Company Limited	**690,991**	649,976
– China CITIC Bank	**–**	1
– Third party banks and other financial institutions	**876,408**	757,294
	2,475,307	1,523,352

As at 31 December 2021 and 2020, the annual interest rates on cash at bank are determined in accordance with the annual interest rates of bank current account.

At the end of the respective reporting periods, the maximum exposure to credit risk approximates the carrying amounts of the Group's cash and cash equivalents.

27. SHARE CAPITAL

	2021		2020	
	Number of shares	Share capital	Number of shares	Share capital
	Share	RMB'000	Share	RMB'000
Registered, issued and paid:				
– Domestic non-public legal person shares of RMB1.00 each	**11,786,045,218**	**11,786,046**	11,786,045,218	11,786,046
– Social public A shares of RMB1.00 each	**1,783,333,333**	**1,783,333**	1,783,333,333	1,783,333
– H shares of RMB1.00 each	**5,414,961,482**	**5,414,961**	5,414,961,482	5,414,961
	18,984,340,033	**18,984,340**	18,984,340,033	18,984,340

28. THE STATEMENT OF FINANCIAL POSITION AND THE STATEMENT OF CHANGES IN EQUITY OF THE COMPANY

(i) The statement of financial position of the Company

	2021 RMB'000	2020 RMB'000
Assets		
Non-current assets		
Interests in subsidiaries	27,891,662	27,891,662
Total non-current assets	27,891,662	27,891,662
Current assets		
Other receivables	4,380,622	4,396,431
Other current assets	278	167
Cash and cash equivalents	147	159
Total current assets	4,381,047	4,396,757
Total assets	32,272,709	32,288,419
Equity		
Share capital	18,984,340	18,984,340
Reserves	13,238,794	13,252,312
Total equity	32,223,134	32,236,652
Liabilities		
Current liabilities		
Trade payables	8,500	11,800
Other payables	14,284	13,306
Other taxes payables	26,791	26,661
Total current liabilities	49,575	51,767
Total liabilities	49,575	51,767
Total equity and liabilities	32,272,709	32,288,419
Net current assets	4,331,472	4,344,990
Total assets less current liabilities	32,223,134	32,236,652

Approved and authorised for issue by the board of directors on 29 March 2022.

Chairman of the Board:

CHEN Xikun

Executive director, General Manager:

YUAN Jianqiang

28. THE STATEMENT OF FINANCIAL POSITION AND THE STATEMENT OF CHANGES IN EQUITY OF THE COMPANY (Continued)

(ii) The statement of changed in equity of the Company

	Share capital	Share premium	Other capital reserve	Surplus reserve	Accumulated losses	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		(Note 29(i))		(Note 29(ii))		
At 1 January 2020	18,984,340	13,919,394	45,809	200,383	(896,591)	32,253,335
Total comprehensive expense	–	–	–	–	(19,875)	(19,875)
Total transactions with owners:						
– Equity-settled share-based transaction (Note 30)	–	–	3,192	–	–	3,192
At 31 December 2020 and 1 January 2021	**18,984,340**	**13,919,394**	**49,001**	**200,383**	**(916,466)**	**32,236,652**
Total comprehensive expense	**–**	**–**	**–**	**–**	**(13,518)**	**(13,518)**
At 31 December 2021	**18,984,340**	**13,919,394**	**49,001**	**200,383**	**(929,984)**	**32,223,134**

The distributable profits of the Company are as follows:

	2021	2020
	RMB'000	RMB'000
Distributable profits	–	–

29. RESERVES

(i) Share premium and other capital reserve

In accordance with the relevant laws and regulations of the PRC, on this restructuring, the surplus of related asset revaluation, transaction with Sinopec Group, issue of share capital and share repurchases are reflected in this reserves. Other capital reserve includes the fair value of recognised share options (refer to Note 2.18 for the accounting policies).

(ii) 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 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 statutory surplus reserve can be used to offset losses, if any, and may be converted into share capital by issuing new shares.

(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 oil construction 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) Other comprehensive income reserve (non-recycling)

Other comprehensive income reserve (non-recycling) includes net accumulated movement in fair value of equity investment at FVTOCI (refer to Note 2.9 for the accounting policies).

30. SHARE-BASED PAYMENTS

Pursuant to the resolution of the fourteen meeting of the eighth session of the Board of Directors of the Company on 1 November 2016, the proposal regarding "the Adjustment of the List of Participants and the Number of the Share Options under the Proposed Grant of the Share Option Incentive Scheme" and the proposal regarding "the Proposed Grant under Share Option Incentive Scheme" was approved.

30. SHARE-BASED PAYMENTS (Continued)

According to the Company's share option incentive scheme, the grant date of share options was 1 November 2016, and there were a total of 49,050,000 share options granted to 477 participants (0.3469% of the total ordinary share capital issued). Each share option has a right to purchase an ordinary A share listed in PRC on vesting date at an exercise price of RMB5.63 under vesting conditions. The options are exercisable starting two years from the grant date, subject to the following vesting conditions:

(i) achieving compound annual growth rate of no less than 6% in profit before income tax for 2017, 2018 and 2019, respectively based on the profit before income tax of 2015;

(ii) ratio of earnings before interest, tax, depreciation and amortisation to net asset of the Group should be no less than 32% for 2017, 2018 and 2019 in respect to the three vesting periods;

(iii) the above (i) and (ii) conditions should be no lower than the 75% level of peer companies; and

(iv) the performance of the indicator for economic value added has reached the target set by the Sinopec Group for 2017, 2018 and 2019, and the changes of economic value added should be large than zero.

The total fair value of share options at the grant date was RMB54,229,200 for 49,050,000 share options, which has been valued by an external valuation expert using Black-Scholes valuation model. The Third Exercise Period under the First Grant of the A Share Option Incentive Scheme of the Company is from 1 November 2020 to 30 October 2021. On 28 October 2021, the outstanding Share Options granted to the Participants were cancelled in view of the relatively substantial difference between the Company's A Share price and the exercise price. As at 31 December 2021, there is no outstanding share options.

At 31 December 2020, the Company had 17,084,000 share options that had not been exercised with a total fair value of RMB22,067,000 at the grant date. The Board of Directors of the Company cancelled a total of 17,084,000 Share Options, to be expired but unexercised at the Third Exercise Period, granted to 423 Participants.

The movement of share options are as follows:

	No. of share options
Outstanding shares at 31 December 2020 and 1 January 2021	17,084,000
Cancelled during the year	(17,084,000)
Outstanding shares at 31 December 2021	–

The significant inputs into the model were as follows:

	Granting date
Spot share price	RMB3.96
Exercise price	RMB5.63
Expected volatility	46.17%
Maturity (years)	3-5 years
Risk-free interest rate	2.34% – 2.45%
Expected dividend yield	0%

No share-based payment expenses has been recognised in the consolidated statement of comprehensive income for the year ended 31 December 2021 (2020: RMB3,192,000).

At 31 December 2020, under the current capital structure, fully exercise of the outstanding shares will lead to issue of 17,084,000 extra ordinary A share and increase in share capital of RMB17,084,000, before issue expenses.

31. DEFERRED INCOME

	2021 RMB'000	2020 RMB'000
At 1 January	**14,186**	92,211
Government grants received during the year	**295,576**	433,185
Recognised in the statement of comprehensive income for the year	**(300,474)**	(511,210)
At 31 December	**9,288**	14,186

Deferred income mainly related to income from the national special research government grants.

32. NOTES AND TRADE PAYABLES

	2021 RMB'000	2020 RMB'000
Trade payables		
– Sinopec Group and its subsidiaries	**1,242,579**	1,146,343
– Joint ventures	**52,175**	18,322
– Sinopec Group's joint ventures and associates	**12,054**	7,204
– Third parties	**20,249,454**	19,325,640
	21,556,262	20,497,509
Notes payables	**8,334,086**	6,305,228
	29,890,348	26,802,737

As at 31 December 2021 and 2020, the carrying amounts of Group's notes and trade payables were approximately their fair values.

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

	2021 RMB'000	2020 RMB'000
Within 1 year	**29,450,316**	26,219,667
1 and 2 years	**161,590**	277,441
2 and 3 years	**87,803**	96,699
Over 3 years	**190,639**	208,930
	29,890,348	26,802,737

33. OTHER PAYABLES

	2021 RMB'000	2020 RMB'000
Salaries payables	**644,026**	498,071
Other tax payables	**526,212**	457,761
Interest payables (Note (i))	**19,476**	17,458
Other payables (Note (ii))		
Guarantee deposits	**617,945**	489,083
Deposits	**138,024**	126,570
Disbursement of funds	**671,505**	558,073
Temporary receipts	**224,384**	117,080
Escrow payments	**38,852**	43,776
Withheld payments	**56,341**	54,411
Others	**618,281**	289,965
	3,555,046	2,652,248

Notes:

(i) As at 31 December 2021, the interest payables include related party balances: Sinopec Group and its subsidiaries amounting at RMB19,364,000 (2020: RMB16,594,000).

(ii) As at 31 December 2021, the other payables include related party balances: Sinopec Group and its subsidiaries amounting to RMB47,788,000 (2020: RMB26,233,000), joint ventures of the Group amounting to RMB468,000 (2020: RMB2,688,000) and joint ventures and associates of Sinopec Group amounting to RMB23,410,000 (2020: RMB Nil).

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

34. BORROWINGS

	2021 RMB'000	2020 RMB'000
Current liabilities		
Loans from Sinopec Finance Company Limited (Note (a))	**4,550,000**	6,400,000
Loans from Sinopec Century Bright Capital Investment Limited (Note (a))	**1,970,091**	1,970,520
Loans from Sinopec Group (Note (a))	**11,000,000**	11,000,000
Lease liabilities (Note (b))	**295,945**	356,647
	17,816,036	19,727,167
Non-current liabilities		
Loans from Sinopec Group (Note (a))	**1,000,000**	–
Bank borrowings (Note (a))	**554,686**	580,716
Lease liabilities (Note (b))	**390,866**	904,069
	1,945,552	1,484,785
	19,761,588	21,211,952

Notes:

(i) The loans of the Group are repayable as follows:

	2021 RMB'000	2020 RMB'000
Within 1 year	**17,520,091**	19,370,520
1 to 2 years	**1,554,686**	580,716
	19,074,777	19,951,236

As at 31 December 2021, annual interest rates of credit loans from related parties and bank ranged from 1.43% to 3.92% (2020: 1.42% to 3.92%).

(ii) Lease liabilities

	2021 RMB'000	2020 RMB'000
Total minimum lease payments		
– Within 1 year	**308,806**	372,436
– 1 to 2 years	**224,724**	177,417
– 2 to 5 years	**195,470**	637,027
– Over 5 years	**10,834**	331,542
	739,834	1,518,422
Future finance charges on lease liabilities	**(53,023)**	(257,706)
Present value of lease liabilities	**686,811**	1,260,716

	2021 RMB'000	2020 RMB'000
Present value of minimum lease payments:		
– Within 1 year	**295,945**	356,647
– 1 to 2 years	**202,509**	161,987
– 2 to 5 years	**178,013**	530,767
– Over 5 years	**10,344**	211,315
	686,811	1,260,716
Less: Portion due within one year included under current liabilities	**(295,945)**	(356,647)
Portion due after one year included under non-current liabilities	**390,866**	904,069

Notes:

(a) For the year ended 31 December 2021, the Group leases various residential properties, office and equipment under non-cancellable operating lease agreements. The leases run for an initial period of 1 to 30 years (2020: 1 to 29 years), with an option to renew the leases and renegotiate the terms at the expiry date or at dates mutually agreed between the Group and respective landlords/lessors.

(b) As at 31 December 2021, lease liabilities included related party balances: Sinopec Group and its subsidiaries amounting to RMB40,504,000 (2020: RMB441,190,000), the associated and joint ventures of Sinopec Group amounting to RMB22,053,000 (2020: RMB558,471,000).

35. DEFERRED TAX

Deferred tax assets and liabilities recognised:

The analysis of deferred tax assets and liabilities is as follows:

	2021	2020
	RMB'000	RMB'000
Deferred tax assets	310,764	395,834
Deferred tax liabilities	(9,438)	(13,471)
Deferred tax assets, net	301,326	382,363

The movement of the deferred tax account is as follows:

	2021	2020
	RMB'000	RMB'000
At 1 January	382,363	399,150
Credited to profit or loss (Note 12)	(81,380)	(18,338)
Debited to other comprehensive income	343	1,551
At 31 December	301,326	382,363

The movement of deferred tax assets/(liabilities) during the years ended 31 December 2021 and 2020, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred tax assets

	Deferred income	Provision for impairment on assets	Net movement in fair value of financial assets at FVTOCI	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2020	9,362	407,642	–	417,004
(Credited)/Debited to:				
Profit or loss	(8,869)	(13,464)	–	(22,333)
Other comprehensive income	–	–	1,163	1,163
At 31 December 2020 and 1 January 2021	493	394,178	1,163	395,834
(Credited)/Debited to:				
Profit or loss	(121)	(85,242)	–	(85,363)
Other comprehensive income	–	–	293	293
At 31 December 2021	372	308,936	1,456	310,764

Deferred tax liabilities

	Accelerated depreciation allowance	Revaluation on assets	Net movement in fair value of financial assets at FVTOCI	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2020	484	15,359	2,011	17,854
Credited to:				
Profit or loss	(155)	(3,840)	–	(3,995)
Other comprehensive income	–	–	(388)	(388)
At 31 December 2020 and 1 January 2021	329	11,519	1,623	13,471
Credited to:				
Profit or loss	(193)	(3,790)	–	(3,983)
Other comprehensive income	–	–	(50)	(50)
At 31 December 2021	136	7,729	1,573	9,438

35. DEFERRED TAX (Continued)

Deferred tax liabilities (Continued)

Deferred tax assets represent the recognised 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. Tax losses and deductible temporary differences not recognised as deferred in tax assets in the Group is as follow:

	2021	2020
	RMB'000	RMB'000
Tax losses not recognised as deferred tax assets	144,146,311	15,801,608
Temporary differences not recognized as deferred tax assets	2,760,502	2,366,618

The Group did not recognise the above deferred tax assets as the management believes that it is less likely such deductible temporary differences and tax losses would be realised. The said tax losses not recognised as deferred tax assets would be expired within five years.

36. COMMITMENTS

(a) Capital commitments

Capital commitments for the purchase of property, plant and equipment outstanding as at 31 December 2021 and 2020 not provided for in the financial statements are as follows:

	2021	2020
	RMB'000	RMB'000
Contracted but not provided for	74,473	180,023

(b) Lease commitments

The Group as a lessee

The lease commitments for short-term leases as at 31 December 2021 and 2020 are as follows:

	2021	2020
	RMB'000	RMB'000
Within 1 year	89,085	337,451

As at 31 December 2021 and 2020, the Group leases various residential properties, office and equipments under non-cancellable operating leases, with a lease period of 6 to 12 months, which are qualified to be accounted for under short-term lease exemption under IFRS 16.

The Group as as a lessor

The Group has entered into operating leases on its property, plant and equipment. Rental income recognised by the Group during the year was RMB71,821,000 (2020: RMB24,400,000) in Revenue.

Future minimum rentals receivable under non-cancellable operating leases as at 31 December are as follows:

	2021	2020
	RMB'000	RMB'000
Within 1 year	53,130	18,012
After 1 year but not more than 5 years	79,426	54,569
Over 5 years	11,191	19,799
	143,747	92,380

(c) Investment commitments

As at 31 December 2021, the Group has outstanding commitments of RMB129,625,000 (2020: RMB129,625,000) in respect of its investment in in joint ventures.

(d) Fulfillment of commitments for the previous period

The Group has fulfilled the capital and operating lease commitments as at 31 December 2021.

37(a) CASH GENERATED FROM OPERATIONS

	2021	2020
	RMB'000	RMB'000
Profit before income tax	**451,181**	233,339
Adjustments for:		
– Depreciation of property, plant and equipment	**3,476,585**	3,486,322
– Gains on disposal of property, plant and equipment	**(84,972)**	(935)
– Amortisation of other non-current assets	**2,150,492**	2,182,941
– Gains on disposal of other non-current assets	**(3,751)**	(5,026)
– Amortisation of intangible assets	**112,164**	116,224
– Interest income	**(38,180)**	(59,576)
– Interest expense	**726,760**	906,693
– Share of (profit)/loss from joint ventures	**(1,467)**	94
– Share of profit from associates	**(5,813)**	(5,561)
– Provision for ECL on trade and other receivables, net	**22,492**	38,350
– (Reversal of provision for)/provision for ECL on contract assets	**(2,826)**	65,897
– Write down of inventories to net realisable value	**–**	4,846
– Investment income from financial assets at FVTOCI	**(1,577)**	(500)
– Equity-settled share-based payment	**–**	3,192
Cash flows generated from operating activities before changes in working capital	**6,801,088**	6,966,300
Changes in working capital:		
– Other non-current assets	**(2,985,086)**	(2,664,016)
– Inventories	**16,799**	17,654
– Notes and trade receivables	**1,233,478**	2,797,176
– Prepayments and other receivables	**(767,757)**	(499,754)
– Restricted cash	**(4,811)**	(10,001)
– Provisions	**(176,875)**	(66,610)
– Contract assets and cost to fulfil contracts	**(2,004,606)**	(1,977,210)
– Contract liabilities	**523,477**	(551,193)
– Deferred income	**(4,898)**	(78,025)
– Notes and trade payables	**3,087,611**	946,371
– Other payables	**734,776**	(160,148)
Cash generated from operations	**6,453,196**	4,720,544

37(b) RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

As at 31 December 2021, the details changes in the Group's liabilities arising from financing activities are as below:

	Borrowings	Lease liabilities	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2021	19,951,236	1,260,716	21,211,952
Changes from financing cash flows:			
Proceeds from borrowings	60,848,383	–	60,848,383
Repayments of borrowings	(61,666,957)	–	(61,666,957)
Interest paid	(557,579)	–	(557,579)
Capital element of lease rentals paid	–	(516,092)	(516,092)
Interest element of lease rentals paid	–	(55,962)	(55,962)
Total changes from financing cash flows	(1,376,153)	(572,054)	(1,948,207)
Other changes:			
Additions of lease liabilities	–	322,050	322,050
Remeasurement of leases	–	8,588	8,588
Expiry write-off or early termination of			
lease liabilities	–	(338,229)	(338,229)
Interest expenses on borrowings	670,289	–	670,289
Interest expenses on lease liabilities	–	56,471	56,471
Exchange difference	(170,595)	(50,731)	(221,326)
Total other changes	499,694	(1,851)	497,843
At 31 December 2021	19,074,777	686,811	19,761,588

As at 31 December 2020, the details changes in the Group's liabilities arising from financing activities are as below:

	Borrowings	Lease liabilities	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2020	20,877,457	2,368,821	23,246,278
Changes from financing cash flows:			
Proceeds from borrowings	53,601,812	–	53,601,812
Repayments of borrowings	(54,391,017)	–	(54,391,017)
Interest paid	(792,191)	–	(792,191)
Capital element of lease rentals paid	–	(1,227,045)	(1,227,045)
Interest element of lease rentals paid	–	(71,661)	(71,661)
Total changes from financing cash flows	(1,581,396)	(1,298,706)	(2,880,102)
Other changes:			
Addition of lease liabilities	–	283,501	283,501
Remeasurement of leases	–	(28,856)	(28,856)
Interest expenses on borrowings	806,750	–	806,750
Interest expenses on lease liabilities	–	99,943	99,943
Exchange difference	(151,575)	(163,987)	(315,562)
Total other changes	655,175	190,601	845,776
At 31 December 2020	19,951,236	1,260,716	21,211,952

38. PROVISIONS

	Provision for the pending litigations	Provision for onerous contracts	Provision for loss on judicial reorganisation	Others	Total
	RMB'000 (Note(a))	RMB'000 (Note(b))	RMB'000 (Note(c))	RMB'000	RMB'000
At January 2020	1,915	82,736	364,605	–	449,256
Realisation during the year	(1,026)	(31,655)	(33,929)	–	(66,610)
At 31 December 2020 and 1 January 2021	**889**	**51,081**	**330,676**	**–**	**382,646**
Provision during the year	**4,000**	**–**	**–**	**18,534**	**22,534**
Reversal during the year	**–**	**–**	**(69,049)**	**–**	**(69,049)**
Realisation during the year	**(889)**	**(26,077)**	**(103,394)**	**–**	**(130,360)**
At 31 December 2021	**4,000**	**25,004**	**158,233**	**18,534**	**205,771**

Notes:

(a) The Group recognised provision amounting to RMB4,000,000 based on the estimated claim amount.

(b) As at 31 December 2021, the Group had a provision of approximately RMB25,004,000 (2020: RMB51,081,000) for onerous contracts, of which the expected unavoidable costs of meeting the performance obligation as stated in construction contracts have exceeded the economic benefits expected to be received. The provision was recognised for the contract based on the estimated minimum net cost of completing the contract.

(c) On 16 August 2018, Sinopec (Brazil) Co., Ltd., an indirectly wholly-owned subsidiary of the Company (the "Brazil Subsidiary") applied for judicial reorganisation to the Third State Court of Commercial Enterprises in Rio de Janeiro, Brazil (the "Court of Rio") according to the relevant local laws in Brazil. On 31 August 2018, the Brazil Subsidiary received ruling from Court of Rio, which approved Brazil subsidiary's entered into judicial reorganisation and Nascimento & Rezende Advogados, the law firm, was appointed as the judicial reorganisation manager by Court of Rio.

According to relevant laws of Brazil, the Brazil Subsidiary is required to prepare a reorganisation plan upon the court of Rio has approved that the Brazil Subsidiary is allowed to implement the legal reorganisation procedure. Such legal reorganization is conditional upon the approval of the reorganisation plan from the creditors' meeting and the court of Rio.

For the purpose of obtaining approval from creditors' meeting and the court of Rio in Brazil, the Brazil Subsidiary's reorganisation plan shall include fully settlement of the amount due to employees in respect of the project, repayment of a proportion of debts due to suppliers, service providers and subcontractors, and payment of legal fees, fees on judicial authorities and other service fees in relation to the implementation of the legal reorganisation procedure. The management assessed that a total provision for loss on judicial reorganisation amounting to approximately RMB389,000,000 was required. At 31 December 2021, the balance for the provision was approximately RMB158,233,000.

39. CONTINGENCIES AND PENDING LITIGATION AND ARBITRATION

(a) Contingent liabilities and financial impacts due to pending litigation

The Group is the defendant of certain lawsuits and also the third party or the designated party of other proceedings arising in the ordinary course of business. Management has assessed the possibility of adverse results of these contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have significant negative impact on the financial position, operating results or cash flow of the Group. Therefore, the management does not make provision for the foresaid matters.

China National Chemical Engineering No. 11 Construction Co., Ltd. (the "Applicant") and Sinopec International Petroleum Services Corporation ("International services Corporation" or the "Respondent"), a wholly-owned subsidiary of the Group, has entered into the "Works Contract for the Package C Construction of the Saudi Yanbu-Medina Phase III Pipeline Project" (the "Construction Works Contract") with International Services Corporation on 16 August 2012. Pursuant to the Construction Works Contract, International Services Corporation subcontracted to the Applicant the construction of the "Package C Project" of the "Saudi Yanbu-Medina Phase III Pipeline Project". On 29 May 2018, the Applicant submitted to the China International Economic and Trade Arbitration Commission in Beijing the "Application for Arbitration" in respect of the contract dispute between the Applicant and the Respondent during the performance of the Construction Works Contract, requesting the Respondent to pay approximately RMB456,810,000 for the project fee and the accrued interest, approximately RMB145,968,000 for the loss due to stoppage of work and the accrued interest, approximately RMB38,018,000 for the advance payment under the letter of guarantee and the accrued interest, and approximately RMB500,000 for attorney fee and the arbitration fee for the case (the "Arbitration"). The China International Economic and Trade Arbitration Commission accepted the case on 15 June 2018. At the report date, the arbitration tribunal has selected a professional to conduct cost confirmation on the disputed costs in this case.

As the case is still under trial, the Group does not make provision for the pending litigation since the management considered that the outcome of the litigation cannot be reasonably estimated and an outflow of recourses embodying economic benefits required to settle the obligation is not probable.

39. CONTINGENCIES AND PENDING LITIGATION AND ARBITRATION (Continued)

(b) Pending arbitration and its financial impacts

On 8 October 2014, the Ecuador Banya Duri Company (厄瓜多爾斑尼亞杜麗公司), an indirectly wholly-owned subsidiary of the Company (the "Banya Duri Company") entered into the Contract for I-L-Y Oilfield Comprehensive Service Projects in Ecuador (the "I-L-Y Oilfield Projects Contract") with Corporacion Estatal Petrolera Ecuatoriana (the "PAM"). During the implementation of the I-L-Y oilfield comprehensive service project, the two parties had disputes over the oilfield production and payment amount from 2016 to 2017 and negotiations were unsuccessful. In October 2018, the PAM agreed with the Company to initiate an international legal arbitration plan. In April 2019, in accordance with the relevant provisions of the I-L-Y Oilfield Project Contract, the Company submitted a "Notice of Application for Legal Arbitration" to PAM for contract disputes to initiate legal arbitration procedures. In May 2020, the Company submitted an arbitration application for the compensation and the accrued interest, approximately amounting to USD79.22 million. On 22 February 2022, Banya Duli Company received the international arbitration award issued by the arbitral tribunal on the dispute over the payment of oil production increase in the I-L-Y oilfield comprehensive service project. The overall result of the award is favourable for Banya Duli Company. However, since the place of arbitration is Chile, the parties to the arbitration have the right to apply for annulment of the arbitral award according to the relevant laws of Chile, and there is still uncertainty as whether the other party will perform the arbitral award. As at 31 December 2021, the arbitration procedure had not been completed. The Company will make active response and safeguard the legitimate rights and interests of the Company.

(c) Contingent liabilities and financial impacts from guarantee provided for other entities

As at 31 December 2021, there is no material contingency from guarantee provided for other entities (2020: none).

(d) Foreign tax penalties

On 7 February 2014, Federal Tax Administration of Rio de Janeiro conducted a tax audit on the Brazilian subsidiary of International Engineering. On 11 February 2014, the Brazilian subsidiary of International Engineering received a notice of the tax payments and penalties from Federal Tax Administration of Rio de Janeiro with total amount of BRL80,459,100, including tax of BRL36,467,100, interest of BRL13,929,800 and tax penalties of BRL30,062,200. According to the legal opinion of the Brazilian subsidiary of International Engineering, on 10 March 2014, the Brazilian subsidiary of International Engineering has administratively replied to such tax penalties and no final results can be predicted. Even if Federal Tax Administration of Rio de Janeiro has made unfavorable decision against the Brazilian subsidiary of International Engineering, the Brazilian subsidiary of International Engineering still has the right for the administrative legal proceedings to the local court.

On 30 December 2019, the Brazilian subsidiary received a notice of administrative second level review and approved some expenditures, and the tax penalty has been revised to BRL73,195,000 (approximately US$18,130,700).

The Brazilian subsidiary has led a new administrative review on 13 January 2020. Subsequent to the tax bureau's failure to implement legal procedures and the consideration of COVID-19, the time for filing administrative third level review was changed to 29 August 2020.

At the end of March 2021, the Brazilian subsidiary received a three-level tax review notice, which maintained the result of second-level review. After the three-level administrative review, the Brazilian subsidiary can resolve the dispute through filing an administrative lawsuit in the local court.

In March 2021, the Federal Tax Administration of Brazil issued a special policy for federal tax debt treatment of companies with judicial reorganization (On 15 July 2019 (Brazil time), the Court of Rio approved the judicial reorganization plan of the Brazilian Subsidiary), by which the maximum exemption amount could account for 70% of the total tax debts and can be repaid by installments. The deadline for such settlement negotiation application is 29 December 2021.

After the settlement negotiation between the Brazilian subsidiary and the Federal Tax Administration of Brazil, the two parties reached a settlement regarding the tax penalty on 22 December 2021 (Brazil time). The Federal Tax Administration of Brazil agreed to give a 67.2% discount on the total tax penalty amount (including tax, interest, penalty and tax legal service fee). The final tax penalty amounted to BRL27,296,700 (equivalent to approximately RMB30,985,200). On 29 December 2021 (Brazil time), the Brazilian Subsidiary paid the above-mentioned tax penalty to the Federal Tax Administration of Brazil with a total amount of BRL27,296,700 (equivalent to approximately RMB30,985,200).

(e) Other contingent liabilities

With respect to uncertainties about enterprise income tax differences arising from 2006 and before as originated from a tax circular (Circular [2007] No. 664) issued by the State Administrative of Taxation in June 2007, the Group has been informed by the relevant tax authority to settle the enterprise income tax ("EIT") for 2007 at a rate of 33%. Up to date, the Group has not been requested to pay additional EIT in respect of any years prior to 2007. There is no further development of this matter as at 31 December 2021. No provision has been made in the financial statements for this uncertainty for tax years prior to 2007 because management believes it cannot reliably estimate the amount of the obligation, if any, which might exist.

40. SIGNIFICANT RELATED PARTY TRANSACTIONS

Related parties are those parties that have the ability to control the other party or exercise significant influence in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. The Group is subject to the control of the PRC government which also controls a significant portion of the productive assets and entities in the PRC (collectively known as the "state-owned enterprises").

In accordance with IAS 24 "Related party disclosures", other state-owned enterprises and their subsidiaries, directly or indirectly controlled by the PRC government are regarded as related parties of the Group ("other state-owned enterprises"). For the purpose of related party disclosures, the Group has in place procedures to identify the immediate ownership structure of its customers and suppliers to determine whether they are state-owned enterprises. Many state-owned enterprises have multi-layered corporate structure and the ownership structures change over time as a result of transfers and privatisation programs. Nevertheless, management believes that meaningful information relating to related party transaction has been adequately disclosed.

In addition to the related party transactions and balances shown elsewhere in this interim financial information, the following is a summary of significant related party transactions entered into in the ordinary course of business between the Group and its related parties, including other state-owned enterprises, during the year ended 31 December 2021 and 2020.

The transactions with related parties are carried out on normal commercial terms or relevant agreements with counter parties in the ordinary course of business.

The majority of these significant related party transactions with Sinopec Group and its 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.

(a) Significant related party transactions arising with Sinopec Group and its subsidiaries and fellow subsidiaries:

	2021 RMB'000	2020 RMB'000
Purchases of materials		
– Sinopec Group and its subsidiaries	11,446,329	10,364,984
Sales of products		
– Sinopec Group and its subsidiaries	13,546	110,473
Rendering of engineering services		
– Sinopec Group and its subsidiaries	46,780,540	40,745,639
Receiving of community services		
– Sinopec Group and its subsidiaries	54,034	389,047
Rendering of integrated services		
– Sinopec Group and its subsidiaries	29,578	95,987
Receiving of integrated services		
– Sinopec Group and its subsidiaries	514,949	351,306
Rendering of technology development services		
– Sinopec Group and its subsidiaries	95,956	79,300
Rental income – Buildings		
– Sinopec Group and its subsidiaries	1,920	2,225
Rental income – Equipment		
– Sinopec Group and its subsidiaries	808	–
Lease payment – Lands and buildings – short-term leases		
– Sinopec Group and its subsidiaries	58,576	18,620
Lease payment – Lands and buildings – right-of-use assets		
– Sinopec Group and its subsidiaries	55,678	189,418
Lease payment – equipment and vehicles – short-term leases		
– Sinopec Group and its subsidiaries	29,911	24,099
Lease payment – equipment and vehicles – right-of-use assets		
– Sinopec Group and its subsidiaries	3,805	3,362

40. SIGNIFICANT RELATED PARTY TRANSACTIONS (Continued)

(a) Significant related party transactions arising with Sinopec Group and its subsidiaries and fellow subsidiaries: (Continued)

	2021 RMB'000	2020 RMB'000
Deposits interest income		
– Sinopec Group's subsidiaries	1,008	1,407
Loans interest expenses		
– Sinopec Group and its subsidiaries	597,814	753,965
Interest expenses on lease liabilities		
– Sinopec Group and its subsidiaries	21,752	25,699
Borrowings obtained		
– Sinopec Group and its subsidiaries	60,848,383	52,974,382
Borrowings repaid		
– Sinopec Group and its subsidiaries	61,654,200	54,391,017
Safety and insurance fund expenses		
– Sinopec Group	75,600	76,160
Safety and insurance fund refund		
– Sinopec Group	132,145	107,168

(b) Significant related party transactions arising with the associates and joint ventures of the Group:

	2021 RMB'000	2020 RMB'000
Rendering of engineering services		
– Associates and joint ventures of the Group	180,725	5,580
Receiving of engineering services		
– Associates and joint ventures of the Group	1,944,794	1,932,918
Lease payment – land and buildings – short-term leases		
– Associates and joint ventures of the Group	–	1,000

(c) Significant related party transactions arising with Sinopec Group's associates and joint ventures:

	2021 RMB'000	2020 RMB'000
Purchases of materials		
– Sinopec Group's associates and joint ventures	232,535	201,258
Sale of products		
– Sinopec Group's associates and joint ventures	13	–
Rendering of engineering services		
– Sinopec Group's associates and joint ventures	3,495,833	2,509,490
Receiving of integrated services		
– Sinopec Group's associates and joint ventures	542	–
Lease payment – equipment and vehicles – short-term leases		
– Sinopec Group's associates and joint ventures	25,071	27,345
Lease payment – equipment and vehicles – right-of-use assets		
– Sinopec Group's associates and joint ventures	328,182	209,839
Interest expenses on lease liabilities		
– Sinopec Group's associates and joint ventures	20,410	59,303

40. SIGNIFICANT RELATED PARTY TRANSACTIONS (Continued)

(d) Remuneration of key management personnel

Key management includes directors, supervisors, president, vice presidents, chief financial officer and secretary to the Board of Directors. The compensation paid or payable to key management form employee services is shown below:

	2021 RMB'000	2020 RMB'000
Fee	600	650
Salaries, allowances and bonus	9,799	7,801
Contributions to pension plans	585	443
Share-based payments	–	85
	10,984	8,979

Senior management, excluding directors and supervisors, whose remuneration fell within the following bands is as follows:

	2021 Number of Individuals	2020 Number of Individuals
RMB0 to RMB500,000	4	2
RMB500,001 to RMB1,000,000	4	5
RMB1,000,001 to RMB2,000,000	–	–
	8	7

(e) Provision for counter guarantee

As at 31 December 2021, the Group has provided the counter guarantee to Sinopec Group, amounting to RMB300,000,000 (2020: RMB500,000,000). The counter guarantee will be ended in September 2024 (2020: November 2021).

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT

The Group established certain risk management policies to recognise and analyse the potential risk of the Group. The Group designed an internal control procedure according to proper acceptable risk level in order to monitor the risk position of the Group. Both risk management policies and related internal control system will be reviewed regularly to adapt the market condition or changes in operating activities of the Group. The implementation of internal control system will be reviewed regularly or randomly by the internal audit department in accordance to the risk management policies.

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.1 Category of financial assets and liabilities

	2021 RMB'000	2020 RMB'000
Financial assets		
Financial assets at FVTOCI (non-recycling)		
– Unlisted equity investment	**21,760**	22,835
Financial assets at FVTOCI		
– Notes receivables	**1,295,971**	1,323,425
	1,317,731	1,346,260
Financial assets measured at amortised cost		
– Restricted cash and cash and cash equivalents	**2,508,224**	1,551,458
– Trade receivables	**8,151,019**	9,358,385
– Other receivables	**2,530,409**	2,444,952
	13,189,652	13,754,795
	14,567,383	14,701,055
Financial liabilities		
Financial liabilities measured at amortised cost		
– Notes and trade payables	**29,890,348**	26,802,737
– Other payables	**3,555,046**	2,652,248
– Borrowings	**19,761,588**	21,211,952
	53,206,982	50,666,937

41.2 Financial risk factors

The Group's financial instrument risks mainly include interest rate risk, currency risk, credit risk and liquidity risk. The Group's objective in risk management is to obtain an appropriate equilibrium between risk and return. It also focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

(a) Market risk

Market risk includes interest rate risk and currency risk, refers to the risk that the fair value or future cash flow of a financial instrument will be fluctuated due to the changes in market price.

(i) Interest rate risk

Interest rate risk refers to the risk that the fair value or future cash flow of a financial instrument will be fluctuated due to the floating rate. Interest rate risk arises from recognised interest-bearing financial instrument and unrecognised financial instrument (e.g. loan commitments).

The Group's interest rate risk arises from cash and cash equivalents, borrowings and interest-bearing liabilities. Financial liabilities issued at floating rate expose the Group to cash flow interest rate risk. Financial liabilities issued at fixed rate expose the Group to fair value interest rate risk. The Group determines the relative proportions of its fixed rate and floating rate contracts depending on the prevailing market conditions and to maintain an appropriate combination of financial instruments at fixed rate and floating rate through regular reviews and monitors.

The Group's finance department continuously monitors the interest rate position of the Group. Increase in interest rates will increase the cost of new borrowing and the interest expenses with respect to the Group's outstanding floating rate interest-bearing borrowings, and therefore could have a material adverse effect on the Group's financial result. The management will make adjustments with reference to the latest market conditions. These adjustments may include enter into interest swap agreement to mitigate its exposure to the interest rate risk. For the year ended 31 December 2021 and 2020, the Group did not enter into any interest rate swap arrangements. The fair value interest rate risk of the deposit with bank was not significant because the fixed term deposits are short-term deposits.

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(a) Market risk (Continued)

(i) Interest rate risk (Continued)

Interest-bearing financial instruments held by the Group are as below:

	2021		2020	
	%	RMB'000	%	RMB'000
Fixed rate financial instruments				
Restricted cash and cash and cash equivalents (Notes 25 and 26)	**2.75%**	**3,000**	2.75%-3.41%	6,210
Borrowings (Note 34)	**1.42%-3.92%**	**16,236,811**	1.42%-5.23%	18,660,716
Floating rate financial instruments				
Restricted cash and cash and cash equivalents (Notes 25 and 26)	**0.01%-0.35%**	**2,505,224**	0.3%-0.35%	1,545,248
Borrowings (Note 34)	**2.37%-2.92%**	**3,524,777**	1.42%-2.92%	2,551,236

As at 31 December 2021, it is estimated that a general increase of 50 basis points in the borrowings with variable interest rates, with all other variables held constant, would decrease the Group's net profit and decrease the shareholder's equity for the year by approximately RMB13,218,000 (2020: increase the net loss and decrease the shareholder's equity for the year by approximately RMB9,567,000).

As at 31 December 2021, a general decrease of 50 basis points in variable interest rates would have had the same magnitude but of opposite effect the above borrowings, on the basis that all other variables remain constant.

The financial instruments held by the Group at the reporting date expose the Group to fair value interest rate risk. This sensitivity analysis as above been determined assuming that the change in interest rates had occurred at the reporting date and arised from the recalculation of the above financial instrument issued at new interest rates. The non-derivative tools issued at floating interest rate held by the Group at the reporting date expose the Group to cash flow interest rate risk. The effect to the net profit and shareholder's equity illustrated in the sensitivity analysis as above is arised from the effect the annual estimate amount of interest expenses or revenue at the floating interest rate. The analysis is performed on the same basis for last year.

(ii) Currency risk

Currency risk refers to the risk that the fair value or future cash flows of a financial instrument will be fluctuated due to the changes in foreign currency rates. Foreign currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured.

The Group's major operational activities are carried out in the PRC and a majority of the transactions are denominated in RMB. The Group is exposed to foreign currency risk arising from the recognised assets and liabilities, and future transactions denominated in foreign currencies, primarily denominated in US Dollars, Saudi Riyals and Kuwait Dinars.

The foreign currency assets and liabilities include restricted cash, cash and cash equivalents, trade and other receivables, trade and other payables and borrowings which are denominated in foreign currencies.

The following table details the financial assets and liabilities held by the Group which denominated in foreign currencies and amounted to RMB are as follows:

As at 31 December 2021	**USD**	**SAR**	**KWD**	**Others**
	RMB'000	**RMB'000**	**RMB'000**	**RMB'000**
Restricted cash and cash and cash equivalents	**689,107**	**46,836**	**227,162**	**285,192**
Trade and other receivables	**3,712,323**	**583,651**	**704,421**	**418,279**
Trade and other payables	**(575,665)**	**(236,671)**	**(124,601)**	**(166,726)**
Borrowings	**(2,524,777)**	**–**	**–**	**–**
Net exposure in RMB	**1,300,988**	**393,816**	**806,982**	**536,745**

As at 31 December 2020	USD	SAR	KWD	Others
	RMB'000	RMB'000	RMB'000	RMB'000
Restricted cash and cash and cash equivalents	748,671	19,514	158,970	341,844
Trade and other receivables	3,924,110	655,519	761,534	599,531
Trade and other payables	(598,537)	(204,400)	(171,614)	(276,935)
Borrowings	(2,551,236)	–	–	–
Net exposure in RMB	1,523,008	470,633	748,890	664,440

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(a) Market risk (Continued)

(ii) Currency risk (Continued)

The Group's finance department is responsible for monitoring the amount of assets and liabilities, and transactions denominated in foreign currencies in order to minimise foreign exchange risk. The Group may sign a forward exchange contracts or currency swap contracts to mitigate the foreign exchange risk. In 2021 and 2020, the Group did not enter into any forward exchange contracts or currency swap contracts to mitigate the foreign currency risk.

The following table illustrates the effect on the Group's net profit/loss in regard to a 5% appreciation in RMB against the following currencies, with other variables were held constant as at 31 December 2021 and 2020:

	2021	2020
	RMB'000	RMB'000
	Decrease in net profit	Increase in net loss
– USD	**(48,787)**	(57,113)
– SAR	**(14,768)**	(17,649)
– KWD	**(30,262)**	(28,083)

As at 31 December 2021 and 2020, the same 5% depreciation in RMB against the respective foreign currencies would have the same magnitude but of opposite effect, on the basis that all other variables remain constant.

(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, cash and cash equivalent, notes and trade receivables, contract assets and other receivables.

In order to minimise credit risk, the Group has developed and maintains the Group's credit risk gradings to categorise exposures according to their degree of risk of default. The credit rating information is based on the Group's own trading records to rate its major customers and other debtors. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties.

For receivables, the Group has policies to limit the credit risk exposure. The Group assesses the credit quality of and sets credit limits on its customers by taking into account their financial position, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, shorten or cancel credit periods, to ensure the overall credit risk is limited to a controllable extent.

The Group has certain concentration of credit risk in respect of trade receivables as 48.71% (2020: 43.14%) of the total trade receivables was due from the Group's five largest customers. The Group has certain concentration of credit risk in respect of other receivables as 30.60% (2020: 40.44%) of the total other receivables was due from the Group's five largest customers.

For financial assets at amortised cost and contract assets, the exposures to credit risk are monitored such that any outstanding debtors are reviewed and followed up on an ongoing basis. 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 recognizing 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 2.9, the Group assesses ECL under IFRS 9 on trade receivables and contract assets based on provision matrix, the expected loss rates are based on the payment profile for sales in the past 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.

As at 31 December 2021, the gross carrying amount of trade receivables is RMB955,589,000 (2020: RMB983,589,000) has been individually assessed and impaired in full. For remaining trade receivables and contract assets, based on the historical credit loss experience of the existing debtors and all available forward-looking information, the Group assessed the losses for trade receivables and contract assets based on debtors with aging for classes with different credit risk characteristics and exposures.

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(b) Credit risk (Continued)

Impairment assessment under ECL model (Continued)

Trade receivables and contract assets (Continued)

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables as at 31 December 2021 and 2020:

Type	As at 31 December 2021				
	Cost		Provision		Net carrying amount RMB' 000
	Amount RMB' 000	Proportion (%)	Amount RMB' 000	ECL (%)	
Provision made on individual basis	955,589	9.04	955,589	100.00	–
Provision made on collective basis	9,610,925	90.96	1,459,906	23.81	8,151,019
Including:					
Related party grouping	3,293,119	31.17	48,184	1.46	3,244,935
Third party grouping	6,317,806	59.79	1,411,722	22.35	4,906,084
Total	10,566,514	100.00	2,415,495		8,151,019

Type	As at 31 December 2020				
	Cost		Provision		Net carrying amount RMB' 000
	Amount RMB' 000	Proportion (%)	Amount RMB' 000	ECL (%)	
Provision made on individual basis	983,589	8.32	983,589	100.00	–
Provision made on collective basis	10,849,334	91.68	1,490,949	20.94	9,358,385
Including:					
Related party grouping	3,282,821	27.74	71,948	2.19	3,210,873
Third party grouping	7,566,513	63.94	1,419,001	18.75	6,147,512
Total	11,832,923	100.00	2,474,538		9,358,385

Provision made on an individual basis:

Name	As at 31 December 2021			
	Cost RMB' 000	Provision RMB' 000	ECL (%)	Reason of provision
Entity A	873,848	873,848	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Entity B	42,469	42,469	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Entity C	24,530	24,530	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Others	14,742	14,742	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Total	955,589	955,589		

Name	As at 31 December 2020			
	Cost RMB' 000	Provision RMB' 000	ECL (%)	Reason of provision
Entity A	894,297	894,297	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Entity B	43,463	43,463	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Entity C	27,266	27,266	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Others	18,563	18,563	100.00	The debtor is short of funds and the amount is outstanding for a long time.
Total	983,589	983,589		

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(b) Credit risk (Continued)

Impairment assessment under ECL model (Continued)

Trade receivables and contract assets (Continued)

Provision made on collective basis: Related party grouping

	As at 31 December 2021			As at 31 December 2020		
	Cost	Provision		Cost	Provision	
Category	Amount RMB'000	ECL RMB'000	ECL (%)	Amount RMB'000	ECL RMB'000	ECL (%)
Within 1 year	3,025,701	11,896	0.39	2,841,134	10,041	0.35
Including:						
Not overdue	2,333,468	7,000	0.30	2,624,432	7,874	0.30
Overdue within 1 year	692,233	4,896	0.71	216,702	2,167	1.00
1 to 2 years	128,378	5,810	4.53	237,034	12,449	5.25
2 to 3 years	79,747	5,666	7.10	115,193	11,865	10.30
Over 3 years	59,293	24,812	41.85	89,460	37,593	42.02
Total	3,293,119	48,184	1.46	3,282,821	71,948	2.19

Provision made on collective basis: Third party grouping

	As at 31 December 2021			As at 31 December 2020		
	Cost	Provision		Cost	Provision	
Category	Amount RMB'000	ECL RMB'000	ECL (%)	Amount RMB'000	ECL RMB'000	ECL (%)
Within 1 year	4,449,971	107,739	2.42	5,531,474	60,406	1.09
Including:						
Not overdue	2,345,154	7,035	0.30	4,599,324	13,798	0.30
Overdue within 1 year	2,104,817	100,704	4.78	932,150	46,608	5.00
1 to 2 years	448,706	115,929	25.84	532,550	139,574	26.21
2 to 3 years	234,489	123,406	52.63	435,280	229,215	52.66
Over 3 years	1,184,640	1,064,648	89.87	1,067,209	989,806	92.75
Total	6,317,806	1,411,722	22.35	7,566,513	1,419,001	18.75

The following table provides information about the Group's exposure to credit risk and ECLs for contract assets as at 31 December 2021 and 2020:

	As at 31 December 2021				
	Cost		Provision		
Type	Amount RMB'000	Proportion (%)	Amount RMB'000	ECL (%)	Net carrying amount RMB'000
Provision made on collective basis	13,647,488	100.00	100,593	0.74	13,546,895
Including:					
Petroleum engineering	7,627,792	55.89	82,495	1.08	7,545,297
Construction and Engineering	6,019,696	44.11	18,098	0.30	6,001,598
Total	13,647,488	100.00	100,593		13,546,895

	As at 31 December 2020				
	Cost		Provision		
Type	Amount RMB'000	Proportion (%)	Amount RMB'000	ECL (%)	Net carrying amount RMB'000
Provision made on collective basis	11,715,335	100.00	104,447	0.89	11,610,888
Including:					
Petroleum engineering	5,996,377	51.18	87,600	1.46	5,908,777
Construction and Engineering	5,718,958	48.82	16,847	0.30	5,702,111
Total	11,715,335	100.00	104,447		11,610,888

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(b) Credit risk (Continued)

Other receivables

As at 31 December 2021, lifetime ECL is applied for credit impaired other receivables with gross carrying amount RMB705,973,000 (2020: RMB780,289,000).

Other than abovesaid other receivables, the Group measures the loss allowance equal to 12-month ECL of remaining other receivables. There is no significant increase in credit risk since initial recognition, the Group apply 12-month ECL based on aging for classes with different credit risk characteristics and exposures.

The following table provides information about the Group's exposure to credit risk and ECLs for other receivables as at 31 December 2021 and 2020:

As at 31 December 2021

	Gross carrying amount	ECLs allowance		As at 31 December 2021
	RMB'000	%	RMB'000	RMB'000
Petty cash funds	3,304	3.8	(124)	3,180
Guarantee deposits	1,247,723	9.7	(121,125)	1,126,598
Disbursement of funds	870,202	19.1	(165,960)	704,242
Temporary payment	697,197	67.9	(473,246)	223,951
Escrow payments	6,430	26.9	(1,727)	4,703
Deposits	127,035	6.8	(8,611)	118,424
Others	383,687	8.9	(34,376)	349,311
Total	3,335,578		(805,169)	2,530,409

ECL provision in the first stage:

Category	Cost RMB'000	Expected ECL in the next 12 months (%)	ECL RMB'000	Net carrying amount RMB'000
Provision made on collective basis:				
– Petty cash funds	3,304	3.75	124	3,180
– Guarantee and other deposits	1,272,362	4.03	51,276	1,221,086
– Others	1,353,939	5.83	80,093	1,273,846
Total	2,629,605	5.00	131,493	2,498,112

ECL provision in the third stage:

Category	Cost RMB'000	Expected ECL in the next 12 months (%)	ECL RMB'000	Net carrying amount RMB'000
Provision made on collective basis:				
– Petty cash funds	102,396	76.62	78,460	23,936
– Guarantee and other deposits	603,577	98.61	595,216	8,361
Total	705,973	95.43	673,676	32,297

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(b) Credit risk (Continued)

Other receivables (Continued)

As at 31 December 2020

	Gross carrying amount RMB'000	ECLs allowance %	RMB'000	As at 31 December 2020 RMB'000
Petty cash funds	11,907	2.8	(338)	11,569
Guarantee deposits	1,326,522	13.1	(173,435)	1,153,087
Disbursement of funds	833,797	18.2	(151,599)	682,198
Temporary payment	622,405	63.4	(394,479)	227,926
Escrow payments	4,688	63.5	(2,975)	1,713
Deposits	44,539	19.2	(8,540)	35,999
Others	354,938	6.3	(22,478)	332,460
Total	3,198,796		(753,844)	2,444,952

ECL provision in the first stage:

Category	Cost RMB'000	Expected ECL in the next 12 months (%)	ECL RMB'000	Net carrying amount RMB'000
Provision made on collective basis:				
– Petty cash funds	11,907	2.84	33,624	803,491
– Guarantee and other deposits	825,208	5.58	46,110	732,287
– Others	1,581,392	1.89	29,981	773,014
Total	2,418,507	4.53	109,715	2,308,792

ECL provision in the third stage:

Category	Cost RMB'000	Expected ECL in the next 12 months (%)	ECL RMB'000	Net carrying amount RMB'000
Provision made on collective basis:				
– Petty cash funds	183,896	70.68	129,983	53,913
– Guarantee and other deposits	596,393	86.21	514,146	82,247
Total	780,289	82.55	644,129	136,160

Restricted cash and cash and cash equivalents

The Group's bank deposits are mainly deposited in state-owned banks and other large and medium-sized listed banks, and the Group considers the credit risk to be insignificant that the losses due to the breach of contract is minimal.

Notes receivables measured at FVTOCI

The Group's notes receivables measured at FVTOCI issued by banks and other financial institutions with high credit ratings, and the Group considers the credit risk to be insignificant that the losses due to the breach of contract is minimal.

The Group's maximum exposure to credit risk is the carrying amount of each financial asset in the statement of financial position as stated in Note 41.1. The Group did not provide any other guarantees that may pose credit risk to the Group.

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.2 Financial risk factors (Continued)

(c) Liquidity risk

Liquidity risk refers to the risks that the Group will not be able to meet its obligations associated with its financial liabilities that are settled by delivering cash or other financial assets.

Regarding to the management of liquidity risk, the Group's management monitors cash and cash equivalents to meet operational needs and reduce the effect of floating cash flow. The Group's management monitors the usage of bank loan so that the Group does not breach borrowing limits or covenants while maintaining sufficient commitment on reserve fund from major financial institute to meet needs of short-term and long-term liquidity. Besides, to improve the cash flow position, the Group also considers to negotiate with suppliers with a view to lower the amount due.

The Group raised working capital through its operations, bank and other borrowings. As at 31 December 2021, the Group's unused line of credit was RMB15,937,997,000 (2020: RMB12,044,420,000).

The financial assets and liabilities of the Group at the reporting date are analysed by their maturity date as below at their undiscounted contractual cash flows:

	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total undiscounted cash flows	Carrying amount
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
As at 31 December 2021						
Restricted cash and cash and cash equivalents	**2,508,224**	**–**	**–**	**–**	**2,508,224**	**2,508,224**
Trade receivables	**8,151,019**	**–**	**–**	**–**	**8,151,019**	**8,151,019**
Financial assets at FVTOCI – Notes receivables	**1,295,971**	**–**	**–**	**–**	**1,295,971**	**1,295,971**
Other receivables	**2,530,409**	**–**	**–**	**–**	**2,530,409**	**2,530,409**
Notes and trade payables	**(29,890,348)**	**–**	**–**	**–**	**(29,890,348)**	**(29,890,348)**
Other payables	**(3,555,046)**	**–**	**–**	**–**	**(3,555,046)**	**(3,555,046)**
Borrowings	**(18,186,863)**	**(1,863,738)**	**(195,470)**	**(10,835)**	**(20,256,906)**	**(19,761,588)**
	(37,146,634)	**(1,863,738)**	**(195,470)**	**(10,835)**	**(39,216,677)**	**(38,721,359)**
As at 31 December 2020						
Restricted cash and cash and cash equivalents	1,551,458	–	–	–	1,551,458	1,551,458
Trade receivables	9,358,385	–	–	–	9,358,385	9,358,385
Financial assets at FVTOCI – Notes receivables	1,323,425	–	–	–	1,323,425	1,323,425
Other receivables	2,444,952	–	–	–	2,444,952	2,444,952
Notes and trade payables	(26,802,737)	–	–	–	(26,802,737)	(26,802,737)
Other payables	(2,652,248)	–	–	–	(2,652,248)	(2,652,248)
Borrowings	(20,158,137)	(771,927)	(637,027)	(331,542)	(21,898,633)	(21,211,952)
	(34,934,902)	(771,927)	(637,027)	(331,542)	(36,675,398)	(35,988,717)

41.3 Capital risk management

The objectives of the Group's capital risk management is to safeguard the Group's ability to continue 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, return capital to shareholders, issue new shares or disposes assets to reduce its liabilities.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net liabilities divided by total capital. Net liabilities are calculated as total borrowings (including "current and non-current borrowings" as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is the sum of total equity and net liabilities as shown in the consolidated statement of financial position. Total equity includes the equity attributable to shareholders of the parent and non-controlling interests.

41. FINANCIAL AND CAPITAL RISKS MANAGEMENT (Continued)

41.3 Capital risk management (Continued)

At the reporting date, the gearing ratio is set out as below:

	2021 RMB'000	2020 RMB'000
Total borrowings (Note 34)	**19,761,588**	21,211,952
Less: Cash and cash equivalents (Note 26)	**(2,475,307)**	(1,523,352)
Net debts	**17,286,281**	19,688,600
Total equity	**6,861,517**	6,722,866
Total capital	**24,147,798**	26,411,466
Gearing ratio	**72%**	75%

41.4 Fair value estimation

Fair value measurements

Other than noted as below, the carrying value of the Group's financial assets and liabilities stated at the consolidated statement of financial position are not materially different from their fair values.

Fair value is the price that would be received to sell assets or paid to transfer liabilities 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 (level 3).

(a) Recurring fair value measurement of the Group's financial assets measured at fair value

The financial assets measured at fair value in the consolidated statement of financial position on a recurring basis are grouped into the fair value hierarchy as follows:

	Level 3	
	2021 RMB'000	2020 RMB'000
Financial assets at FVTOCI (non-recycling)		
– Unlisted equity investments	**21,760**	22,835
Financial assets at FVTOCI		
– Notes receivables	**1,295,971**	1,323,425
	1,317,731	1,346,260

The reconciliation of the carrying amounts of assets classified within Level 3 of the fair value hierarchy is as follows:

	2021 RMB'000	2020 RMB'000
At 1 January	**1,346,260**	1,479,236
Addition/(Deduction)	**(26,377)**	(122,964)
Movement in fair value recognized in other comprehensive income	**(2,152)**	(10,012)
At 31 December	**1,317,731**	1,346,260

The fair value of the unlisted equity securities and notes receivables is measured using valuation techniques with reference to the net asset value and asset-based valuation and discounted cash flow, where appropriate. The Directors believe that the change in fair value (which is included in other comprehensive income) derived from the valuation technique is reasonable and is the most appropriate value at the end of the reporting period.

There have been no transfers into or out of Level 3 during the year ended 31 December 2021 (2020: Nil).

(b) Fair values of financial assets and liabilities carried at other than fair value

The carrying value of the Group's financial instruments carried at cost or amortised cost are not materially different from fair value as at 31 December 2021 and 2020.

42. POST BALANCE SHEET EVENTS

As at 29 March 2022, there are no other material events after reporting period to be disclosed.

43. PARTICULARS OF PRINCIPAL SUBSIDIARIES

As at 31 December 2021 and 2020, the Group has direct and indirect interests in the following principal subsidiaries:

Name	Establishment/Place of incorporation and type of legal entity	Registered capital in RMB'000	Actual interest held		Principal activities and place of operation
			Direct held	Indirect held	
Sinopec Oilfield Service Co., Ltd.	The PRC/Limited Company	4,000,000	100% (2020: 100%)	–	Petroleum engineering and technical services/The PRC
Sinopec Shengli Oil Engineering Company Limited*	The PRC/Limited Company	700,000	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec Zhongyuan Oil Engineering Company Limited*	The PRC/Limited Company	450,000	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec Jianghan Oil Engineering Company Limited*	The PRC/Limited Company	250,000	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec East China Oil Engineering Company Limited*	The PRC/Limited Company	864,297	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec North China Oil Engineering Company Limited*	The PRC/Limited Company	886,300	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec Southwest China Oil Engineering Company Limited*	The PRC/Limited Company	300,000	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec Oil Engineering Geophysical Company Limited*	The PRC/Limited Company	300,000	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec Oil Engineering and Construction Corporation*	The PRC/Limited Company	500,000	–	100% (2020: 100%)	Engineering and Construction/ The PRC
Sinopec Shanghai Offshore Oil Engineering Company Limited*	The PRC/Limited Company	2,000,000	–	100% (2020: 100%)	Offshore Oil engineering and technical services/The PRC
Sinopec International Oil Engineering Company Limited*	The PRC/Limited Company	700,000	–	100% (2020: 100%)	Petroleum engineering and technical services/The PRC
Sinopec Jingwei Company Limited*	The PRC/Limited Company	1,000,000	–	100% (2020: N/A)	Testing, logging and locating service

* The Company holds shares through Sinopec Oilfield Service Co., Ltd.

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, results in particulars of excessive length.

Section XI Documents Available for Inspection

The following documents are available for inspection at the legal address of the Company from 30 March 2022 (Wednesday) upon requests by related supervisory institute and shareholders in accordance with the Articles of Association of the Company and relevant regulations:

1. The original copy of the annual report signed by the Chairman of the Company;
2. The financial statements signed by the Chairman, General Manager, Chief Financial Officer and the Head of the Accounting Department;
3. The original reports of the auditors and the accounts prepared in accordance with the PRC Accounting Standards for Business Enterprises signed by the Certified Public Accountants, registered the PRC under the seal of BDO China (Special General Partnership); The original reports of the auditors and the financial statements prepared in accordance with IFRSs signed by BDO Limited;
4. Documents and Announcements disclosed in the reporting period;
5. The Article of Associations of the Company;
6. Copies of the Annual Reports and Interim Reports from 1993 to 2021 and the First Quarter Report and the Third Quarter Report from 2002 to 2021 of the Company.

This Annual Report has been drafted in both English and Chinese. In the event that different interpretation occurs, except the financial statements prepared in accordance with IFRSs and its related reports of the auditors, the Chinese version is considered to be more accurate.